



# **MODELO**

**SAFE Analysis & Design Report**

**Model Name: SafeCombinada.fdb**

**14 febrero 2018**

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# Model Definition

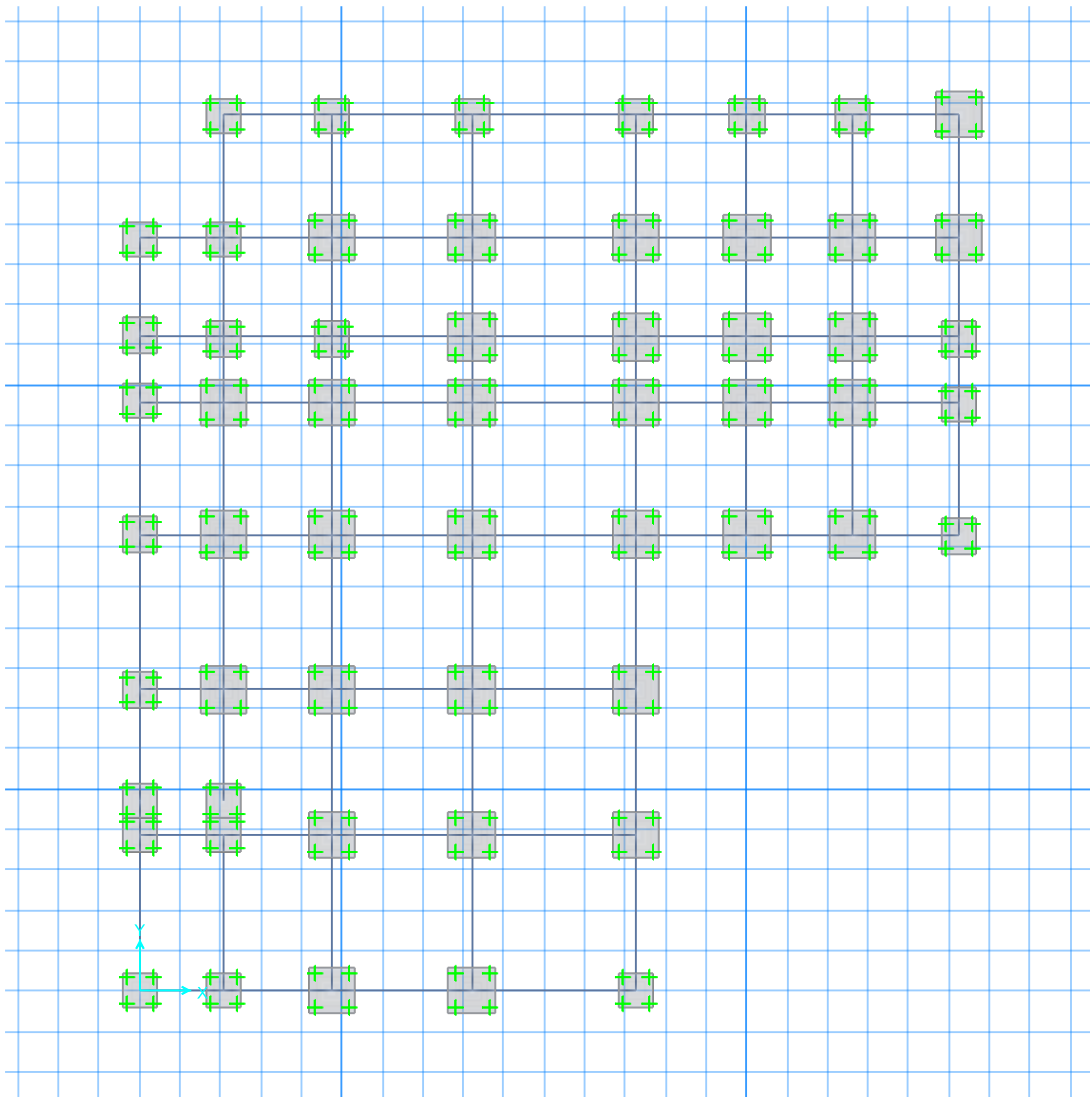


Figure 1: Finite element model

# 1. Model geometry

This section provides model geometry information, including items such as joint coordinates, joint restraints, and element connectivity.

## 1.1. Connectivity

**Table 1: Concrete Slab Design Summary 02 - Span Definition Data**

Table 1: Concrete Slab Design Summary 02 - Span Definition Data							
Strip	SpanID	SpanLength m	StartDist m	GlobalX1 m	GlobalY1 m	GlobalX2 m	GlobalY2 m
SA1	Span 1	4.70000	2.87000	3.62000	0.00000	8.32000	0.00000
SA1	Span 2	6.05000	7.57000	8.32000	0.00000	14.37000	0.00000
SA1	Span 3	7.08000	13.62000	14.37000	0.00000	21.45000	0.00000
SA1	Span 4	4.82000	20.70000	21.45000	0.00000	26.27000	0.00000
SA1	Span 5	4.58000	25.52000	26.27000	0.00000	30.85000	0.00000
SA1	Span 6	4.60000	30.10000	30.85000	0.00000	35.45000	0.00000
SA2	Span 1	3.62000	0.00000	0.00000	3.37500	3.62000	3.37500
SA2	Span 2	4.70000	3.62000	3.62000	3.37500	8.32000	3.37500
SA2	Span 3	6.05000	8.32000	8.32000	3.37500	14.37000	3.37500
SA2	Span 4	7.08000	14.37000	14.37000	3.37500	21.45000	3.37500
SA2	Span 5	4.82000	21.45000	21.45000	3.37500	26.27000	3.37500
SA2	Span 6	4.58000	26.27000	26.27000	3.37500	30.85000	3.37500
SA2	Span 7	4.60000	30.85000	30.85000	3.37500	35.45000	3.37500
SA3	Span 1	4.70000	2.87000	3.62000	6.75000	8.32000	6.75000
SA3	Span 2	6.05000	7.57000	8.32000	6.75000	14.37000	6.75000
SA3	Span 3	7.08000	13.62000	14.37000	6.75000	21.45000	6.75000
SA3	Span 4	4.82000	20.70000	21.45000	6.75000	26.27000	6.75000
SA3	Span 5	4.58000	25.52000	26.27000	6.75000	30.85000	6.75000
SA3	Span 6	4.60000	30.10000	30.85000	6.75000	35.45000	6.75000
SA4	Span 1	4.70000	2.87000	3.62000	7.50000	8.32000	7.50000
SA4	Span 2	6.05000	7.57000	8.32000	7.50000	14.37000	7.50000
SA4	Span 3	7.08000	13.62000	14.37000	7.50000	21.45000	7.50000
SA4	Span 4	4.82000	20.70000	21.45000	7.50000	26.27000	7.50000
SA4	Span 5	4.58000	25.52000	26.27000	7.50000	30.85000	7.50000
SA4	Span 6	4.60000	30.10000	30.85000	7.50000	35.45000	7.50000
SA5	Span 1	4.70000	2.87000	3.62000	8.25000	8.32000	8.25000
SA5	Span 2	6.05000	7.57000	8.32000	8.25000	14.37000	8.25000
SA5	Span 3	7.08000	13.62000	14.37000	8.25000	21.45000	8.25000
SA5	Span 4	4.82000	20.70000	21.45000	8.25000	26.27000	8.25000
SA5	Span 5	4.58000	25.52000	26.27000	8.25000	30.85000	8.25000
SA5	Span 6	4.60000	30.10000	30.85000	8.25000	35.45000	8.25000
SA6	Span 1	3.62000	0.00000	0.00000	10.65000	3.62000	10.65000
SA6	Span 2	4.70000	3.62000	3.62000	10.65000	8.32000	10.65000
SA6	Span 3	6.05000	8.32000	8.32000	10.65000	14.37000	10.65000
SA6	Span 4	7.08000	14.37000	14.37000	10.65000	21.45000	10.65000
SA6	Span 5	4.82000	21.45000	21.45000	10.65000	26.27000	10.65000
SA6	Span 6	4.58000	26.27000	26.27000	10.65000	30.85000	10.65000
SA6	Span 7	4.60000	30.85000	30.85000	10.65000	35.45000	10.65000
SA7	Span 1	4.70000	2.87000	3.62000	13.05000	8.32000	13.05000
SA7	Span 2	6.05000	7.57000	8.32000	13.05000	14.37000	13.05000
SA7	Span 3	7.08000	13.62000	14.37000	13.05000	21.45000	13.05000
SA7	Span 4	4.82000	20.70000	21.45000	13.05000	26.27000	13.05000
SA7	Span 5	4.58000	25.52000	26.27000	13.05000	30.85000	13.05000

**Table 1: Concrete Slab Design Summary 02 - Span Definition Data**

Strip	SpanID	SpanLength m	StartDist m	GlobalX1 m	GlobalY1 m	GlobalX2 m	GlobalY2 m
SA7	Span 6	4.60000	30.10000	30.85000	13.05000	35.45000	13.05000
SA8	Span 1	3.62000	0.00000	0.00000	16.41500	3.62000	16.41500
SA8	Span 2	4.70000	3.62000	3.62000	16.41500	8.32000	16.41500
SA8	Span 3	6.05000	8.32000	8.32000	16.41500	14.37000	16.41500
SA8	Span 4	7.08000	14.37000	14.37000	16.41500	21.45000	16.41500
SA8	Span 5	4.82000	21.45000	21.45000	16.41500	26.27000	16.41500
SA8	Span 6	4.58000	26.27000	26.27000	16.41500	30.85000	16.41500
SA8	Span 7	4.60000	30.85000	30.85000	16.41500	35.45000	16.41500
SA9	Span 1	4.70000	2.87000	3.62000	19.78000	8.32000	19.78000
SA9	Span 2	6.05000	7.57000	8.32000	19.78000	14.37000	19.78000
SA9	Span 3	7.08000	13.62000	14.37000	19.78000	21.45000	19.78000
SA9	Span 4	4.82000	20.70000	21.45000	19.78000	26.27000	19.78000
SA9	Span 5	4.58000	25.52000	26.27000	19.78000	30.85000	19.78000
SA9	Span 6	4.60000	30.10000	30.85000	19.78000	35.45000	19.78000
SB1	Span 1	6.75000	0.75000	0.00000	0.00000	0.00000	6.75000
SB1	Span 2	1.50000	7.50000	0.00000	6.75000	0.00000	8.25000
SB1	Span 3	4.80000	9.00000	0.00000	8.25000	0.00000	13.05000
SB1	Span 4	6.73000	13.80000	0.00000	13.05000	0.00000	19.78000
SB1	Span 5	5.72000	20.53000	0.00000	19.78000	0.00000	25.50000
SB1	Span 6	2.83000	26.25000	0.00000	25.50000	0.00000	28.33000
SB1	Span 7	4.32000	29.08000	0.00000	28.33000	0.00000	32.65000
SB1	Span 8	5.35000	33.40000	0.00000	32.65000	0.00000	38.00000
SB2	Span 1	6.75000	0.00000	1.81000	0.00000	1.81000	6.75000
SB2	Span 2	1.50000	6.75000	1.81000	6.75000	1.81000	8.25000
SB2	Span 3	4.80000	8.25000	1.81000	8.25000	1.81000	13.05000
SB2	Span 4	6.73000	13.05000	1.81000	13.05000	1.81000	19.78000
SB2	Span 5	5.72000	19.78000	1.81000	19.78000	1.81000	25.50000
SB2	Span 6	2.83000	25.50000	1.81000	25.50000	1.81000	28.33000
SB2	Span 7	4.32000	28.33000	1.81000	28.33000	1.81000	32.65000
SB2	Span 8	5.35000	32.65000	1.81000	32.65000	1.81000	38.00000
SB3	Span 1	6.75000	0.75000	3.62000	0.00000	3.62000	6.75000
SB3	Span 2	1.50000	7.50000	3.62000	6.75000	3.62000	8.25000
SB3	Span 3	4.80000	9.00000	3.62000	8.25000	3.62000	13.05000
SB3	Span 4	6.73000	13.80000	3.62000	13.05000	3.62000	19.78000
SB3	Span 5	5.72000	20.53000	3.62000	19.78000	3.62000	25.50000
SB3	Span 6	2.83000	26.25000	3.62000	25.50000	3.62000	28.33000
SB3	Span 7	4.32000	29.08000	3.62000	28.33000	3.62000	32.65000
SB3	Span 8	5.35000	33.40000	3.62000	32.65000	3.62000	38.00000
SB4	Span 1	6.75000	0.00000	5.97000	0.00000	5.97000	6.75000
SB4	Span 2	1.50000	6.75000	5.97000	6.75000	5.97000	8.25000
SB4	Span 3	4.80000	8.25000	5.97000	8.25000	5.97000	13.05000
SB4	Span 4	6.73000	13.05000	5.97000	13.05000	5.97000	19.78000
SB4	Span 5	5.72000	19.78000	5.97000	19.78000	5.97000	25.50000
SB4	Span 6	2.83000	25.50000	5.97000	25.50000	5.97000	28.33000
SB4	Span 7	4.32000	28.33000	5.97000	28.33000	5.97000	32.65000
SB4	Span 8	5.35000	32.65000	5.97000	32.65000	5.97000	38.00000
SB5	Span 1	6.75000	0.00000	8.32000	0.00000	8.32000	6.75000
SB5	Span 2	1.50000	6.75000	8.32000	6.75000	8.32000	8.25000
SB5	Span 3	4.80000	8.25000	8.32000	8.25000	8.32000	13.05000
SB5	Span 4	6.73000	13.05000	8.32000	13.05000	8.32000	19.78000
SB5	Span 5	5.72000	19.78000	8.32000	19.78000	8.32000	25.50000
SB5	Span 6	2.83000	25.50000	8.32000	25.50000	8.32000	28.33000
SB5	Span 7	4.32000	28.33000	8.32000	28.33000	8.32000	32.65000
SB5	Span 8	5.35000	32.65000	8.32000	32.65000	8.32000	38.00000

**Table 1: Concrete Slab Design Summary 02 - Span Definition Data**

Strip	SpanID	SpanLength m	StartDist m	GlobalX1 m	GlobalY1 m	GlobalX2 m	GlobalY2 m
SB6	Span 1	6.75000	0.00000	11.34500	0.00000	11.34500	6.75000
SB6	Span 2	1.50000	6.75000	11.34500	6.75000	11.34500	8.25000
SB6	Span 3	4.80000	8.25000	11.34500	8.25000	11.34500	13.05000
SB6	Span 4	6.73000	13.05000	11.34500	13.05000	11.34500	19.78000
SB6	Span 5	5.72000	19.78000	11.34500	19.78000	11.34500	25.50000
SB6	Span 6	2.83000	25.50000	11.34500	25.50000	11.34500	28.33000
SB6	Span 7	4.32000	28.33000	11.34500	28.33000	11.34500	32.65000
SB6	Span 8	5.35000	32.65000	11.34500	32.65000	11.34500	38.00000
SB7	Span 1	6.75000	0.00000	14.37000	0.00000	14.37000	6.75000
SB7	Span 2	1.50000	6.75000	14.37000	6.75000	14.37000	8.25000
SB7	Span 3	4.80000	8.25000	14.37000	8.25000	14.37000	13.05000
SB7	Span 4	6.73000	13.05000	14.37000	13.05000	14.37000	19.78000
SB7	Span 5	5.72000	19.78000	14.37000	19.78000	14.37000	25.50000
SB7	Span 6	2.83000	25.50000	14.37000	25.50000	14.37000	28.33000
SB7	Span 7	4.32000	28.33000	14.37000	28.33000	14.37000	32.65000
SB7	Span 8	5.35000	32.65000	14.37000	32.65000	14.37000	38.00000
SB8	Span 1	6.75000	0.00000	17.91000	0.00000	17.91000	6.75000
SB8	Span 2	1.50000	6.75000	17.91000	6.75000	17.91000	8.25000
SB8	Span 3	4.80000	8.25000	17.91000	8.25000	17.91000	13.05000
SB8	Span 4	6.73000	13.05000	17.91000	13.05000	17.91000	19.78000
SB8	Span 5	5.72000	19.78000	17.91000	19.78000	17.91000	25.50000
SB8	Span 6	2.83000	25.50000	17.91000	25.50000	17.91000	28.33000
SB8	Span 7	4.32000	28.33000	17.91000	28.33000	17.91000	32.65000
SB8	Span 8	5.35000	32.65000	17.91000	32.65000	17.91000	38.00000
SB9	Span 1	6.75000	0.75000	21.45000	0.00000	21.45000	6.75000
SB9	Span 2	1.50000	7.50000	21.45000	6.75000	21.45000	8.25000
SB9	Span 3	4.80000	9.00000	21.45000	8.25000	21.45000	13.05000
SB9	Span 4	6.73000	13.80000	21.45000	13.05000	21.45000	19.78000
SB9	Span 5	5.72000	20.53000	21.45000	19.78000	21.45000	25.50000
SB9	Span 6	2.83000	26.25000	21.45000	25.50000	21.45000	28.33000
SB9	Span 7	4.32000	29.08000	21.45000	28.33000	21.45000	32.65000
SB9	Span 8	5.35000	33.40000	21.45000	32.65000	21.45000	38.00000
SA10	Span 1	3.62000	0.00000	0.00000	22.64000	3.62000	22.64000
SA10	Span 2	4.70000	3.62000	3.62000	22.64000	8.32000	22.64000
SA10	Span 3	6.05000	8.32000	8.32000	22.64000	14.37000	22.64000
SA10	Span 4	7.08000	14.37000	14.37000	22.64000	21.45000	22.64000
SA10	Span 5	4.82000	21.45000	21.45000	22.64000	26.27000	22.64000
SA10	Span 6	4.58000	26.27000	26.27000	22.64000	30.85000	22.64000
SA10	Span 7	4.60000	30.85000	30.85000	22.64000	35.45000	22.64000
SA11	Span 1	4.70000	2.87000	3.62000	25.50000	8.32000	25.50000
SA11	Span 2	6.05000	7.57000	8.32000	25.50000	14.37000	25.50000
SA11	Span 3	7.08000	13.62000	14.37000	25.50000	21.45000	25.50000
SA11	Span 4	4.82000	20.70000	21.45000	25.50000	26.27000	25.50000
SA11	Span 5	4.58000	25.52000	26.27000	25.50000	30.85000	25.50000
SA11	Span 6	4.60000	30.10000	30.85000	25.50000	35.45000	25.50000
SA12	Span 1	3.62000	0.00000	0.00000	26.91500	3.62000	26.91500
SA12	Span 2	4.70000	3.62000	3.62000	26.91500	8.32000	26.91500
SA12	Span 3	6.05000	8.32000	8.32000	26.91500	14.37000	26.91500
SA12	Span 4	7.08000	14.37000	14.37000	26.91500	21.45000	26.91500
SA12	Span 5	4.82000	21.45000	21.45000	26.91500	26.27000	26.91500
SA12	Span 6	4.58000	26.27000	26.27000	26.91500	30.85000	26.91500
SA12	Span 7	4.60000	30.85000	30.85000	26.91500	35.45000	26.91500
SA13	Span 1	4.70000	2.87000	3.62000	28.33000	8.32000	28.33000
SA13	Span 2	6.05000	7.57000	8.32000	28.33000	14.37000	28.33000

**Table 1: Concrete Slab Design Summary 02 - Span Definition Data**

Strip	SpanID	SpanLength m	StartDist m	GlobalX1 m	GlobalY1 m	GlobalX2 m	GlobalY2 m
SA13	Span 3	7.08000	13.62000	14.37000	28.33000	21.45000	28.33000
SA13	Span 4	4.82000	20.70000	21.45000	28.33000	26.27000	28.33000
SA13	Span 5	4.58000	25.52000	26.27000	28.33000	30.85000	28.33000
SA13	Span 6	4.60000	30.10000	30.85000	28.33000	35.45000	28.33000
SA14	Span 1	3.62000	0.00000	0.00000	30.49000	3.62000	30.49000
SA14	Span 2	4.70000	3.62000	3.62000	30.49000	8.32000	30.49000
SA14	Span 3	6.05000	8.32000	8.32000	30.49000	14.37000	30.49000
SA14	Span 4	7.08000	14.37000	14.37000	30.49000	21.45000	30.49000
SA14	Span 5	4.82000	21.45000	21.45000	30.49000	26.27000	30.49000
SA14	Span 6	4.58000	26.27000	26.27000	30.49000	30.85000	30.49000
SA14	Span 7	4.60000	30.85000	30.85000	30.49000	35.45000	30.49000
SA15	Span 1	4.70000	2.87000	3.62000	32.65000	8.32000	32.65000
SA15	Span 2	6.05000	7.57000	8.32000	32.65000	14.37000	32.65000
SA15	Span 3	7.08000	13.62000	14.37000	32.65000	21.45000	32.65000
SA15	Span 4	4.82000	20.70000	21.45000	32.65000	26.27000	32.65000
SA15	Span 5	4.58000	25.52000	26.27000	32.65000	30.85000	32.65000
SA15	Span 6	4.60000	30.10000	30.85000	32.65000	35.45000	32.65000
SA16	Span 1	3.62000	0.00000	0.00000	35.32500	3.62000	35.32500
SA16	Span 2	4.70000	3.62000	3.62000	35.32500	8.32000	35.32500
SA16	Span 3	6.05000	8.32000	8.32000	35.32500	14.37000	35.32500
SA16	Span 4	7.08000	14.37000	14.37000	35.32500	21.45000	35.32500
SA16	Span 5	4.82000	21.45000	21.45000	35.32500	26.27000	35.32500
SA16	Span 6	4.58000	26.27000	26.27000	35.32500	30.85000	35.32500
SA16	Span 7	4.60000	30.85000	30.85000	35.32500	35.45000	35.32500
SA17	Span 1	3.62000	0.00000	0.00000	38.00000	3.62000	38.00000
SA17	Span 2	4.70000	3.62000	3.62000	38.00000	8.32000	38.00000
SA17	Span 3	6.05000	8.32000	8.32000	38.00000	14.37000	38.00000
SA17	Span 4	7.08000	14.37000	14.37000	38.00000	21.45000	38.00000
SA17	Span 5	4.82000	21.45000	21.45000	38.00000	26.27000	38.00000
SA17	Span 6	4.58000	26.27000	26.27000	38.00000	30.85000	38.00000
SA17	Span 7	4.60000	30.85000	30.85000	38.00000	35.45000	38.00000
SB10	Span 1	6.75000	0.00000	23.86000	0.00000	23.86000	6.75000
SB10	Span 2	1.50000	6.75000	23.86000	6.75000	23.86000	8.25000
SB10	Span 3	4.80000	8.25000	23.86000	8.25000	23.86000	13.05000
SB10	Span 4	6.73000	13.05000	23.86000	13.05000	23.86000	19.78000
SB10	Span 5	5.72000	19.78000	23.86000	19.78000	23.86000	25.50000
SB10	Span 6	2.83000	25.50000	23.86000	25.50000	23.86000	28.33000
SB10	Span 7	4.32000	28.33000	23.86000	28.33000	23.86000	32.65000
SB10	Span 8	5.35000	32.65000	23.86000	32.65000	23.86000	38.00000
SB11	Span 1	6.75000	0.00000	26.27000	0.00000	26.27000	6.75000
SB11	Span 2	1.50000	6.75000	26.27000	6.75000	26.27000	8.25000
SB11	Span 3	4.80000	8.25000	26.27000	8.25000	26.27000	13.05000
SB11	Span 4	6.73000	13.05000	26.27000	13.05000	26.27000	19.78000
SB11	Span 5	5.72000	19.78000	26.27000	19.78000	26.27000	25.50000
SB11	Span 6	2.83000	25.50000	26.27000	25.50000	26.27000	28.33000
SB11	Span 7	4.32000	28.33000	26.27000	28.33000	26.27000	32.65000
SB11	Span 8	5.35000	32.65000	26.27000	32.65000	26.27000	38.00000
SB12	Span 1	6.75000	0.00000	28.56000	0.00000	28.56000	6.75000
SB12	Span 2	1.50000	6.75000	28.56000	6.75000	28.56000	8.25000
SB12	Span 3	4.80000	8.25000	28.56000	8.25000	28.56000	13.05000
SB12	Span 4	6.73000	13.05000	28.56000	13.05000	28.56000	19.78000
SB12	Span 5	5.72000	19.78000	28.56000	19.78000	28.56000	25.50000
SB12	Span 6	2.83000	25.50000	28.56000	25.50000	28.56000	28.33000
SB12	Span 7	4.32000	28.33000	28.56000	28.33000	28.56000	32.65000

**Table 1: Concrete Slab Design Summary 02 - Span Definition Data**

Strip	SpanID	SpanLength m	StartDist m	GlobalX1 m	GlobalY1 m	GlobalX2 m	GlobalY2 m
SB12	Span 8	5.35000	32.65000	28.56000	32.65000	28.56000	38.00000
SB13	Span 1	6.75000	0.00000	30.85000	0.00000	30.85000	6.75000
SB13	Span 2	1.50000	6.75000	30.85000	6.75000	30.85000	8.25000
SB13	Span 3	4.80000	8.25000	30.85000	8.25000	30.85000	13.05000
SB13	Span 4	6.73000	13.05000	30.85000	13.05000	30.85000	19.78000
SB13	Span 5	5.72000	19.78000	30.85000	19.78000	30.85000	25.50000
SB13	Span 6	2.83000	25.50000	30.85000	25.50000	30.85000	28.33000
SB13	Span 7	4.32000	28.33000	30.85000	28.33000	30.85000	32.65000
SB13	Span 8	5.35000	32.65000	30.85000	32.65000	30.85000	38.00000
SB14	Span 1	6.75000	0.00000	33.15000	0.00000	33.15000	6.75000
SB14	Span 2	1.50000	6.75000	33.15000	6.75000	33.15000	8.25000
SB14	Span 3	4.80000	8.25000	33.15000	8.25000	33.15000	13.05000
SB14	Span 4	6.73000	13.05000	33.15000	13.05000	33.15000	19.78000
SB14	Span 5	5.72000	19.78000	33.15000	19.78000	33.15000	25.50000
SB14	Span 6	2.83000	25.50000	33.15000	25.50000	33.15000	28.33000
SB14	Span 7	4.32000	28.33000	33.15000	28.33000	33.15000	32.65000
SB14	Span 8	5.35000	32.65000	33.15000	32.65000	33.15000	38.00000
SB15	Span 1	6.75000	0.00000	35.45000	0.00000	35.45000	6.75000
SB15	Span 2	1.50000	6.75000	35.45000	6.75000	35.45000	8.25000
SB15	Span 3	4.80000	8.25000	35.45000	8.25000	35.45000	13.05000
SB15	Span 4	6.73000	13.05000	35.45000	13.05000	35.45000	19.78000
SB15	Span 5	5.72000	19.78000	35.45000	19.78000	35.45000	25.50000
SB15	Span 6	2.83000	25.50000	35.45000	25.50000	35.45000	28.33000
SB15	Span 7	4.32000	28.33000	35.45000	28.33000	35.45000	32.65000
SB15	Span 8	5.35000	32.65000	35.45000	32.65000	35.45000	38.00000

## 2. Model properties

This section provides model properties, including items such as material properties, section properties, and support properties.

### 2.1. Material properties

**Table 2: Material Properties 03 - Concrete**

**Table 2: Material Properties 03 - Concrete**

Material	E N/mm2	U	A 1/C	UnitWt kN/m3	Fc N/mm2	LtWtConc	UserModRup
CSAC30	26667.31234	0.200000	9.9000E-06	2.3563E+01	30.00000	No	No
MAT1	24875.04000	0.200000	9.9000E-06	2.4000E+01	28.00000	No	No
MAT3	21538.11000	0.200000	9.9000E-06	2.4000E+01	21.00000	No	No
MAT4	21538.11000	0.200000	9.9000E-06	2.4000E+01	27.50000	No	No

**Table 3: Material Properties 04 - Rebar**

**Table 3: Material Properties 04 - Rebar**

Material	E N/mm2	UnitWt kN/m3	Fy N/mm2	Fu N/mm2
CSA-G30.18Gr4 00	200000	7.6973E+01	400.00000	500.00000
MAT2	200000	7.6973E+01	420.00000	525.00000

**Table 4: Material Properties 05 - Tendon**

**Table 4: Material Properties 05 - Tendon**

Material	E N/mm2	UnitWt kN/m3	Fy N/mm2	Fu N/mm2
A416MGr186	196501	7.6973E+01	1690.00000	1860.00000

### 2.2. Section properties

**Table 5: Slab Properties 02 - Solid Slabs**

**Table 5: Slab Properties 02 - Solid Slabs**

Slab	Type	MatProp	Thickness mm	Ortho
Col_Stiff	Stiff	MAT4	500.000	No
SLAB1	Slab	CSAC30	200.000	No
Z1.5	Slab	MAT3	500.000	No
Z2	Slab	MAT3	500.000	No

### Table 6: Beam Properties 02 - Rectangular Beam

Table 6: Beam Properties 02 - Rectangular Beam

Beam	MatProp	Depth mm	WidthTop mm	WidthBot mm
BEAM1	CSAC30	600.000	300.000	300.000
Viga45*50	MAT1	450.000	500.000	500.000

### Table 7: Beam Properties 06 - Design Data

Table 7: Beam Properties 06 - Design Data

Beam	MatRebarL	MatRebarS	FIngWOpt	CoverTop mm	CoverBot mm	NoDesign
BEAM1	CSA-G30.18Gr4 00	CSA-G30.18Gr4 00	Analysis Property	75.000	75.000	No
Viga45*50	MAT2	MAT2	Analysis Property	45.000	45.000	No

### Table 8: Tendon Properties

Table 8: Tendon Properties

TendonProp	MatProp	StrandArea mm2
TENDON1	A416MGr186	98.71

### Table 9: Column Properties 02 - Rectangular

Table 9: Column Properties 02 - Rectangular

Column	MatProp	SecDim2 mm	SecDim3 mm	AutoRigid	AutoDrop	IncludeCap
COL1	CSAC30	600.000	300.000	No	No	No

### Table 10: Wall Properties

Table 10: Wall Properties

Wall	MatProp	Thickness mm	AutoRigid	OutOfPlane
WALL1	CSAC30	300.000	No	Yes

## 2.3. Support properties

**Table 11: Soil Properties**

Table 11: Soil Properties

Soil	Subgrade kN/m3	NonlinOpt
SOIL1	1.3605E+04	Compression Only

**Table 12: Spring Properties - Point**

Table 12: Spring Properties - Point

Spring	Ux kN/mm	Uy kN/mm	Uz kN/mm	Rx kN-mm/rad	Ry kN-mm/rad	Rz kN-mm/rad	NonlinOpt
PSPR1	0.00000	0.00000	0.00100	0.00	0.00	0.00	None (Linear)

**Table 13: Spring Properties - Line**

Table 13: Spring Properties - Line

Spring	VertStiff kN/mm/mm	RotStiff kN/rad	NonlinOpt
LSPR1	0.001000	1.000E-003	None (Linear)

### 3. Model assignments

This section provides model assignments, including assignments to slabs, beams, and joints.

#### 3.1. Slab assignments

**Table 14: Slab Property Assignments**

Table 14: Slab Property Assignments

Area	SlabProp
F49	Z1.5
F50	Z1.5
F51	Z1.5
F52	Z1.5
F53	Z1.5
F67	Z1.5
F68	Z1.5
F69	Z1.5
F70	Z1.5
F71	Z1.5
F73	Z1.5
F74	Z1.5
F75	Z1.5
F76	Z1.5
F77	Z1.5
F80	Z2
F81	Z1.5
F82	Z2
F83	Z2
F84	Z2
F85	Z2
F86	Z2
F87	Z2
F88	Z1.5
F89	Z1.5
F90	Z2
F91	Z2
F92	Z2
F93	Z2
F94	Z1.5
F95	Z1.5
F96	Z2
F97	Z2
F98	Z2
F99	Z2
F100	Z2
F101	Z2
F102	Z2
F103	Z2
F104	Z2
F105	Z2
F106	Z2
F107	Z2
F108	Z1.5

**Table 14: Slab Property Assignments**

Area	SlabProp
F109	Z2
F110	Z2
F111	Z2
F112	Z2
F113	Z1.5
F114	Z1.5
F115	Z2
F116	Z2
F117	Z2
F119	Z1.5
F120	Z2
F121	Z2

### 3.2. Beam assignments

**Table 15: Beam Property Assignments**

**Table 15: Beam Property Assignments**

Line	BeamProp
B1	Viga45*50
B2	Viga45*50
B3	Viga45*50
B4	Viga45*50
B7	Viga45*50
B14	Viga45*50
B15	Viga45*50
B16	Viga45*50
B17	Viga45*50
B18	Viga45*50
B19	Viga45*50
B20	Viga45*50
B22	Viga45*50
B23	Viga45*50
B24	Viga45*50
B25	Viga45*50
B26	Viga45*50
B27	Viga45*50
B28	Viga45*50
B29	Viga45*50
B30	Viga45*50
B31	Viga45*50
B32	Viga45*50
B33	Viga45*50
B34	Viga45*50
B35	Viga45*50
B36	Viga45*50
B37	Viga45*50
B38	Viga45*50

**Table 15: Beam Property Assignments**

Line	BeamProp
B39	Viga45*50
B40	Viga45*50
B41	Viga45*50
B42	Viga45*50
B43	Viga45*50
B44	Viga45*50
B45	Viga45*50
B46	Viga45*50
B47	Viga45*50
B48	Viga45*50
B49	Viga45*50
B50	Viga45*50
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B66	Viga45*50
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B69	Viga45*50
B70	Viga45*50
B71	Viga45*50
B72	Viga45*50
B73	Viga45*50
B74	Viga45*50
B75	Viga45*50
B76	Viga45*50
B77	Viga45*50
B78	Viga45*50
B79	Viga45*50
B80	Viga45*50
B81	Viga45*50
B82	Viga45*50
B83	Viga45*50
B84	Viga45*50
B85	Viga45*50
B86	Viga45*50
B87	Viga45*50
B88	Viga45*50
B89	Viga45*50
B90	Viga45*50
B91	Viga45*50
B92	Viga45*50
B93	Viga45*50

**Table 15: Beam Property Assignments**

Line	BeamProp
B94	Viga45*50
B95	Viga45*50
B96	Viga45*50
B104	Viga45*50
B108	Viga45*50
B129	Viga45*50
B130	Viga45*50
B131	Viga45*50
B132	Viga45*50
B133	Viga45*50
B134	Viga45*50

### 3.3. Support assignments

**Table 16: Soil Property Assignments**

**Table 16: Soil Property Assignments**

Area	SoilProp
F49	SOIL1
F50	SOIL1
F51	SOIL1
F52	SOIL1
F53	SOIL1
F67	SOIL1
F68	SOIL1
F69	SOIL1
F70	SOIL1
F71	SOIL1
F73	SOIL1
F74	SOIL1
F75	SOIL1
F76	SOIL1
F77	SOIL1
F80	SOIL1
F81	SOIL1
F82	SOIL1
F83	SOIL1
F84	SOIL1
F85	SOIL1
F86	SOIL1
F87	SOIL1
F88	SOIL1
F89	SOIL1
F90	SOIL1
F91	SOIL1
F92	SOIL1
F93	SOIL1
F94	SOIL1

**Table 16: Soil Property Assignments**

Area	SoilProp
F95	SOIL1
F96	SOIL1
F97	SOIL1
F98	SOIL1
F99	SOIL1
F100	SOIL1
F101	SOIL1
F102	SOIL1
F103	SOIL1
F104	SOIL1
F105	SOIL1
F106	SOIL1
F107	SOIL1
F108	SOIL1
F109	SOIL1
F110	SOIL1
F111	SOIL1
F112	SOIL1
F113	SOIL1
F114	SOIL1
F115	SOIL1
F116	SOIL1
F117	SOIL1
F119	SOIL1
F120	SOIL1
F121	SOIL1

## 4. Model loading

This section provides model loading information, including load patterns, load cases, and load combinations.

### 4.1. Load patterns

**Table 17: Load Patterns**

Table 17: Load Patterns

LoadPat	Type	SelfWtMult
Muerta	DEAD	1.000000
Viva	LIVE	0.000000
Viva cubierta	LIVE	0.000000
SismoX	QUAKE	0.000000
SismoY	QUAKE	0.000000

### 4.2. Load cases

**Table 18: Load Cases 02 - Static**

Table 18: Load Cases 02 - Static

LoadCase	InitialCond	AType
D	Zero	Linear
L	Zero	Linear
Lr	Zero	Linear
Ex	Zero	Linear
Ey	Zero	Linear

**Table 19: Load Cases 06 - Loads Applied**

Table 19: Load Cases 06 - Loads Applied

LoadCase	LoadPat	SF
D	Muerta	1.000000
L	Viva	1.000000
Lr	Viva cubierta	1.000000
Ex	SismoX	1.000000
Ey	SismoY	1.000000

### 4.3. Load combinations

**Table 20: Load Combinations**

Table 20: Load Combinations							
Combo	Load	SF	Type	DSStrength	DSServInit	DSServNorm	DSServLong
Comb1	D	1.40000 0	Linear Add	Yes	No	No	No
Comb2	D	1.20000 0	Linear Add	Yes	No	No	No
Comb2	L	1.60000 0					
Comb2	Lr	0.50000 0					
Comb3	D	1.20000 0	Linear Add	Yes	No	No	No
Comb3	L	1.00000 0					
Comb3	Lr	1.60000 0					
Comb4	D	1.20000 0	Linear Add	Yes	No	No	No
Comb4	L	1.00000 0					
Comb4	Lr	0.50000 0					

# Analysis Results

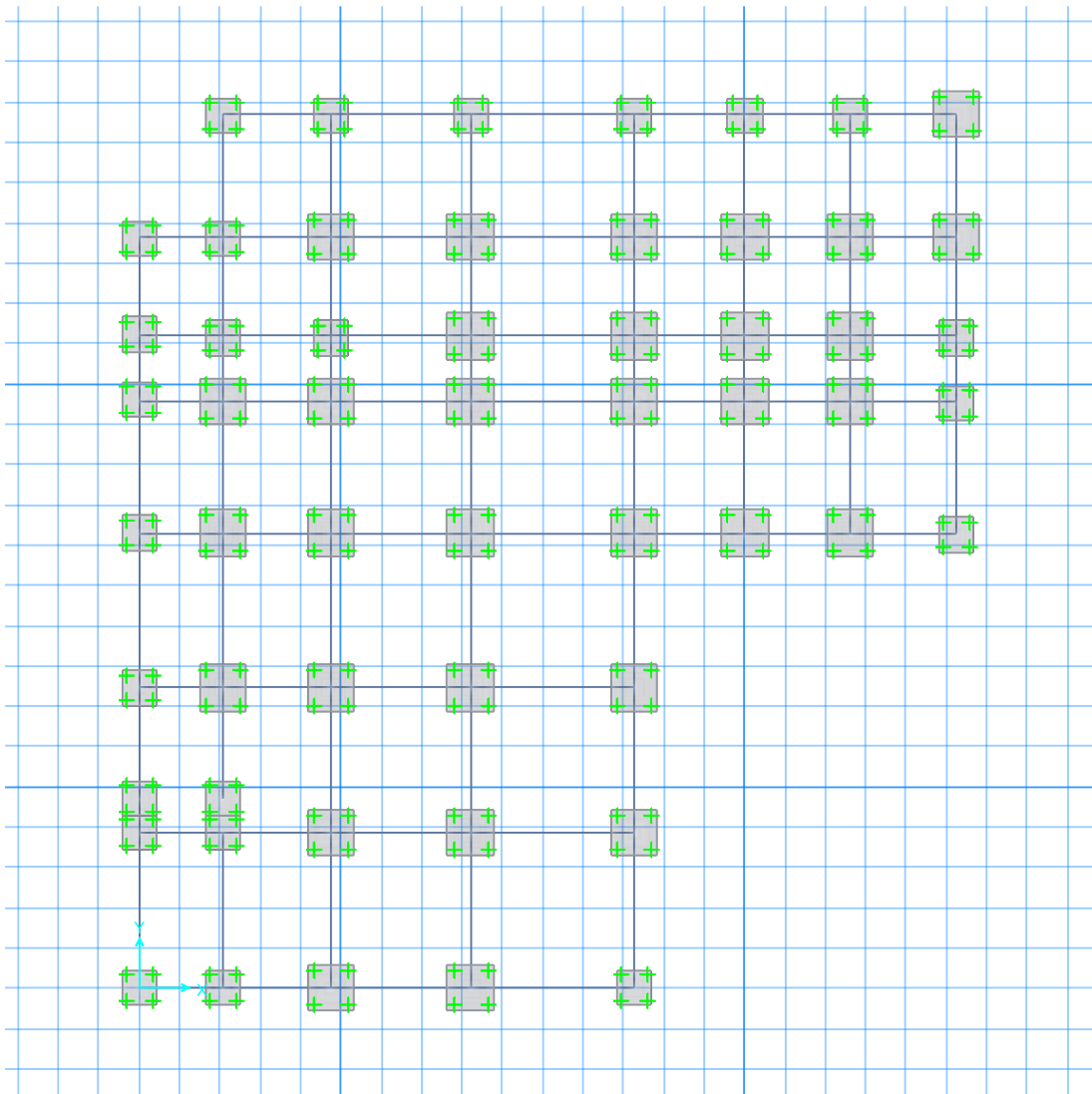


Figure 2: Deformed shape

## 5. Analysis results

### 5.1. Support results

This section provides support results, including items such as column, support, and spring reactions, .

**Table 21: Soil Pressures - Summary**

Table 21: Soil Pressures - Summary							
Panel	OutputCase	MaxPress N/mm2	MinPress N/mm2	GlobalXMax m	GlobalYMax m	GlobalXMin m	GlobalYMin m
1	D	-0.023088	-0.031237	0.00000	0.75000	2.87000	0.75000
2	D	-0.022068	-0.027606	0.00000	8.25000	2.87000	7.50000
3	D	-0.021130	-0.026587	0.00000	9.00000	0.00000	13.05000
4	D	-0.025558	-0.031114	2.62000	14.05000	0.00000	19.78000
5	D	-0.025294	-0.030179	2.62000	25.50000	0.00000	20.53000
6	D	-0.023801	-0.027817	0.00000	28.33000	2.87000	28.33000
7	D	-0.021687	-0.031417	0.00000	32.65000	2.87000	32.65000
8	D	-0.019958	-0.031790	2.87000	38.00000	2.87000	33.31000
9	D	-0.023736	-0.031237	7.32000	1.00000	3.62000	0.75000
10	D	-0.023072	-0.028689	3.62000	8.25000	7.32000	7.75000
11	D	-0.021608	-0.027285	3.62000	9.00000	7.32000	13.05000
12	D	-0.025530	-0.028650	3.62000	14.05000	3.62000	19.78000
13	D	-0.025175	-0.027473	3.62000	25.50000	3.62000	20.78000
14	D	-0.025325	-0.028267	3.62000	26.50000	3.62000	28.33000
15	D	-0.027817	-0.032090	3.62000	28.99000	3.62000	32.65000
16	D	-0.022261	-0.032445	3.62000	38.00000	3.62000	33.31000
17	D	-0.023217	-0.032738	8.32000	1.00000	13.37000	6.75000
18	D	-0.027732	-0.031564	8.32000	7.75000	13.37000	7.75000
19	D	-0.026909	-0.030661	8.32000	13.05000	13.37000	13.05000
20	D	-0.027285	-0.031269	8.32000	14.05000	13.37000	14.05000
21	D	-0.026052	-0.030072	8.32000	25.50000	13.37000	20.78000
22	D	-0.025546	-0.027924	13.37000	28.33000	8.32000	28.33000
23	D	-0.025784	-0.029215	13.37000	29.33000	8.32000	32.65000
24	D	-0.028105	-0.033960	13.37000	33.65000	13.62000	38.00000
25	D	-0.024881	-0.033991	20.70000	0.75000	14.37000	6.75000
26	D	-0.024653	-0.033104	20.45000	7.75000	14.37000	7.75000
27	D	-0.024060	-0.032098	20.45000	13.05000	14.37000	13.05000
28	D	-0.024785	-0.032443	20.45000	14.05000	14.37000	14.05000
29	D	-0.025816	-0.031159	20.45000	25.50000	14.37000	20.78000
30	D	-0.024546	-0.027681	20.45000	28.33000	14.37000	26.50000
31	D	-0.024620	-0.029705	20.45000	29.33000	14.37000	32.65000
32	D	-0.027741	-0.034707	20.45000	33.65000	14.37000	38.00000
33	D	-0.021045	-0.028093	21.45000	0.75000	21.45000	0.75000
34	D	-0.019812	-0.026045	21.45000	7.75000	21.45000	7.75000
35	D	-0.019279	-0.024785	21.45000	13.05000	21.45000	13.05000
36	D	-0.019060	-0.028558	25.27000	19.78000	21.45000	19.78000
37	D	-0.021863	-0.028212	25.27000	20.78000	21.45000	20.78000
38	D	-0.022280	-0.025816	25.27000	28.33000	21.45000	26.50000
39	D	-0.022348	-0.027741	25.27000	29.33000	21.45000	32.65000
40	D	-0.025398	-0.032346	25.27000	33.65000	21.45000	38.00000
44	D	-0.018571	-0.022318	29.85000	19.78000	29.85000	19.78000
45	D	-0.021429	-0.026971	26.27000	20.78000	29.85000	25.50000
46	D	-0.022297	-0.025573	26.27000	28.33000	29.85000	26.50000
47	D	-0.022348	-0.025943	26.27000	29.33000	29.85000	32.65000

Table 21: Soil Pressures - Summary

Panel	OutputCase	MaxPress N/mm2	MinPress N/mm2	GlobalXMax m	GlobalYMax m	GlobalXMin m	GlobalYMin m
48	D	-0.025430	-0.029285	26.27000	33.65000	26.27000	38.00000
52	D	-0.018566	-0.023297	34.70000	19.78000	34.70000	19.78000
53	D	-0.022318	-0.029162	30.85000	20.78000	34.70000	25.50000
54	D	-0.023622	-0.027562	30.85000	28.33000	34.70000	26.16000
55	D	-0.022293	-0.026038	34.45000	32.65000	30.85000	32.65000
56	D	-0.018188	-0.028654	34.45000	38.00000	30.85000	38.00000
1	L	0.000000	0.000000	2.87000	0.75000	2.87000	0.75000
2	L	0.000000	0.000000	2.87000	7.50000	2.87000	7.50000
3	L	0.000000	0.000000	2.62000	13.05000	2.62000	13.05000
4	L	0.000000	0.000000	2.62000	14.05000	2.62000	14.05000
5	L	0.000000	0.000000	2.62000	20.78000	2.62000	20.78000
6	L	0.000000	0.000000	2.62000	26.50000	2.62000	26.50000
7	L	0.000000	0.000000	2.87000	28.99000	2.87000	28.99000
8	L	0.000000	0.000000	2.87000	33.31000	2.87000	33.31000
9	L	0.000000	0.000000	7.32000	1.00000	7.32000	1.00000
10	L	0.000000	0.000000	7.32000	7.75000	7.32000	7.75000
11	L	0.000000	0.000000	3.62000	13.05000	3.62000	13.05000
12	L	0.000000	0.000000	3.62000	14.05000	3.62000	14.05000
13	L	0.000000	0.000000	3.62000	20.78000	3.62000	20.78000
14	L	0.000000	0.000000	3.62000	26.50000	3.62000	26.50000
15	L	0.000000	0.000000	7.32000	32.65000	7.32000	32.65000
16	L	0.000000	0.000000	7.32000	33.65000	7.32000	33.65000
17	L	0.000000	0.000000	8.32000	1.00000	8.32000	1.00000
18	L	0.000000	0.000000	8.32000	7.75000	8.32000	7.75000
19	L	0.000000	0.000000	8.32000	13.05000	8.32000	13.05000
20	L	0.000000	0.000000	8.32000	14.05000	8.32000	14.05000
21	L	0.000000	0.000000	8.32000	20.78000	8.32000	20.78000
22	L	0.000000	0.000000	8.32000	26.50000	8.32000	26.50000
23	L	0.000000	0.000000	8.32000	32.65000	8.32000	32.65000
24	L	0.000000	0.000000	8.32000	33.65000	8.32000	33.65000
25	L	0.000000	0.000000	14.37000	1.00000	14.37000	1.00000
26	L	0.000000	0.000000	14.37000	7.75000	14.37000	7.75000
27	L	0.000000	0.000000	14.37000	13.05000	14.37000	13.05000
28	L	0.000000	0.000000	14.37000	14.05000	14.37000	14.05000
29	L	0.000000	0.000000	14.37000	20.78000	14.37000	20.78000
30	L	0.000000	0.000000	14.37000	26.50000	14.37000	26.50000
31	L	0.000000	0.000000	14.37000	32.65000	14.37000	32.65000
32	L	0.000000	0.000000	14.37000	33.65000	14.37000	33.65000
33	L	0.000000	0.000000	21.45000	6.75000	21.45000	6.75000
34	L	0.000000	0.000000	21.45000	7.75000	21.45000	7.75000
35	L	0.000000	0.000000	21.45000	13.05000	21.45000	13.05000
36	L	0.000000	0.000000	21.45000	14.05000	21.45000	14.05000
37	L	0.000000	0.000000	21.45000	20.78000	21.45000	20.78000
38	L	0.000000	0.000000	21.45000	26.50000	21.45000	26.50000
39	L	0.000000	0.000000	21.45000	32.65000	21.45000	32.65000
40	L	0.000000	0.000000	21.45000	33.65000	21.45000	33.65000
44	L	0.000000	0.000000	26.27000	19.78000	26.27000	19.78000
45	L	0.000000	0.000000	26.27000	20.78000	26.27000	20.78000
46	L	0.000000	0.000000	26.27000	26.50000	26.27000	26.50000
47	L	0.000000	0.000000	26.27000	32.65000	26.27000	32.65000
48	L	0.000000	0.000000	26.27000	33.65000	26.27000	33.65000
52	L	0.000000	0.000000	30.85000	19.78000	30.85000	19.78000
53	L	0.000000	0.000000	30.85000	20.78000	30.85000	20.78000
54	L	0.000000	0.000000	30.85000	26.50000	30.85000	26.50000

Table 21: Soil Pressures - Summary

Panel	OutputCase	MaxPress N/mm2	MinPress N/mm2	GlobalXMax m	GlobalYMax m	GlobalXMin m	GlobalYMin m
55	L	0.000000	0.000000	30.85000	32.65000	30.85000	32.65000
56	L	0.000000	0.000000	34.45000	38.00000	34.45000	38.00000
1	Lr	0.000000	0.000000	2.87000	0.75000	2.87000	0.75000
2	Lr	0.000000	0.000000	2.87000	7.50000	2.87000	7.50000
3	Lr	0.000000	0.000000	2.62000	13.05000	2.62000	13.05000
4	Lr	0.000000	0.000000	2.62000	14.05000	2.62000	14.05000
5	Lr	0.000000	0.000000	2.62000	20.78000	2.62000	20.78000
6	Lr	0.000000	0.000000	2.62000	26.50000	2.62000	26.50000
7	Lr	0.000000	0.000000	2.87000	28.99000	2.87000	28.99000
8	Lr	0.000000	0.000000	2.87000	33.31000	2.87000	33.31000
9	Lr	0.000000	0.000000	7.32000	1.00000	7.32000	1.00000
10	Lr	0.000000	0.000000	7.32000	7.75000	7.32000	7.75000
11	Lr	0.000000	0.000000	3.62000	13.05000	3.62000	13.05000
12	Lr	0.000000	0.000000	3.62000	14.05000	3.62000	14.05000
13	Lr	0.000000	0.000000	3.62000	20.78000	3.62000	20.78000
14	Lr	0.000000	0.000000	3.62000	26.50000	3.62000	26.50000
15	Lr	0.000000	0.000000	7.32000	32.65000	7.32000	32.65000
16	Lr	0.000000	0.000000	7.32000	33.65000	7.32000	33.65000
17	Lr	0.000000	0.000000	8.32000	1.00000	8.32000	1.00000
18	Lr	0.000000	0.000000	8.32000	7.75000	8.32000	7.75000
19	Lr	0.000000	0.000000	8.32000	13.05000	8.32000	13.05000
20	Lr	0.000000	0.000000	8.32000	14.05000	8.32000	14.05000
21	Lr	0.000000	0.000000	8.32000	20.78000	8.32000	20.78000
22	Lr	0.000000	0.000000	8.32000	26.50000	8.32000	26.50000
23	Lr	0.000000	0.000000	8.32000	32.65000	8.32000	32.65000
24	Lr	0.000000	0.000000	8.32000	33.65000	8.32000	33.65000
25	Lr	0.000000	0.000000	14.37000	1.00000	14.37000	1.00000
26	Lr	0.000000	0.000000	14.37000	7.75000	14.37000	7.75000
27	Lr	0.000000	0.000000	14.37000	13.05000	14.37000	13.05000
28	Lr	0.000000	0.000000	14.37000	14.05000	14.37000	14.05000
29	Lr	0.000000	0.000000	14.37000	20.78000	14.37000	20.78000
30	Lr	0.000000	0.000000	14.37000	26.50000	14.37000	26.50000
31	Lr	0.000000	0.000000	14.37000	32.65000	14.37000	32.65000
32	Lr	0.000000	0.000000	14.37000	33.65000	14.37000	33.65000
33	Lr	0.000000	0.000000	21.45000	6.75000	21.45000	6.75000
34	Lr	0.000000	0.000000	21.45000	7.75000	21.45000	7.75000
35	Lr	0.000000	0.000000	21.45000	13.05000	21.45000	13.05000
36	Lr	0.000000	0.000000	21.45000	14.05000	21.45000	14.05000
37	Lr	0.000000	0.000000	21.45000	20.78000	21.45000	20.78000
38	Lr	0.000000	0.000000	21.45000	26.50000	21.45000	26.50000
39	Lr	0.000000	0.000000	21.45000	32.65000	21.45000	32.65000
40	Lr	0.000000	0.000000	21.45000	33.65000	21.45000	33.65000
44	Lr	0.000000	0.000000	26.27000	19.78000	26.27000	19.78000
45	Lr	0.000000	0.000000	26.27000	20.78000	26.27000	20.78000
46	Lr	0.000000	0.000000	26.27000	26.50000	26.27000	26.50000
47	Lr	0.000000	0.000000	26.27000	32.65000	26.27000	32.65000
48	Lr	0.000000	0.000000	26.27000	33.65000	26.27000	33.65000
52	Lr	0.000000	0.000000	30.85000	19.78000	30.85000	19.78000
53	Lr	0.000000	0.000000	30.85000	20.78000	30.85000	20.78000
54	Lr	0.000000	0.000000	30.85000	26.50000	30.85000	26.50000
55	Lr	0.000000	0.000000	30.85000	32.65000	30.85000	32.65000
56	Lr	0.000000	0.000000	34.45000	38.00000	34.45000	38.00000
1	Ex	0.000000	0.000000	2.87000	0.75000	2.87000	0.75000
2	Ex	0.000000	0.000000	2.87000	7.50000	2.87000	7.50000

Table 21: Soil Pressures - Summary

Panel	OutputCase	MaxPress N/mm2	MinPress N/mm2	GlobalXMax m	GlobalYMax m	GlobalXMin m	GlobalYMin m
3	Ex	0.000000	0.000000	2.62000	13.05000	2.62000	13.05000
4	Ex	0.000000	0.000000	2.62000	14.05000	2.62000	14.05000
5	Ex	0.000000	0.000000	2.62000	20.78000	2.62000	20.78000
6	Ex	0.000000	0.000000	2.62000	26.50000	2.62000	26.50000
7	Ex	0.000000	0.000000	2.87000	28.99000	2.87000	28.99000
8	Ex	0.000000	0.000000	2.87000	33.31000	2.87000	33.31000
9	Ex	0.000000	0.000000	7.32000	1.00000	7.32000	1.00000
10	Ex	0.000000	0.000000	7.32000	7.75000	7.32000	7.75000
11	Ex	0.000000	0.000000	3.62000	13.05000	3.62000	13.05000
12	Ex	0.000000	0.000000	3.62000	14.05000	3.62000	14.05000
13	Ex	0.000000	0.000000	3.62000	20.78000	3.62000	20.78000
14	Ex	0.000000	0.000000	3.62000	26.50000	3.62000	26.50000
15	Ex	0.000000	0.000000	7.32000	32.65000	7.32000	32.65000
16	Ex	0.000000	0.000000	7.32000	33.65000	7.32000	33.65000
17	Ex	0.000000	0.000000	8.32000	1.00000	8.32000	1.00000
18	Ex	0.000000	0.000000	8.32000	7.75000	8.32000	7.75000
19	Ex	0.000000	0.000000	8.32000	13.05000	8.32000	13.05000
20	Ex	0.000000	0.000000	8.32000	14.05000	8.32000	14.05000
21	Ex	0.000000	0.000000	8.32000	20.78000	8.32000	20.78000
22	Ex	0.000000	0.000000	8.32000	26.50000	8.32000	26.50000
23	Ex	0.000000	0.000000	8.32000	32.65000	8.32000	32.65000
24	Ex	0.000000	0.000000	8.32000	33.65000	8.32000	33.65000
25	Ex	0.000000	0.000000	14.37000	1.00000	14.37000	1.00000
26	Ex	0.000000	0.000000	14.37000	7.75000	14.37000	7.75000
27	Ex	0.000000	0.000000	14.37000	13.05000	14.37000	13.05000
28	Ex	0.000000	0.000000	14.37000	14.05000	14.37000	14.05000
29	Ex	0.000000	0.000000	14.37000	20.78000	14.37000	20.78000
30	Ex	0.000000	0.000000	14.37000	26.50000	14.37000	26.50000
31	Ex	0.000000	0.000000	14.37000	32.65000	14.37000	32.65000
32	Ex	0.000000	0.000000	14.37000	33.65000	14.37000	33.65000
33	Ex	0.000000	0.000000	21.45000	6.75000	21.45000	6.75000
34	Ex	0.000000	0.000000	21.45000	7.75000	21.45000	7.75000
35	Ex	0.000000	0.000000	21.45000	13.05000	21.45000	13.05000
36	Ex	0.000000	0.000000	21.45000	14.05000	21.45000	14.05000
37	Ex	0.000000	0.000000	21.45000	20.78000	21.45000	20.78000
38	Ex	0.000000	0.000000	21.45000	26.50000	21.45000	26.50000
39	Ex	0.000000	0.000000	21.45000	32.65000	21.45000	32.65000
40	Ex	0.000000	0.000000	21.45000	33.65000	21.45000	33.65000
44	Ex	0.000000	0.000000	26.27000	19.78000	26.27000	19.78000
45	Ex	0.000000	0.000000	26.27000	20.78000	26.27000	20.78000
46	Ex	0.000000	0.000000	26.27000	26.50000	26.27000	26.50000
47	Ex	0.000000	0.000000	26.27000	32.65000	26.27000	32.65000
48	Ex	0.000000	0.000000	26.27000	33.65000	26.27000	33.65000
52	Ex	0.000000	0.000000	30.85000	19.78000	30.85000	19.78000
53	Ex	0.000000	0.000000	30.85000	20.78000	30.85000	20.78000
54	Ex	0.000000	0.000000	30.85000	26.50000	30.85000	26.50000
55	Ex	0.000000	0.000000	30.85000	32.65000	30.85000	32.65000
56	Ex	0.000000	0.000000	34.45000	38.00000	34.45000	38.00000
1	Ey	0.000000	0.000000	2.87000	0.75000	2.87000	0.75000
2	Ey	0.000000	0.000000	2.87000	7.50000	2.87000	7.50000
3	Ey	0.000000	0.000000	2.62000	13.05000	2.62000	13.05000
4	Ey	0.000000	0.000000	2.62000	14.05000	2.62000	14.05000
5	Ey	0.000000	0.000000	2.62000	20.78000	2.62000	20.78000
6	Ey	0.000000	0.000000	2.62000	26.50000	2.62000	26.50000

Table 21: Soil Pressures - Summary

Panel	OutputCase	MaxPress N/mm2	MinPress N/mm2	GlobalXMax m	GlobalYMax m	GlobalXMin m	GlobalYMin m
7	Ey	0.000000	0.000000	2.87000	28.99000	2.87000	28.99000
8	Ey	0.000000	0.000000	2.87000	33.31000	2.87000	33.31000
9	Ey	0.000000	0.000000	7.32000	1.00000	7.32000	1.00000
10	Ey	0.000000	0.000000	7.32000	7.75000	7.32000	7.75000
11	Ey	0.000000	0.000000	3.62000	13.05000	3.62000	13.05000
12	Ey	0.000000	0.000000	3.62000	14.05000	3.62000	14.05000
13	Ey	0.000000	0.000000	3.62000	20.78000	3.62000	20.78000
14	Ey	0.000000	0.000000	3.62000	26.50000	3.62000	26.50000
15	Ey	0.000000	0.000000	7.32000	32.65000	7.32000	32.65000
16	Ey	0.000000	0.000000	7.32000	33.65000	7.32000	33.65000
17	Ey	0.000000	0.000000	8.32000	1.00000	8.32000	1.00000
18	Ey	0.000000	0.000000	8.32000	7.75000	8.32000	7.75000
19	Ey	0.000000	0.000000	8.32000	13.05000	8.32000	13.05000
20	Ey	0.000000	0.000000	8.32000	14.05000	8.32000	14.05000
21	Ey	0.000000	0.000000	8.32000	20.78000	8.32000	20.78000
22	Ey	0.000000	0.000000	8.32000	26.50000	8.32000	26.50000
23	Ey	0.000000	0.000000	8.32000	32.65000	8.32000	32.65000
24	Ey	0.000000	0.000000	8.32000	33.65000	8.32000	33.65000
25	Ey	0.000000	0.000000	14.37000	1.00000	14.37000	1.00000
26	Ey	0.000000	0.000000	14.37000	7.75000	14.37000	7.75000
27	Ey	0.000000	0.000000	14.37000	13.05000	14.37000	13.05000
28	Ey	0.000000	0.000000	14.37000	14.05000	14.37000	14.05000
29	Ey	0.000000	0.000000	14.37000	20.78000	14.37000	20.78000
30	Ey	0.000000	0.000000	14.37000	26.50000	14.37000	26.50000
31	Ey	0.000000	0.000000	14.37000	32.65000	14.37000	32.65000
32	Ey	0.000000	0.000000	14.37000	33.65000	14.37000	33.65000
33	Ey	0.000000	0.000000	21.45000	6.75000	21.45000	6.75000
34	Ey	0.000000	0.000000	21.45000	7.75000	21.45000	7.75000
35	Ey	0.000000	0.000000	21.45000	13.05000	21.45000	13.05000
36	Ey	0.000000	0.000000	21.45000	14.05000	21.45000	14.05000
37	Ey	0.000000	0.000000	21.45000	20.78000	21.45000	20.78000
38	Ey	0.000000	0.000000	21.45000	26.50000	21.45000	26.50000
39	Ey	0.000000	0.000000	21.45000	32.65000	21.45000	32.65000
40	Ey	0.000000	0.000000	21.45000	33.65000	21.45000	33.65000
44	Ey	0.000000	0.000000	26.27000	19.78000	26.27000	19.78000
45	Ey	0.000000	0.000000	26.27000	20.78000	26.27000	20.78000
46	Ey	0.000000	0.000000	26.27000	26.50000	26.27000	26.50000
47	Ey	0.000000	0.000000	26.27000	32.65000	26.27000	32.65000
48	Ey	0.000000	0.000000	26.27000	33.65000	26.27000	33.65000
52	Ey	0.000000	0.000000	30.85000	19.78000	30.85000	19.78000
53	Ey	0.000000	0.000000	30.85000	20.78000	30.85000	20.78000
54	Ey	0.000000	0.000000	30.85000	26.50000	30.85000	26.50000
55	Ey	0.000000	0.000000	30.85000	32.65000	30.85000	32.65000
56	Ey	0.000000	0.000000	34.45000	38.00000	34.45000	38.00000

## 5.2. Structure results

**Table 22: Sum Of Reactions, Part 1 of 2**

Table 22: Sum Of Reactions, Part 1 of 2

OutputCase	GlobalFX kN	GlobalFY kN	GlobalFZ kN	GlobalMX kN-m	GlobalMY kN-m	GlobalMZ kN-m
D	0.000	0.000	4753.266	103850.0405	-74825.0393	0.0000
L	0.000	0.000	0.000	0.0000	0.0000	0.0000
Lr	0.000	0.000	0.000	0.0000	0.0000	0.0000
Ex	0.000	0.000	0.000	0.0000	0.0000	0.0000
Ey	0.000	0.000	0.000	0.0000	0.0000	0.0000

**Table 22: Sum Of Reactions, Part 2 of 2**

Table 22: Sum Of Reactions, Part 2 of 2

OutputCase	GlobalX m	GlobalY m	GlobalZ m
D	0.00000	0.00000	0.00000
L	0.00000	0.00000	0.00000
Lr	0.00000	0.00000	0.00000
Ex	0.00000	0.00000	0.00000
Ey	0.00000	0.00000	0.00000

**Table 23: Nodal Displacements - Summary, Part 1 of 2**

Table 23: Nodal Displacements - Summary, Part 1 of 2

Panel	Node	OutputCase	Ux mm	Uy mm	Uz mm	Rx Radians	Ry Radians	Rz Radians
1	~611	D	0.000000	0.000000	-2.829418	0.000000	0.000000	0.000000
2	34	D	0.000000	0.000000	-2.029081	0.000000	0.000000	0.000000
3	46	D	0.000000	0.000000	-1.954207	0.000000	0.000000	0.000000
4	~593	D	0.000000	0.000000	-2.518469	0.000000	0.000000	0.000000
5	45	D	0.000000	0.000000	-2.218225	0.000000	0.000000	0.000000
6	16	D	0.000000	0.000000	-2.044613	0.000000	0.000000	0.000000
7	9	D	0.000000	0.000000	-2.309239	0.000000	0.000000	0.000000
8	~599	D	0.000000	0.000000	-2.367302	0.000000	0.000000	0.000000
9	~611	D	0.000000	0.000000	-2.829418	0.000000	0.000000	0.000000
10	35	D	0.000000	0.000000	-2.108682	0.000000	0.000000	0.000000
11	~625	D	0.000000	0.000000	-2.025082	0.000000	0.000000	0.000000
12	~608	D	0.000000	0.000000	-2.306059	0.000000	0.000000	0.000000
13	47	D	0.000000	0.000000	-2.019336	0.000000	0.000000	0.000000
14	~530	D	0.000000	0.000000	-2.117747	0.000000	0.000000	0.000000
15	~515	D	0.000000	0.000000	-2.372459	0.000000	0.000000	0.000000
16	121	D	0.000000	0.000000	-2.384774	0.000000	0.000000	0.000000
17	~643	D	0.000000	0.000000	-2.626885	0.000000	0.000000	0.000000
18	36	D	0.000000	0.000000	-2.320044	0.000000	0.000000	0.000000
19	~640	D	0.000000	0.000000	-2.267704	0.000000	0.000000	0.000000
20	~637	D	0.000000	0.000000	-2.436515	0.000000	0.000000	0.000000
21	49	D	0.000000	0.000000	-2.210354	0.000000	0.000000	0.000000
22	~532	D	0.000000	0.000000	-2.059387	0.000000	0.000000	0.000000
23	10	D	0.000000	0.000000	-2.147408	0.000000	0.000000	0.000000
24	~452	D	0.000000	0.000000	-2.496165	0.000000	0.000000	0.000000
25	~578	D	0.000000	0.000000	-2.723045	0.000000	0.000000	0.000000

Table 23: Nodal Displacements - Summary, Part 1 of 2

Panel	Node	OutputCase	Ux mm	Uy mm	Uz mm	Rx Radians	Ry Radians	Rz Radians
26	~578	D	0.000000	0.000000	-2.723045	0.000000	0.000000	0.000000
27	~686	D	0.000000	0.000000	-2.636225	0.000000	0.000000	0.000000
28	~686	D	0.000000	0.000000	-2.636225	0.000000	0.000000	0.000000
29	~682	D	0.000000	0.000000	-2.512779	0.000000	0.000000	0.000000
30	~551	D	0.000000	0.000000	-2.223015	0.000000	0.000000	0.000000
31	~521	D	0.000000	0.000000	-2.388011	0.000000	0.000000	0.000000
32	~505	D	0.000000	0.000000	-2.810595	0.000000	0.000000	0.000000
33	~658	D	0.000000	0.000000	-2.448781	0.000000	0.000000	0.000000
34	41	D	0.000000	0.000000	-1.914366	0.000000	0.000000	0.000000
35	51	D	0.000000	0.000000	-1.821790	0.000000	0.000000	0.000000
36	~653	D	0.000000	0.000000	-2.157783	0.000000	0.000000	0.000000
37	~649	D	0.000000	0.000000	-2.087240	0.000000	0.000000	0.000000
38	26	D	0.000000	0.000000	-1.897550	0.000000	0.000000	0.000000
39	12	D	0.000000	0.000000	-2.039020	0.000000	0.000000	0.000000
40	~646	D	0.000000	0.000000	-2.398487	0.000000	0.000000	0.000000
44	53	D	0.000000	0.000000	-1.640456	0.000000	0.000000	0.000000
45	~671	D	0.000000	0.000000	-2.102462	0.000000	0.000000	0.000000
46	28	D	0.000000	0.000000	-1.879643	0.000000	0.000000	0.000000
47	14	D	0.000000	0.000000	-1.906870	0.000000	0.000000	0.000000
48	~662	D	0.000000	0.000000	-2.198234	0.000000	0.000000	0.000000
52	~700	D	0.000000	0.000000	-1.765674	0.000000	0.000000	0.000000
53	~679	D	0.000000	0.000000	-2.282321	0.000000	0.000000	0.000000
54	~559	D	0.000000	0.000000	-2.050682	0.000000	0.000000	0.000000
55	~528	D	0.000000	0.000000	-1.914805	0.000000	0.000000	0.000000
56	~668	D	0.000000	0.000000	-2.178825	0.000000	0.000000	0.000000
1	33	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	33	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3	55	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4	30	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5	23	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6	16	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7	16	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8	1	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	34	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	34	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11	56	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12	30	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13	23	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14	16	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15	16	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16	1	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17	35	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18	35	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19	~624	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20	31	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21	24	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22	17	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23	10	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24	2	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25	36	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26	36	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27	~639	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
28	32	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
29	25	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Table 23: Nodal Displacements - Summary, Part 1 of 2

Panel	Node	OutputCase	Ux mm	Uy mm	Uz mm	Rx Radians	Ry Radians	Rz Radians
30	18	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
31	18	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32	3	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
33	41	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
34	41	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
35	51	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36	51	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37	26	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38	19	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
39	19	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
40	4	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44	203	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45	27	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
46	20	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
47	13	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
48	5	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52	204	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53	28	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
54	21	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55	21	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
56	6	L	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
1	33	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	33	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3	55	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4	30	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5	23	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6	16	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7	16	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8	1	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	34	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	34	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11	56	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12	30	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13	23	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14	16	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15	16	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16	1	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17	35	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18	35	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19	~624	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20	31	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21	24	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22	17	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23	10	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24	2	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25	36	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26	36	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27	~639	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
28	32	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
29	25	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
30	18	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
31	18	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32	3	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
33	41	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Table 23: Nodal Displacements - Summary, Part 1 of 2

Panel	Node	OutputCase	Ux mm	Uy mm	Uz mm	Rx Radians	Ry Radians	Rz Radians
34	41	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
35	51	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36	51	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37	26	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38	19	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
39	19	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
40	4	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44	203	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45	27	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
46	20	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
47	13	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
48	5	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52	204	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53	28	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
54	21	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55	21	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
56	6	Lr	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
1	33	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	33	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3	55	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4	30	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5	23	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6	16	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7	16	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8	1	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	34	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	34	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11	56	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12	30	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13	23	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14	16	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15	16	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16	1	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17	35	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18	35	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19	~624	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20	31	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21	24	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22	17	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23	10	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24	2	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25	36	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26	36	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27	~639	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
28	32	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
29	25	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
30	18	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
31	18	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32	3	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
33	41	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
34	41	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
35	51	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36	51	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37	26	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Table 23: Nodal Displacements - Summary, Part 1 of 2

Panel	Node	OutputCase	Ux mm	Uy mm	Uz mm	Rx Radians	Ry Radians	Rz Radians
38	19	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
39	19	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
40	4	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44	203	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
45	27	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
46	20	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
47	13	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
48	5	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52	204	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53	28	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
54	21	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55	21	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
56	6	Ex	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
1	33	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	33	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
3	55	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4	30	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5	23	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6	16	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
7	16	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8	1	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	34	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10	34	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11	56	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12	30	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13	23	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14	16	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15	16	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16	1	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
17	35	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18	35	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19	~624	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20	31	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21	24	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22	17	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23	10	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
24	2	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25	36	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26	36	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27	~639	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
28	32	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
29	25	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
30	18	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
31	18	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32	3	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
33	41	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
34	41	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
35	51	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
36	51	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
37	26	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38	19	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
39	19	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
40	4	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44	203	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

**Table 23: Nodal Displacements - Summary, Part 1 of 2**

Panel	Node	OutputCase	Ux mm	Uy mm	Uz mm	Rx Radians	Ry Radians	Rz Radians
45	27	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
46	20	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
47	13	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
48	5	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
52	204	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
53	28	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
54	21	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
55	21	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
56	6	Ey	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

**Table 23: Nodal Displacements - Summary, Part 2 of 2**

Table 23: Nodal Displacements - Summary, Part 2 of 2

Panel	Node	OutputCase	GlobalX m	GlobalY m
1	~611	D	3.62000	2.85000
2	34	D	3.62000	6.75000
3	46	D	0.00000	13.05000
4	~593	D	0.00000	16.93800
5	45	D	0.00000	19.78000
6	16	D	3.62000	28.33000
7	9	D	3.62000	32.65000
8	~599	D	3.62000	34.27250
9	~611	D	3.62000	2.85000
10	35	D	8.32000	6.75000
11	~625	D	8.32000	9.90000
12	~608	D	3.62000	16.41500
13	47	D	3.62000	19.78000
14	~530	D	5.43667	28.33000
15	~515	D	5.35333	32.65000
16	121	D	4.37000	33.31000
17	~643	D	14.37000	3.37500
18	36	D	14.37000	6.75000
19	~640	D	14.37000	9.90000
20	~637	D	14.37000	16.41500
21	49	D	14.37000	19.78000
22	~532	D	10.14500	28.33000
23	10	D	8.32000	32.65000
24	~452	D	14.37000	37.16000
25	~578	D	17.40200	6.75000
26	~578	D	17.40200	6.75000
27	~686	D	17.40200	13.05000
28	~686	D	17.40200	13.05000
29	~682	D	17.40200	19.78000
30	~551	D	17.40200	25.50000
31	~521	D	17.40200	32.65000
32	~505	D	17.35200	38.00000
33	~658	D	21.45000	2.75000
34	41	D	21.45000	6.75000
35	51	D	21.45000	13.05000
36	~653	D	21.45000	17.59750
37	~649	D	21.45000	22.64000
38	26	D	21.45000	25.50000

**Table 23: Nodal Displacements - Summary, Part 2 of 2**

Panel	Node	OutputCase	GlobalX m	GlobalY m
39	12	D	21.45000	32.65000
40	~646	D	21.45000	35.99000
44	53	D	30.85000	19.78000
45	~671	D	30.85000	22.64000
46	28	D	30.85000	25.50000
47	14	D	30.85000	32.65000
48	~662	D	26.27000	35.99000
52	~700	D	33.75000	19.78000
53	~679	D	35.45000	22.55000
54	~559	D	33.75000	25.50000
55	~528	D	32.71667	32.65000
56	~668	D	30.85000	35.99000
1	33	L	0.00000	6.75000
2	33	L	0.00000	6.75000
3	55	L	0.00000	8.25000
4	30	L	3.62000	13.05000
5	23	L	3.62000	25.50000
6	16	L	3.62000	28.33000
7	16	L	3.62000	28.33000
8	1	L	3.62000	38.00000
9	34	L	3.62000	6.75000
10	34	L	3.62000	6.75000
11	56	L	3.62000	8.25000
12	30	L	3.62000	13.05000
13	23	L	3.62000	25.50000
14	16	L	3.62000	28.33000
15	16	L	3.62000	28.33000
16	1	L	3.62000	38.00000
17	35	L	8.32000	6.75000
18	35	L	8.32000	6.75000
19	~624	L	8.32000	8.82500
20	31	L	8.32000	13.05000
21	24	L	8.32000	25.50000
22	17	L	8.32000	28.33000
23	10	L	8.32000	32.65000
24	2	L	8.32000	38.00000
25	36	L	14.37000	6.75000
26	36	L	14.37000	6.75000
27	~639	L	14.37000	8.82500
28	32	L	14.37000	13.05000
29	25	L	14.37000	25.50000
30	18	L	14.37000	28.33000
31	18	L	14.37000	28.33000
32	3	L	14.37000	38.00000
33	41	L	21.45000	6.75000
34	41	L	21.45000	6.75000
35	51	L	21.45000	13.05000
36	51	L	21.45000	13.05000
37	26	L	21.45000	25.50000
38	19	L	21.45000	28.33000
39	19	L	21.45000	28.33000
40	4	L	21.45000	38.00000
44	203	L	29.85000	18.78000
45	27	L	26.27000	25.50000

**Table 23: Nodal Displacements - Summary, Part 2 of 2**

Panel	Node	OutputCase	GlobalX m	GlobalY m
46	20	L	26.27000	28.33000
47	13	L	26.27000	32.65000
48	5	L	26.27000	38.00000
52	204	L	31.85000	18.78000
53	28	L	30.85000	25.50000
54	21	L	30.85000	28.33000
55	21	L	30.85000	28.33000
56	6	L	30.85000	38.00000
1	33	Lr	0.00000	6.75000
2	33	Lr	0.00000	6.75000
3	55	Lr	0.00000	8.25000
4	30	Lr	3.62000	13.05000
5	23	Lr	3.62000	25.50000
6	16	Lr	3.62000	28.33000
7	16	Lr	3.62000	28.33000
8	1	Lr	3.62000	38.00000
9	34	Lr	3.62000	6.75000
10	34	Lr	3.62000	6.75000
11	56	Lr	3.62000	8.25000
12	30	Lr	3.62000	13.05000
13	23	Lr	3.62000	25.50000
14	16	Lr	3.62000	28.33000
15	16	Lr	3.62000	28.33000
16	1	Lr	3.62000	38.00000
17	35	Lr	8.32000	6.75000
18	35	Lr	8.32000	6.75000
19	~624	Lr	8.32000	8.82500
20	31	Lr	8.32000	13.05000
21	24	Lr	8.32000	25.50000
22	17	Lr	8.32000	28.33000
23	10	Lr	8.32000	32.65000
24	2	Lr	8.32000	38.00000
25	36	Lr	14.37000	6.75000
26	36	Lr	14.37000	6.75000
27	~639	Lr	14.37000	8.82500
28	32	Lr	14.37000	13.05000
29	25	Lr	14.37000	25.50000
30	18	Lr	14.37000	28.33000
31	18	Lr	14.37000	28.33000
32	3	Lr	14.37000	38.00000
33	41	Lr	21.45000	6.75000
34	41	Lr	21.45000	6.75000
35	51	Lr	21.45000	13.05000
36	51	Lr	21.45000	13.05000
37	26	Lr	21.45000	25.50000
38	19	Lr	21.45000	28.33000
39	19	Lr	21.45000	28.33000
40	4	Lr	21.45000	38.00000
44	203	Lr	29.85000	18.78000
45	27	Lr	26.27000	25.50000
46	20	Lr	26.27000	28.33000
47	13	Lr	26.27000	32.65000
48	5	Lr	26.27000	38.00000
52	204	Lr	31.85000	18.78000

**Table 23: Nodal Displacements - Summary, Part 2 of 2**

Panel	Node	OutputCase	GlobalX m	GlobalY m
53	28	Lr	30.85000	25.50000
54	21	Lr	30.85000	28.33000
55	21	Lr	30.85000	28.33000
56	6	Lr	30.85000	38.00000
1	33	Ex	0.00000	6.75000
2	33	Ex	0.00000	6.75000
3	55	Ex	0.00000	8.25000
4	30	Ex	3.62000	13.05000
5	23	Ex	3.62000	25.50000
6	16	Ex	3.62000	28.33000
7	16	Ex	3.62000	28.33000
8	1	Ex	3.62000	38.00000
9	34	Ex	3.62000	6.75000
10	34	Ex	3.62000	6.75000
11	56	Ex	3.62000	8.25000
12	30	Ex	3.62000	13.05000
13	23	Ex	3.62000	25.50000
14	16	Ex	3.62000	28.33000
15	16	Ex	3.62000	28.33000
16	1	Ex	3.62000	38.00000
17	35	Ex	8.32000	6.75000
18	35	Ex	8.32000	6.75000
19	-624	Ex	8.32000	8.82500
20	31	Ex	8.32000	13.05000
21	24	Ex	8.32000	25.50000
22	17	Ex	8.32000	28.33000
23	10	Ex	8.32000	32.65000
24	2	Ex	8.32000	38.00000
25	36	Ex	14.37000	6.75000
26	36	Ex	14.37000	6.75000
27	-639	Ex	14.37000	8.82500
28	32	Ex	14.37000	13.05000
29	25	Ex	14.37000	25.50000
30	18	Ex	14.37000	28.33000
31	18	Ex	14.37000	28.33000
32	3	Ex	14.37000	38.00000
33	41	Ex	21.45000	6.75000
34	41	Ex	21.45000	6.75000
35	51	Ex	21.45000	13.05000
36	51	Ex	21.45000	13.05000
37	26	Ex	21.45000	25.50000
38	19	Ex	21.45000	28.33000
39	19	Ex	21.45000	28.33000
40	4	Ex	21.45000	38.00000
44	203	Ex	29.85000	18.78000
45	27	Ex	26.27000	25.50000
46	20	Ex	26.27000	28.33000
47	13	Ex	26.27000	32.65000
48	5	Ex	26.27000	38.00000
52	204	Ex	31.85000	18.78000
53	28	Ex	30.85000	25.50000
54	21	Ex	30.85000	28.33000
55	21	Ex	30.85000	28.33000
56	6	Ex	30.85000	38.00000

**Table 23: Nodal Displacements - Summary, Part 2 of 2**

Panel	Node	OutputCase	GlobalX m	GlobalY m
1	33	Ey	0.00000	6.75000
2	33	Ey	0.00000	6.75000
3	55	Ey	0.00000	8.25000
4	30	Ey	3.62000	13.05000
5	23	Ey	3.62000	25.50000
6	16	Ey	3.62000	28.33000
7	16	Ey	3.62000	28.33000
8	1	Ey	3.62000	38.00000
9	34	Ey	3.62000	6.75000
10	34	Ey	3.62000	6.75000
11	56	Ey	3.62000	8.25000
12	30	Ey	3.62000	13.05000
13	23	Ey	3.62000	25.50000
14	16	Ey	3.62000	28.33000
15	16	Ey	3.62000	28.33000
16	1	Ey	3.62000	38.00000
17	35	Ey	8.32000	6.75000
18	35	Ey	8.32000	6.75000
19	-624	Ey	8.32000	8.82500
20	31	Ey	8.32000	13.05000
21	24	Ey	8.32000	25.50000
22	17	Ey	8.32000	28.33000
23	10	Ey	8.32000	32.65000
24	2	Ey	8.32000	38.00000
25	36	Ey	14.37000	6.75000
26	36	Ey	14.37000	6.75000
27	-639	Ey	14.37000	8.82500
28	32	Ey	14.37000	13.05000
29	25	Ey	14.37000	25.50000
30	18	Ey	14.37000	28.33000
31	18	Ey	14.37000	28.33000
32	3	Ey	14.37000	38.00000
33	41	Ey	21.45000	6.75000
34	41	Ey	21.45000	6.75000
35	51	Ey	21.45000	13.05000
36	51	Ey	21.45000	13.05000
37	26	Ey	21.45000	25.50000
38	19	Ey	21.45000	28.33000
39	19	Ey	21.45000	28.33000
40	4	Ey	21.45000	38.00000
44	203	Ey	29.85000	18.78000
45	27	Ey	26.27000	25.50000
46	20	Ey	26.27000	28.33000
47	13	Ey	26.27000	32.65000
48	5	Ey	26.27000	38.00000
52	204	Ey	31.85000	18.78000
53	28	Ey	30.85000	25.50000
54	21	Ey	30.85000	28.33000
55	21	Ey	30.85000	28.33000
56	6	Ey	30.85000	38.00000

# Design

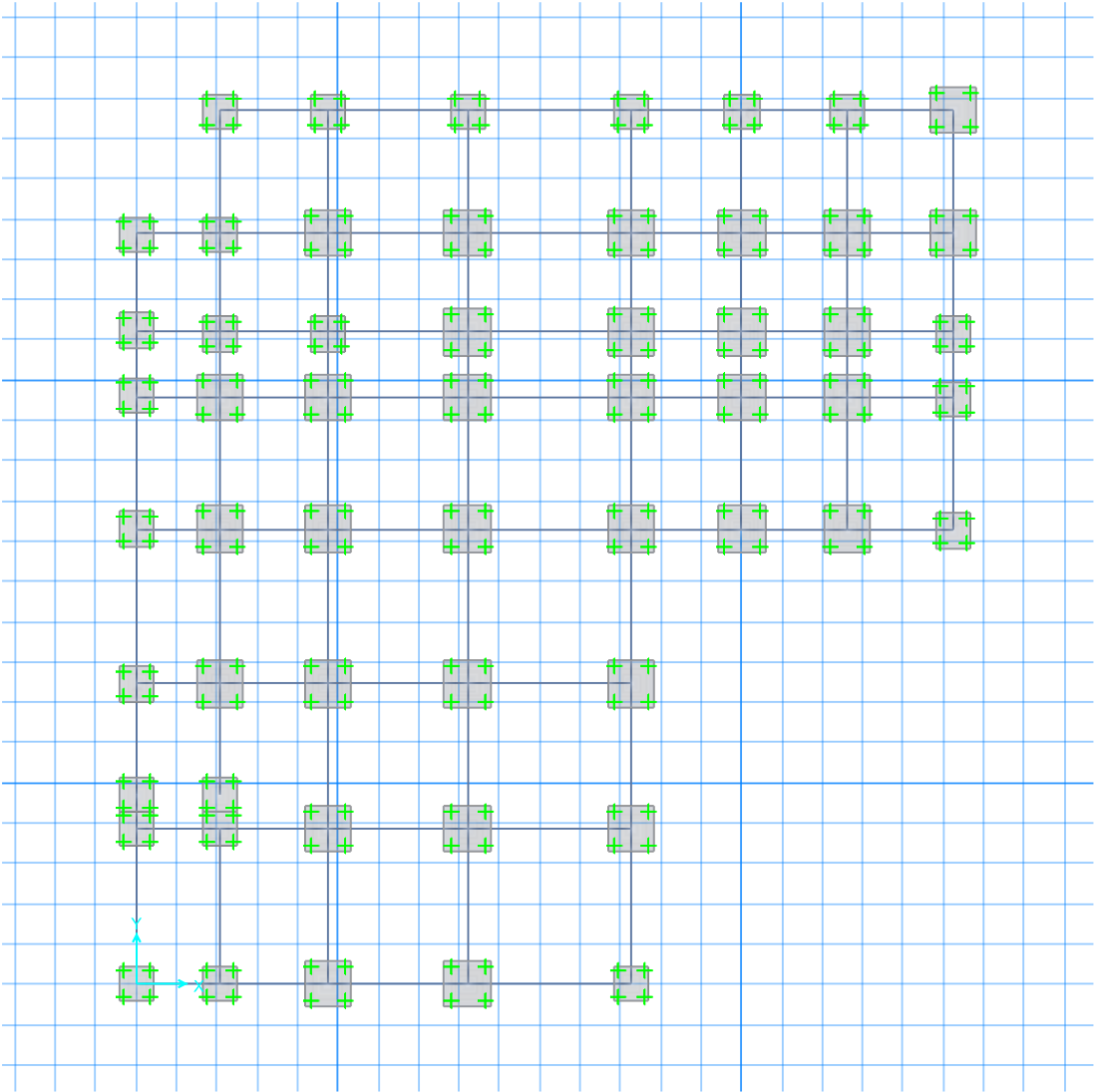


Figure 3: Finite element model

## 6. Design summary

This section provides design information for beams, strips, and punching checks.

### 6.1. Preferences

**Table 24: Design Preferences 01 - Resistance Factors**

Table 24: Design Preferences 01 - Resistance Factors

PhiTen	PhiComp	PhiShear
0.900000	0.650000	0.750000

**Table 25: Design Preferences 02 - Rebar Cover - Slabs**

Table 25: Design Preferences 02 - Rebar Cover - Slabs

CoverTop	CoverBot	BarSize	InnerLayer	PTCGSTop	PTCGSBotE xt	PTCGSBotl nt	SlabType
mm	mm			mm	mm	mm	
15.000	15.000	#6	B	25.000	40.000	25.000	Two Way

**Table 26: Design Preferences 03 - Rebar Cover - Beams**

Table 26: Design Preferences 03 - Rebar Cover - Beams

CoverTop	CoverBot	BarSizeF	BarSizeS	PTCGSTop	PTCGSBot
mm	mm			mm	mm
40.000	40.000	#9	#4	50.000	50.000

**Table 27: Design Preferences 04 - Prestress Data**

Table 27: Design Preferences 04 - Prestress Data

UserStress	InitConcRat	LLFraction
No	0.800000	0.500000

### 6.2. Overwrites

**Table 28: Slab Design Overwrites 01 - Strip Based**

Table 28: Slab Design Overwrites 01 - Strip Based

Strip	Layer	DesignType	RLLF	IgnorePT	RebarMat
SA1	A	Column	1.000000	No	CSA-G30.18Gr4 00
SA2	A	Middle	1.000000	No	CSA-G30.18Gr4 00

**Table 28: Slab Design Overwrites 01 - Strip Based**

Strip	Layer	DesignType	RLLF	IgnorePT	RebarMat
SA3	A	Column	1.000000	No	CSA-G30.18Gr4 00
SA4	A	Middle	1.000000	No	CSA-G30.18Gr4 00
SA5	A	Column	1.000000	No	CSA-G30.18Gr4 00
SA6	A	Middle	1.000000	No	CSA-G30.18Gr4 00
SA7	A	Column	1.000000	No	CSA-G30.18Gr4 00
SA8	A	Middle	1.000000	No	CSA-G30.18Gr4 00
SA9	A	Column	1.000000	No	CSA-G30.18Gr4 00
SB1	B	Column	1.000000	No	CSA-G30.18Gr4 00
SB2	B	Middle	1.000000	No	CSA-G30.18Gr4 00
SB3	B	Column	1.000000	No	CSA-G30.18Gr4 00
SB4	B	Middle	1.000000	No	CSA-G30.18Gr4 00
SB5	B	Column	1.000000	No	CSA-G30.18Gr4 00
SB6	B	Middle	1.000000	No	CSA-G30.18Gr4 00
SB7	B	Column	1.000000	No	CSA-G30.18Gr4 00
SB8	B	Middle	1.000000	No	CSA-G30.18Gr4 00
SB9	B	Column	1.000000	No	CSA-G30.18Gr4 00
SA10	A	Middle	1.000000	No	CSA-G30.18Gr4 00
SA11	A	Column	1.000000	No	CSA-G30.18Gr4 00
SA12	A	Middle	1.000000	No	CSA-G30.18Gr4 00
SA13	A	Column	1.000000	No	CSA-G30.18Gr4 00
SA14	A	Middle	1.000000	No	CSA-G30.18Gr4 00
SA15	A	Column	1.000000	No	CSA-G30.18Gr4 00
SA16	A	Middle	1.000000	No	CSA-G30.18Gr4 00
SA17	A	Column	1.000000	No	CSA-G30.18Gr4 00
SB10	B	Middle	1.000000	No	CSA-G30.18Gr4 00
SB11	B	Column	1.000000	No	CSA-G30.18Gr4 00
SB12	B	Middle	1.000000	No	CSA-G30.18Gr4 00
SB13	B	Column	1.000000	No	CSA-G30.18Gr4 00
SB14	B	Middle	1.000000	No	CSA-G30.18Gr4 00

**Table 28: Slab Design Overwrites 01 - Strip Based**

Strip	Layer	DesignType	RLLF	IgnorePT	RebarMat
SB15	B	Column	1.000000	No	CSA-G30.18Gr400

**Table 29: Slab Design Overwrites 02 - Finite Element Based, Part 1 of 2**

**Table 29: Slab Design Overwrites 02 - Finite Element Based, Part 1 of 2**

Area	RebarMat
F49	CSA-G30.18Gr400
F50	CSA-G30.18Gr400
F51	CSA-G30.18Gr400
F52	CSA-G30.18Gr400
F53	CSA-G30.18Gr400
F67	CSA-G30.18Gr400
F68	CSA-G30.18Gr400
F69	CSA-G30.18Gr400
F70	CSA-G30.18Gr400
F71	CSA-G30.18Gr400
F73	CSA-G30.18Gr400
F74	CSA-G30.18Gr400
F75	CSA-G30.18Gr400
F76	CSA-G30.18Gr400
F77	CSA-G30.18Gr400
F80	CSA-G30.18Gr400
F81	CSA-G30.18Gr400
F82	CSA-G30.18Gr400
F83	CSA-G30.18Gr400
F84	CSA-G30.18Gr400
F85	CSA-G30.18Gr400
F86	CSA-G30.18Gr400
F87	CSA-G30.18Gr400
F88	CSA-G30.18Gr400
F89	CSA-G30.18Gr400
F90	CSA-G30.18Gr400
F91	CSA-G30.18Gr400
F92	CSA-G30.18Gr400
F93	CSA-G30.18Gr400
F94	CSA-G30.18Gr400
F95	CSA-G30.18Gr400
F96	CSA-G30.18Gr400
F97	CSA-G30.18Gr400
F98	CSA-G30.18Gr400
F99	CSA-G30.18Gr400
F100	CSA-G30.18Gr400
F101	CSA-G30.18Gr400
F102	CSA-G30.18Gr400
F103	CSA-G30.18Gr400
F104	CSA-G30.18Gr400
F105	CSA-G30.18Gr400
F106	CSA-G30.18Gr400
F107	CSA-G30.18Gr400
F108	CSA-G30.18Gr400

**Table 29: Slab Design Overwrites 02 - Finite Element Based, Part 1 of 2**

Area	RebarMat
F109	CSA-G30.18Gr400
F110	CSA-G30.18Gr400
F111	CSA-G30.18Gr400
F112	CSA-G30.18Gr400
F113	CSA-G30.18Gr400
F114	CSA-G30.18Gr400
F115	CSA-G30.18Gr400
F116	CSA-G30.18Gr400
F117	CSA-G30.18Gr400
F119	CSA-G30.18Gr400
F120	CSA-G30.18Gr400
F121	CSA-G30.18Gr400

**Table 29: Slab Design Overwrites 02 - Finite Element Based, Part 2 of 2**

**Table 29: Slab Design Overwrites 02 - Finite Element Based, Part 2 of 2**

Area	RLLF	Design	IgnorePT
F49	1.000000	Yes	No
F50	1.000000	Yes	No
F51	1.000000	Yes	No
F52	1.000000	Yes	No
F53	1.000000	Yes	No
F67	1.000000	Yes	No
F68	1.000000	Yes	No
F69	1.000000	Yes	No
F70	1.000000	Yes	No
F71	1.000000	Yes	No
F73	1.000000	Yes	No
F74	1.000000	Yes	No
F75	1.000000	Yes	No
F76	1.000000	Yes	No
F77	1.000000	Yes	No
F80	1.000000	Yes	No
F81	1.000000	Yes	No
F82	1.000000	Yes	No
F83	1.000000	Yes	No
F84	1.000000	Yes	No
F85	1.000000	Yes	No
F86	1.000000	Yes	No
F87	1.000000	Yes	No
F88	1.000000	Yes	No
F89	1.000000	Yes	No
F90	1.000000	Yes	No
F91	1.000000	Yes	No
F92	1.000000	Yes	No
F93	1.000000	Yes	No
F94	1.000000	Yes	No
F95	1.000000	Yes	No
F96	1.000000	Yes	No
F97	1.000000	Yes	No
F98	1.000000	Yes	No

**Table 29: Slab Design Overwrites 02 - Finite Element Based, Part 2 of 2**

Area	RLLF	Design	IgnorePT
F99	1.000000	Yes	No
F100	1.000000	Yes	No
F101	1.000000	Yes	No
F102	1.000000	Yes	No
F103	1.000000	Yes	No
F104	1.000000	Yes	No
F105	1.000000	Yes	No
F106	1.000000	Yes	No
F107	1.000000	Yes	No
F108	1.000000	Yes	No
F109	1.000000	Yes	No
F110	1.000000	Yes	No
F111	1.000000	Yes	No
F112	1.000000	Yes	No
F113	1.000000	Yes	No
F114	1.000000	Yes	No
F115	1.000000	Yes	No
F116	1.000000	Yes	No
F117	1.000000	Yes	No
F119	1.000000	Yes	No
F120	1.000000	Yes	No
F121	1.000000	Yes	No

**Table 30: Beam Design Overwrites**

**Table 30: Beam Design Overwrites**

Line	CoverType	RLLF	IgnorePT
B1	Section	1.000000	No
B2	Section	1.000000	No
B3	Section	1.000000	No
B4	Section	1.000000	No
B7	Section	1.000000	No
B14	Section	1.000000	No
B15	Section	1.000000	No
B16	Section	1.000000	No
B17	Section	1.000000	No
B18	Section	1.000000	No
B19	Section	1.000000	No
B20	Section	1.000000	No
B22	Section	1.000000	No
B23	Section	1.000000	No
B24	Section	1.000000	No
B25	Section	1.000000	No
B26	Section	1.000000	No
B27	Section	1.000000	No
B28	Section	1.000000	No
B29	Section	1.000000	No
B30	Section	1.000000	No
B31	Section	1.000000	No
B32	Section	1.000000	No
B33	Section	1.000000	No

**Table 30: Beam Design Overwrites**

Line	CoverType	RLLF	IgnorePT
B34	Section	1.000000	No
B35	Section	1.000000	No
B36	Section	1.000000	No
B37	Section	1.000000	No
B38	Section	1.000000	No
B39	Section	1.000000	No
B40	Section	1.000000	No
B41	Section	1.000000	No
B42	Section	1.000000	No
B43	Section	1.000000	No
B44	Section	1.000000	No
B45	Section	1.000000	No
B46	Section	1.000000	No
B47	Section	1.000000	No
B48	Section	1.000000	No
B49	Section	1.000000	No
B50	Section	1.000000	No
B51	Section	1.000000	No
B52	Section	1.000000	No
B53	Section	1.000000	No
B54	Section	1.000000	No
B56	Section	1.000000	No
B57	Section	1.000000	No
B58	Section	1.000000	No
B59	Section	1.000000	No
B60	Section	1.000000	No
B61	Section	1.000000	No
B63	Section	1.000000	No
B64	Section	1.000000	No
B65	Section	1.000000	No
B66	Section	1.000000	No
B67	Section	1.000000	No
B68	Section	1.000000	No
B69	Section	1.000000	No
B70	Section	1.000000	No
B71	Section	1.000000	No
B72	Section	1.000000	No
B73	Section	1.000000	No
B74	Section	1.000000	No
B75	Section	1.000000	No
B76	Section	1.000000	No
B77	Section	1.000000	No
B78	Section	1.000000	No
B79	Section	1.000000	No
B80	Section	1.000000	No
B81	Section	1.000000	No
B82	Section	1.000000	No
B83	Section	1.000000	No
B84	Section	1.000000	No
B85	Section	1.000000	No
B86	Section	1.000000	No
B87	Section	1.000000	No
B88	Section	1.000000	No
B89	Section	1.000000	No

**Table 30: Beam Design Overwrites**

Line	CoverType	RLLF	IgnorePT
B90	Section	1.000000	No
B91	Section	1.000000	No
B92	Section	1.000000	No
B93	Section	1.000000	No
B94	Section	1.000000	No
B95	Section	1.000000	No
B96	Section	1.000000	No
B104	Section	1.000000	No
B108	Section	1.000000	No
B129	Section	1.000000	No
B130	Section	1.000000	No
B131	Section	1.000000	No
B132	Section	1.000000	No
B133	Section	1.000000	No
B134	Section	1.000000	No

### 6.3. Slab design

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 1 of 3**

Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 1 of 3

Strip	SpanID	Location	FTopCombo	FTopMomen t kN-m	FTopArea mm2
SA1	Span 1	Start		0.0000	0.000
SA1	Span 1	Middle		0.0000	0.000
SA1	Span 1	End	Comb1	-11.3614	66.427
SA1	Span 2	Start	Comb1	-12.0201	70.281
SA1	Span 2	Middle		0.0000	0.000
SA1	Span 2	End	Comb1	-21.8338	127.748
SA1	Span 3	Start	Comb1	-20.8321	121.879
SA1	Span 3	Middle		0.0000	0.000
SA1	Span 3	End		0.0000	0.000
SA1	Span 4	Start	Comb1	-0.6019	0.000
SA1	Span 4	Middle		0.0000	0.000
SA1	Span 4	End		0.0000	0.000
SA1	Span 5	Start		0.0000	0.000
SA1	Span 5	Middle		0.0000	0.000
SA1	Span 5	End		0.0000	0.000
SA1	Span 6	Start		0.0000	0.000
SA1	Span 6	Middle		0.0000	0.000
SA1	Span 6	End		0.0000	0.000
SA2	Span 1	Start		0.0000	0.000
SA2	Span 1	Middle		0.0000	0.000
SA2	Span 1	End		0.0000	0.000
SA2	Span 2	Start		0.0000	0.000
SA2	Span 2	Middle		0.0000	0.000
SA2	Span 2	End		0.0000	0.000
SA2	Span 3	Start		0.0000	0.000
SA2	Span 3	Middle		0.0000	0.000
SA2	Span 3	End		0.0000	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 1 of 3**

Strip	SpanID	Location	FTopCombo	FTopMoment kN-m	FTopArea mm2
SA2	Span 4	Start		0.0000	0.000
SA2	Span 4	Middle		0.0000	0.000
SA2	Span 4	End		0.0000	0.000
SA2	Span 5	Start		0.0000	0.000
SA2	Span 5	Middle		0.0000	0.000
SA2	Span 5	End		0.0000	0.000
SA2	Span 6	Start		0.0000	0.000
SA2	Span 6	Middle		0.0000	0.000
SA2	Span 6	End		0.0000	0.000
SA2	Span 7	Start		0.0000	0.000
SA2	Span 7	Middle		0.0000	0.000
SA2	Span 7	End		0.0000	0.000
SA3	Span 1	Start	Comb1	-5.2666	30.788
SA3	Span 1	Middle		0.0000	0.000
SA3	Span 1	End	Comb1	-10.7191	62.690
SA3	Span 2	Start	Comb1	-11.0766	64.782
SA3	Span 2	Middle		0.0000	0.000
SA3	Span 2	End	Comb1	-19.4929	114.103
SA3	Span 3	Start	Comb1	-18.3396	107.340
SA3	Span 3	Middle		0.0000	0.000
SA3	Span 3	End		0.0000	0.000
SA3	Span 4	Start	Comb1	-6.1051	35.689
SA3	Span 4	Middle		0.0000	0.000
SA3	Span 4	End		0.0000	0.000
SA3	Span 5	Start		0.0000	0.000
SA3	Span 5	Middle		0.0000	0.000
SA3	Span 5	End		0.0000	0.000
SA3	Span 6	Start		0.0000	0.000
SA3	Span 6	Middle		0.0000	0.000
SA3	Span 6	End		0.0000	0.000
SA4	Span 1	Start	Comb1	-8.7842	51.351
SA4	Span 1	Middle		0.0000	0.000
SA4	Span 1	End	Comb1	-14.9712	87.556
SA4	Span 2	Start	Comb1	-15.2812	89.372
SA4	Span 2	Middle		0.0000	0.000
SA4	Span 2	End	Comb1	-27.1110	158.692
SA4	Span 3	Start	Comb1	-25.7089	150.469
SA4	Span 3	Middle		0.0000	0.000
SA4	Span 3	End		0.0000	0.000
SA4	Span 4	Start	Comb1	-7.9783	46.637
SA4	Span 4	Middle		0.0000	0.000
SA4	Span 4	End		0.0000	0.000
SA4	Span 5	Start		0.0000	0.000
SA4	Span 5	Middle		0.0000	0.000
SA4	Span 5	End		0.0000	0.000
SA4	Span 6	Start		0.0000	0.000
SA4	Span 6	Middle		0.0000	0.000
SA4	Span 6	End		0.0000	0.000
SA5	Span 1	Start	Comb1	-4.7944	28.026
SA5	Span 1	Middle		0.0000	0.000
SA5	Span 1	End		0.0000	0.000
SA5	Span 2	Start		0.0000	0.000
SA5	Span 2	Middle		0.0000	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 1 of 3**

Strip	SpanID	Location	FTopCombo	FTopMoment kN-m	FTopArea mm2
SA5	Span 2	End		0.0000	0.000
SA5	Span 3	Start		0.0000	0.000
SA5	Span 3	Middle		0.0000	0.000
SA5	Span 3	End		0.0000	0.000
SA5	Span 4	Start		0.0000	0.000
SA5	Span 4	Middle		0.0000	0.000
SA5	Span 4	End		0.0000	0.000
SA5	Span 5	Start		0.0000	0.000
SA5	Span 5	Middle		0.0000	0.000
SA5	Span 5	End		0.0000	0.000
SA5	Span 6	Start		0.0000	0.000
SA5	Span 6	Middle		0.0000	0.000
SA5	Span 6	End		0.0000	0.000
SA6	Span 1	Start		0.0000	0.000
SA6	Span 1	Middle		0.0000	0.000
SA6	Span 1	End		0.0000	0.000
SA6	Span 2	Start		0.0000	0.000
SA6	Span 2	Middle		0.0000	0.000
SA6	Span 2	End		0.0000	0.000
SA6	Span 3	Start		0.0000	0.000
SA6	Span 3	Middle		0.0000	0.000
SA6	Span 3	End		0.0000	0.000
SA6	Span 4	Start		0.0000	0.000
SA6	Span 4	Middle		0.0000	0.000
SA6	Span 4	End		0.0000	0.000
SA6	Span 5	Start		0.0000	0.000
SA6	Span 5	Middle		0.0000	0.000
SA6	Span 5	End		0.0000	0.000
SA6	Span 6	Start		0.0000	0.000
SA6	Span 6	Middle		0.0000	0.000
SA6	Span 6	End		0.0000	0.000
SA6	Span 7	Start		0.0000	0.000
SA6	Span 7	Middle		0.0000	0.000
SA6	Span 7	End		0.0000	0.000
SA7	Span 1	Start	Comb1	-12.9733	75.860
SA7	Span 1	Middle		0.0000	0.000
SA7	Span 1	End	Comb1	-13.1602	76.953
SA7	Span 2	Start	Comb1	-12.4186	72.613
SA7	Span 2	Middle		0.0000	0.000
SA7	Span 2	End	Comb1	-26.4655	154.897
SA7	Span 3	Start	Comb1	-25.2095	147.533
SA7	Span 3	Middle		0.0000	0.000
SA7	Span 3	End		0.0000	0.000
SA7	Span 4	Start		0.0000	0.000
SA7	Span 4	Middle		0.0000	0.000
SA7	Span 4	End		0.0000	0.000
SA7	Span 5	Start		0.0000	0.000
SA7	Span 5	Middle		0.0000	0.000
SA7	Span 5	End		0.0000	0.000
SA7	Span 6	Start		0.0000	0.000
SA7	Span 6	Middle		0.0000	0.000
SA7	Span 6	End		0.0000	0.000
SA8	Span 1	Start		0.0000	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 1 of 3**

Strip	SpanID	Location	FTopCombo	FTopMomen t kN-m	FTopArea mm2
SA8	Span 1	Middle		0.0000	0.000
SA8	Span 1	End		0.0000	0.000
SA8	Span 2	Start		0.0000	0.000
SA8	Span 2	Middle		0.0000	0.000
SA8	Span 2	End		0.0000	0.000
SA8	Span 3	Start		0.0000	0.000
SA8	Span 3	Middle		0.0000	0.000
SA8	Span 3	End		0.0000	0.000
SA8	Span 4	Start		0.0000	0.000
SA8	Span 4	Middle		0.0000	0.000
SA8	Span 4	End		0.0000	0.000
SA8	Span 5	Start		0.0000	0.000
SA8	Span 5	Middle		0.0000	0.000
SA8	Span 5	End		0.0000	0.000
SA8	Span 6	Start		0.0000	0.000
SA8	Span 6	Middle		0.0000	0.000
SA8	Span 6	End		0.0000	0.000
SA8	Span 7	Start		0.0000	0.000
SA8	Span 7	Middle		0.0000	0.000
SA8	Span 7	End		0.0000	0.000
SA9	Span 1	Start	Comb1	-15.2184	89.001
SA9	Span 1	Middle		0.0000	0.000
SA9	Span 1	End	Comb1	-15.1653	88.690
SA9	Span 2	Start	Comb1	-13.7088	80.164
SA9	Span 2	Middle		0.0000	0.000
SA9	Span 2	End	Comb1	-23.3665	136.730
SA9	Span 3	Start	Comb1	-22.9092	134.050
SA9	Span 3	Middle		0.0000	0.000
SA9	Span 3	End	Comb1	-13.9581	81.623
SA9	Span 4	Start	Comb1	-15.3045	89.505
SA9	Span 4	Middle		0.0000	0.000
SA9	Span 4	End	Comb1	-10.1859	59.549
SA9	Span 5	Start	Comb1	-8.4902	49.630
SA9	Span 5	Middle		0.0000	0.000
SA9	Span 5	End		0.0000	0.000
SA9	Span 6	Start	Comb1	-4.5120	0.000
SA9	Span 6	Middle		0.0000	0.000
SA9	Span 6	End		0.0000	0.000
SB1	Span 1	Start		0.0000	0.000
SB1	Span 1	Middle		0.0000	0.000
SB1	Span 1	End	Comb1	-19.9920	121.913
SB1	Span 2	Start	Comb1	-19.9920	121.913
SB1	Span 2	Middle	Comb1	-26.3178	160.591
SB1	Span 2	End	Comb1	-26.6003	162.319
SB1	Span 3	Start	Comb1	-26.6003	162.319
SB1	Span 3	Middle		0.0000	0.000
SB1	Span 3	End	Comb1	-10.7407	65.438
SB1	Span 4	Start	Comb1	-9.8046	59.729
SB1	Span 4	Middle		0.0000	0.000
SB1	Span 4	End	Comb1	-14.9812	91.311
SB1	Span 5	Start	Comb1	-14.9812	91.311
SB1	Span 5	Middle		0.0000	0.000
SB1	Span 5	End	Comb1	-8.9774	54.685

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 1 of 3**

Strip	SpanID	Location	FTopCombo	FTopMoment kN-m	FTopArea mm2
SB1	Span 6	Start	Comb1	-8.9774	54.685
SB1	Span 6	Middle	Comb1	-9.8617	60.077
SB1	Span 6	End	Comb1	-7.2480	44.143
SB1	Span 7	Start	Comb1	-3.9414	0.000
SB1	Span 7	Middle		0.0000	0.000
SB1	Span 7	End		0.0000	0.000
SB1	Span 8	Start	Comb1	-0.3751	0.000
SB1	Span 8	Middle		0.0000	0.000
SB1	Span 8	End		0.0000	0.000
SB2	Span 1	Start		0.0000	0.000
SB2	Span 1	Middle		0.0000	0.000
SB2	Span 1	End		0.0000	0.000
SB2	Span 2	Start		0.0000	0.000
SB2	Span 2	Middle		0.0000	0.000
SB2	Span 2	End		0.0000	0.000
SB2	Span 3	Start		0.0000	0.000
SB2	Span 3	Middle		0.0000	0.000
SB2	Span 3	End		0.0000	0.000
SB2	Span 4	Start	Comb1	-0.0230	0.000
SB2	Span 4	Middle		0.0000	0.000
SB2	Span 4	End		0.0000	0.000
SB2	Span 5	Start	Comb1	-0.2992	0.000
SB2	Span 5	Middle		0.0000	0.000
SB2	Span 5	End		0.0000	0.000
SB2	Span 6	Start	Comb1	-0.2189	0.000
SB2	Span 6	Middle	Comb1	-0.8437	5.141
SB2	Span 6	End		0.0000	0.000
SB2	Span 7	Start		0.0000	0.000
SB2	Span 7	Middle		0.0000	0.000
SB2	Span 7	End		0.0000	0.000
SB2	Span 8	Start		0.0000	0.000
SB2	Span 8	Middle		0.0000	0.000
SB2	Span 8	End		0.0000	0.000
SB3	Span 1	Start		0.0000	0.000
SB3	Span 1	Middle		0.0000	0.000
SB3	Span 1	End	Comb1	-18.6675	113.822
SB3	Span 2	Start	Comb1	-18.6675	113.822
SB3	Span 2	Middle	Comb1	-36.4936	222.911
SB3	Span 2	End	Comb1	-36.6876	224.100
SB3	Span 3	Start	Comb1	-36.6876	224.100
SB3	Span 3	Middle		0.0000	0.000
SB3	Span 3	End	Comb1	-13.3218	81.161
SB3	Span 4	Start	Comb1	-8.6746	52.829
SB3	Span 4	Middle		0.0000	0.000
SB3	Span 4	End	Comb1	-15.4558	94.178
SB3	Span 5	Start	Comb1	-17.2234	104.963
SB3	Span 5	Middle		0.0000	0.000
SB3	Span 5	End	Comb1	-13.0148	79.288
SB3	Span 6	Start	Comb1	-9.0941	55.386
SB3	Span 6	Middle	Comb1	-17.9446	109.364
SB3	Span 6	End	Comb1	-1.0613	0.000
SB3	Span 7	Start	Comb1	-1.0613	0.000
SB3	Span 7	Middle		0.0000	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 1 of 3**

Strip	SpanID	Location	FTopCombo	FTopMoment kN-m	FTopArea mm2
SB3	Span 7	End		0.0000	0.000
SB3	Span 8	Start	Comb1	-1.7339	0.000
SB3	Span 8	Middle		0.0000	0.000
SB3	Span 8	End		0.0000	0.000
SB4	Span 1	Start		0.0000	0.000
SB4	Span 1	Middle		0.0000	0.000
SB4	Span 1	End		0.0000	0.000
SB4	Span 2	Start		0.0000	0.000
SB4	Span 2	Middle		0.0000	0.000
SB4	Span 2	End		0.0000	0.000
SB4	Span 3	Start		0.0000	0.000
SB4	Span 3	Middle		0.0000	0.000
SB4	Span 3	End		0.0000	0.000
SB4	Span 4	Start		0.0000	0.000
SB4	Span 4	Middle		0.0000	0.000
SB4	Span 4	End		0.0000	0.000
SB4	Span 5	Start		0.0000	0.000
SB4	Span 5	Middle		0.0000	0.000
SB4	Span 5	End		0.0000	0.000
SB4	Span 6	Start		0.0000	0.000
SB4	Span 6	Middle		0.0000	0.000
SB4	Span 6	End		0.0000	0.000
SB4	Span 7	Start		0.0000	0.000
SB4	Span 7	Middle		0.0000	0.000
SB4	Span 7	End		0.0000	0.000
SB4	Span 8	Start		0.0000	0.000
SB4	Span 8	Middle		0.0000	0.000
SB4	Span 8	End		0.0000	0.000
SB5	Span 1	Start		0.0000	0.000
SB5	Span 1	Middle		0.0000	0.000
SB5	Span 1	End	Comb1	-19.0667	116.205
SB5	Span 2	Start	Comb1	-14.4531	88.056
SB5	Span 2	Middle	Comb1	-21.6446	131.942
SB5	Span 2	End		0.0000	0.000
SB5	Span 3	Start		0.0000	0.000
SB5	Span 3	Middle		0.0000	0.000
SB5	Span 3	End	Comb1	-18.0791	110.178
SB5	Span 4	Start	Comb1	-16.6832	101.660
SB5	Span 4	Middle		0.0000	0.000
SB5	Span 4	End	Comb1	-15.7025	95.677
SB5	Span 5	Start	Comb1	-16.9473	103.271
SB5	Span 5	Middle		0.0000	0.000
SB5	Span 5	End	Comb1	-13.6544	83.185
SB5	Span 6	Start	Comb1	-7.6861	46.804
SB5	Span 6	Middle	Comb1	-16.3113	99.391
SB5	Span 6	End		0.0000	0.000
SB5	Span 7	Start		0.0000	0.000
SB5	Span 7	Middle		0.0000	0.000
SB5	Span 7	End	Comb1	-19.2321	117.214
SB5	Span 8	Start	Comb1	-19.3113	117.698
SB5	Span 8	Middle		0.0000	0.000
SB5	Span 8	End		0.0000	0.000
SB6	Span 1	Start		0.0000	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 1 of 3**

Strip	SpanID	Location	FTopCombo	FTopMomen	FTopArea
				t	mm2
				kN-m	
SB6	Span 1	Middle		0.0000	0.000
SB6	Span 1	End		0.0000	0.000
SB6	Span 2	Start		0.0000	0.000
SB6	Span 2	Middle		0.0000	0.000
SB6	Span 2	End		0.0000	0.000
SB6	Span 3	Start		0.0000	0.000
SB6	Span 3	Middle		0.0000	0.000
SB6	Span 3	End		0.0000	0.000
SB6	Span 4	Start		0.0000	0.000
SB6	Span 4	Middle		0.0000	0.000
SB6	Span 4	End		0.0000	0.000
SB6	Span 5	Start		0.0000	0.000
SB6	Span 5	Middle		0.0000	0.000
SB6	Span 5	End		0.0000	0.000
SB6	Span 6	Start		0.0000	0.000
SB6	Span 6	Middle		0.0000	0.000
SB6	Span 6	End		0.0000	0.000
SB6	Span 7	Start		0.0000	0.000
SB6	Span 7	Middle		0.0000	0.000
SB6	Span 7	End		0.0000	0.000
SB6	Span 8	Start		0.0000	0.000
SB6	Span 8	Middle		0.0000	0.000
SB6	Span 8	End		0.0000	0.000
SB7	Span 1	Start		0.0000	0.000
SB7	Span 1	Middle		0.0000	0.000
SB7	Span 1	End	Comb1	-24.9487	152.121
SB7	Span 2	Start	Comb1	-13.2066	80.454
SB7	Span 2	Middle	Comb1	-26.9871	164.574
SB7	Span 2	End		0.0000	0.000
SB7	Span 3	Start		0.0000	0.000
SB7	Span 3	Middle		0.0000	0.000
SB7	Span 3	End	Comb1	-23.1237	140.974
SB7	Span 4	Start	Comb1	-22.0870	134.643
SB7	Span 4	Middle		0.0000	0.000
SB7	Span 4	End	Comb1	-20.9595	127.759
SB7	Span 5	Start	Comb1	-20.7483	126.469
SB7	Span 5	Middle		0.0000	0.000
SB7	Span 5	End	Comb1	-12.5512	76.458
SB7	Span 6	Start	Comb1	-3.0039	0.000
SB7	Span 6	Middle	Comb1	-18.2724	111.357
SB7	Span 6	End	Comb1	-4.3332	0.000
SB7	Span 7	Start	Comb1	-14.0421	85.550
SB7	Span 7	Middle		0.0000	0.000
SB7	Span 7	End	Comb1	-19.6829	119.965
SB7	Span 8	Start	Comb1	-18.4495	112.438
SB7	Span 8	Middle		0.0000	0.000
SB7	Span 8	End		0.0000	0.000
SB8	Span 1	Start		0.0000	0.000
SB8	Span 1	Middle		0.0000	0.000
SB8	Span 1	End		0.0000	0.000
SB8	Span 2	Start		0.0000	0.000
SB8	Span 2	Middle		0.0000	0.000
SB8	Span 2	End		0.0000	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 1 of 3**

Strip	SpanID	Location	FTopCombo	FTopMomen	FTopArea
				t	mm2
				kN-m	
SB8	Span 3	Start		0.0000	0.000
SB8	Span 3	Middle		0.0000	0.000
SB8	Span 3	End		0.0000	0.000
SB8	Span 4	Start		0.0000	0.000
SB8	Span 4	Middle		0.0000	0.000
SB8	Span 4	End		0.0000	0.000
SB8	Span 5	Start		0.0000	0.000
SB8	Span 5	Middle		0.0000	0.000
SB8	Span 5	End		0.0000	0.000
SB8	Span 6	Start		0.0000	0.000
SB8	Span 6	Middle		0.0000	0.000
SB8	Span 6	End		0.0000	0.000
SB8	Span 7	Start		0.0000	0.000
SB8	Span 7	Middle		0.0000	0.000
SB8	Span 7	End		0.0000	0.000
SB8	Span 8	Start		0.0000	0.000
SB8	Span 8	Middle		0.0000	0.000
SB8	Span 8	End		0.0000	0.000
SB9	Span 1	Start		0.0000	0.000
SB9	Span 1	Middle		0.0000	0.000
SB9	Span 1	End	Comb1	-18.9676	115.600
SB9	Span 2	Start	Comb1	-18.7664	114.372
SB9	Span 2	Middle	Comb1	-20.2724	123.564
SB9	Span 2	End		0.0000	0.000
SB9	Span 3	Start		0.0000	0.000
SB9	Span 3	Middle		0.0000	0.000
SB9	Span 3	End	Comb1	-15.3851	93.741
SB9	Span 4	Start	Comb1	-14.9499	91.086
SB9	Span 4	Middle		0.0000	0.000
SB9	Span 4	End	Comb1	-15.2617	92.988
SB9	Span 5	Start	Comb1	-15.5528	94.764
SB9	Span 5	Middle		0.0000	0.000
SB9	Span 5	End	Comb1	-10.3067	62.774
SB9	Span 6	Start	Comb1	-2.4877	0.000
SB9	Span 6	Middle	Comb1	-17.0519	103.909
SB9	Span 6	End	Comb1	-4.3810	0.000
SB9	Span 7	Start	Comb1	-12.4620	75.914
SB9	Span 7	Middle		0.0000	0.000
SB9	Span 7	End	Comb1	-17.2878	105.349
SB9	Span 8	Start	Comb1	-15.4875	94.365
SB9	Span 8	Middle		0.0000	0.000
SB9	Span 8	End		0.0000	0.000
SA10	Span 1	Start		0.0000	0.000
SA10	Span 1	Middle		0.0000	0.000
SA10	Span 1	End		0.0000	0.000
SA10	Span 2	Start		0.0000	0.000
SA10	Span 2	Middle		0.0000	0.000
SA10	Span 2	End		0.0000	0.000
SA10	Span 3	Start		0.0000	0.000
SA10	Span 3	Middle		0.0000	0.000
SA10	Span 3	End		0.0000	0.000
SA10	Span 4	Start		0.0000	0.000
SA10	Span 4	Middle		0.0000	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 1 of 3**

Strip	SpanID	Location	FTopCombo	FTopMomen	FTopArea
				t	mm2
				kN-m	
SA10	Span 4	End		0.0000	0.000
SA10	Span 5	Start		0.0000	0.000
SA10	Span 5	Middle		0.0000	0.000
SA10	Span 5	End		0.0000	0.000
SA10	Span 6	Start		0.0000	0.000
SA10	Span 6	Middle		0.0000	0.000
SA10	Span 6	End		0.0000	0.000
SA10	Span 7	Start		0.0000	0.000
SA10	Span 7	Middle		0.0000	0.000
SA10	Span 7	End		0.0000	0.000
SA11	Span 1	Start	Comb1	-10.2436	59.894
SA11	Span 1	Middle		0.0000	0.000
SA11	Span 1	End	Comb1	-10.6455	62.246
SA11	Span 2	Start	Comb1	-9.7088	56.765
SA11	Span 2	Middle		0.0000	0.000
SA11	Span 2	End	Comb1	-17.3284	101.376
SA11	Span 3	Start	Comb1	-16.6032	97.128
SA11	Span 3	Middle		0.0000	0.000
SA11	Span 3	End	Comb1	-12.8425	75.105
SA11	Span 4	Start	Comb1	-14.7618	86.343
SA11	Span 4	Middle		0.0000	0.000
SA11	Span 4	End	Comb1	-7.9209	46.304
SA11	Span 5	Start	Comb1	-7.7876	45.525
SA11	Span 5	Middle		0.0000	0.000
SA11	Span 5	End	Comb1	-10.6657	62.364
SA11	Span 6	Start	Comb1	-9.1364	53.415
SA11	Span 6	Middle		0.0000	0.000
SA11	Span 6	End		0.0000	0.000
SA12	Span 1	Start		0.0000	0.000
SA12	Span 1	Middle	Comb1	-5.3046	31.012
SA12	Span 1	End	Comb1	-5.3046	31.012
SA12	Span 2	Start	Comb1	-2.1579	0.000
SA12	Span 2	Middle		0.0000	0.000
SA12	Span 2	End		0.0000	0.000
SA12	Span 3	Start	Comb1	-3.0151	0.000
SA12	Span 3	Middle		0.0000	0.000
SA12	Span 3	End	Comb1	-11.6107	67.914
SA12	Span 4	Start	Comb1	-11.6107	67.914
SA12	Span 4	Middle		0.0000	0.000
SA12	Span 4	End	Comb1	-8.5402	49.938
SA12	Span 5	Start	Comb1	-10.5046	61.437
SA12	Span 5	Middle		0.0000	0.000
SA12	Span 5	End	Comb1	-5.6609	33.092
SA12	Span 6	Start	Comb1	-2.7358	0.000
SA12	Span 6	Middle		0.0000	0.000
SA12	Span 6	End		0.0000	0.000
SA12	Span 7	Start	Comb1	-4.8322	0.000
SA12	Span 7	Middle		0.0000	0.000
SA12	Span 7	End		0.0000	0.000
SA13	Span 1	Start	Comb1	-1.2354	0.000
SA13	Span 1	Middle		0.0000	0.000
SA13	Span 1	End	Comb1	-6.5037	38.020
SA13	Span 2	Start	Comb1	-6.5037	38.020

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 1 of 3**

Strip	SpanID	Location	FTopCombo	FTopMomen t kN-m	FTopArea mm2
SA13	Span 2	Middle		0.0000	0.000
SA13	Span 2	End	Comb1	-18.9085	110.634
SA13	Span 3	Start	Comb1	-17.7968	104.121
SA13	Span 3	Middle		0.0000	0.000
SA13	Span 3	End	Comb1	-11.7522	68.723
SA13	Span 4	Start	Comb1	-13.6253	79.688
SA13	Span 4	Middle		0.0000	0.000
SA13	Span 4	End	Comb1	-8.5550	50.014
SA13	Span 5	Start	Comb1	-8.0712	47.184
SA13	Span 5	Middle		0.0000	0.000
SA13	Span 5	End	Comb1	-9.4831	55.444
SA13	Span 6	Start	Comb1	-7.4015	43.266
SA13	Span 6	Middle		0.0000	0.000
SA13	Span 6	End		0.0000	0.000
SA14	Span 1	Start		0.0000	0.000
SA14	Span 1	Middle		0.0000	0.000
SA14	Span 1	End		0.0000	0.000
SA14	Span 2	Start		0.0000	0.000
SA14	Span 2	Middle		0.0000	0.000
SA14	Span 2	End		0.0000	0.000
SA14	Span 3	Start		0.0000	0.000
SA14	Span 3	Middle		0.0000	0.000
SA14	Span 3	End		0.0000	0.000
SA14	Span 4	Start		0.0000	0.000
SA14	Span 4	Middle		0.0000	0.000
SA14	Span 4	End		0.0000	0.000
SA14	Span 5	Start		0.0000	0.000
SA14	Span 5	Middle		0.0000	0.000
SA14	Span 5	End		0.0000	0.000
SA14	Span 6	Start		0.0000	0.000
SA14	Span 6	Middle		0.0000	0.000
SA14	Span 6	End		0.0000	0.000
SA14	Span 7	Start		0.0000	0.000
SA14	Span 7	Middle		0.0000	0.000
SA14	Span 7	End		0.0000	0.000
SA15	Span 1	Start		0.0000	0.000
SA15	Span 1	Middle		0.0000	0.000
SA15	Span 1	End	Comb1	-18.9917	111.097
SA15	Span 2	Start	Comb1	-19.8368	116.048
SA15	Span 2	Middle		0.0000	0.000
SA15	Span 2	End	Comb1	-22.6090	132.291
SA15	Span 3	Start	Comb1	-21.1166	123.545
SA15	Span 3	Middle		0.0000	0.000
SA15	Span 3	End	Comb1	-16.8329	98.454
SA15	Span 4	Start	Comb1	-18.9212	110.684
SA15	Span 4	Middle		0.0000	0.000
SA15	Span 4	End	Comb1	-11.3279	66.230
SA15	Span 5	Start	Comb1	-9.8596	57.640
SA15	Span 5	Middle		0.0000	0.000
SA15	Span 5	End	Comb1	-8.3636	48.889
SA15	Span 6	Start	Comb1	-1.5233	0.000
SA15	Span 6	Middle		0.0000	0.000
SA15	Span 6	End		0.0000	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 1 of 3**

Strip	SpanID	Location	FTopCombo	FTopMomen	FTopArea
				t	mm2
				kN-m	
SA16	Span 1	Start		0.0000	0.000
SA16	Span 1	Middle		0.0000	0.000
SA16	Span 1	End		0.0000	0.000
SA16	Span 2	Start		0.0000	0.000
SA16	Span 2	Middle		0.0000	0.000
SA16	Span 2	End		0.0000	0.000
SA16	Span 3	Start		0.0000	0.000
SA16	Span 3	Middle		0.0000	0.000
SA16	Span 3	End		0.0000	0.000
SA16	Span 4	Start		0.0000	0.000
SA16	Span 4	Middle		0.0000	0.000
SA16	Span 4	End		0.0000	0.000
SA16	Span 5	Start		0.0000	0.000
SA16	Span 5	Middle		0.0000	0.000
SA16	Span 5	End		0.0000	0.000
SA16	Span 6	Start		0.0000	0.000
SA16	Span 6	Middle		0.0000	0.000
SA16	Span 6	End		0.0000	0.000
SA16	Span 7	Start		0.0000	0.000
SA16	Span 7	Middle		0.0000	0.000
SA16	Span 7	End		0.0000	0.000
SA17	Span 1	Start		0.0000	0.000
SA17	Span 1	Middle		0.0000	0.000
SA17	Span 1	End		0.0000	0.000
SA17	Span 2	Start		0.0000	0.000
SA17	Span 2	Middle		0.0000	0.000
SA17	Span 2	End	Comb1	-6.6498	38.873
SA17	Span 3	Start	Comb1	-7.7714	45.434
SA17	Span 3	Middle		0.0000	0.000
SA17	Span 3	End	Comb1	-17.7526	103.882
SA17	Span 4	Start	Comb1	-16.9637	99.259
SA17	Span 4	Middle		0.0000	0.000
SA17	Span 4	End	Comb1	-13.0997	76.622
SA17	Span 5	Start	Comb1	-15.0796	88.219
SA17	Span 5	Middle		0.0000	0.000
SA17	Span 5	End	Comb1	-8.1896	47.881
SA17	Span 6	Start	Comb1	-6.1504	35.952
SA17	Span 6	Middle		0.0000	0.000
SA17	Span 6	End		0.0000	0.000
SA17	Span 7	Start	Comb1	-0.4444	0.000
SA17	Span 7	Middle		0.0000	0.000
SA17	Span 7	End		0.0000	0.000
SB10	Span 1	Start		0.0000	0.000
SB10	Span 1	Middle		0.0000	0.000
SB10	Span 1	End	Comb1	-3.9451	24.049
SB10	Span 2	Start	Comb1	-3.9451	24.049
SB10	Span 2	Middle	Comb1	-3.6199	22.064
SB10	Span 2	End		0.0000	0.000
SB10	Span 3	Start		0.0000	0.000
SB10	Span 3	Middle		0.0000	0.000
SB10	Span 3	End	Comb1	-3.0681	18.696
SB10	Span 4	Start	Comb1	-3.0681	18.696
SB10	Span 4	Middle		0.0000	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 1 of 3**

Strip	SpanID	Location	FTopCombo	FTopMomen t kN-m	FTopArea mm2
SB10	Span 4	End		0.0000	0.000
SB10	Span 5	Start	Comb1	-1.3206	0.000
SB10	Span 5	Middle		0.0000	0.000
SB10	Span 5	End		0.0000	0.000
SB10	Span 6	Start	Comb1	-0.2168	0.000
SB10	Span 6	Middle	Comb1	-2.6672	16.251
SB10	Span 6	End	Comb1	-0.3180	0.000
SB10	Span 7	Start	Comb1	-0.3180	0.000
SB10	Span 7	Middle		0.0000	0.000
SB10	Span 7	End		0.0000	0.000
SB10	Span 8	Start	Comb1	-0.5169	0.000
SB10	Span 8	Middle		0.0000	0.000
SB10	Span 8	End		0.0000	0.000
SB11	Span 1	Start		0.0000	0.000
SB11	Span 1	Middle		0.0000	0.000
SB11	Span 1	End		0.0000	0.000
SB11	Span 2	Start		0.0000	0.000
SB11	Span 2	Middle		0.0000	0.000
SB11	Span 2	End		0.0000	0.000
SB11	Span 3	Start		0.0000	0.000
SB11	Span 3	Middle		0.0000	0.000
SB11	Span 3	End		0.0000	0.000
SB11	Span 4	Start		0.0000	0.000
SB11	Span 4	Middle		0.0000	0.000
SB11	Span 4	End		0.0000	0.000
SB11	Span 5	Start		0.0000	0.000
SB11	Span 5	Middle		0.0000	0.000
SB11	Span 5	End		0.0000	0.000
SB11	Span 6	Start	Comb1	-6.0486	0.000
SB11	Span 6	Middle	Comb1	-16.7010	101.769
SB11	Span 6	End	Comb1	-5.1235	0.000
SB11	Span 7	Start	Comb1	-10.3236	62.878
SB11	Span 7	Middle		0.0000	0.000
SB11	Span 7	End	Comb1	-13.3753	81.483
SB11	Span 8	Start	Comb1	-10.5608	64.323
SB11	Span 8	Middle		0.0000	0.000
SB11	Span 8	End		0.0000	0.000
SB12	Span 1	Start		0.0000	0.000
SB12	Span 1	Middle		0.0000	0.000
SB12	Span 1	End		0.0000	0.000
SB12	Span 2	Start		0.0000	0.000
SB12	Span 2	Middle		0.0000	0.000
SB12	Span 2	End		0.0000	0.000
SB12	Span 3	Start		0.0000	0.000
SB12	Span 3	Middle		0.0000	0.000
SB12	Span 3	End		0.0000	0.000
SB12	Span 4	Start		0.0000	0.000
SB12	Span 4	Middle		0.0000	0.000
SB12	Span 4	End		0.0000	0.000
SB12	Span 5	Start		0.0000	0.000
SB12	Span 5	Middle		0.0000	0.000
SB12	Span 5	End		0.0000	0.000
SB12	Span 6	Start		0.0000	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 1 of 3**

Strip	SpanID	Location	FTopCombo	FTopMoment kN-m	FTopArea mm2
SB12	Span 6	Middle		0.0000	0.000
SB12	Span 6	End		0.0000	0.000
SB12	Span 7	Start		0.0000	0.000
SB12	Span 7	Middle		0.0000	0.000
SB12	Span 7	End		0.0000	0.000
SB12	Span 8	Start		0.0000	0.000
SB12	Span 8	Middle		0.0000	0.000
SB12	Span 8	End		0.0000	0.000
SB13	Span 1	Start		0.0000	0.000
SB13	Span 1	Middle		0.0000	0.000
SB13	Span 1	End		0.0000	0.000
SB13	Span 2	Start		0.0000	0.000
SB13	Span 2	Middle		0.0000	0.000
SB13	Span 2	End		0.0000	0.000
SB13	Span 3	Start		0.0000	0.000
SB13	Span 3	Middle		0.0000	0.000
SB13	Span 3	End		0.0000	0.000
SB13	Span 4	Start		0.0000	0.000
SB13	Span 4	Middle		0.0000	0.000
SB13	Span 4	End		0.0000	0.000
SB13	Span 5	Start		0.0000	0.000
SB13	Span 5	Middle		0.0000	0.000
SB13	Span 5	End		0.0000	0.000
SB13	Span 6	Start	Comb1	-3.3317	0.000
SB13	Span 6	Middle	Comb1	-16.9584	103.339
SB13	Span 6	End	Comb1	-4.4591	0.000
SB13	Span 7	Start	Comb1	-10.5814	64.449
SB13	Span 7	Middle		0.0000	0.000
SB13	Span 7	End	Comb1	-11.9809	72.981
SB13	Span 8	Start	Comb1	-9.2513	56.342
SB13	Span 8	Middle		0.0000	0.000
SB13	Span 8	End		0.0000	0.000
SB14	Span 1	Start		0.0000	0.000
SB14	Span 1	Middle		0.0000	0.000
SB14	Span 1	End		0.0000	0.000
SB14	Span 2	Start		0.0000	0.000
SB14	Span 2	Middle		0.0000	0.000
SB14	Span 2	End		0.0000	0.000
SB14	Span 3	Start		0.0000	0.000
SB14	Span 3	Middle		0.0000	0.000
SB14	Span 3	End		0.0000	0.000
SB14	Span 4	Start		0.0000	0.000
SB14	Span 4	Middle		0.0000	0.000
SB14	Span 4	End		0.0000	0.000
SB14	Span 5	Start		0.0000	0.000
SB14	Span 5	Middle		0.0000	0.000
SB14	Span 5	End		0.0000	0.000
SB14	Span 6	Start		0.0000	0.000
SB14	Span 6	Middle		0.0000	0.000
SB14	Span 6	End		0.0000	0.000
SB14	Span 7	Start		0.0000	0.000
SB14	Span 7	Middle		0.0000	0.000
SB14	Span 7	End		0.0000	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 1 of 3**

Strip	SpanID	Location	FTopCombo	FTopMomen	FTopArea
				t	mm2
				kN-m	
SB14	Span 8	Start		0.0000	0.000
SB14	Span 8	Middle		0.0000	0.000
SB14	Span 8	End		0.0000	0.000
SB15	Span 1	Start		0.0000	0.000
SB15	Span 1	Middle		0.0000	0.000
SB15	Span 1	End		0.0000	0.000
SB15	Span 2	Start		0.0000	0.000
SB15	Span 2	Middle		0.0000	0.000
SB15	Span 2	End		0.0000	0.000
SB15	Span 3	Start		0.0000	0.000
SB15	Span 3	Middle		0.0000	0.000
SB15	Span 3	End		0.0000	0.000
SB15	Span 4	Start		0.0000	0.000
SB15	Span 4	Middle		0.0000	0.000
SB15	Span 4	End		0.0000	0.000
SB15	Span 5	Start		0.0000	0.000
SB15	Span 5	Middle		0.0000	0.000
SB15	Span 5	End	Comb1	-5.7858	35.232
SB15	Span 6	Start	Comb1	-8.0567	49.072
SB15	Span 6	Middle	Comb1	-7.0703	43.060
SB15	Span 6	End	Comb1	-3.8757	0.000
SB15	Span 7	Start	Comb1	-3.8757	0.000
SB15	Span 7	Middle		0.0000	0.000
SB15	Span 7	End	Comb1	-9.1243	55.568
SB15	Span 8	Start	Comb1	-7.6135	46.362
SB15	Span 8	Middle		0.0000	0.000
SB15	Span 8	End		0.0000	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 2 of 3**

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 2 of 3**

Strip	SpanID	Location	FBotCombo	FBotMomen	FBotArea
				t	mm2
				kN-m	
SA1	Span 1	Start	Comb1	7.1543	41.824
SA1	Span 1	Middle		0.0000	0.000
SA1	Span 1	End		0.0000	0.000
SA1	Span 2	Start	Comb4	0.0000	0.000
SA1	Span 2	Middle		0.0000	0.000
SA1	Span 2	End		0.0000	0.000
SA1	Span 3	Start	Comb4	0.0000	0.000
SA1	Span 3	Middle		0.0000	0.000
SA1	Span 3	End	Comb1	9.3124	54.451
SA1	Span 4	Start	Comb1	7.1916	42.042
SA1	Span 4	Middle		0.0000	0.000
SA1	Span 4	End		0.0000	0.000
SA1	Span 5	Start		0.0000	0.000
SA1	Span 5	Middle		0.0000	0.000
SA1	Span 5	End		0.0000	0.000
SA1	Span 6	Start		0.0000	0.000
SA1	Span 6	Middle		0.0000	0.000
SA1	Span 6	End		0.0000	0.000
SA2	Span 1	Start		0.0000	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 2 of 3**

Strip	SpanID	Location	FBotCombo	FBotMomen t kN-m	FBotArea mm2
SA2	Span 1	Middle		0.0000	0.000
SA2	Span 1	End		0.0000	0.000
SA2	Span 2	Start		0.0000	0.000
SA2	Span 2	Middle		0.0000	0.000
SA2	Span 2	End		0.0000	0.000
SA2	Span 3	Start		0.0000	0.000
SA2	Span 3	Middle		0.0000	0.000
SA2	Span 3	End		0.0000	0.000
SA2	Span 4	Start		0.0000	0.000
SA2	Span 4	Middle		0.0000	0.000
SA2	Span 4	End		0.0000	0.000
SA2	Span 5	Start		0.0000	0.000
SA2	Span 5	Middle		0.0000	0.000
SA2	Span 5	End		0.0000	0.000
SA2	Span 6	Start		0.0000	0.000
SA2	Span 6	Middle		0.0000	0.000
SA2	Span 6	End		0.0000	0.000
SA2	Span 7	Start		0.0000	0.000
SA2	Span 7	Middle		0.0000	0.000
SA2	Span 7	End		0.0000	0.000
SA3	Span 1	Start	Comb1	2.8304	0.000
SA3	Span 1	Middle		0.0000	0.000
SA3	Span 1	End		0.0000	0.000
SA3	Span 2	Start	Comb1	3.2889	0.000
SA3	Span 2	Middle		0.0000	0.000
SA3	Span 2	End		0.0000	0.000
SA3	Span 3	Start	Comb1	5.7358	33.528
SA3	Span 3	Middle		0.0000	0.000
SA3	Span 3	End	Comb1	9.2844	54.291
SA3	Span 4	Start	Comb1	9.2844	54.291
SA3	Span 4	Middle		0.0000	0.000
SA3	Span 4	End		0.0000	0.000
SA3	Span 5	Start		0.0000	0.000
SA3	Span 5	Middle		0.0000	0.000
SA3	Span 5	End		0.0000	0.000
SA3	Span 6	Start		0.0000	0.000
SA3	Span 6	Middle		0.0000	0.000
SA3	Span 6	End		0.0000	0.000
SA4	Span 1	Start	Comb1	2.8304	0.000
SA4	Span 1	Middle		0.0000	0.000
SA4	Span 1	End	Comb1	8.4647	49.481
SA4	Span 2	Start	Comb1	8.5257	49.838
SA4	Span 2	Middle		0.0000	0.000
SA4	Span 2	End	Comb1	9.1365	53.411
SA4	Span 3	Start	Comb1	9.4558	55.279
SA4	Span 3	Middle		0.0000	0.000
SA4	Span 3	End	Comb1	13.2104	77.249
SA4	Span 4	Start	Comb1	13.2104	77.249
SA4	Span 4	Middle		0.0000	0.000
SA4	Span 4	End		0.0000	0.000
SA4	Span 5	Start		0.0000	0.000
SA4	Span 5	Middle		0.0000	0.000
SA4	Span 5	End		0.0000	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 2 of 3**

Strip	SpanID	Location	FBotCombo	FBotMomen t kN-m	FBotArea mm2
SA4	Span 6	Start		0.0000	0.000
SA4	Span 6	Middle		0.0000	0.000
SA4	Span 6	End		0.0000	0.000
SA5	Span 1	Start	Comb1	5.6282	32.903
SA5	Span 1	Middle		0.0000	0.000
SA5	Span 1	End		0.0000	0.000
SA5	Span 2	Start		0.0000	0.000
SA5	Span 2	Middle		0.0000	0.000
SA5	Span 2	End		0.0000	0.000
SA5	Span 3	Start		0.0000	0.000
SA5	Span 3	Middle		0.0000	0.000
SA5	Span 3	End		0.0000	0.000
SA5	Span 4	Start		0.0000	0.000
SA5	Span 4	Middle		0.0000	0.000
SA5	Span 4	End		0.0000	0.000
SA5	Span 5	Start		0.0000	0.000
SA5	Span 5	Middle		0.0000	0.000
SA5	Span 5	End		0.0000	0.000
SA5	Span 6	Start		0.0000	0.000
SA5	Span 6	Middle		0.0000	0.000
SA5	Span 6	End		0.0000	0.000
SA6	Span 1	Start		0.0000	0.000
SA6	Span 1	Middle		0.0000	0.000
SA6	Span 1	End		0.0000	0.000
SA6	Span 2	Start		0.0000	0.000
SA6	Span 2	Middle		0.0000	0.000
SA6	Span 2	End		0.0000	0.000
SA6	Span 3	Start		0.0000	0.000
SA6	Span 3	Middle		0.0000	0.000
SA6	Span 3	End		0.0000	0.000
SA6	Span 4	Start		0.0000	0.000
SA6	Span 4	Middle		0.0000	0.000
SA6	Span 4	End		0.0000	0.000
SA6	Span 5	Start		0.0000	0.000
SA6	Span 5	Middle		0.0000	0.000
SA6	Span 5	End		0.0000	0.000
SA6	Span 6	Start		0.0000	0.000
SA6	Span 6	Middle		0.0000	0.000
SA6	Span 6	End		0.0000	0.000
SA6	Span 7	Start		0.0000	0.000
SA6	Span 7	Middle		0.0000	0.000
SA6	Span 7	End		0.0000	0.000
SA7	Span 1	Start	Comb1	2.0716	0.000
SA7	Span 1	Middle		0.0000	0.000
SA7	Span 1	End		0.0000	0.000
SA7	Span 2	Start	Comb1	5.2071	0.000
SA7	Span 2	Middle		0.0000	0.000
SA7	Span 2	End	Comb1	8.3718	48.937
SA7	Span 3	Start	Comb1	8.6539	50.587
SA7	Span 3	Middle		0.0000	0.000
SA7	Span 3	End	Comb1	11.9277	69.741
SA7	Span 4	Start	Comb1	11.9277	69.741
SA7	Span 4	Middle		0.0000	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 2 of 3**

Strip	SpanID	Location	FBotCombo	FBotMomen	FBotArea
				t kN-m	mm2
SA7	Span 4	End		0.0000	0.000
SA7	Span 5	Start		0.0000	0.000
SA7	Span 5	Middle		0.0000	0.000
SA7	Span 5	End		0.0000	0.000
SA7	Span 6	Start		0.0000	0.000
SA7	Span 6	Middle		0.0000	0.000
SA7	Span 6	End		0.0000	0.000
SA8	Span 1	Start		0.0000	0.000
SA8	Span 1	Middle		0.0000	0.000
SA8	Span 1	End		0.0000	0.000
SA8	Span 2	Start		0.0000	0.000
SA8	Span 2	Middle		0.0000	0.000
SA8	Span 2	End		0.0000	0.000
SA8	Span 3	Start		0.0000	0.000
SA8	Span 3	Middle		0.0000	0.000
SA8	Span 3	End		0.0000	0.000
SA8	Span 4	Start		0.0000	0.000
SA8	Span 4	Middle		0.0000	0.000
SA8	Span 4	End		0.0000	0.000
SA8	Span 5	Start		0.0000	0.000
SA8	Span 5	Middle		0.0000	0.000
SA8	Span 5	End		0.0000	0.000
SA8	Span 6	Start		0.0000	0.000
SA8	Span 6	Middle		0.0000	0.000
SA8	Span 6	End		0.0000	0.000
SA8	Span 7	Start		0.0000	0.000
SA8	Span 7	Middle		0.0000	0.000
SA8	Span 7	End		0.0000	0.000
SA9	Span 1	Start	Comb1	4.4107	0.000
SA9	Span 1	Middle		0.0000	0.000
SA9	Span 1	End		0.0000	0.000
SA9	Span 2	Start	Comb1	4.0922	0.000
SA9	Span 2	Middle		0.0000	0.000
SA9	Span 2	End		0.0000	0.000
SA9	Span 3	Start	Comb1	8.1863	47.852
SA9	Span 3	Middle		0.0000	0.000
SA9	Span 3	End		0.0000	0.000
SA9	Span 4	Start	Comb1	3.6970	0.000
SA9	Span 4	Middle		0.0000	0.000
SA9	Span 4	End		0.0000	0.000
SA9	Span 5	Start	Comb4	0.0000	0.000
SA9	Span 5	Middle		0.0000	0.000
SA9	Span 5	End		0.0000	0.000
SA9	Span 6	Start	Comb1	0.2875	0.000
SA9	Span 6	Middle		0.0000	0.000
SA9	Span 6	End	Comb1	7.4684	43.661
SB1	Span 1	Start	Comb1	9.2989	56.645
SB1	Span 1	Middle		0.0000	0.000
SB1	Span 1	End		0.0000	0.000
SB1	Span 2	Start	Comb4	0.0000	0.000
SB1	Span 2	Middle	Comb4	0.0000	0.000
SB1	Span 2	End	Comb4	0.0000	0.000
SB1	Span 3	Start	Comb4	0.0000	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 2 of 3**

Strip	SpanID	Location	FBotCombo	FBotMomen t kN-m	FBotArea mm2
SB1	Span 3	Middle		0.0000	0.000
SB1	Span 3	End		0.0000	0.000
SB1	Span 4	Start	Comb4	0.0000	0.000
SB1	Span 4	Middle		0.0000	0.000
SB1	Span 4	End		0.0000	0.000
SB1	Span 5	Start	Comb4	0.0000	0.000
SB1	Span 5	Middle		0.0000	0.000
SB1	Span 5	End		0.0000	0.000
SB1	Span 6	Start	Comb4	0.0000	0.000
SB1	Span 6	Middle	Comb4	0.0000	0.000
SB1	Span 6	End		0.0000	0.000
SB1	Span 7	Start	Comb4	0.0000	0.000
SB1	Span 7	Middle		0.0000	0.000
SB1	Span 7	End		0.0000	0.000
SB1	Span 8	Start	Comb1	4.1443	0.000
SB1	Span 8	Middle		0.0000	0.000
SB1	Span 8	End		0.0000	0.000
SB2	Span 1	Start		0.0000	0.000
SB2	Span 1	Middle		0.0000	0.000
SB2	Span 1	End		0.0000	0.000
SB2	Span 2	Start		0.0000	0.000
SB2	Span 2	Middle		0.0000	0.000
SB2	Span 2	End		0.0000	0.000
SB2	Span 3	Start		0.0000	0.000
SB2	Span 3	Middle		0.0000	0.000
SB2	Span 3	End		0.0000	0.000
SB2	Span 4	Start	Comb1	0.2709	0.000
SB2	Span 4	Middle		0.0000	0.000
SB2	Span 4	End		0.0000	0.000
SB2	Span 5	Start	Comb1	0.0915	0.000
SB2	Span 5	Middle		0.0000	0.000
SB2	Span 5	End		0.0000	0.000
SB2	Span 6	Start	Comb1	0.0868	0.000
SB2	Span 6	Middle	Comb1	0.3465	0.000
SB2	Span 6	End		0.0000	0.000
SB2	Span 7	Start		0.0000	0.000
SB2	Span 7	Middle		0.0000	0.000
SB2	Span 7	End		0.0000	0.000
SB2	Span 8	Start		0.0000	0.000
SB2	Span 8	Middle		0.0000	0.000
SB2	Span 8	End		0.0000	0.000
SB3	Span 1	Start	Comb1	9.4968	57.852
SB3	Span 1	Middle		0.0000	0.000
SB3	Span 1	End		0.0000	0.000
SB3	Span 2	Start	Comb4	0.0000	0.000
SB3	Span 2	Middle	Comb4	0.0000	0.000
SB3	Span 2	End	Comb4	0.0000	0.000
SB3	Span 3	Start	Comb4	0.0000	0.000
SB3	Span 3	Middle		0.0000	0.000
SB3	Span 3	End		0.0000	0.000
SB3	Span 4	Start	Comb1	2.7184	0.000
SB3	Span 4	Middle		0.0000	0.000
SB3	Span 4	End		0.0000	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 2 of 3**

Strip	SpanID	Location	FBotCombo	FBotMomen	FBotArea
				t kN-m	mm2
SB3	Span 5	Start	Comb1	0.6553	0.000
SB3	Span 5	Middle		0.0000	0.000
SB3	Span 5	End		0.0000	0.000
SB3	Span 6	Start	Comb1	0.7488	0.000
SB3	Span 6	Middle	Comb1	3.8030	0.000
SB3	Span 6	End	Comb1	4.3499	0.000
SB3	Span 7	Start	Comb1	4.3499	0.000
SB3	Span 7	Middle		0.0000	0.000
SB3	Span 7	End		0.0000	0.000
SB3	Span 8	Start	Comb1	0.1795	0.000
SB3	Span 8	Middle		0.0000	0.000
SB3	Span 8	End	Comb1	6.1557	37.486
SB4	Span 1	Start		0.0000	0.000
SB4	Span 1	Middle		0.0000	0.000
SB4	Span 1	End		0.0000	0.000
SB4	Span 2	Start		0.0000	0.000
SB4	Span 2	Middle		0.0000	0.000
SB4	Span 2	End		0.0000	0.000
SB4	Span 3	Start		0.0000	0.000
SB4	Span 3	Middle		0.0000	0.000
SB4	Span 3	End		0.0000	0.000
SB4	Span 4	Start		0.0000	0.000
SB4	Span 4	Middle		0.0000	0.000
SB4	Span 4	End		0.0000	0.000
SB4	Span 5	Start		0.0000	0.000
SB4	Span 5	Middle		0.0000	0.000
SB4	Span 5	End		0.0000	0.000
SB4	Span 6	Start		0.0000	0.000
SB4	Span 6	Middle		0.0000	0.000
SB4	Span 6	End		0.0000	0.000
SB4	Span 7	Start		0.0000	0.000
SB4	Span 7	Middle		0.0000	0.000
SB4	Span 7	End		0.0000	0.000
SB4	Span 8	Start		0.0000	0.000
SB4	Span 8	Middle		0.0000	0.000
SB4	Span 8	End		0.0000	0.000
SB5	Span 1	Start	Comb1	11.3117	68.901
SB5	Span 1	Middle		0.0000	0.000
SB5	Span 1	End		0.0000	0.000
SB5	Span 2	Start	Comb4	0.0000	0.000
SB5	Span 2	Middle	Comb1	5.6585	0.000
SB5	Span 2	End		0.0000	0.000
SB5	Span 3	Start		0.0000	0.000
SB5	Span 3	Middle		0.0000	0.000
SB5	Span 3	End		0.0000	0.000
SB5	Span 4	Start	Comb1	0.1831	0.000
SB5	Span 4	Middle		0.0000	0.000
SB5	Span 4	End		0.0000	0.000
SB5	Span 5	Start	Comb1	1.1822	0.000
SB5	Span 5	Middle		0.0000	0.000
SB5	Span 5	End		0.0000	0.000
SB5	Span 6	Start	Comb1	1.4384	0.000
SB5	Span 6	Middle	Comb1	4.7315	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 2 of 3**

Strip	SpanID	Location	FBotCombo	FBotMomen	FBotArea
				t kN-m	mm2
SB5	Span 6	End	Comb1	8.6334	52.588
SB5	Span 7	Start	Comb1	8.6334	52.588
SB5	Span 7	Middle		0.0000	0.000
SB5	Span 7	End	Comb1	7.7308	47.076
SB5	Span 8	Start	Comb1	7.9126	48.184
SB5	Span 8	Middle		0.0000	0.000
SB5	Span 8	End	Comb1	8.2305	50.132
SB6	Span 1	Start		0.0000	0.000
SB6	Span 1	Middle		0.0000	0.000
SB6	Span 1	End		0.0000	0.000
SB6	Span 2	Start		0.0000	0.000
SB6	Span 2	Middle		0.0000	0.000
SB6	Span 2	End		0.0000	0.000
SB6	Span 3	Start		0.0000	0.000
SB6	Span 3	Middle		0.0000	0.000
SB6	Span 3	End		0.0000	0.000
SB6	Span 4	Start		0.0000	0.000
SB6	Span 4	Middle		0.0000	0.000
SB6	Span 4	End		0.0000	0.000
SB6	Span 5	Start		0.0000	0.000
SB6	Span 5	Middle		0.0000	0.000
SB6	Span 5	End		0.0000	0.000
SB6	Span 6	Start		0.0000	0.000
SB6	Span 6	Middle		0.0000	0.000
SB6	Span 6	End		0.0000	0.000
SB6	Span 7	Start		0.0000	0.000
SB6	Span 7	Middle		0.0000	0.000
SB6	Span 7	End		0.0000	0.000
SB6	Span 8	Start		0.0000	0.000
SB6	Span 8	Middle		0.0000	0.000
SB6	Span 8	End		0.0000	0.000
SB7	Span 1	Start	Comb1	14.3857	87.645
SB7	Span 1	Middle		0.0000	0.000
SB7	Span 1	End	Comb1	10.6864	65.089
SB7	Span 2	Start	Comb1	3.1726	0.000
SB7	Span 2	Middle	Comb1	10.4319	63.537
SB7	Span 2	End		0.0000	0.000
SB7	Span 3	Start		0.0000	0.000
SB7	Span 3	Middle		0.0000	0.000
SB7	Span 3	End	Comb1	10.2444	62.394
SB7	Span 4	Start	Comb1	10.3698	63.159
SB7	Span 4	Middle		0.0000	0.000
SB7	Span 4	End	Comb1	9.3669	57.047
SB7	Span 5	Start	Comb1	9.2136	56.112
SB7	Span 5	Middle		0.0000	0.000
SB7	Span 5	End	Comb1	8.6773	52.844
SB7	Span 6	Start	Comb1	5.6281	0.000
SB7	Span 6	Middle	Comb1	9.2334	56.233
SB7	Span 6	End	Comb1	7.2325	0.000
SB7	Span 7	Start	Comb1	9.2363	56.251
SB7	Span 7	Middle		0.0000	0.000
SB7	Span 7	End	Comb1	8.6967	52.962
SB7	Span 8	Start	Comb1	8.9881	54.738

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 2 of 3**

Strip	SpanID	Location	FBotCombo	FBotMomen t kN-m	FBotArea mm2
SB7	Span 8	Middle		0.0000	0.000
SB7	Span 8	End	Comb1	10.2165	62.241
SB8	Span 1	Start		0.0000	0.000
SB8	Span 1	Middle		0.0000	0.000
SB8	Span 1	End		0.0000	0.000
SB8	Span 2	Start		0.0000	0.000
SB8	Span 2	Middle		0.0000	0.000
SB8	Span 2	End		0.0000	0.000
SB8	Span 3	Start		0.0000	0.000
SB8	Span 3	Middle		0.0000	0.000
SB8	Span 3	End		0.0000	0.000
SB8	Span 4	Start		0.0000	0.000
SB8	Span 4	Middle		0.0000	0.000
SB8	Span 4	End		0.0000	0.000
SB8	Span 5	Start		0.0000	0.000
SB8	Span 5	Middle		0.0000	0.000
SB8	Span 5	End		0.0000	0.000
SB8	Span 6	Start		0.0000	0.000
SB8	Span 6	Middle		0.0000	0.000
SB8	Span 6	End		0.0000	0.000
SB8	Span 7	Start		0.0000	0.000
SB8	Span 7	Middle		0.0000	0.000
SB8	Span 7	End		0.0000	0.000
SB8	Span 8	Start		0.0000	0.000
SB8	Span 8	Middle		0.0000	0.000
SB8	Span 8	End		0.0000	0.000
SB9	Span 1	Start	Comb1	9.1623	55.812
SB9	Span 1	Middle		0.0000	0.000
SB9	Span 1	End		0.0000	0.000
SB9	Span 2	Start	Comb4	0.0000	0.000
SB9	Span 2	Middle	Comb1	1.3256	0.000
SB9	Span 2	End		0.0000	0.000
SB9	Span 3	Start		0.0000	0.000
SB9	Span 3	Middle		0.0000	0.000
SB9	Span 3	End		0.0000	0.000
SB9	Span 4	Start	Comb4	0.0000	0.000
SB9	Span 4	Middle		0.0000	0.000
SB9	Span 4	End		0.0000	0.000
SB9	Span 5	Start	Comb1	1.9752	0.000
SB9	Span 5	Middle		0.0000	0.000
SB9	Span 5	End		0.0000	0.000
SB9	Span 6	Start	Comb1	4.5252	0.000
SB9	Span 6	Middle	Comb1	6.9099	0.000
SB9	Span 6	End	Comb1	4.8631	0.000
SB9	Span 7	Start	Comb1	4.8631	0.000
SB9	Span 7	Middle		0.0000	0.000
SB9	Span 7	End		0.0000	0.000
SB9	Span 8	Start	Comb1	7.5486	45.966
SB9	Span 8	Middle		0.0000	0.000
SB9	Span 8	End	Comb1	9.1706	55.863
SA10	Span 1	Start		0.0000	0.000
SA10	Span 1	Middle		0.0000	0.000
SA10	Span 1	End		0.0000	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 2 of 3**

Strip	SpanID	Location	FBotCombo	FBotMomen	FBotArea
				t kN-m	mm2
SA10	Span 2	Start		0.0000	0.000
SA10	Span 2	Middle		0.0000	0.000
SA10	Span 2	End		0.0000	0.000
SA10	Span 3	Start		0.0000	0.000
SA10	Span 3	Middle		0.0000	0.000
SA10	Span 3	End		0.0000	0.000
SA10	Span 4	Start		0.0000	0.000
SA10	Span 4	Middle		0.0000	0.000
SA10	Span 4	End		0.0000	0.000
SA10	Span 5	Start		0.0000	0.000
SA10	Span 5	Middle		0.0000	0.000
SA10	Span 5	End		0.0000	0.000
SA10	Span 6	Start		0.0000	0.000
SA10	Span 6	Middle		0.0000	0.000
SA10	Span 6	End		0.0000	0.000
SA10	Span 7	Start		0.0000	0.000
SA10	Span 7	Middle		0.0000	0.000
SA10	Span 7	End		0.0000	0.000
SA11	Span 1	Start	Comb1	2.6908	0.000
SA11	Span 1	Middle		0.0000	0.000
SA11	Span 1	End		0.0000	0.000
SA11	Span 2	Start	Comb1	2.6650	0.000
SA11	Span 2	Middle		0.0000	0.000
SA11	Span 2	End		0.0000	0.000
SA11	Span 3	Start	Comb4	0.0000	0.000
SA11	Span 3	Middle		0.0000	0.000
SA11	Span 3	End		0.0000	0.000
SA11	Span 4	Start	Comb1	0.3232	0.000
SA11	Span 4	Middle		0.0000	0.000
SA11	Span 4	End		0.0000	0.000
SA11	Span 5	Start	Comb1	2.7805	0.000
SA11	Span 5	Middle		0.0000	0.000
SA11	Span 5	End		0.0000	0.000
SA11	Span 6	Start	Comb1	1.6723	0.000
SA11	Span 6	Middle		0.0000	0.000
SA11	Span 6	End	Comb1	8.9586	52.380
SA12	Span 1	Start	Comb1	4.0172	23.484
SA12	Span 1	Middle		0.0000	0.000
SA12	Span 1	End	Comb1	3.5059	0.000
SA12	Span 2	Start	Comb1	1.8174	0.000
SA12	Span 2	Middle		0.0000	0.000
SA12	Span 2	End		0.0000	0.000
SA12	Span 3	Start	Comb1	1.7875	0.000
SA12	Span 3	Middle		0.0000	0.000
SA12	Span 3	End		0.0000	0.000
SA12	Span 4	Start	Comb4	0.0000	0.000
SA12	Span 4	Middle		0.0000	0.000
SA12	Span 4	End		0.0000	0.000
SA12	Span 5	Start	Comb4	0.0000	0.000
SA12	Span 5	Middle		0.0000	0.000
SA12	Span 5	End	Comb1	4.2269	0.000
SA12	Span 6	Start	Comb1	1.6003	0.000
SA12	Span 6	Middle		0.0000	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 2 of 3**

Strip	SpanID	Location	FBotCombo	FBotMomen	FBotArea
				t kN-m	mm2
SA12	Span 6	End		0.0000	0.000
SA12	Span 7	Start	Comb1	0.7891	0.000
SA12	Span 7	Middle		0.0000	0.000
SA12	Span 7	End	Comb1	3.5819	20.939
SA13	Span 1	Start	Comb1	1.4258	0.000
SA13	Span 1	Middle		0.0000	0.000
SA13	Span 1	End		0.0000	0.000
SA13	Span 2	Start	Comb4	0.0000	0.000
SA13	Span 2	Middle		0.0000	0.000
SA13	Span 2	End		0.0000	0.000
SA13	Span 3	Start	Comb4	0.0000	0.000
SA13	Span 3	Middle		0.0000	0.000
SA13	Span 3	End		0.0000	0.000
SA13	Span 4	Start	Comb4	0.0000	0.000
SA13	Span 4	Middle		0.0000	0.000
SA13	Span 4	End		0.0000	0.000
SA13	Span 5	Start	Comb1	1.3281	0.000
SA13	Span 5	Middle		0.0000	0.000
SA13	Span 5	End		0.0000	0.000
SA13	Span 6	Start	Comb1	1.0075	0.000
SA13	Span 6	Middle		0.0000	0.000
SA13	Span 6	End	Comb1	5.9730	34.916
SA14	Span 1	Start		0.0000	0.000
SA14	Span 1	Middle		0.0000	0.000
SA14	Span 1	End		0.0000	0.000
SA14	Span 2	Start		0.0000	0.000
SA14	Span 2	Middle		0.0000	0.000
SA14	Span 2	End		0.0000	0.000
SA14	Span 3	Start		0.0000	0.000
SA14	Span 3	Middle		0.0000	0.000
SA14	Span 3	End		0.0000	0.000
SA14	Span 4	Start		0.0000	0.000
SA14	Span 4	Middle		0.0000	0.000
SA14	Span 4	End		0.0000	0.000
SA14	Span 5	Start		0.0000	0.000
SA14	Span 5	Middle		0.0000	0.000
SA14	Span 5	End		0.0000	0.000
SA14	Span 6	Start		0.0000	0.000
SA14	Span 6	Middle		0.0000	0.000
SA14	Span 6	End		0.0000	0.000
SA14	Span 7	Start		0.0000	0.000
SA14	Span 7	Middle		0.0000	0.000
SA14	Span 7	End		0.0000	0.000
SA15	Span 1	Start	Comb1	14.7519	86.299
SA15	Span 1	Middle		0.0000	0.000
SA15	Span 1	End		0.0000	0.000
SA15	Span 2	Start	Comb1	2.7221	0.000
SA15	Span 2	Middle		0.0000	0.000
SA15	Span 2	End		0.0000	0.000
SA15	Span 3	Start	Comb1	1.0523	0.000
SA15	Span 3	Middle		0.0000	0.000
SA15	Span 3	End		0.0000	0.000
SA15	Span 4	Start	Comb1	1.7756	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 2 of 3**

Strip	SpanID	Location	FBotCombo	FBotMomen	FBotArea
				t kN-m	mm2
SA15	Span 4	Middle		0.0000	0.000
SA15	Span 4	End		0.0000	0.000
SA15	Span 5	Start	Comb1	3.9335	0.000
SA15	Span 5	Middle		0.0000	0.000
SA15	Span 5	End		0.0000	0.000
SA15	Span 6	Start	Comb1	5.7095	0.000
SA15	Span 6	Middle		0.0000	0.000
SA15	Span 6	End	Comb1	11.4001	66.653
SA16	Span 1	Start		0.0000	0.000
SA16	Span 1	Middle		0.0000	0.000
SA16	Span 1	End		0.0000	0.000
SA16	Span 2	Start		0.0000	0.000
SA16	Span 2	Middle		0.0000	0.000
SA16	Span 2	End		0.0000	0.000
SA16	Span 3	Start		0.0000	0.000
SA16	Span 3	Middle		0.0000	0.000
SA16	Span 3	End		0.0000	0.000
SA16	Span 4	Start		0.0000	0.000
SA16	Span 4	Middle		0.0000	0.000
SA16	Span 4	End		0.0000	0.000
SA16	Span 5	Start		0.0000	0.000
SA16	Span 5	Middle		0.0000	0.000
SA16	Span 5	End		0.0000	0.000
SA16	Span 6	Start		0.0000	0.000
SA16	Span 6	Middle		0.0000	0.000
SA16	Span 6	End		0.0000	0.000
SA16	Span 7	Start		0.0000	0.000
SA16	Span 7	Middle		0.0000	0.000
SA16	Span 7	End		0.0000	0.000
SA17	Span 1	Start		0.0000	0.000
SA17	Span 1	Middle		0.0000	0.000
SA17	Span 1	End		0.0000	0.000
SA17	Span 2	Start	Comb1	6.0886	0.000
SA17	Span 2	Middle		0.0000	0.000
SA17	Span 2	End		0.0000	0.000
SA17	Span 3	Start	Comb4	0.0000	0.000
SA17	Span 3	Middle		0.0000	0.000
SA17	Span 3	End		0.0000	0.000
SA17	Span 4	Start	Comb4	0.0000	0.000
SA17	Span 4	Middle		0.0000	0.000
SA17	Span 4	End		0.0000	0.000
SA17	Span 5	Start	Comb4	0.0000	0.000
SA17	Span 5	Middle		0.0000	0.000
SA17	Span 5	End		0.0000	0.000
SA17	Span 6	Start	Comb4	0.0000	0.000
SA17	Span 6	Middle		0.0000	0.000
SA17	Span 6	End		0.0000	0.000
SA17	Span 7	Start	Comb1	1.8328	0.000
SA17	Span 7	Middle		0.0000	0.000
SA17	Span 7	End		0.0000	0.000
SB10	Span 1	Start		0.0000	0.000
SB10	Span 1	Middle		0.0000	0.000
SB10	Span 1	End		0.0000	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 2 of 3**

Strip	SpanID	Location	FBotCombo	FBotMomen t kN-m	FBotArea mm2
SB10	Span 2	Start	Comb4	0.0000	0.000
SB10	Span 2	Middle	Comb1	0.2033	0.000
SB10	Span 2	End		0.0000	0.000
SB10	Span 3	Start		0.0000	0.000
SB10	Span 3	Middle		0.0000	0.000
SB10	Span 3	End		0.0000	0.000
SB10	Span 4	Start	Comb4	0.0000	0.000
SB10	Span 4	Middle		0.0000	0.000
SB10	Span 4	End		0.0000	0.000
SB10	Span 5	Start	Comb1	0.3534	0.000
SB10	Span 5	Middle		0.0000	0.000
SB10	Span 5	End	Comb1	1.3907	8.469
SB10	Span 6	Start	Comb1	1.3907	8.469
SB10	Span 6	Middle	Comb1	1.9929	12.139
SB10	Span 6	End	Comb1	1.2922	0.000
SB10	Span 7	Start	Comb1	1.2922	0.000
SB10	Span 7	Middle		0.0000	0.000
SB10	Span 7	End		0.0000	0.000
SB10	Span 8	Start	Comb1	0.8518	0.000
SB10	Span 8	Middle		0.0000	0.000
SB10	Span 8	End	Comb1	0.7722	4.705
SB11	Span 1	Start		0.0000	0.000
SB11	Span 1	Middle		0.0000	0.000
SB11	Span 1	End		0.0000	0.000
SB11	Span 2	Start		0.0000	0.000
SB11	Span 2	Middle		0.0000	0.000
SB11	Span 2	End		0.0000	0.000
SB11	Span 3	Start		0.0000	0.000
SB11	Span 3	Middle		0.0000	0.000
SB11	Span 3	End		0.0000	0.000
SB11	Span 4	Start		0.0000	0.000
SB11	Span 4	Middle		0.0000	0.000
SB11	Span 4	End	Comb1	10.4246	63.493
SB11	Span 5	Start	Comb1	10.4246	63.493
SB11	Span 5	Middle		0.0000	0.000
SB11	Span 5	End		0.0000	0.000
SB11	Span 6	Start	Comb1	0.9695	0.000
SB11	Span 6	Middle	Comb1	3.6280	0.000
SB11	Span 6	End	Comb1	2.3959	0.000
SB11	Span 7	Start	Comb1	2.3959	0.000
SB11	Span 7	Middle		0.0000	0.000
SB11	Span 7	End		0.0000	0.000
SB11	Span 8	Start	Comb1	1.2313	0.000
SB11	Span 8	Middle		0.0000	0.000
SB11	Span 8	End	Comb1	7.3700	44.887
SB12	Span 1	Start		0.0000	0.000
SB12	Span 1	Middle		0.0000	0.000
SB12	Span 1	End		0.0000	0.000
SB12	Span 2	Start		0.0000	0.000
SB12	Span 2	Middle		0.0000	0.000
SB12	Span 2	End		0.0000	0.000
SB12	Span 3	Start		0.0000	0.000
SB12	Span 3	Middle		0.0000	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 2 of 3**

Strip	SpanID	Location	FBotCombo	FBotMomen	FBotArea
				t kN-m	mm2
SB12	Span 3	End		0.0000	0.000
SB12	Span 4	Start		0.0000	0.000
SB12	Span 4	Middle		0.0000	0.000
SB12	Span 4	End		0.0000	0.000
SB12	Span 5	Start		0.0000	0.000
SB12	Span 5	Middle		0.0000	0.000
SB12	Span 5	End		0.0000	0.000
SB12	Span 6	Start		0.0000	0.000
SB12	Span 6	Middle		0.0000	0.000
SB12	Span 6	End		0.0000	0.000
SB12	Span 7	Start		0.0000	0.000
SB12	Span 7	Middle		0.0000	0.000
SB12	Span 7	End		0.0000	0.000
SB12	Span 8	Start		0.0000	0.000
SB12	Span 8	Middle		0.0000	0.000
SB12	Span 8	End		0.0000	0.000
SB13	Span 1	Start		0.0000	0.000
SB13	Span 1	Middle		0.0000	0.000
SB13	Span 1	End		0.0000	0.000
SB13	Span 2	Start		0.0000	0.000
SB13	Span 2	Middle		0.0000	0.000
SB13	Span 2	End		0.0000	0.000
SB13	Span 3	Start		0.0000	0.000
SB13	Span 3	Middle		0.0000	0.000
SB13	Span 3	End		0.0000	0.000
SB13	Span 4	Start		0.0000	0.000
SB13	Span 4	Middle		0.0000	0.000
SB13	Span 4	End	Comb1	10.6512	64.874
SB13	Span 5	Start	Comb1	10.6512	64.874
SB13	Span 5	Middle		0.0000	0.000
SB13	Span 5	End		0.0000	0.000
SB13	Span 6	Start	Comb1	2.7790	0.000
SB13	Span 6	Middle	Comb1	5.0066	0.000
SB13	Span 6	End	Comb1	3.4284	0.000
SB13	Span 7	Start	Comb1	3.4284	0.000
SB13	Span 7	Middle		0.0000	0.000
SB13	Span 7	End		0.0000	0.000
SB13	Span 8	Start	Comb1	1.4347	0.000
SB13	Span 8	Middle		0.0000	0.000
SB13	Span 8	End	Comb1	7.4306	45.256
SB14	Span 1	Start		0.0000	0.000
SB14	Span 1	Middle		0.0000	0.000
SB14	Span 1	End		0.0000	0.000
SB14	Span 2	Start		0.0000	0.000
SB14	Span 2	Middle		0.0000	0.000
SB14	Span 2	End		0.0000	0.000
SB14	Span 3	Start		0.0000	0.000
SB14	Span 3	Middle		0.0000	0.000
SB14	Span 3	End		0.0000	0.000
SB14	Span 4	Start		0.0000	0.000
SB14	Span 4	Middle		0.0000	0.000
SB14	Span 4	End		0.0000	0.000
SB14	Span 5	Start		0.0000	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 2 of 3**

Strip	SpanID	Location	FBotCombo	FBotMomen t kN-m	FBotArea mm2
SB14	Span 5	Middle		0.0000	0.000
SB14	Span 5	End		0.0000	0.000
SB14	Span 6	Start		0.0000	0.000
SB14	Span 6	Middle		0.0000	0.000
SB14	Span 6	End		0.0000	0.000
SB14	Span 7	Start		0.0000	0.000
SB14	Span 7	Middle		0.0000	0.000
SB14	Span 7	End		0.0000	0.000
SB14	Span 8	Start		0.0000	0.000
SB14	Span 8	Middle		0.0000	0.000
SB14	Span 8	End		0.0000	0.000
SB15	Span 1	Start		0.0000	0.000
SB15	Span 1	Middle		0.0000	0.000
SB15	Span 1	End		0.0000	0.000
SB15	Span 2	Start		0.0000	0.000
SB15	Span 2	Middle		0.0000	0.000
SB15	Span 2	End		0.0000	0.000
SB15	Span 3	Start		0.0000	0.000
SB15	Span 3	Middle		0.0000	0.000
SB15	Span 3	End		0.0000	0.000
SB15	Span 4	Start		0.0000	0.000
SB15	Span 4	Middle		0.0000	0.000
SB15	Span 4	End	Comb1	6.3835	38.874
SB15	Span 5	Start	Comb1	9.2969	56.633
SB15	Span 5	Middle		0.0000	0.000
SB15	Span 5	End		0.0000	0.000
SB15	Span 6	Start	Comb4	0.0000	0.000
SB15	Span 6	Middle		0.0000	0.000
SB15	Span 6	End	Comb4	0.0000	0.000
SB15	Span 7	Start	Comb4	0.0000	0.000
SB15	Span 7	Middle		0.0000	0.000
SB15	Span 7	End		0.0000	0.000
SB15	Span 8	Start	Comb4	0.0000	0.000
SB15	Span 8	Middle		0.0000	0.000
SB15	Span 8	End		0.0000	0.000

**Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 3 of 3**

Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 3 of 3

Strip	SpanID	Location	VCombo	VForce kN	VArea mm2/m	Status	Layer
SA1	Span 1	Start	Comb1	1.978	0.000	OK	A
SA1	Span 1	Middle		0.000	0.000	OK	A
SA1	Span 1	End		0.000	0.000	OK	A
SA1	Span 2	Start	Comb1	0.900	0.000	OK	A
SA1	Span 2	Middle		0.000	0.000	OK	A
SA1	Span 2	End		0.000	0.000	OK	A
SA1	Span 3	Start	Comb1	2.477	0.000	OK	A
SA1	Span 3	Middle		0.000	0.000	OK	A
SA1	Span 3	End		0.000	0.000	OK	A
SA1	Span 4	Start	Comb1	1.999	0.000	OK	A
SA1	Span 4	Middle		0.000	0.000	OK	A
SA1	Span 4	End		0.000	0.000	OK	A

Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 3 of 3

Strip	SpanID	Location	VCombo	VForce kN	VArea mm2/m	Status	Layer
SA1	Span 5	Start		0.000	0.000	OK	A
SA1	Span 5	Middle		0.000	0.000	OK	A
SA1	Span 5	End		0.000	0.000	OK	A
SA1	Span 6	Start		0.000	0.000	OK	A
SA1	Span 6	Middle		0.000	0.000	OK	A
SA1	Span 6	End		0.000	0.000	OK	A
SA2	Span 1	Start		0.000	0.000	OK	A
SA2	Span 1	Middle		0.000	0.000	OK	A
SA2	Span 1	End		0.000	0.000	OK	A
SA2	Span 2	Start		0.000	0.000	OK	A
SA2	Span 2	Middle		0.000	0.000	OK	A
SA2	Span 2	End		0.000	0.000	OK	A
SA2	Span 3	Start		0.000	0.000	OK	A
SA2	Span 3	Middle		0.000	0.000	OK	A
SA2	Span 3	End		0.000	0.000	OK	A
SA2	Span 4	Start		0.000	0.000	OK	A
SA2	Span 4	Middle		0.000	0.000	OK	A
SA2	Span 4	End		0.000	0.000	OK	A
SA2	Span 5	Start		0.000	0.000	OK	A
SA2	Span 5	Middle		0.000	0.000	OK	A
SA2	Span 5	End		0.000	0.000	OK	A
SA2	Span 6	Start		0.000	0.000	OK	A
SA2	Span 6	Middle		0.000	0.000	OK	A
SA2	Span 6	End		0.000	0.000	OK	A
SA2	Span 7	Start		0.000	0.000	OK	A
SA2	Span 7	Middle		0.000	0.000	OK	A
SA2	Span 7	End		0.000	0.000	OK	A
SA3	Span 1	Start	Comb1	3.074	0.000	OK	A
SA3	Span 1	Middle		0.000	0.000	OK	A
SA3	Span 1	End		0.000	0.000	OK	A
SA3	Span 2	Start	Comb1	5.256	0.000	OK	A
SA3	Span 2	Middle		0.000	0.000	OK	A
SA3	Span 2	End		0.000	0.000	OK	A
SA3	Span 3	Start	Comb1	3.694	0.000	OK	A
SA3	Span 3	Middle		0.000	0.000	OK	A
SA3	Span 3	End		0.000	0.000	OK	A
SA3	Span 4	Start	Comb1	5.666	0.000	OK	A
SA3	Span 4	Middle		0.000	0.000	OK	A
SA3	Span 4	End		0.000	0.000	OK	A
SA3	Span 5	Start		0.000	0.000	OK	A
SA3	Span 5	Middle		0.000	0.000	OK	A
SA3	Span 5	End		0.000	0.000	OK	A
SA3	Span 6	Start		0.000	0.000	OK	A
SA3	Span 6	Middle		0.000	0.000	OK	A
SA3	Span 6	End		0.000	0.000	OK	A
SA4	Span 1	Start	Comb1	3.097	0.000	OK	A
SA4	Span 1	Middle		0.000	0.000	OK	A
SA4	Span 1	End		0.000	0.000	OK	A
SA4	Span 2	Start	Comb1	6.981	0.000	OK	A
SA4	Span 2	Middle		0.000	0.000	OK	A
SA4	Span 2	End		0.000	0.000	OK	A
SA4	Span 3	Start	Comb1	4.785	0.000	OK	A
SA4	Span 3	Middle		0.000	0.000	OK	A
SA4	Span 3	End		0.000	0.000	OK	A

Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 3 of 3

Strip	SpanID	Location	VCombo	VForce kN	VArea mm2/m	Status	Layer
SA4	Span 4	Start	Comb1	7.421	0.000	OK	A
SA4	Span 4	Middle		0.000	0.000	OK	A
SA4	Span 4	End		0.000	0.000	OK	A
SA4	Span 5	Start		0.000	0.000	OK	A
SA4	Span 5	Middle		0.000	0.000	OK	A
SA4	Span 5	End		0.000	0.000	OK	A
SA4	Span 6	Start		0.000	0.000	OK	A
SA4	Span 6	Middle		0.000	0.000	OK	A
SA4	Span 6	End		0.000	0.000	OK	A
SA5	Span 1	Start	Comb1	4.949	0.000	OK	A
SA5	Span 1	Middle		0.000	0.000	OK	A
SA5	Span 1	End		0.000	0.000	OK	A
SA5	Span 2	Start		0.000	0.000	OK	A
SA5	Span 2	Middle		0.000	0.000	OK	A
SA5	Span 2	End		0.000	0.000	OK	A
SA5	Span 3	Start		0.000	0.000	OK	A
SA5	Span 3	Middle		0.000	0.000	OK	A
SA5	Span 3	End		0.000	0.000	OK	A
SA5	Span 4	Start		0.000	0.000	OK	A
SA5	Span 4	Middle		0.000	0.000	OK	A
SA5	Span 4	End		0.000	0.000	OK	A
SA5	Span 5	Start		0.000	0.000	OK	A
SA5	Span 5	Middle		0.000	0.000	OK	A
SA5	Span 5	End		0.000	0.000	OK	A
SA5	Span 6	Start		0.000	0.000	OK	A
SA5	Span 6	Middle		0.000	0.000	OK	A
SA5	Span 6	End		0.000	0.000	OK	A
SA6	Span 1	Start		0.000	0.000	OK	A
SA6	Span 1	Middle		0.000	0.000	OK	A
SA6	Span 1	End		0.000	0.000	OK	A
SA6	Span 2	Start		0.000	0.000	OK	A
SA6	Span 2	Middle		0.000	0.000	OK	A
SA6	Span 2	End		0.000	0.000	OK	A
SA6	Span 3	Start		0.000	0.000	OK	A
SA6	Span 3	Middle		0.000	0.000	OK	A
SA6	Span 3	End		0.000	0.000	OK	A
SA6	Span 4	Start		0.000	0.000	OK	A
SA6	Span 4	Middle		0.000	0.000	OK	A
SA6	Span 4	End		0.000	0.000	OK	A
SA6	Span 5	Start		0.000	0.000	OK	A
SA6	Span 5	Middle		0.000	0.000	OK	A
SA6	Span 5	End		0.000	0.000	OK	A
SA6	Span 6	Start		0.000	0.000	OK	A
SA6	Span 6	Middle		0.000	0.000	OK	A
SA6	Span 6	End		0.000	0.000	OK	A
SA6	Span 7	Start		0.000	0.000	OK	A
SA6	Span 7	Middle		0.000	0.000	OK	A
SA6	Span 7	End		0.000	0.000	OK	A
SA7	Span 1	Start	Comb1	3.440	0.000	OK	A
SA7	Span 1	Middle		0.000	0.000	OK	A
SA7	Span 1	End		0.000	0.000	OK	A
SA7	Span 2	Start	Comb1	7.184	0.000	OK	A
SA7	Span 2	Middle		0.000	0.000	OK	A
SA7	Span 2	End		0.000	0.000	OK	A

Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 3 of 3

Strip	SpanID	Location	VCombo	VForce kN	VArea mm2/m	Status	Layer
SA7	Span 3	Start	Comb1	3.601	0.000	OK	A
SA7	Span 3	Middle		0.000	0.000	OK	A
SA7	Span 3	End		0.000	0.000	OK	A
SA7	Span 4	Start	Comb1	6.045	0.000	OK	A
SA7	Span 4	Middle		0.000	0.000	OK	A
SA7	Span 4	End		0.000	0.000	OK	A
SA7	Span 5	Start		0.000	0.000	OK	A
SA7	Span 5	Middle		0.000	0.000	OK	A
SA7	Span 5	End		0.000	0.000	OK	A
SA7	Span 6	Start		0.000	0.000	OK	A
SA7	Span 6	Middle		0.000	0.000	OK	A
SA7	Span 6	End		0.000	0.000	OK	A
SA8	Span 1	Start		0.000	0.000	OK	A
SA8	Span 1	Middle		0.000	0.000	OK	A
SA8	Span 1	End		0.000	0.000	OK	A
SA8	Span 2	Start		0.000	0.000	OK	A
SA8	Span 2	Middle		0.000	0.000	OK	A
SA8	Span 2	End		0.000	0.000	OK	A
SA8	Span 3	Start		0.000	0.000	OK	A
SA8	Span 3	Middle		0.000	0.000	OK	A
SA8	Span 3	End		0.000	0.000	OK	A
SA8	Span 4	Start		0.000	0.000	OK	A
SA8	Span 4	Middle		0.000	0.000	OK	A
SA8	Span 4	End		0.000	0.000	OK	A
SA8	Span 5	Start		0.000	0.000	OK	A
SA8	Span 5	Middle		0.000	0.000	OK	A
SA8	Span 5	End		0.000	0.000	OK	A
SA8	Span 6	Start		0.000	0.000	OK	A
SA8	Span 6	Middle		0.000	0.000	OK	A
SA8	Span 6	End		0.000	0.000	OK	A
SA8	Span 7	Start		0.000	0.000	OK	A
SA8	Span 7	Middle		0.000	0.000	OK	A
SA8	Span 7	End		0.000	0.000	OK	A
SA9	Span 1	Start	Comb1	6.307	0.000	OK	A
SA9	Span 1	Middle		0.000	0.000	OK	A
SA9	Span 1	End		0.000	0.000	OK	A
SA9	Span 2	Start	Comb1	6.613	0.000	OK	A
SA9	Span 2	Middle		0.000	0.000	OK	A
SA9	Span 2	End		0.000	0.000	OK	A
SA9	Span 3	Start	Comb1	4.085	0.000	OK	A
SA9	Span 3	Middle		0.000	0.000	OK	A
SA9	Span 3	End		0.000	0.000	OK	A
SA9	Span 4	Start	Comb1	4.846	0.000	OK	A
SA9	Span 4	Middle		0.000	0.000	OK	A
SA9	Span 4	End		0.000	0.000	OK	A
SA9	Span 5	Start	Comb1	0.675	0.000	OK	A
SA9	Span 5	Middle		0.000	0.000	OK	A
SA9	Span 5	End		0.000	0.000	OK	A
SA9	Span 6	Start	Comb1	1.131	0.000	OK	A
SA9	Span 6	Middle		0.000	0.000	OK	A
SA9	Span 6	End		0.000	0.000	OK	A
SB1	Span 1	Start	Comb1	5.555	0.000	OK	B
SB1	Span 1	Middle		0.000	0.000	OK	B
SB1	Span 1	End		0.000	0.000	OK	B

Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 3 of 3

Strip	SpanID	Location	VCombo	VForce kN	VArea mm2/m	Status	Layer
SB1	Span 2	Start	Comb1	9.527	0.000	OK	B
SB1	Span 2	Middle	Comb1	8.208	0.000	OK	B
SB1	Span 2	End	Comb1	1.063	0.000	OK	B
SB1	Span 3	Start	Comb1	1.063	0.000	OK	B
SB1	Span 3	Middle		0.000	0.000	OK	B
SB1	Span 3	End		0.000	0.000	OK	B
SB1	Span 4	Start	Comb1	0.737	0.000	OK	B
SB1	Span 4	Middle		0.000	0.000	OK	B
SB1	Span 4	End		0.000	0.000	OK	B
SB1	Span 5	Start	Comb1	5.316	0.000	OK	B
SB1	Span 5	Middle		0.000	0.000	OK	B
SB1	Span 5	End		0.000	0.000	OK	B
SB1	Span 6	Start	Comb1	4.050	0.000	OK	B
SB1	Span 6	Middle	Comb1	0.528	0.000	OK	B
SB1	Span 6	End		0.000	0.000	OK	B
SB1	Span 7	Start	Comb1	2.882	0.000	OK	B
SB1	Span 7	Middle		0.000	0.000	OK	B
SB1	Span 7	End		0.000	0.000	OK	B
SB1	Span 8	Start	Comb1	0.241	0.000	OK	B
SB1	Span 8	Middle		0.000	0.000	OK	B
SB1	Span 8	End		0.000	0.000	OK	B
SB2	Span 1	Start		0.000	0.000	OK	B
SB2	Span 1	Middle		0.000	0.000	OK	B
SB2	Span 1	End		0.000	0.000	OK	B
SB2	Span 2	Start		0.000	0.000	OK	B
SB2	Span 2	Middle		0.000	0.000	OK	B
SB2	Span 2	End		0.000	0.000	OK	B
SB2	Span 3	Start		0.000	0.000	OK	B
SB2	Span 3	Middle		0.000	0.000	OK	B
SB2	Span 3	End		0.000	0.000	OK	B
SB2	Span 4	Start	Comb1	0.305	0.000	OK	B
SB2	Span 4	Middle		0.000	0.000	OK	B
SB2	Span 4	End		0.000	0.000	OK	B
SB2	Span 5	Start	Comb1	0.098	0.000	OK	B
SB2	Span 5	Middle		0.000	0.000	OK	B
SB2	Span 5	End		0.000	0.000	OK	B
SB2	Span 6	Start	Comb1	0.120	0.000	OK	B
SB2	Span 6	Middle	Comb1	0.264	0.000	OK	B
SB2	Span 6	End		0.000	0.000	OK	B
SB2	Span 7	Start		0.000	0.000	OK	B
SB2	Span 7	Middle		0.000	0.000	OK	B
SB2	Span 7	End		0.000	0.000	OK	B
SB2	Span 8	Start		0.000	0.000	OK	B
SB2	Span 8	Middle		0.000	0.000	OK	B
SB2	Span 8	End		0.000	0.000	OK	B
SB3	Span 1	Start	Comb1	8.659	0.000	OK	B
SB3	Span 1	Middle		0.000	0.000	OK	B
SB3	Span 1	End		0.000	0.000	OK	B
SB3	Span 2	Start	Comb1	6.505	0.000	OK	B
SB3	Span 2	Middle	Comb1	22.463	0.000	OK	B
SB3	Span 2	End	Comb1	1.889	0.000	OK	B
SB3	Span 3	Start	Comb1	1.889	0.000	OK	B
SB3	Span 3	Middle		0.000	0.000	OK	B
SB3	Span 3	End		0.000	0.000	OK	B

Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 3 of 3

Strip	SpanID	Location	VCombo	VForce kN	VArea mm2/m	Status	Layer
SB3	Span 4	Start	Comb1	5.865	0.000	OK	B
SB3	Span 4	Middle		0.000	0.000	OK	B
SB3	Span 4	End		0.000	0.000	OK	B
SB3	Span 5	Start	Comb1	1.490	0.000	OK	B
SB3	Span 5	Middle		0.000	0.000	OK	B
SB3	Span 5	End		0.000	0.000	OK	B
SB3	Span 6	Start	Comb1	2.137	0.000	OK	B
SB3	Span 6	Middle	Comb1	5.005	0.000	OK	B
SB3	Span 6	End	Comb1	9.801	0.000	OK	B
SB3	Span 7	Start	Comb1	9.801	0.000	OK	B
SB3	Span 7	Middle		0.000	0.000	OK	B
SB3	Span 7	End		0.000	0.000	OK	B
SB3	Span 8	Start	Comb1	1.845	0.000	OK	B
SB3	Span 8	Middle		0.000	0.000	OK	B
SB3	Span 8	End		0.000	0.000	OK	B
SB4	Span 1	Start		0.000	0.000	OK	B
SB4	Span 1	Middle		0.000	0.000	OK	B
SB4	Span 1	End		0.000	0.000	OK	B
SB4	Span 2	Start		0.000	0.000	OK	B
SB4	Span 2	Middle		0.000	0.000	OK	B
SB4	Span 2	End		0.000	0.000	OK	B
SB4	Span 3	Start		0.000	0.000	OK	B
SB4	Span 3	Middle		0.000	0.000	OK	B
SB4	Span 3	End		0.000	0.000	OK	B
SB4	Span 4	Start		0.000	0.000	OK	B
SB4	Span 4	Middle		0.000	0.000	OK	B
SB4	Span 4	End		0.000	0.000	OK	B
SB4	Span 5	Start		0.000	0.000	OK	B
SB4	Span 5	Middle		0.000	0.000	OK	B
SB4	Span 5	End		0.000	0.000	OK	B
SB4	Span 6	Start		0.000	0.000	OK	B
SB4	Span 6	Middle		0.000	0.000	OK	B
SB4	Span 6	End		0.000	0.000	OK	B
SB4	Span 7	Start		0.000	0.000	OK	B
SB4	Span 7	Middle		0.000	0.000	OK	B
SB4	Span 7	End		0.000	0.000	OK	B
SB4	Span 8	Start		0.000	0.000	OK	B
SB4	Span 8	Middle		0.000	0.000	OK	B
SB4	Span 8	End		0.000	0.000	OK	B
SB5	Span 1	Start		0.000	0.000	OK	B
SB5	Span 1	Middle		0.000	0.000	OK	B
SB5	Span 1	End		0.000	0.000	OK	B
SB5	Span 2	Start	Comb1	1.070	0.000	OK	B
SB5	Span 2	Middle	Comb1	2.380	0.000	OK	B
SB5	Span 2	End		0.000	0.000	OK	B
SB5	Span 3	Start		0.000	0.000	OK	B
SB5	Span 3	Middle		0.000	0.000	OK	B
SB5	Span 3	End		0.000	0.000	OK	B
SB5	Span 4	Start	Comb1	2.218	0.000	OK	B
SB5	Span 4	Middle		0.000	0.000	OK	B
SB5	Span 4	End		0.000	0.000	OK	B
SB5	Span 5	Start	Comb1	2.343	0.000	OK	B
SB5	Span 5	Middle		0.000	0.000	OK	B
SB5	Span 5	End		0.000	0.000	OK	B

Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 3 of 3

Strip	SpanID	Location	VCombo	VForce kN	VArea mm2/m	Status	Layer
SB5	Span 6	Start	Comb1	3.041	0.000	OK	B
SB5	Span 6	Middle	Comb1	4.641	0.000	OK	B
SB5	Span 6	End	Comb1	11.759	0.000	OK	B
SB5	Span 7	Start	Comb1	11.759	0.000	OK	B
SB5	Span 7	Middle		0.000	0.000	OK	B
SB5	Span 7	End		0.000	0.000	OK	B
SB5	Span 8	Start	Comb1	4.319	0.000	OK	B
SB5	Span 8	Middle		0.000	0.000	OK	B
SB5	Span 8	End		0.000	0.000	OK	B
SB6	Span 1	Start		0.000	0.000	OK	B
SB6	Span 1	Middle		0.000	0.000	OK	B
SB6	Span 1	End		0.000	0.000	OK	B
SB6	Span 2	Start		0.000	0.000	OK	B
SB6	Span 2	Middle		0.000	0.000	OK	B
SB6	Span 2	End		0.000	0.000	OK	B
SB6	Span 3	Start		0.000	0.000	OK	B
SB6	Span 3	Middle		0.000	0.000	OK	B
SB6	Span 3	End		0.000	0.000	OK	B
SB6	Span 4	Start		0.000	0.000	OK	B
SB6	Span 4	Middle		0.000	0.000	OK	B
SB6	Span 4	End		0.000	0.000	OK	B
SB6	Span 5	Start		0.000	0.000	OK	B
SB6	Span 5	Middle		0.000	0.000	OK	B
SB6	Span 5	End		0.000	0.000	OK	B
SB6	Span 6	Start		0.000	0.000	OK	B
SB6	Span 6	Middle		0.000	0.000	OK	B
SB6	Span 6	End		0.000	0.000	OK	B
SB6	Span 7	Start		0.000	0.000	OK	B
SB6	Span 7	Middle		0.000	0.000	OK	B
SB6	Span 7	End		0.000	0.000	OK	B
SB6	Span 8	Start		0.000	0.000	OK	B
SB6	Span 8	Middle		0.000	0.000	OK	B
SB6	Span 8	End		0.000	0.000	OK	B
SB7	Span 1	Start		0.000	0.000	OK	B
SB7	Span 1	Middle		0.000	0.000	OK	B
SB7	Span 1	End		0.000	0.000	OK	B
SB7	Span 2	Start	Comb1	4.491	0.000	OK	B
SB7	Span 2	Middle	Comb1	5.998	0.000	OK	B
SB7	Span 2	End		0.000	0.000	OK	B
SB7	Span 3	Start		0.000	0.000	OK	B
SB7	Span 3	Middle		0.000	0.000	OK	B
SB7	Span 3	End		0.000	0.000	OK	B
SB7	Span 4	Start	Comb1	6.725	0.000	OK	B
SB7	Span 4	Middle		0.000	0.000	OK	B
SB7	Span 4	End		0.000	0.000	OK	B
SB7	Span 5	Start	Comb1	5.493	0.000	OK	B
SB7	Span 5	Middle		0.000	0.000	OK	B
SB7	Span 5	End		0.000	0.000	OK	B
SB7	Span 6	Start	Comb1	6.456	0.000	OK	B
SB7	Span 6	Middle	Comb1	10.807	0.000	OK	B
SB7	Span 6	End	Comb1	11.741	0.000	OK	B
SB7	Span 7	Start	Comb1	11.741	0.000	OK	B
SB7	Span 7	Middle		0.000	0.000	OK	B
SB7	Span 7	End		0.000	0.000	OK	B

Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 3 of 3

Strip	SpanID	Location	VCombo	VForce kN	VArea mm2/m	Status	Layer
SB7	Span 8	Start	Comb1	6.672	0.000	OK	B
SB7	Span 8	Middle		0.000	0.000	OK	B
SB7	Span 8	End		0.000	0.000	OK	B
SB8	Span 1	Start		0.000	0.000	OK	B
SB8	Span 1	Middle		0.000	0.000	OK	B
SB8	Span 1	End		0.000	0.000	OK	B
SB8	Span 2	Start		0.000	0.000	OK	B
SB8	Span 2	Middle		0.000	0.000	OK	B
SB8	Span 2	End		0.000	0.000	OK	B
SB8	Span 3	Start		0.000	0.000	OK	B
SB8	Span 3	Middle		0.000	0.000	OK	B
SB8	Span 3	End		0.000	0.000	OK	B
SB8	Span 4	Start		0.000	0.000	OK	B
SB8	Span 4	Middle		0.000	0.000	OK	B
SB8	Span 4	End		0.000	0.000	OK	B
SB8	Span 5	Start		0.000	0.000	OK	B
SB8	Span 5	Middle		0.000	0.000	OK	B
SB8	Span 5	End		0.000	0.000	OK	B
SB8	Span 6	Start		0.000	0.000	OK	B
SB8	Span 6	Middle		0.000	0.000	OK	B
SB8	Span 6	End		0.000	0.000	OK	B
SB8	Span 7	Start		0.000	0.000	OK	B
SB8	Span 7	Middle		0.000	0.000	OK	B
SB8	Span 7	End		0.000	0.000	OK	B
SB8	Span 8	Start		0.000	0.000	OK	B
SB8	Span 8	Middle		0.000	0.000	OK	B
SB8	Span 8	End		0.000	0.000	OK	B
SB9	Span 1	Start	Comb1	7.554	0.000	OK	B
SB9	Span 1	Middle		0.000	0.000	OK	B
SB9	Span 1	End		0.000	0.000	OK	B
SB9	Span 2	Start	Comb1	3.120	0.000	OK	B
SB9	Span 2	Middle	Comb1	1.877	0.000	OK	B
SB9	Span 2	End		0.000	0.000	OK	B
SB9	Span 3	Start		0.000	0.000	OK	B
SB9	Span 3	Middle		0.000	0.000	OK	B
SB9	Span 3	End		0.000	0.000	OK	B
SB9	Span 4	Start	Comb1	0.891	0.000	OK	B
SB9	Span 4	Middle		0.000	0.000	OK	B
SB9	Span 4	End		0.000	0.000	OK	B
SB9	Span 5	Start	Comb1	3.270	0.000	OK	B
SB9	Span 5	Middle		0.000	0.000	OK	B
SB9	Span 5	End		0.000	0.000	OK	B
SB9	Span 6	Start	Comb1	4.937	0.000	OK	B
SB9	Span 6	Middle	Comb1	9.861	0.000	OK	B
SB9	Span 6	End	Comb1	9.571	0.000	OK	B
SB9	Span 7	Start	Comb1	9.571	0.000	OK	B
SB9	Span 7	Middle		0.000	0.000	OK	B
SB9	Span 7	End		0.000	0.000	OK	B
SB9	Span 8	Start	Comb1	6.028	0.000	OK	B
SB9	Span 8	Middle		0.000	0.000	OK	B
SB9	Span 8	End		0.000	0.000	OK	B
SA10	Span 1	Start		0.000	0.000	OK	A
SA10	Span 1	Middle		0.000	0.000	OK	A
SA10	Span 1	End		0.000	0.000	OK	A

Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 3 of 3

Strip	SpanID	Location	VCombo	VForce kN	VArea mm2/m	Status	Layer
SA10	Span 2	Start		0.000	0.000	OK	A
SA10	Span 2	Middle		0.000	0.000	OK	A
SA10	Span 2	End		0.000	0.000	OK	A
SA10	Span 3	Start		0.000	0.000	OK	A
SA10	Span 3	Middle		0.000	0.000	OK	A
SA10	Span 3	End		0.000	0.000	OK	A
SA10	Span 4	Start		0.000	0.000	OK	A
SA10	Span 4	Middle		0.000	0.000	OK	A
SA10	Span 4	End		0.000	0.000	OK	A
SA10	Span 5	Start		0.000	0.000	OK	A
SA10	Span 5	Middle		0.000	0.000	OK	A
SA10	Span 5	End		0.000	0.000	OK	A
SA10	Span 6	Start		0.000	0.000	OK	A
SA10	Span 6	Middle		0.000	0.000	OK	A
SA10	Span 6	End		0.000	0.000	OK	A
SA10	Span 7	Start		0.000	0.000	OK	A
SA10	Span 7	Middle		0.000	0.000	OK	A
SA10	Span 7	End		0.000	0.000	OK	A
SA11	Span 1	Start	Comb1	3.436	0.000	OK	A
SA11	Span 1	Middle		0.000	0.000	OK	A
SA11	Span 1	End		0.000	0.000	OK	A
SA11	Span 2	Start	Comb1	4.380	0.000	OK	A
SA11	Span 2	Middle		0.000	0.000	OK	A
SA11	Span 2	End		0.000	0.000	OK	A
SA11	Span 3	Start	Comb1	0.388	0.000	OK	A
SA11	Span 3	Middle		0.000	0.000	OK	A
SA11	Span 3	End		0.000	0.000	OK	A
SA11	Span 4	Start	Comb1	0.536	0.000	OK	A
SA11	Span 4	Middle		0.000	0.000	OK	A
SA11	Span 4	End		0.000	0.000	OK	A
SA11	Span 5	Start	Comb1	4.541	0.000	OK	A
SA11	Span 5	Middle		0.000	0.000	OK	A
SA11	Span 5	End		0.000	0.000	OK	A
SA11	Span 6	Start	Comb1	3.442	0.000	OK	A
SA11	Span 6	Middle		0.000	0.000	OK	A
SA11	Span 6	End		0.000	0.000	OK	A
SA12	Span 1	Start		0.000	0.000	OK	A
SA12	Span 1	Middle		0.000	0.000	OK	A
SA12	Span 1	End	Comb1	1.690	0.000	OK	A
SA12	Span 2	Start	Comb1	1.581	0.000	OK	A
SA12	Span 2	Middle		0.000	0.000	OK	A
SA12	Span 2	End		0.000	0.000	OK	A
SA12	Span 3	Start	Comb1	2.169	0.000	OK	A
SA12	Span 3	Middle		0.000	0.000	OK	A
SA12	Span 3	End		0.000	0.000	OK	A
SA12	Span 4	Start	Comb1	0.981	0.000	OK	A
SA12	Span 4	Middle		0.000	0.000	OK	A
SA12	Span 4	End		0.000	0.000	OK	A
SA12	Span 5	Start	Comb1	0.861	0.000	OK	A
SA12	Span 5	Middle		0.000	0.000	OK	A
SA12	Span 5	End	Comb1	1.568	0.000	OK	A
SA12	Span 6	Start	Comb1	1.568	0.000	OK	A
SA12	Span 6	Middle		0.000	0.000	OK	A
SA12	Span 6	End		0.000	0.000	OK	A

Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 3 of 3

Strip	SpanID	Location	VCombo	VForce kN	VArea mm2/m	Status	Layer
SA12	Span 7	Start	Comb1	0.847	0.000	OK	A
SA12	Span 7	Middle		0.000	0.000	OK	A
SA12	Span 7	End		0.000	0.000	OK	A
SA13	Span 1	Start	Comb1	0.359	0.000	OK	A
SA13	Span 1	Middle		0.000	0.000	OK	A
SA13	Span 1	End		0.000	0.000	OK	A
SA13	Span 2	Start	Comb1	1.819	0.000	OK	A
SA13	Span 2	Middle		0.000	0.000	OK	A
SA13	Span 2	End		0.000	0.000	OK	A
SA13	Span 3	Start	Comb1	1.332	0.000	OK	A
SA13	Span 3	Middle		0.000	0.000	OK	A
SA13	Span 3	End		0.000	0.000	OK	A
SA13	Span 4	Start	Comb1	0.486	0.000	OK	A
SA13	Span 4	Middle		0.000	0.000	OK	A
SA13	Span 4	End		0.000	0.000	OK	A
SA13	Span 5	Start	Comb1	2.088	0.000	OK	A
SA13	Span 5	Middle		0.000	0.000	OK	A
SA13	Span 5	End		0.000	0.000	OK	A
SA13	Span 6	Start	Comb1	1.708	0.000	OK	A
SA13	Span 6	Middle		0.000	0.000	OK	A
SA13	Span 6	End		0.000	0.000	OK	A
SA14	Span 1	Start		0.000	0.000	OK	A
SA14	Span 1	Middle		0.000	0.000	OK	A
SA14	Span 1	End		0.000	0.000	OK	A
SA14	Span 2	Start		0.000	0.000	OK	A
SA14	Span 2	Middle		0.000	0.000	OK	A
SA14	Span 2	End		0.000	0.000	OK	A
SA14	Span 3	Start		0.000	0.000	OK	A
SA14	Span 3	Middle		0.000	0.000	OK	A
SA14	Span 3	End		0.000	0.000	OK	A
SA14	Span 4	Start		0.000	0.000	OK	A
SA14	Span 4	Middle		0.000	0.000	OK	A
SA14	Span 4	End		0.000	0.000	OK	A
SA14	Span 5	Start		0.000	0.000	OK	A
SA14	Span 5	Middle		0.000	0.000	OK	A
SA14	Span 5	End		0.000	0.000	OK	A
SA14	Span 6	Start		0.000	0.000	OK	A
SA14	Span 6	Middle		0.000	0.000	OK	A
SA14	Span 6	End		0.000	0.000	OK	A
SA14	Span 7	Start		0.000	0.000	OK	A
SA14	Span 7	Middle		0.000	0.000	OK	A
SA14	Span 7	End		0.000	0.000	OK	A
SA15	Span 1	Start	Comb1	6.657	0.000	OK	A
SA15	Span 1	Middle		0.000	0.000	OK	A
SA15	Span 1	End		0.000	0.000	OK	A
SA15	Span 2	Start	Comb1	4.233	0.000	OK	A
SA15	Span 2	Middle		0.000	0.000	OK	A
SA15	Span 2	End		0.000	0.000	OK	A
SA15	Span 3	Start	Comb1	3.467	0.000	OK	A
SA15	Span 3	Middle		0.000	0.000	OK	A
SA15	Span 3	End		0.000	0.000	OK	A
SA15	Span 4	Start	Comb1	2.847	0.000	OK	A
SA15	Span 4	Middle		0.000	0.000	OK	A
SA15	Span 4	End		0.000	0.000	OK	A

Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 3 of 3

Strip	SpanID	Location	VCombo	VForce kN	VArea mm2/m	Status	Layer
SA15	Span 5	Start	Comb1	6.230	0.000	OK	A
SA15	Span 5	Middle		0.000	0.000	OK	A
SA15	Span 5	End		0.000	0.000	OK	A
SA15	Span 6	Start	Comb1	6.262	0.000	OK	A
SA15	Span 6	Middle		0.000	0.000	OK	A
SA15	Span 6	End		0.000	0.000	OK	A
SA16	Span 1	Start		0.000	0.000	OK	A
SA16	Span 1	Middle		0.000	0.000	OK	A
SA16	Span 1	End		0.000	0.000	OK	A
SA16	Span 2	Start		0.000	0.000	OK	A
SA16	Span 2	Middle		0.000	0.000	OK	A
SA16	Span 2	End		0.000	0.000	OK	A
SA16	Span 3	Start		0.000	0.000	OK	A
SA16	Span 3	Middle		0.000	0.000	OK	A
SA16	Span 3	End		0.000	0.000	OK	A
SA16	Span 4	Start		0.000	0.000	OK	A
SA16	Span 4	Middle		0.000	0.000	OK	A
SA16	Span 4	End		0.000	0.000	OK	A
SA16	Span 5	Start		0.000	0.000	OK	A
SA16	Span 5	Middle		0.000	0.000	OK	A
SA16	Span 5	End		0.000	0.000	OK	A
SA16	Span 6	Start		0.000	0.000	OK	A
SA16	Span 6	Middle		0.000	0.000	OK	A
SA16	Span 6	End		0.000	0.000	OK	A
SA16	Span 7	Start		0.000	0.000	OK	A
SA16	Span 7	Middle		0.000	0.000	OK	A
SA16	Span 7	End		0.000	0.000	OK	A
SA17	Span 1	Start		0.000	0.000	OK	A
SA17	Span 1	Middle		0.000	0.000	OK	A
SA17	Span 1	End		0.000	0.000	OK	A
SA17	Span 2	Start	Comb1	6.563	0.000	OK	A
SA17	Span 2	Middle		0.000	0.000	OK	A
SA17	Span 2	End		0.000	0.000	OK	A
SA17	Span 3	Start	Comb1	2.064	0.000	OK	A
SA17	Span 3	Middle		0.000	0.000	OK	A
SA17	Span 3	End		0.000	0.000	OK	A
SA17	Span 4	Start	Comb1	2.614	0.000	OK	A
SA17	Span 4	Middle		0.000	0.000	OK	A
SA17	Span 4	End		0.000	0.000	OK	A
SA17	Span 5	Start	Comb1	3.170	0.000	OK	A
SA17	Span 5	Middle		0.000	0.000	OK	A
SA17	Span 5	End		0.000	0.000	OK	A
SA17	Span 6	Start	Comb1	0.750	0.000	OK	A
SA17	Span 6	Middle		0.000	0.000	OK	A
SA17	Span 6	End		0.000	0.000	OK	A
SA17	Span 7	Start	Comb1	1.229	0.000	OK	A
SA17	Span 7	Middle		0.000	0.000	OK	A
SA17	Span 7	End		0.000	0.000	OK	A
SB10	Span 1	Start		0.000	0.000	OK	B
SB10	Span 1	Middle		0.000	0.000	OK	B
SB10	Span 1	End		0.000	0.000	OK	B
SB10	Span 2	Start	Comb1	1.233	0.000	OK	B
SB10	Span 2	Middle	Comb1	1.012	0.000	OK	B
SB10	Span 2	End		0.000	0.000	OK	B

Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 3 of 3

Strip	SpanID	Location	VCombo	VForce kN	VArea mm2/m	Status	Layer
SB10	Span 3	Start		0.000	0.000	OK	B
SB10	Span 3	Middle		0.000	0.000	OK	B
SB10	Span 3	End		0.000	0.000	OK	B
SB10	Span 4	Start	Comb1	0.828	0.000	OK	B
SB10	Span 4	Middle		0.000	0.000	OK	B
SB10	Span 4	End		0.000	0.000	OK	B
SB10	Span 5	Start	Comb1	0.346	0.000	OK	B
SB10	Span 5	Middle		0.000	0.000	OK	B
SB10	Span 5	End		0.000	0.000	OK	B
SB10	Span 6	Start	Comb1	0.723	0.000	OK	B
SB10	Span 6	Middle	Comb1	1.606	0.000	OK	B
SB10	Span 6	End	Comb1	1.549	0.000	OK	B
SB10	Span 7	Start	Comb1	1.549	0.000	OK	B
SB10	Span 7	Middle		0.000	0.000	OK	B
SB10	Span 7	End		0.000	0.000	OK	B
SB10	Span 8	Start	Comb1	0.895	0.000	OK	B
SB10	Span 8	Middle		0.000	0.000	OK	B
SB10	Span 8	End		0.000	0.000	OK	B
SB11	Span 1	Start		0.000	0.000	OK	B
SB11	Span 1	Middle		0.000	0.000	OK	B
SB11	Span 1	End		0.000	0.000	OK	B
SB11	Span 2	Start		0.000	0.000	OK	B
SB11	Span 2	Middle		0.000	0.000	OK	B
SB11	Span 2	End		0.000	0.000	OK	B
SB11	Span 3	Start		0.000	0.000	OK	B
SB11	Span 3	Middle		0.000	0.000	OK	B
SB11	Span 3	End		0.000	0.000	OK	B
SB11	Span 4	Start		0.000	0.000	OK	B
SB11	Span 4	Middle		0.000	0.000	OK	B
SB11	Span 4	End		0.000	0.000	OK	B
SB11	Span 5	Start	Comb1	9.933	0.000	OK	B
SB11	Span 5	Middle		0.000	0.000	OK	B
SB11	Span 5	End		0.000	0.000	OK	B
SB11	Span 6	Start	Comb1	0.260	0.000	OK	B
SB11	Span 6	Middle	Comb1	6.523	0.000	OK	B
SB11	Span 6	End	Comb1	7.365	0.000	OK	B
SB11	Span 7	Start	Comb1	7.365	0.000	OK	B
SB11	Span 7	Middle		0.000	0.000	OK	B
SB11	Span 7	End		0.000	0.000	OK	B
SB11	Span 8	Start	Comb1	3.529	0.000	OK	B
SB11	Span 8	Middle		0.000	0.000	OK	B
SB11	Span 8	End		0.000	0.000	OK	B
SB12	Span 1	Start		0.000	0.000	OK	B
SB12	Span 1	Middle		0.000	0.000	OK	B
SB12	Span 1	End		0.000	0.000	OK	B
SB12	Span 2	Start		0.000	0.000	OK	B
SB12	Span 2	Middle		0.000	0.000	OK	B
SB12	Span 2	End		0.000	0.000	OK	B
SB12	Span 3	Start		0.000	0.000	OK	B
SB12	Span 3	Middle		0.000	0.000	OK	B
SB12	Span 3	End		0.000	0.000	OK	B
SB12	Span 4	Start		0.000	0.000	OK	B
SB12	Span 4	Middle		0.000	0.000	OK	B
SB12	Span 4	End		0.000	0.000	OK	B

Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 3 of 3

Strip	SpanID	Location	VCombo	VForce kN	VArea mm2/m	Status	Layer
SB12	Span 5	Start		0.000	0.000	OK	B
SB12	Span 5	Middle		0.000	0.000	OK	B
SB12	Span 5	End		0.000	0.000	OK	B
SB12	Span 6	Start		0.000	0.000	OK	B
SB12	Span 6	Middle		0.000	0.000	OK	B
SB12	Span 6	End		0.000	0.000	OK	B
SB12	Span 7	Start		0.000	0.000	OK	B
SB12	Span 7	Middle		0.000	0.000	OK	B
SB12	Span 7	End		0.000	0.000	OK	B
SB12	Span 8	Start		0.000	0.000	OK	B
SB12	Span 8	Middle		0.000	0.000	OK	B
SB12	Span 8	End		0.000	0.000	OK	B
SB13	Span 1	Start		0.000	0.000	OK	B
SB13	Span 1	Middle		0.000	0.000	OK	B
SB13	Span 1	End		0.000	0.000	OK	B
SB13	Span 2	Start		0.000	0.000	OK	B
SB13	Span 2	Middle		0.000	0.000	OK	B
SB13	Span 2	End		0.000	0.000	OK	B
SB13	Span 3	Start		0.000	0.000	OK	B
SB13	Span 3	Middle		0.000	0.000	OK	B
SB13	Span 3	End		0.000	0.000	OK	B
SB13	Span 4	Start		0.000	0.000	OK	B
SB13	Span 4	Middle		0.000	0.000	OK	B
SB13	Span 4	End		0.000	0.000	OK	B
SB13	Span 5	Start	Comb1	10.084	0.000	OK	B
SB13	Span 5	Middle		0.000	0.000	OK	B
SB13	Span 5	End		0.000	0.000	OK	B
SB13	Span 6	Start	Comb1	1.923	0.000	OK	B
SB13	Span 6	Middle	Comb1	8.829	0.000	OK	B
SB13	Span 6	End	Comb1	8.748	0.000	OK	B
SB13	Span 7	Start	Comb1	8.748	0.000	OK	B
SB13	Span 7	Middle		0.000	0.000	OK	B
SB13	Span 7	End		0.000	0.000	OK	B
SB13	Span 8	Start	Comb1	4.354	0.000	OK	B
SB13	Span 8	Middle		0.000	0.000	OK	B
SB13	Span 8	End		0.000	0.000	OK	B
SB14	Span 1	Start		0.000	0.000	OK	B
SB14	Span 1	Middle		0.000	0.000	OK	B
SB14	Span 1	End		0.000	0.000	OK	B
SB14	Span 2	Start		0.000	0.000	OK	B
SB14	Span 2	Middle		0.000	0.000	OK	B
SB14	Span 2	End		0.000	0.000	OK	B
SB14	Span 3	Start		0.000	0.000	OK	B
SB14	Span 3	Middle		0.000	0.000	OK	B
SB14	Span 3	End		0.000	0.000	OK	B
SB14	Span 4	Start		0.000	0.000	OK	B
SB14	Span 4	Middle		0.000	0.000	OK	B
SB14	Span 4	End		0.000	0.000	OK	B
SB14	Span 5	Start		0.000	0.000	OK	B
SB14	Span 5	Middle		0.000	0.000	OK	B
SB14	Span 5	End		0.000	0.000	OK	B
SB14	Span 6	Start		0.000	0.000	OK	B
SB14	Span 6	Middle		0.000	0.000	OK	B
SB14	Span 6	End		0.000	0.000	OK	B

Table 31: Concrete Slab Design Summary 01 - Flexural And Shear Data, Part 3 of 3

Strip	SpanID	Location	VCombo	VForce kN	VArea mm2/m	Status	Layer
SB14	Span 7	Start		0.000	0.000	OK	B
SB14	Span 7	Middle		0.000	0.000	OK	B
SB14	Span 7	End		0.000	0.000	OK	B
SB14	Span 8	Start		0.000	0.000	OK	B
SB14	Span 8	Middle		0.000	0.000	OK	B
SB14	Span 8	End		0.000	0.000	OK	B
SB15	Span 1	Start		0.000	0.000	OK	B
SB15	Span 1	Middle		0.000	0.000	OK	B
SB15	Span 1	End		0.000	0.000	OK	B
SB15	Span 2	Start		0.000	0.000	OK	B
SB15	Span 2	Middle		0.000	0.000	OK	B
SB15	Span 2	End		0.000	0.000	OK	B
SB15	Span 3	Start		0.000	0.000	OK	B
SB15	Span 3	Middle		0.000	0.000	OK	B
SB15	Span 3	End		0.000	0.000	OK	B
SB15	Span 4	Start		0.000	0.000	OK	B
SB15	Span 4	Middle		0.000	0.000	OK	B
SB15	Span 4	End		0.000	0.000	OK	B
SB15	Span 5	Start	Comb1	5.787	0.000	OK	B
SB15	Span 5	Middle		0.000	0.000	OK	B
SB15	Span 5	End		0.000	0.000	OK	B
SB15	Span 6	Start	Comb1	4.234	0.000	OK	B
SB15	Span 6	Middle		0.000	0.000	OK	B
SB15	Span 6	End	Comb1	2.771	0.000	OK	B
SB15	Span 7	Start	Comb1	2.771	0.000	OK	B
SB15	Span 7	Middle		0.000	0.000	OK	B
SB15	Span 7	End		0.000	0.000	OK	B
SB15	Span 8	Start	Comb1	0.511	0.000	OK	B
SB15	Span 8	Middle		0.000	0.000	OK	B
SB15	Span 8	End		0.000	0.000	OK	B

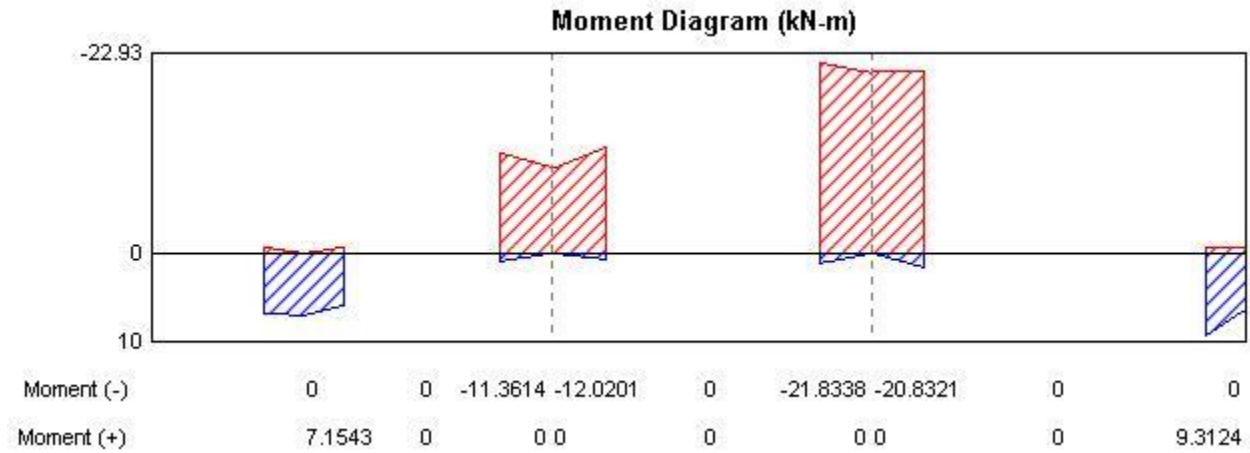
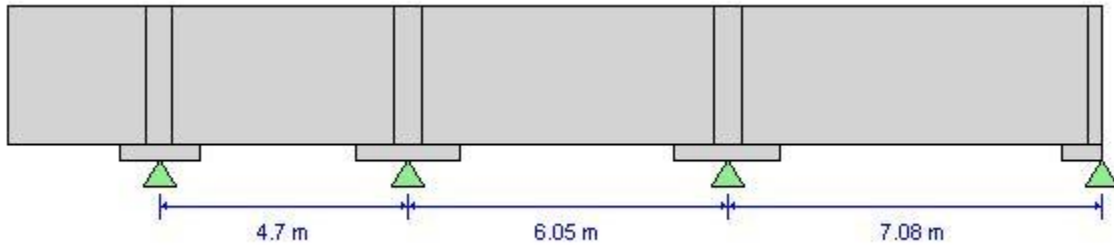
## ACI 318-14 Concrete Strip Design

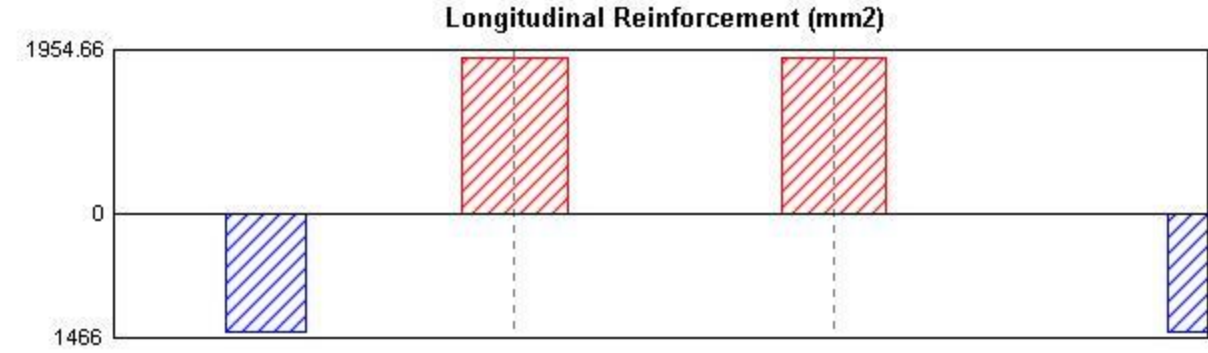
### Geometric Properties

Combination = Overall Envelope  
 Strip Label = SA1  
 Length = 34.7 m  
 Distance to Top Rebar Center = 24.525 mm  
 Distance to Bot Rebar Center = 24.525 mm

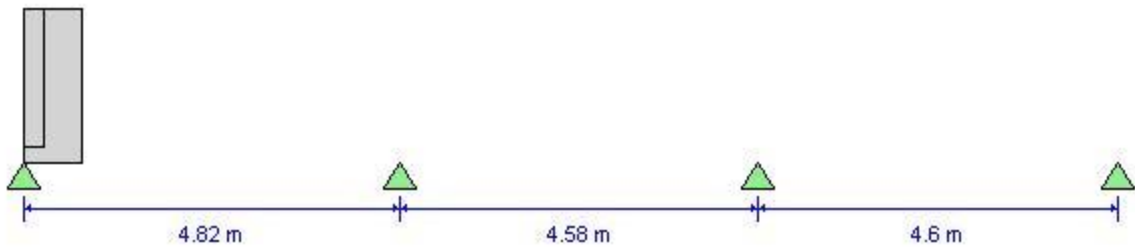
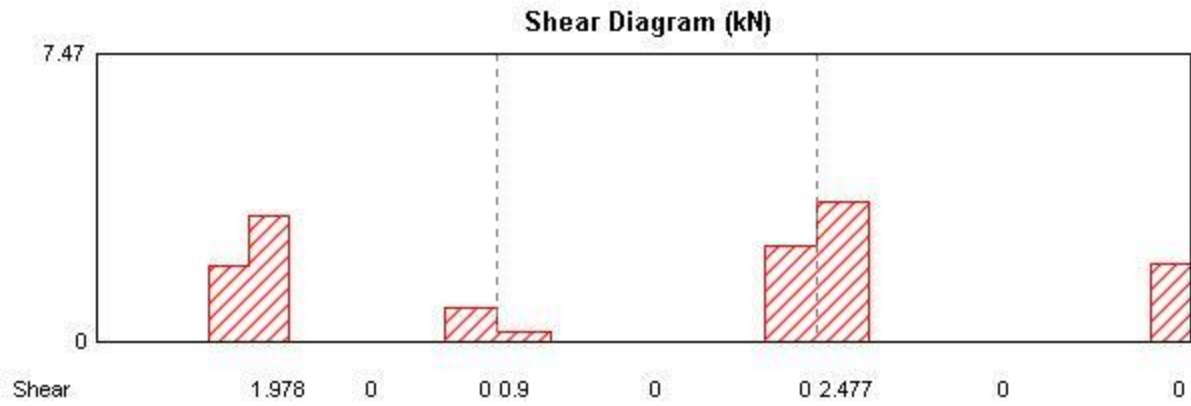
### Material Properties

Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
 Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>

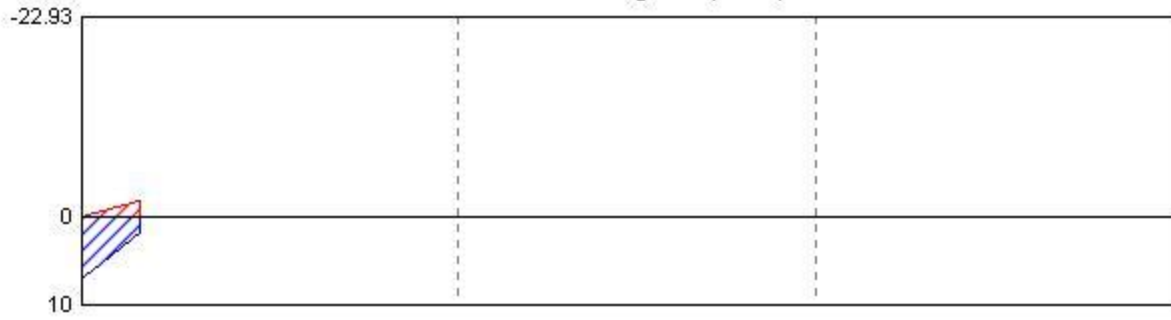




As (top)	0	0	66.427	70.281	0	127.748	121.879	0	0
Combo			Comb1	Comb1		Comb1	Comb1		
As (bot)	41.824	0	0	0	0	0	0	0	54.451
Combo	Comb1		Comb4			Comb4			Comb1

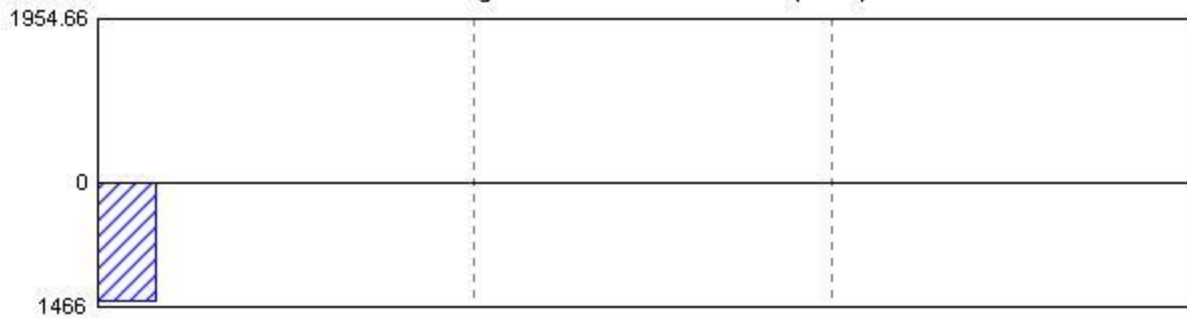


**Moment Diagram (kN-m)**



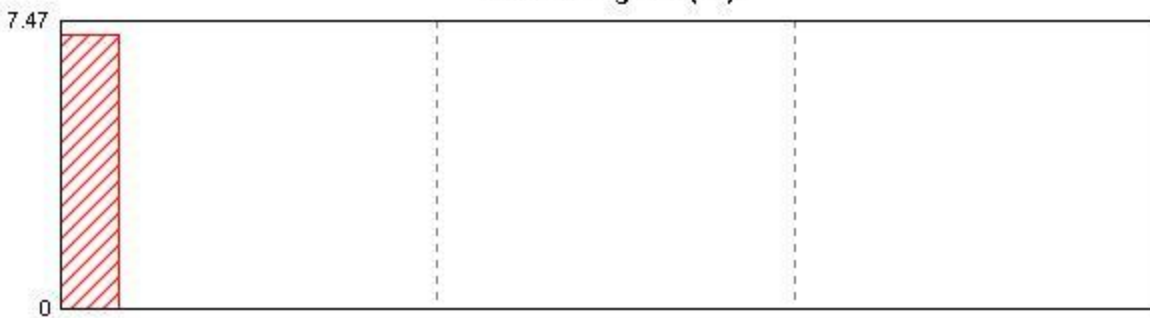
Moment (-)	-0.6019	0	0 0	0	0 0	0	0
Moment (+)	7.1916	0	0 0	0	0 0	0	0

**Longitudinal Reinforcement (mm2)**



As (top)	0	0	0 0	0	0 0	0	0
Combo	Comb1						
As (bot)	42.042	0	0 0	0	0 0	0	0
Combo	Comb1						

**Shear Diagram (kN)**



Shear	1.999	0	0 0	0	0 0	0	0
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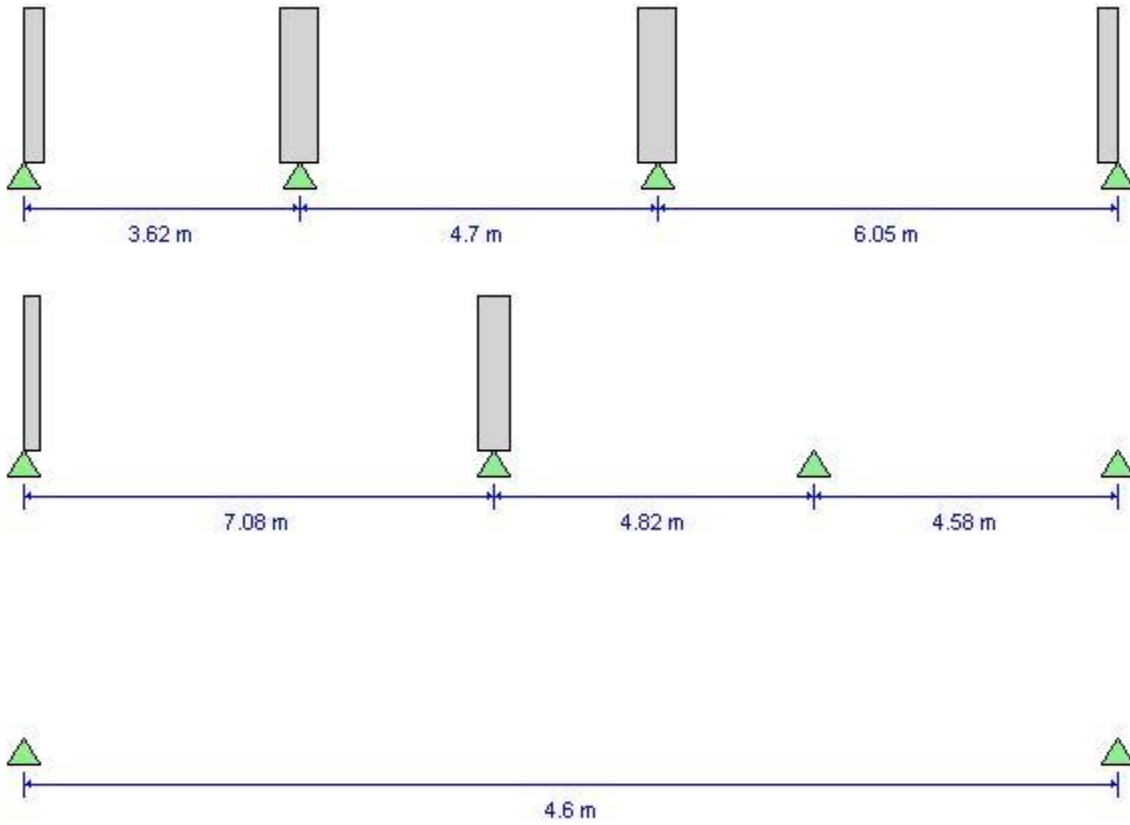
## ACI 318-14 Concrete Strip Design

### Geometric Properties

Combination = Overall Envelope  
Strip Label = SA2  
Length = 35.45 m  
Distance to Top Rebar Center = 24.525 mm  
Distance to Bot Rebar Center = 24.525 mm

### Material Properties

Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



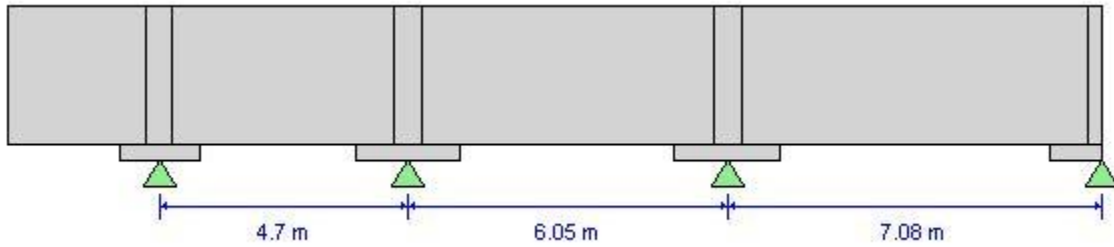
## ACI 318-14 Concrete Strip Design

### Geometric Properties

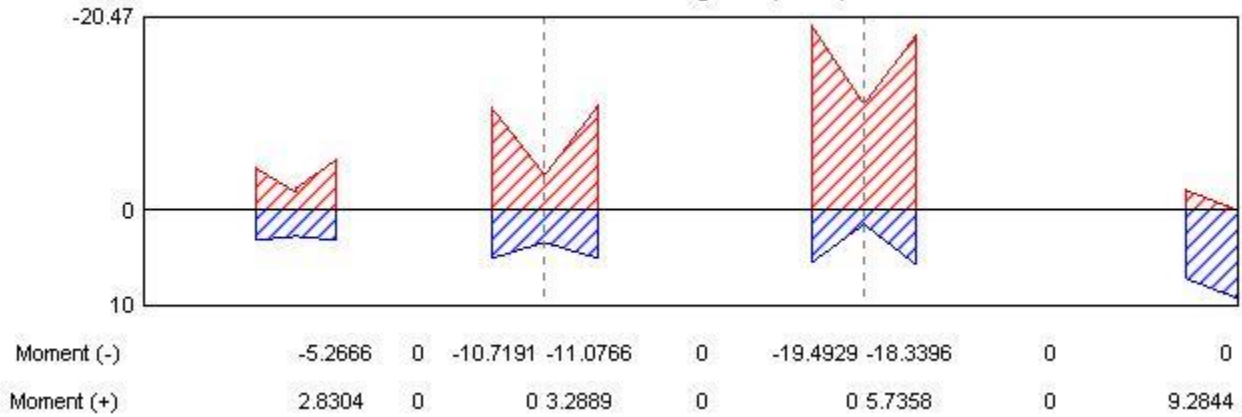
Combination = Overall Envelope  
 Strip Label = SA3  
 Length = 34.7 m  
 Distance to Top Rebar Center = 24.525 mm  
 Distance to Bot Rebar Center = 24.525 mm

### Material Properties

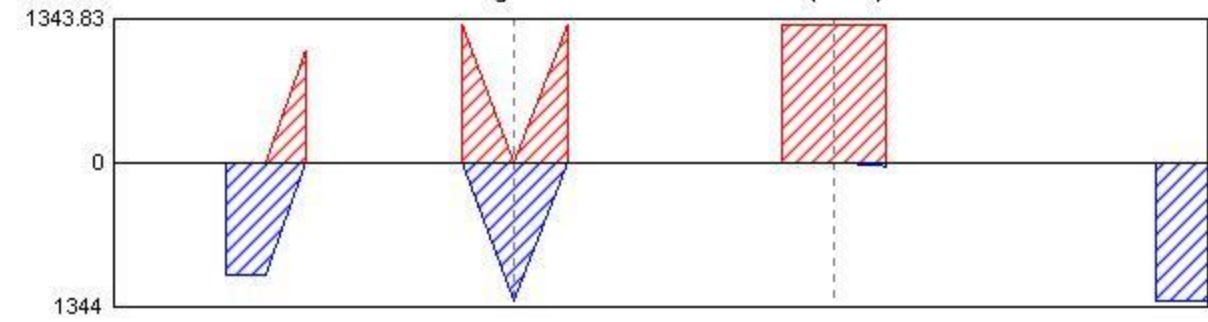
Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
 Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



**Moment Diagram (kN-m)**

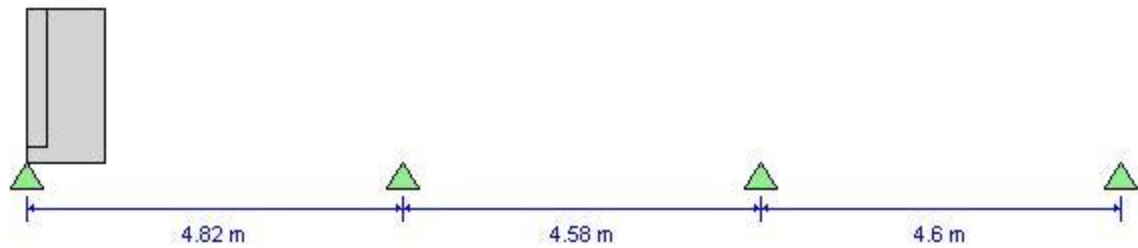
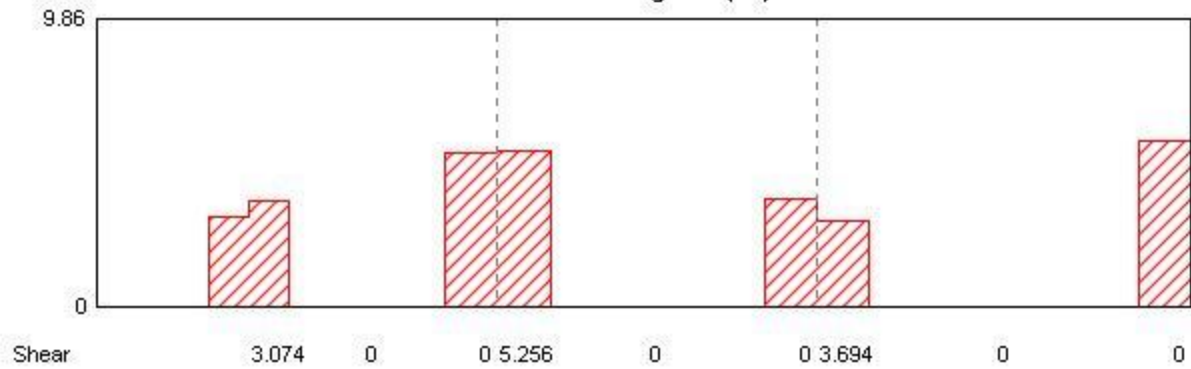


### Longitudinal Reinforcement (mm<sup>2</sup>)

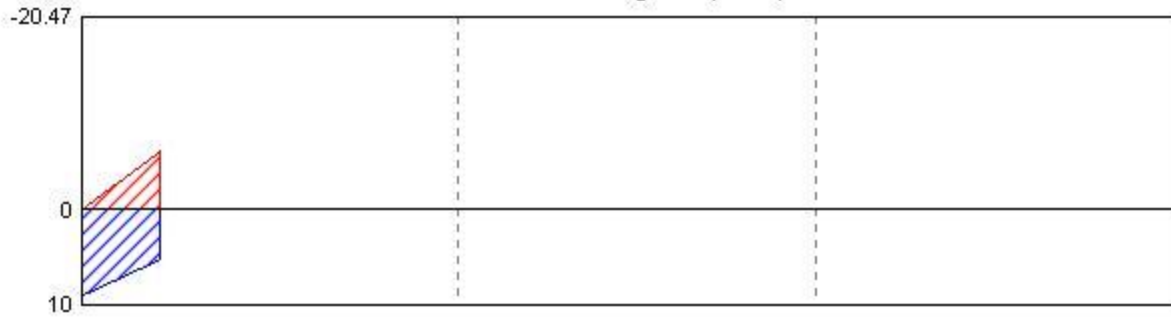


As (top)	30.788	0	62.69	64.782	0	114.103	107.34	0	0
Combo	Comb1		Comb1	Comb1		Comb1	Comb1		
As (bot)	0	0	0	0	0	0	33.528	0	54.291
Combo	Comb1		Comb1			Comb1			Comb1

### Shear Diagram (kN)

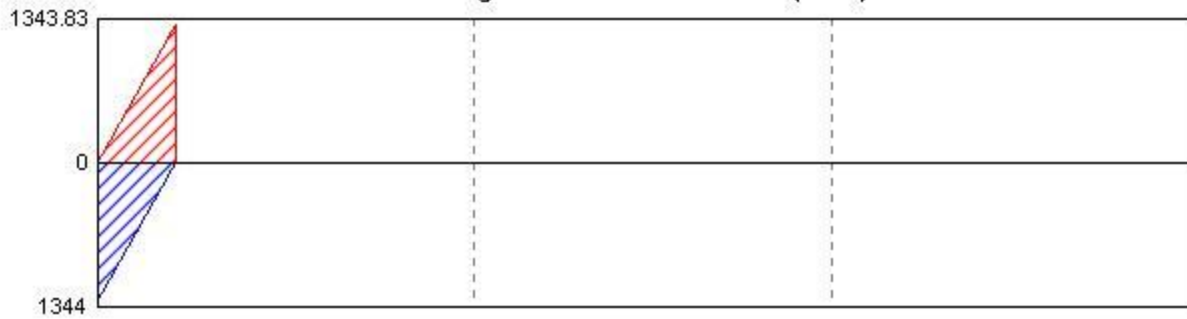


**Moment Diagram (kN-m)**



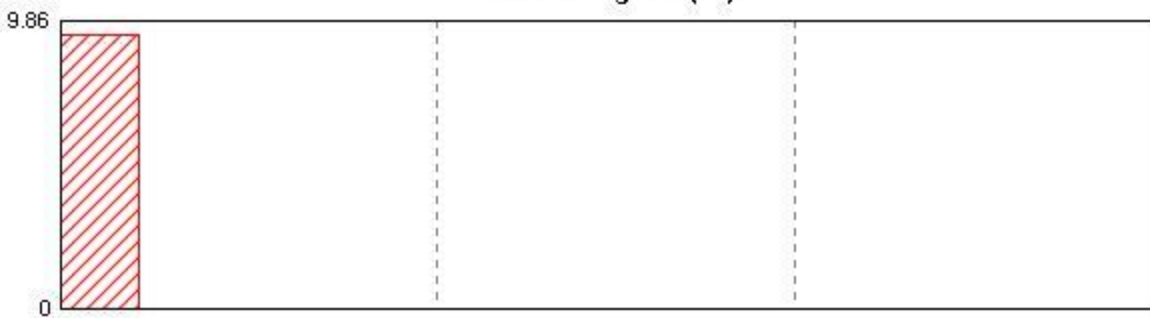
Moment (-)	-6.1051	0	0 0	0	0 0	0	0
Moment (+)	9.2844	0	0 0	0	0 0	0	0

**Longitudinal Reinforcement (mm2)**



As (top)	35.689	0	0 0	0	0 0	0	0
Combo	Comb1						
As (bot)	54.291	0	0 0	0	0 0	0	0
Combo	Comb1						

**Shear Diagram (kN)**



Shear	5.666	0	0 0	0	0 0	0	0
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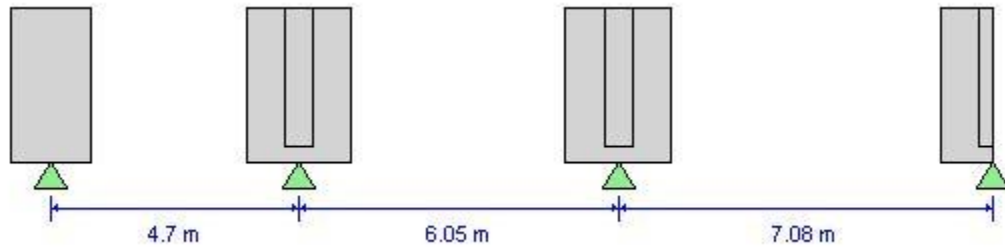
## ACI 318-14 Concrete Strip Design

### Geometric Properties

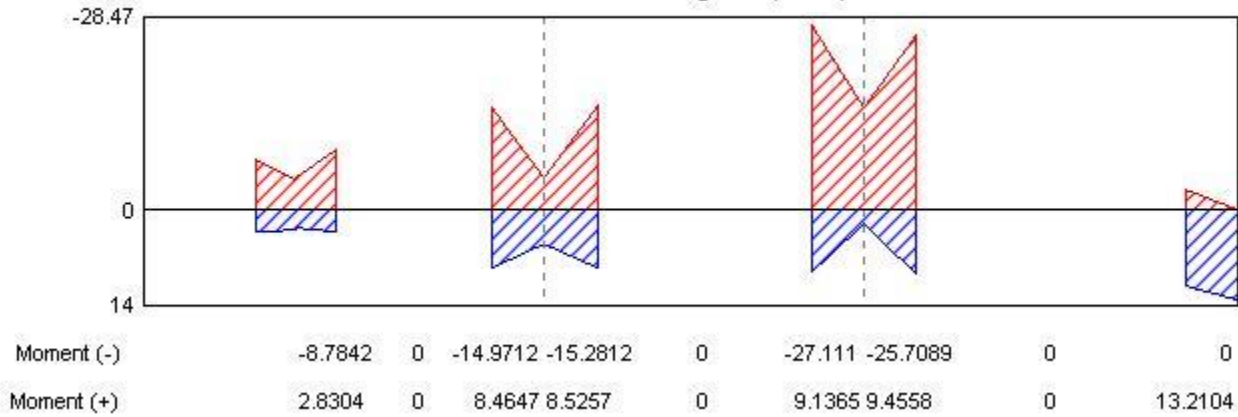
Combination = Overall Envelope  
 Strip Label = SA4  
 Length = 34.7 m  
 Distance to Top Rebar Center = 24.525 mm  
 Distance to Bot Rebar Center = 24.525 mm

### Material Properties

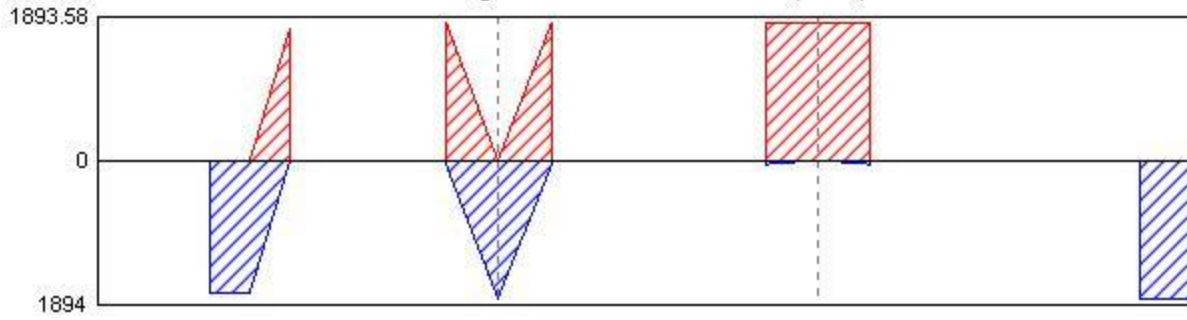
Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
 Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



**Moment Diagram (kN-m)**

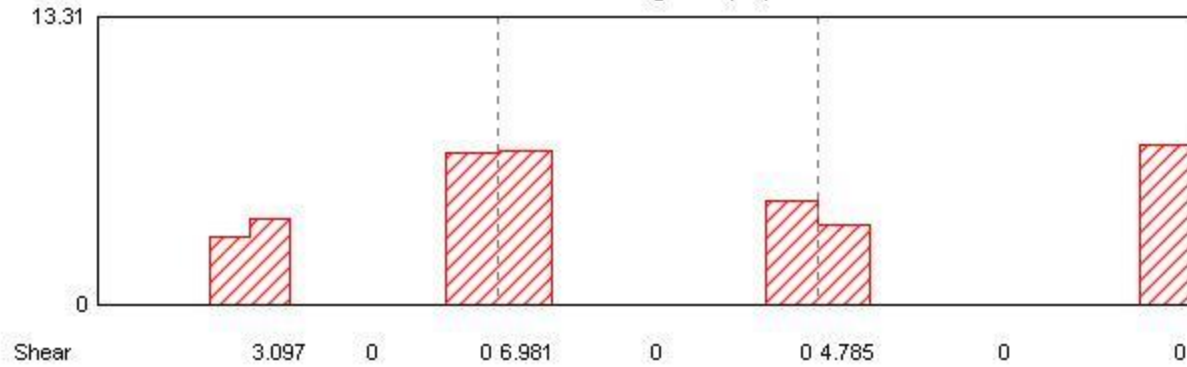


**Longitudinal Reinforcement (mm<sup>2</sup>)**

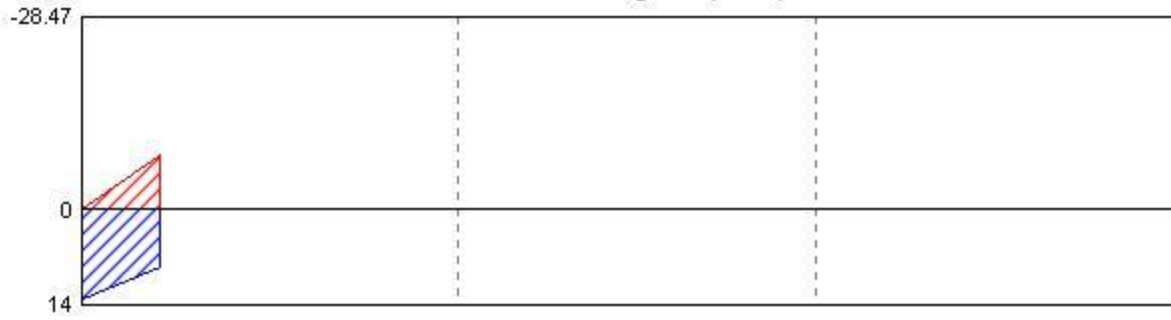


As (top)	51.351	0	87.556	89.372	0	158.692	150.469	0	0
Combo	Comb1		Comb1	Comb1		Comb1	Comb1		
As (bot)	0	0	49.481	49.838	0	53.411	55.279	0	77.249
Combo	Comb1		Comb1	Comb1		Comb1	Comb1		Comb1

**Shear Diagram (kN)**

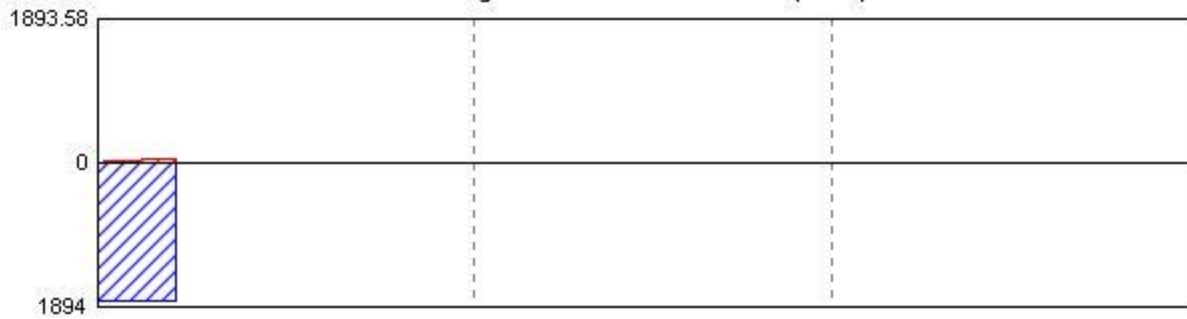


**Moment Diagram (kN-m)**



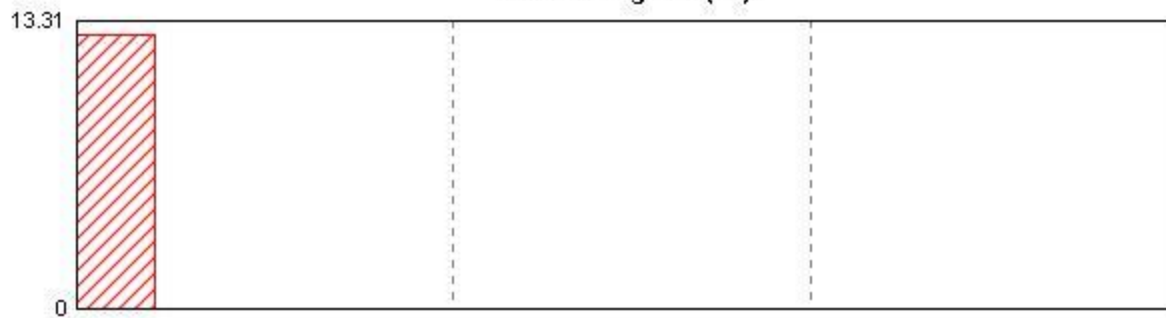
Moment (-)	-7.9783	0	0 0	0	0 0	0	0
Moment (+)	13.2104	0	0 0	0	0 0	0	0

**Longitudinal Reinforcement (mm2)**



As (top)	46.637	0	0 0	0	0 0	0	0
Combo	Comb1						
As (bot)	77.249	0	0 0	0	0 0	0	0
Combo	Comb1						

**Shear Diagram (kN)**



Shear	7.421	0	0 0	0	0 0	0	0
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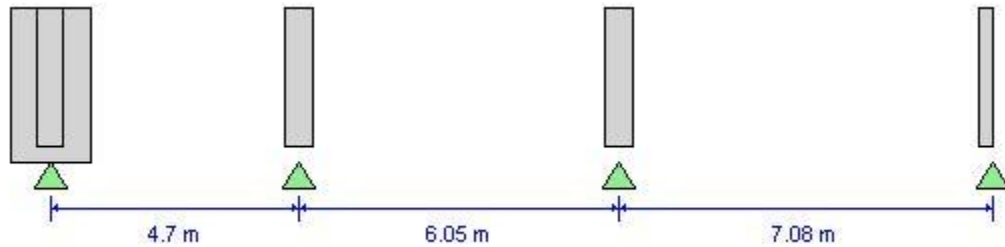
## ACI 318-14 Concrete Strip Design

### Geometric Properties

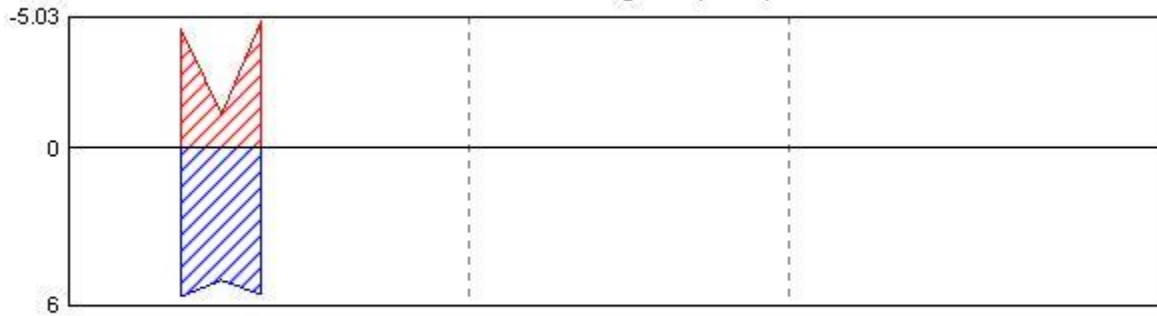
Combination = Overall Envelope  
 Strip Label = SA5  
 Length = 34.7 m  
 Distance to Top Rebar Center = 24.525 mm  
 Distance to Bot Rebar Center = 24.525 mm

### Material Properties

Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
 Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>

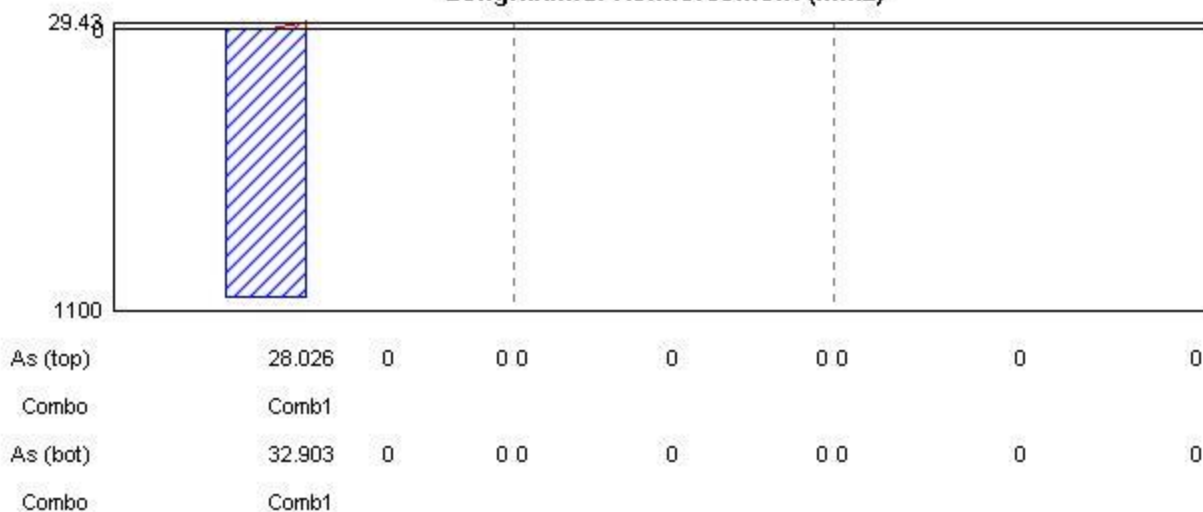


**Moment Diagram (kN-m)**

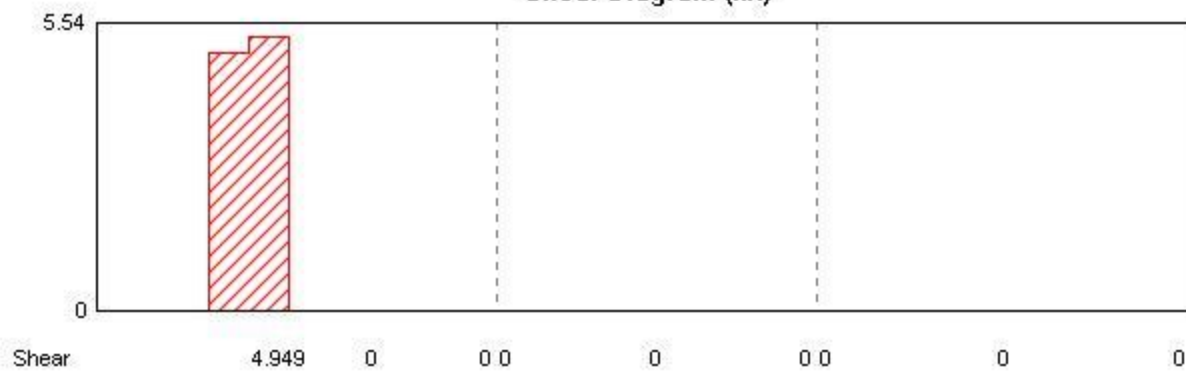


Moment (-)	-4.7944	0	0.0	0	0.0	0	0
Moment (+)	5.6282	0	0.0	0	0.0	0	0

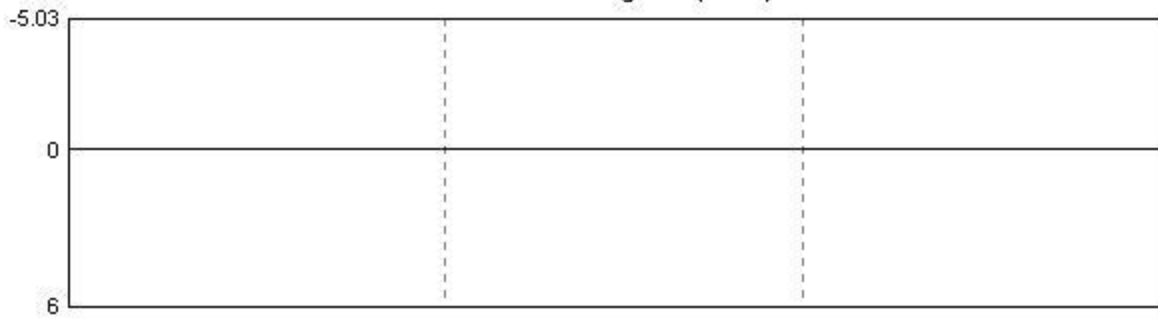
### Longitudinal Reinforcement (mm<sup>2</sup>)



### Shear Diagram (kN)

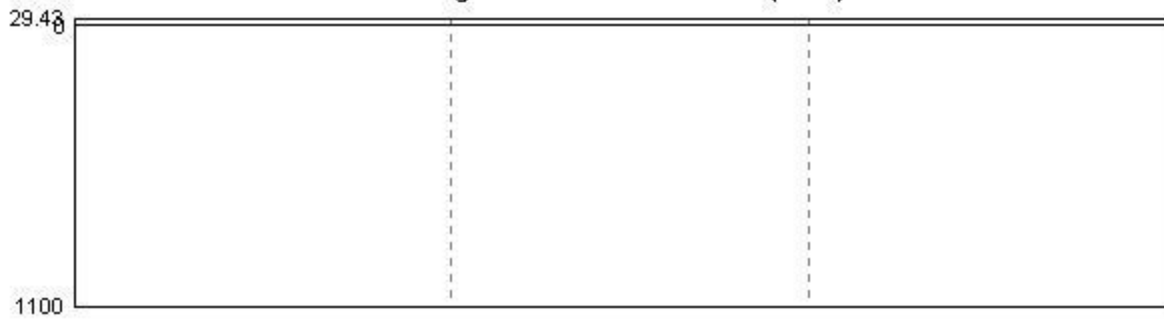


**Moment Diagram (kN-m)**



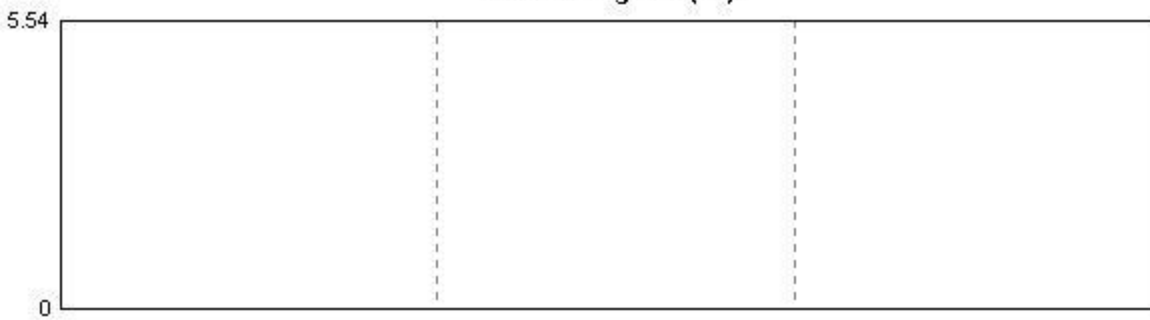
Moment (-)	0	0	0.0	0	0.0	0	0
Moment (+)	0	0	0.0	0	0.0	0	0

**Longitudinal Reinforcement (mm2)**



As (top)	0	0	0.0	0	0.0	0	0
Combo							
As (bot)	0	0	0.0	0	0.0	0	0
Combo							

**Shear Diagram (kN)**



Shear	0	0	0.0	0	0.0	0	0
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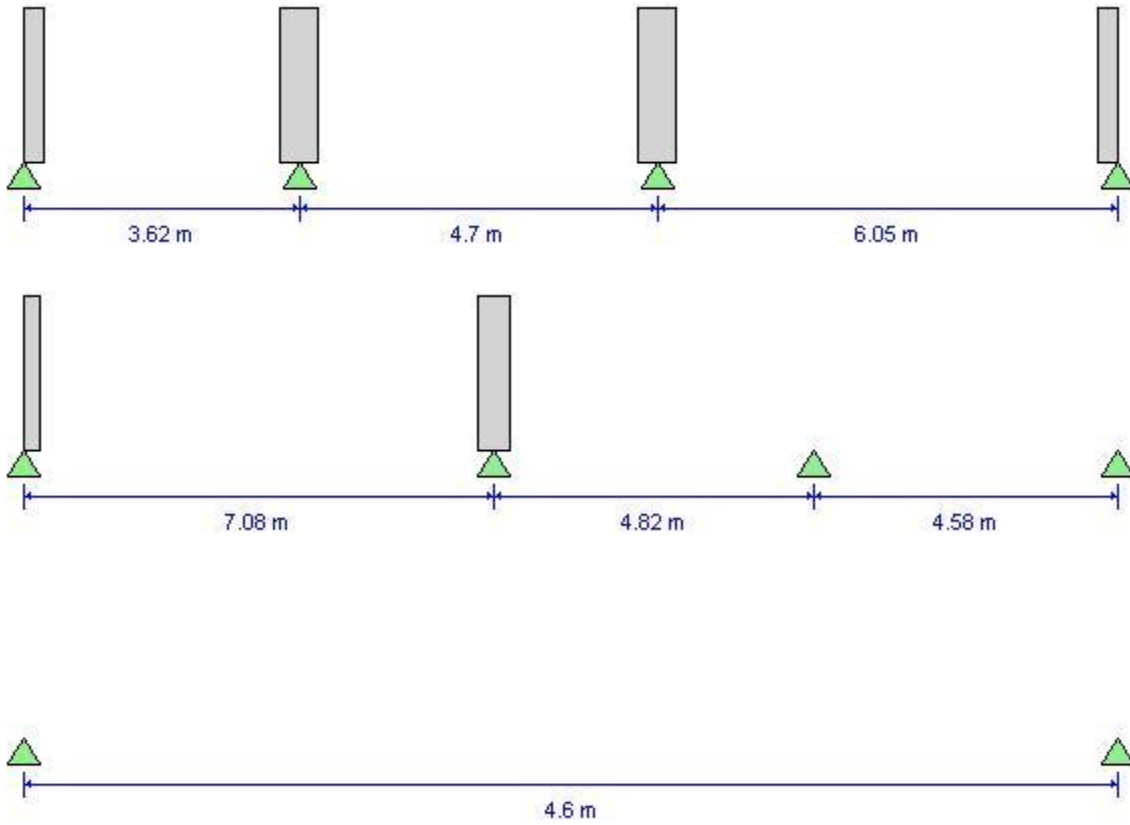
## ACI 318-14 Concrete Strip Design

### Geometric Properties

Combination = Overall Envelope  
Strip Label = SA6  
Length = 35.45 m  
Distance to Top Rebar Center = 24.525 mm  
Distance to Bot Rebar Center = 24.525 mm

### Material Properties

Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



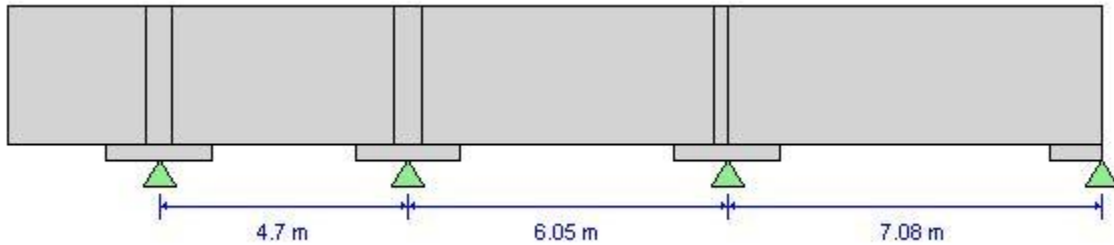
## ACI 318-14 Concrete Strip Design

### Geometric Properties

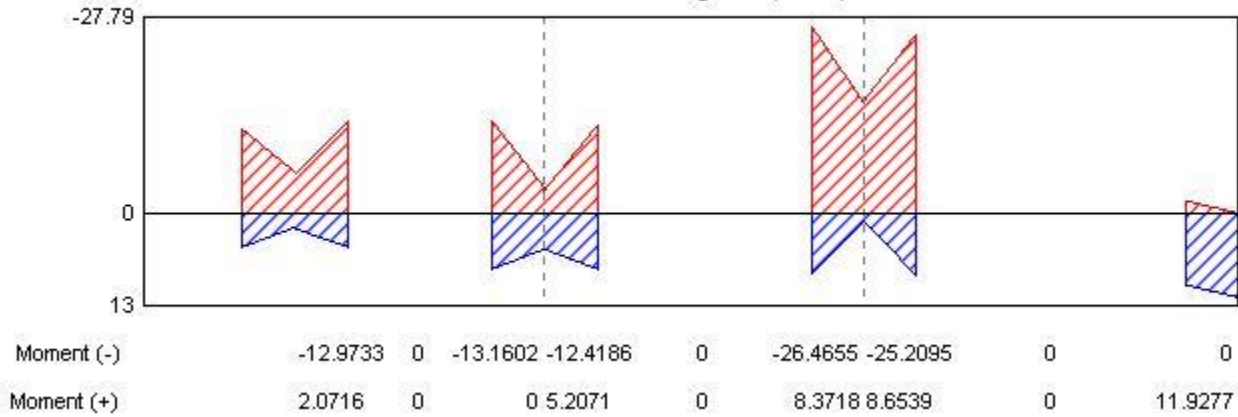
Combination = Overall Envelope  
 Strip Label = SA7  
 Length = 34.7 m  
 Distance to Top Rebar Center = 24.525 mm  
 Distance to Bot Rebar Center = 24.525 mm

### Material Properties

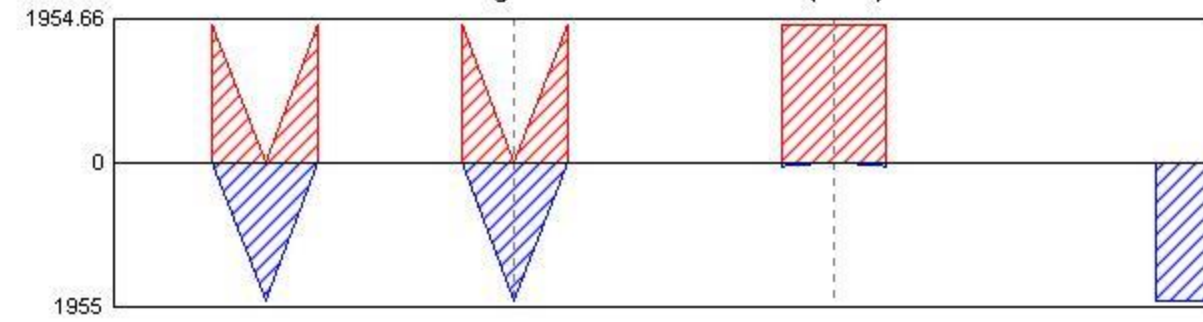
Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
 Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



**Moment Diagram (kN-m)**

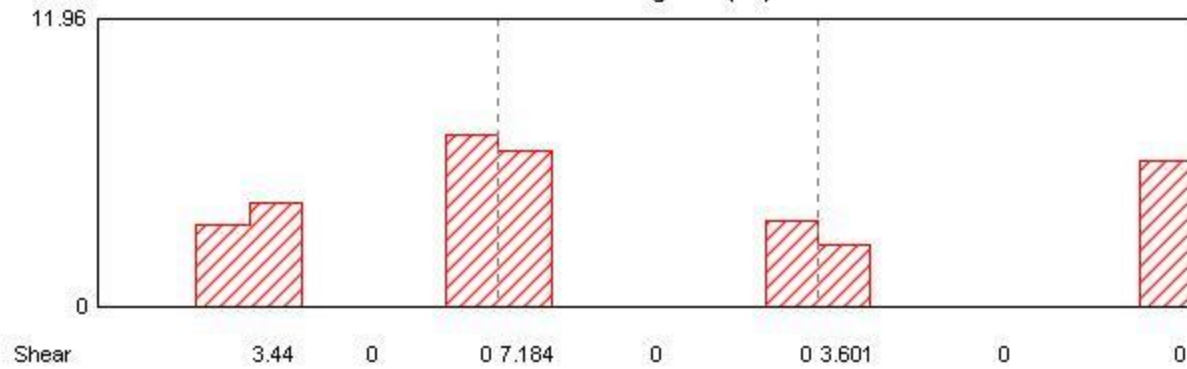


**Longitudinal Reinforcement (mm<sup>2</sup>)**

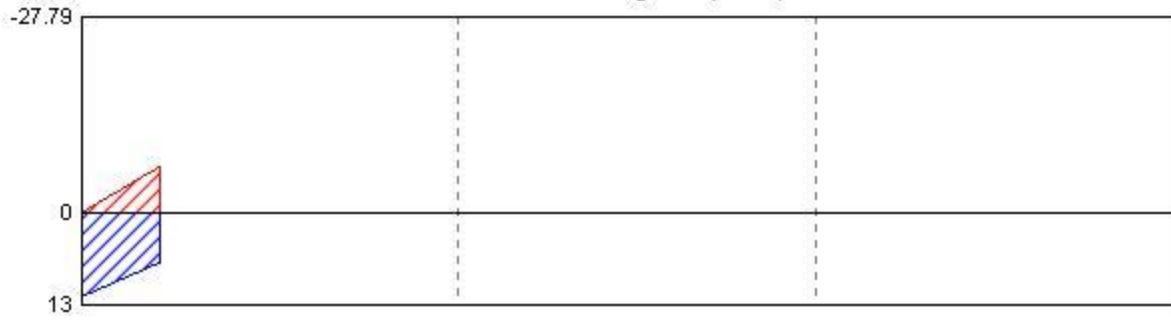


As (top)	75.86	0	76.953	72.613	0	154.897	147.533	0	0
Combo	Comb1		Comb1	Comb1		Comb1	Comb1		
As (bot)	0	0	0	0	0	48.937	50.587	0	69.741
Combo	Comb1		Comb1			Comb1	Comb1		Comb1

**Shear Diagram (kN)**

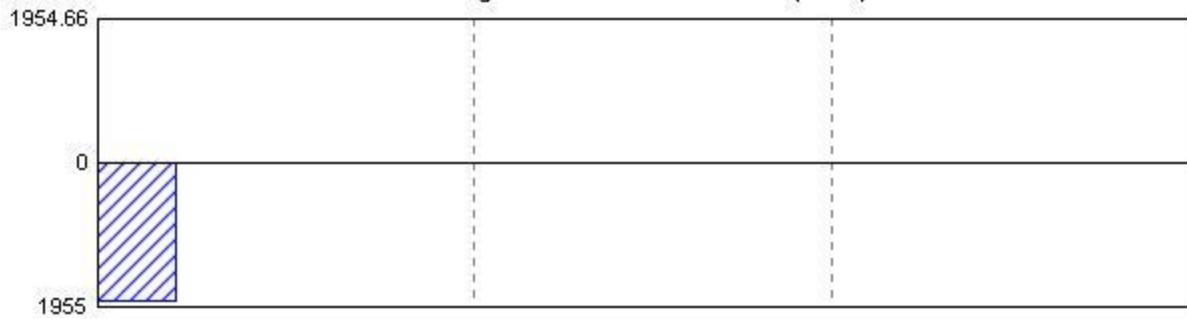


**Moment Diagram (kN-m)**



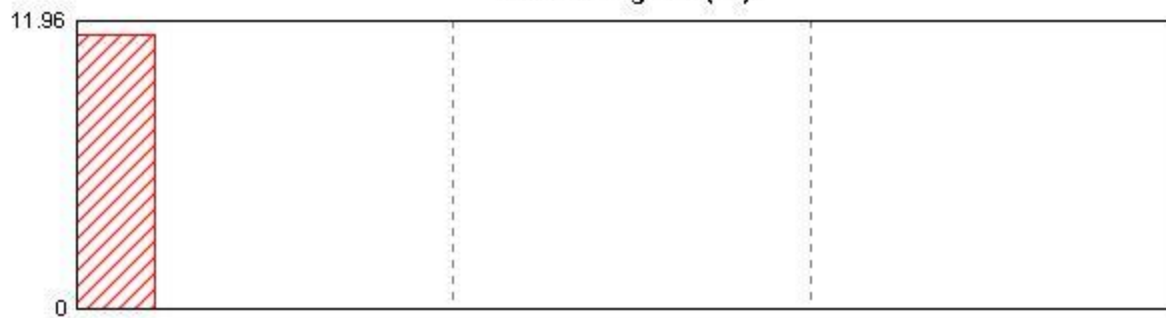
Moment (-)	0	0	0 0	0	0 0	0	0
Moment (+)	11.9277	0	0 0	0	0 0	0	0

**Longitudinal Reinforcement (mm2)**



As (top)	0	0	0 0	0	0 0	0	0
Combo							
As (bot)	69.741	0	0 0	0	0 0	0	0
Combo	Comb1						

**Shear Diagram (kN)**



Shear	6.045	0	0 0	0	0 0	0	0
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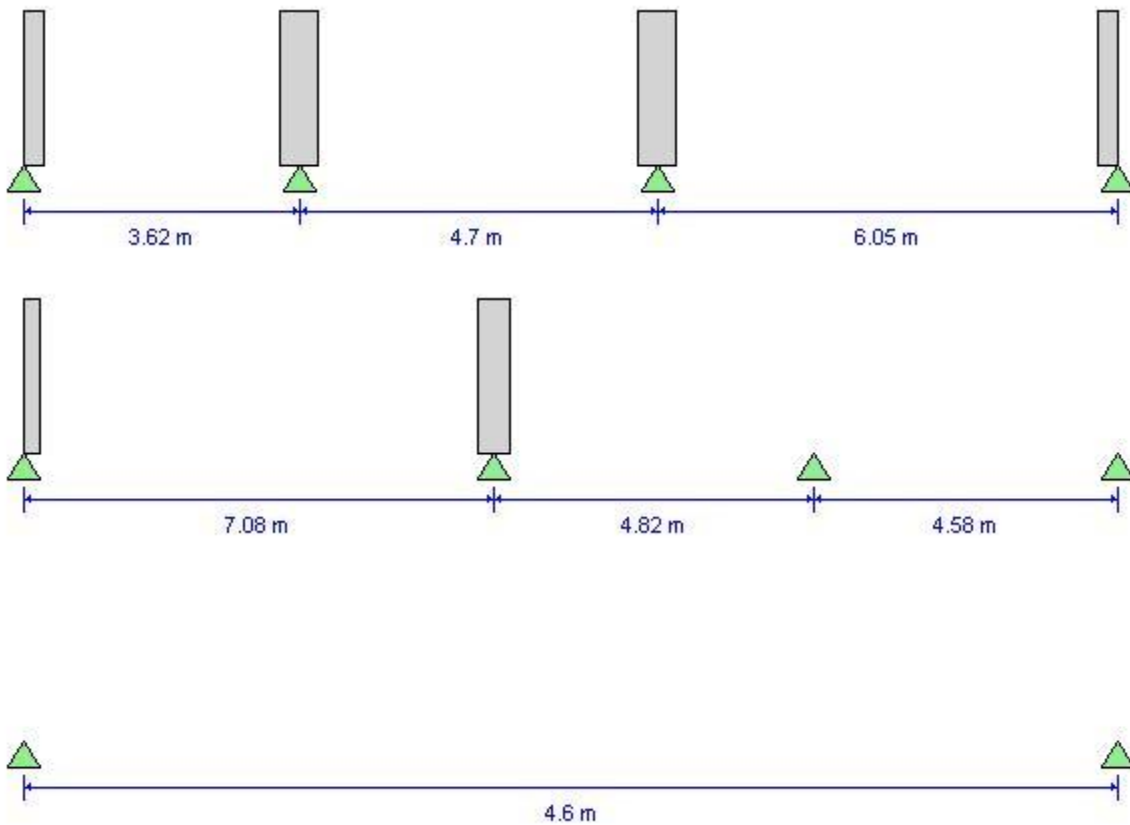
## ACI 318-14 Concrete Strip Design

### Geometric Properties

Combination = Overall Envelope  
Strip Label = SA8  
Length = 35.45 m  
Distance to Top Rebar Center = 24.525 mm  
Distance to Bot Rebar Center = 24.525 mm

### Material Properties

Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



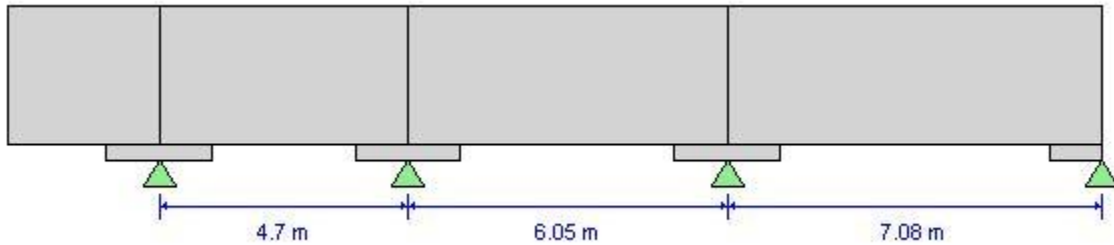
## ACI 318-14 Concrete Strip Design

### Geometric Properties

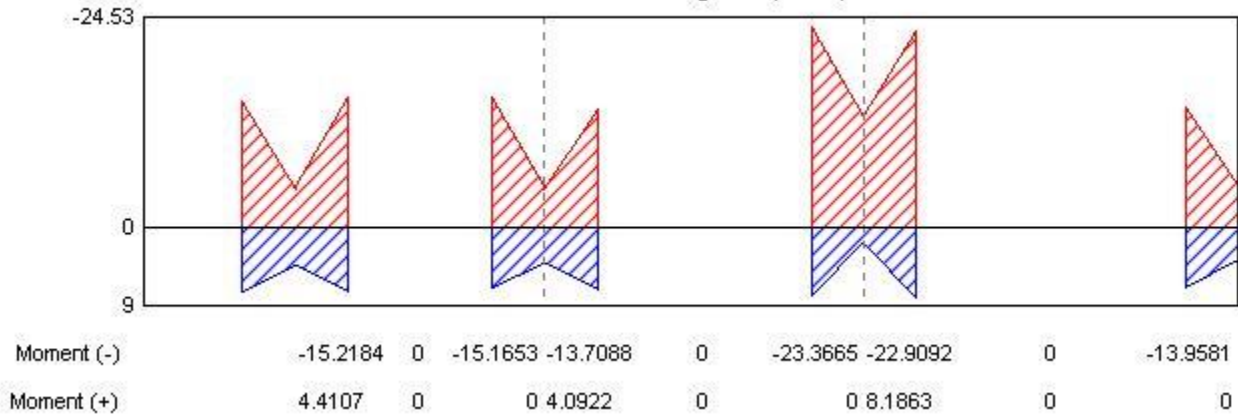
Combination = Overall Envelope  
 Strip Label = SA9  
 Length = 35.45 m  
 Distance to Top Rebar Center = 24.525 mm  
 Distance to Bot Rebar Center = 24.525 mm

### Material Properties

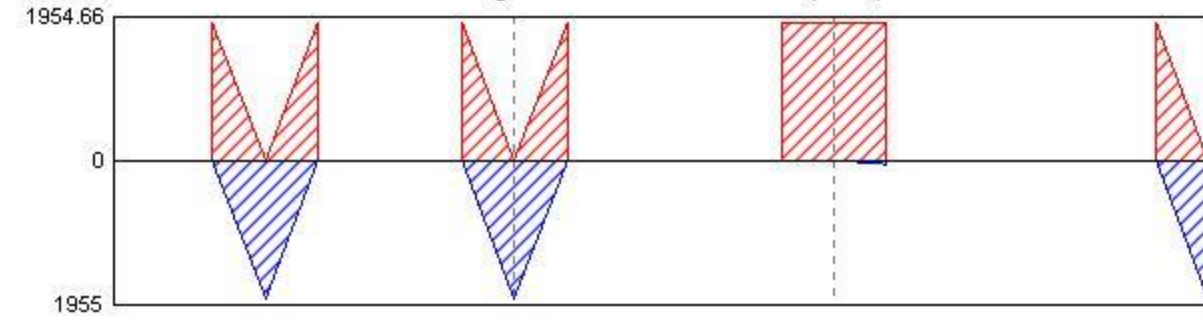
Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
 Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



**Moment Diagram (kN-m)**

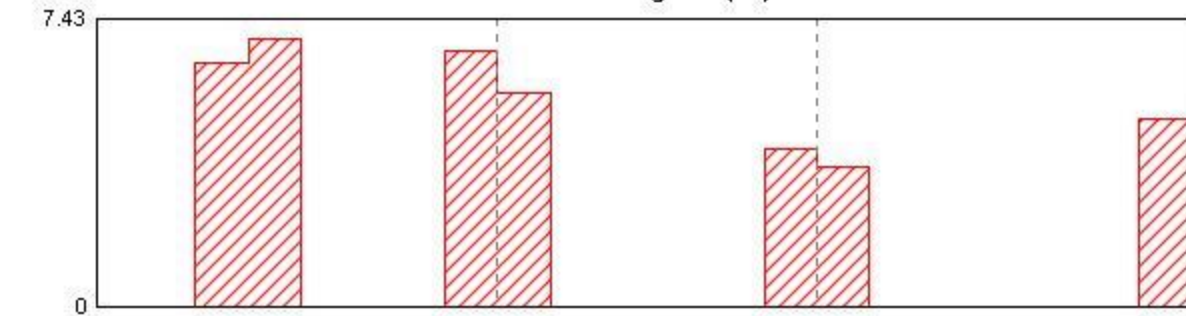


**Longitudinal Reinforcement (mm<sup>2</sup>)**

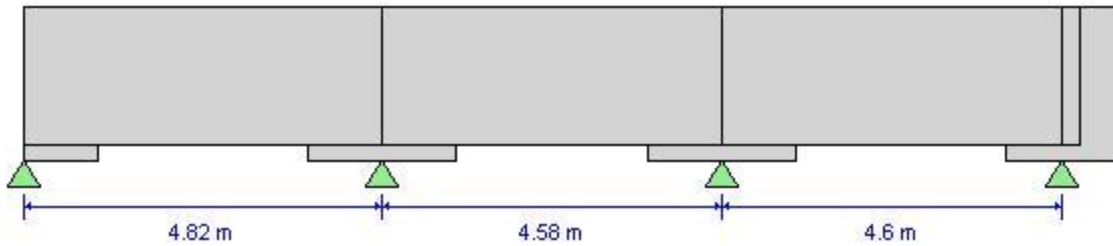


As (top)	89.001	0	88.69	80.164	0	136.73	134.05	0	81.623
Combo	Comb1		Comb1	Comb1		Comb1	Comb1		Comb1
As (bot)	0	0	0	0	0	0	47.852	0	0
Combo	Comb1		Comb1			Comb1			

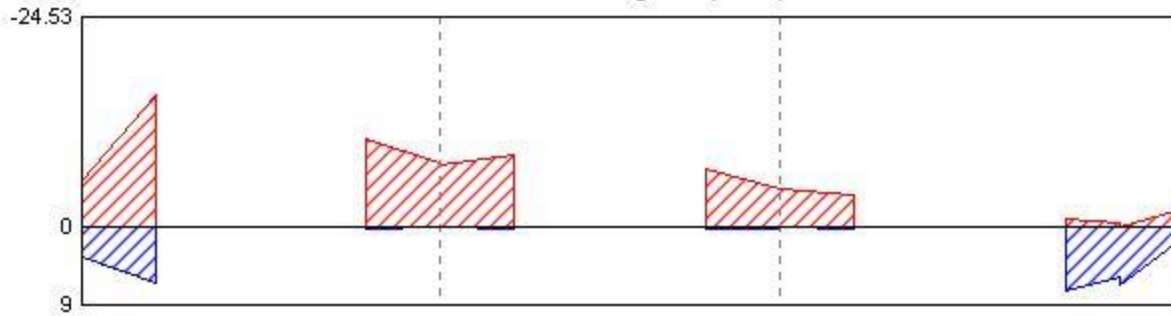
**Shear Diagram (kN)**



Shear	6.307	0	0	6.613	0	0	4.085	0	0
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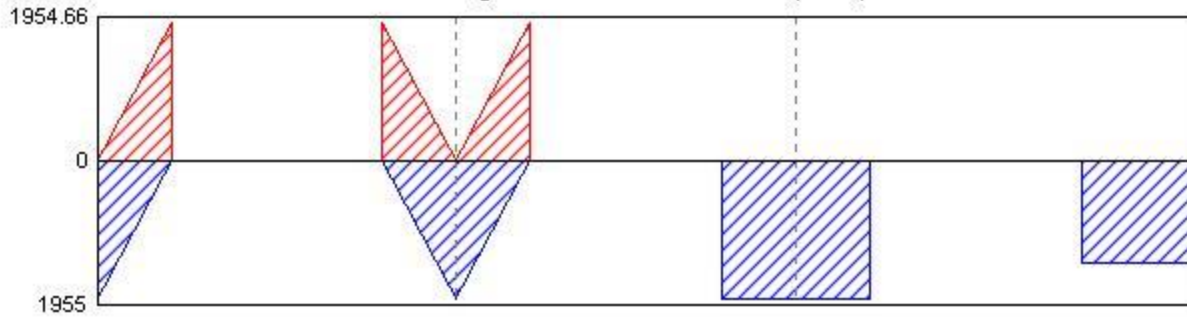


**Moment Diagram (kN-m)**



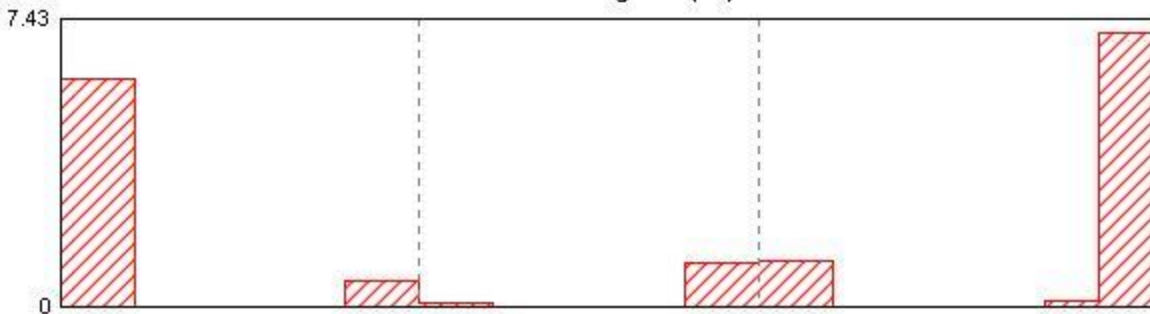
Moment (-)	-15.3045	0	-10.1859	-8.4902	0	0	-4.512	0	0
Moment (+)	3.697	0	0	0	0	0	0.2875	0	7.4684

**Longitudinal Reinforcement (mm2)**



As (top)	89.505	0	59.549	49.63	0	0	0	0	0
Combo	Comb1		Comb1	Comb1		Comb1			
As (bot)	0	0	0	0	0	0	0	0	43.661
Combo	Comb1		Comb4			Comb1			Comb1

**Shear Diagram (kN)**



Shear	4.846	0	0	0.675	0	0	1.131	0	0
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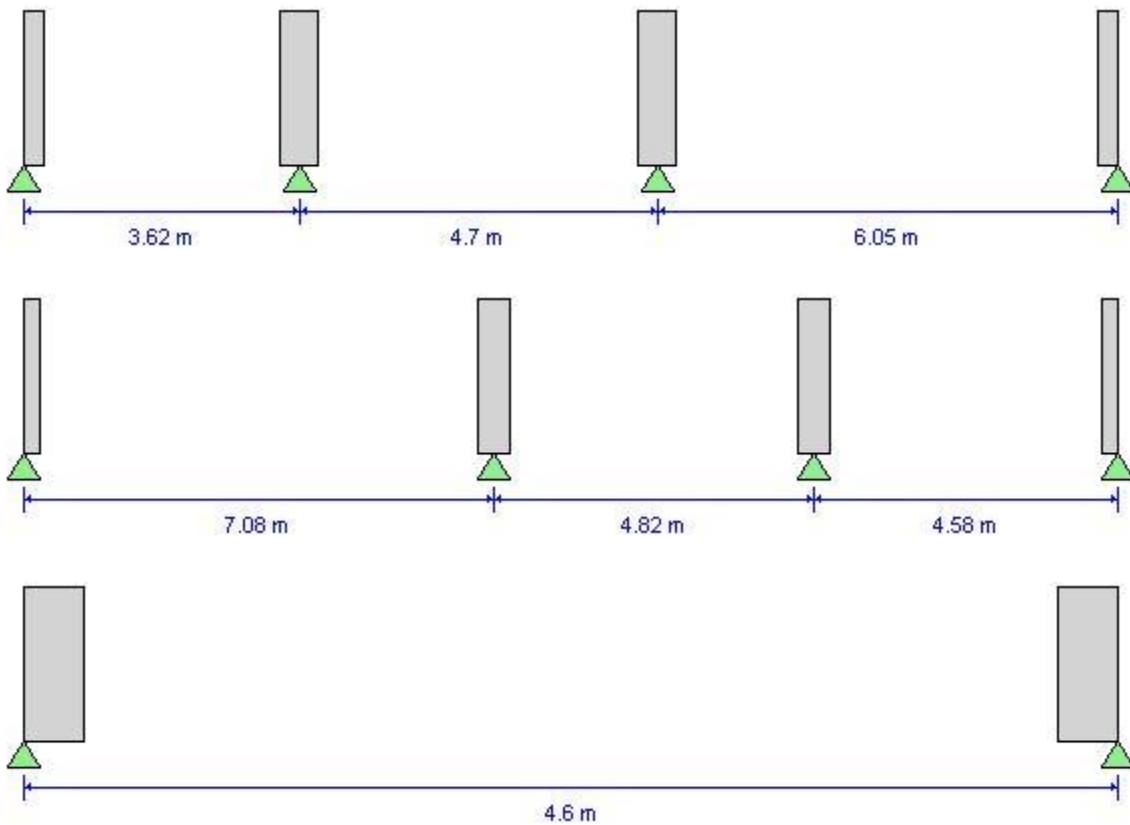
## ACI 318-14 Concrete Strip Design

### Geometric Properties

Combination = Overall Envelope  
Strip Label = SA10  
Length = 35.45 m  
Distance to Top Rebar Center = 24.525 mm  
Distance to Bot Rebar Center = 24.525 mm

### Material Properties

Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



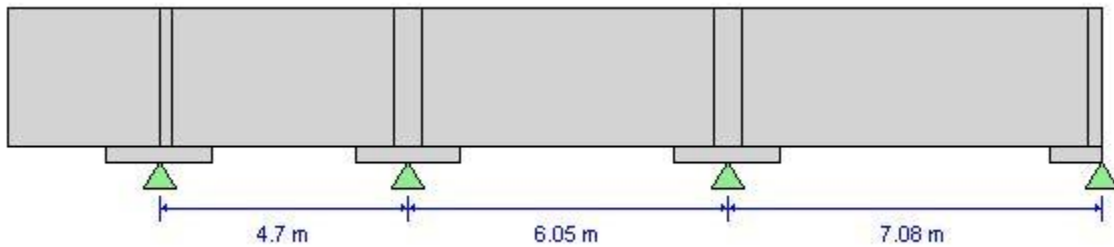
## ACI 318-14 Concrete Strip Design

### Geometric Properties

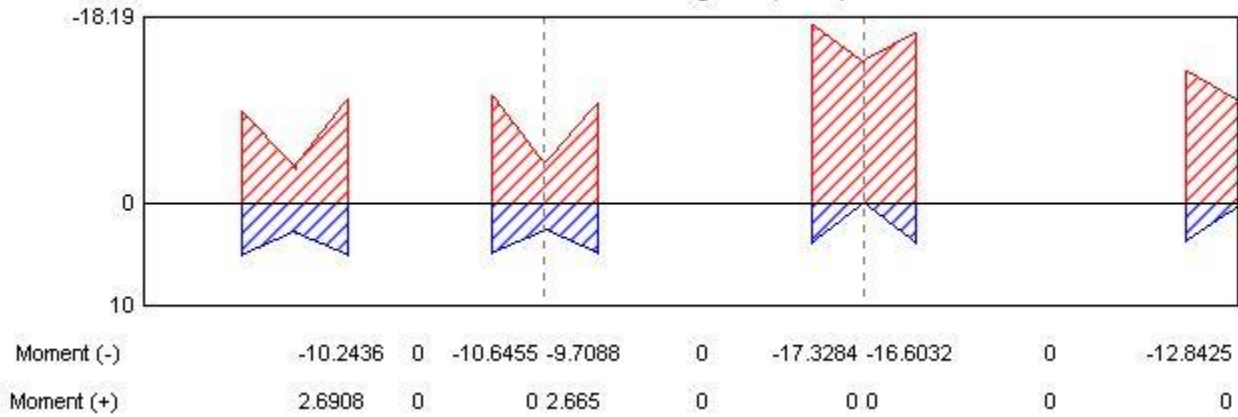
Combination = Overall Envelope  
 Strip Label = SA11  
 Length = 35.45 m  
 Distance to Top Rebar Center = 24.525 mm  
 Distance to Bot Rebar Center = 24.525 mm

### Material Properties

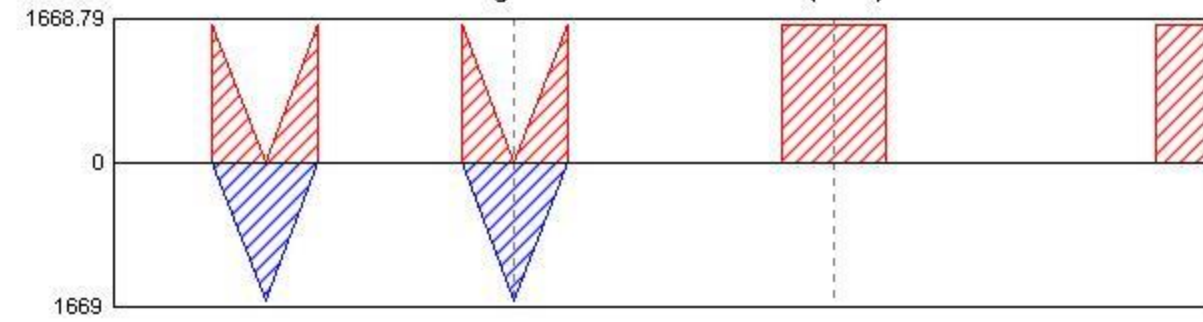
Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
 Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



**Moment Diagram (kN-m)**

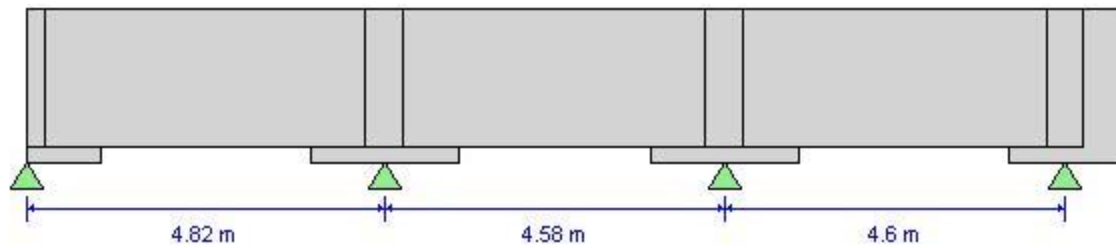
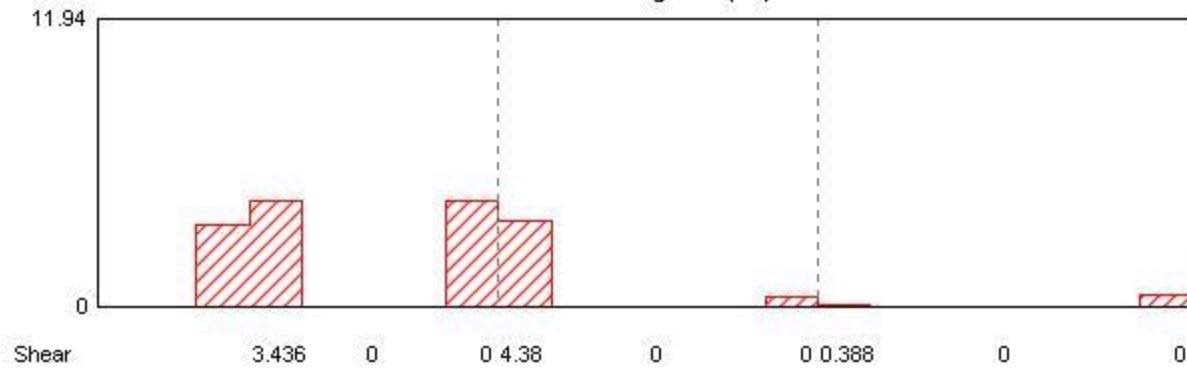


**Longitudinal Reinforcement (mm<sup>2</sup>)**

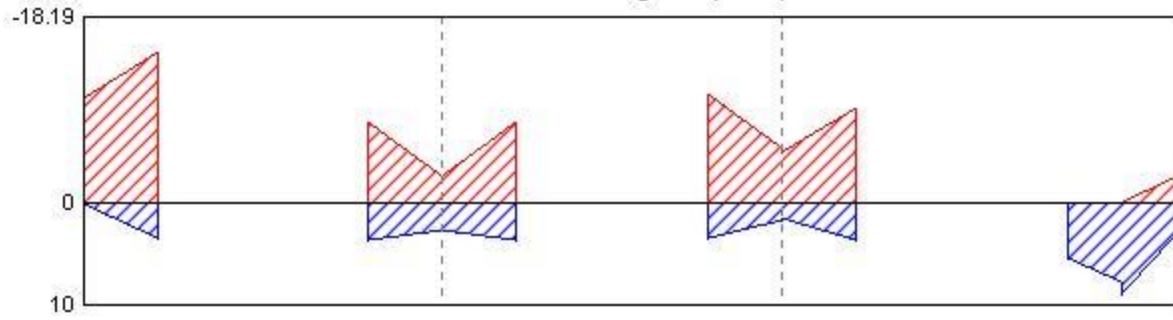


As (top)	59.894	0	62.246	56.765	0	101.376	97.128	0	75.105
Combo	Comb1		Comb1	Comb1		Comb1	Comb1		Comb1
As (bot)	0	0	0	0	0	0	0	0	0
Combo	Comb1		Comb1			Comb4			

**Shear Diagram (kN)**

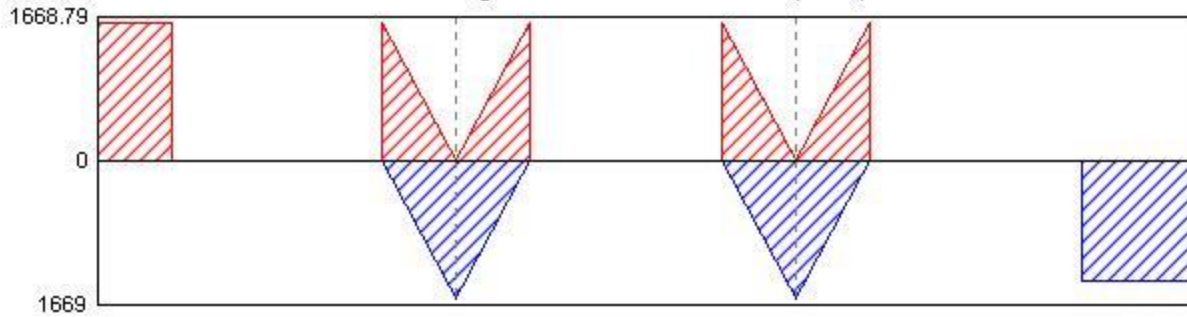


**Moment Diagram (kN-m)**



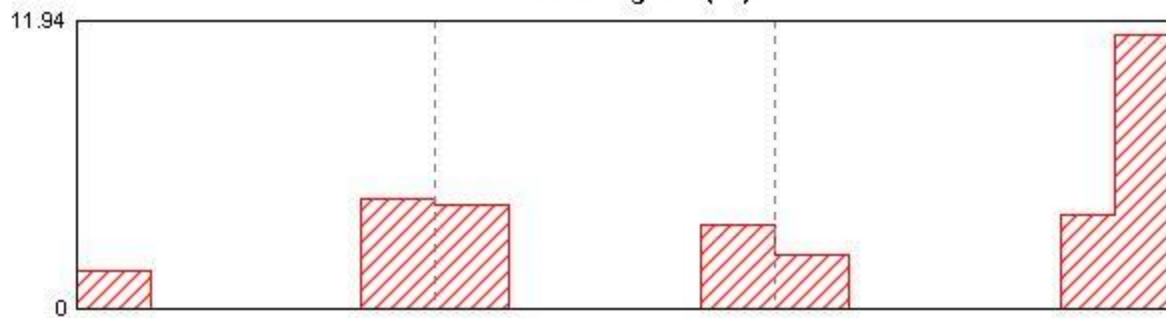
Moment (-)	-14.7618	0	-7.9209	-7.7876	0	-10.6657	-9.1364	0	0
Moment (+)	0.3232	0	0	2.7805	0	0	1.6723	0	8.9586

**Longitudinal Reinforcement (mm2)**



As (top)	86.343	0	46.304	45.525	0	62.364	53.415	0	0
Combo	Comb1		Comb1	Comb1		Comb1	Comb1		
As (bot)	0	0	0	0	0	0	0	0	52.38
Combo	Comb1		Comb1			Comb1			Comb1

**Shear Diagram (kN)**



Shear	0.536	0	0	4.541	0	0	3.442	0	0
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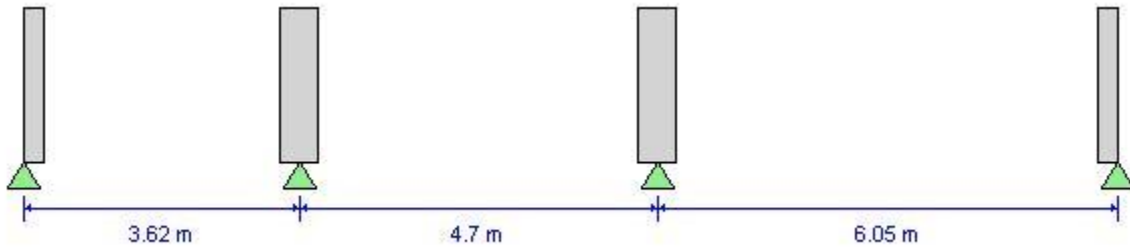
## ACI 318-14 Concrete Strip Design

### Geometric Properties

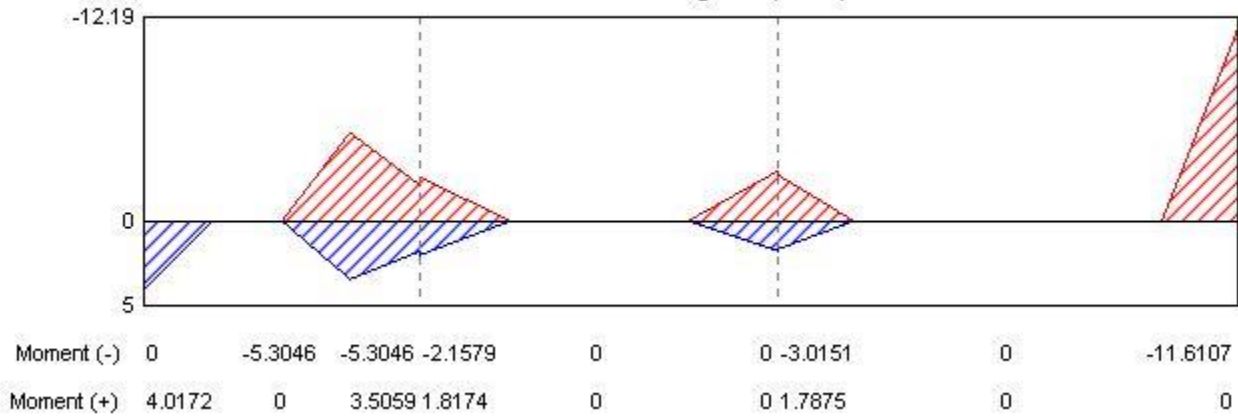
Combination = Overall Envelope  
 Strip Label = SA12  
 Length = 35.45 m  
 Distance to Top Rebar Center = 24.525 mm  
 Distance to Bot Rebar Center = 24.525 mm

### Material Properties

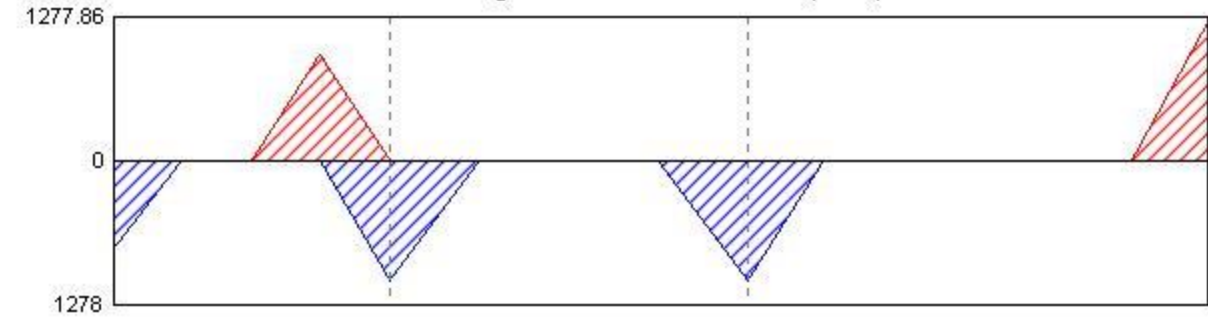
Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
 Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



**Moment Diagram (kN-m)**

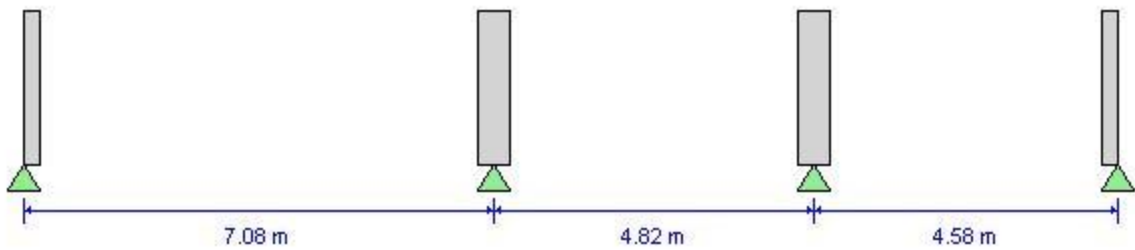
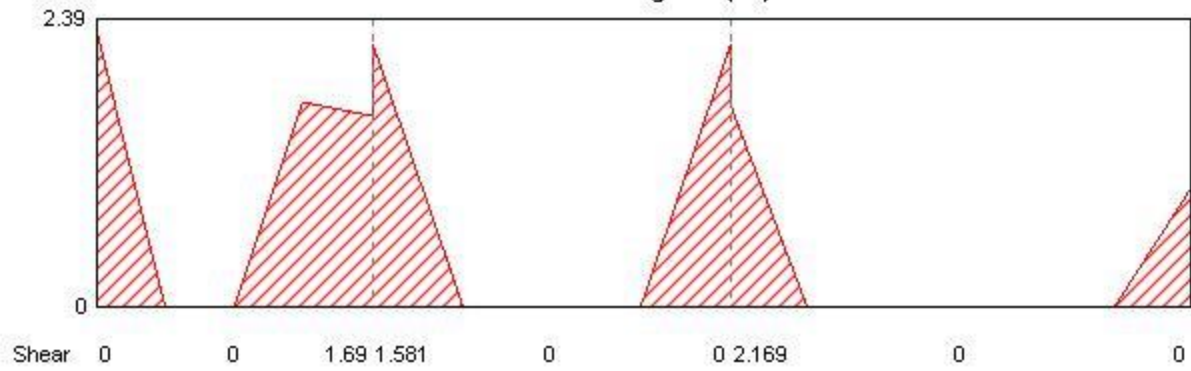


**Longitudinal Reinforcement (mm<sup>2</sup>)**

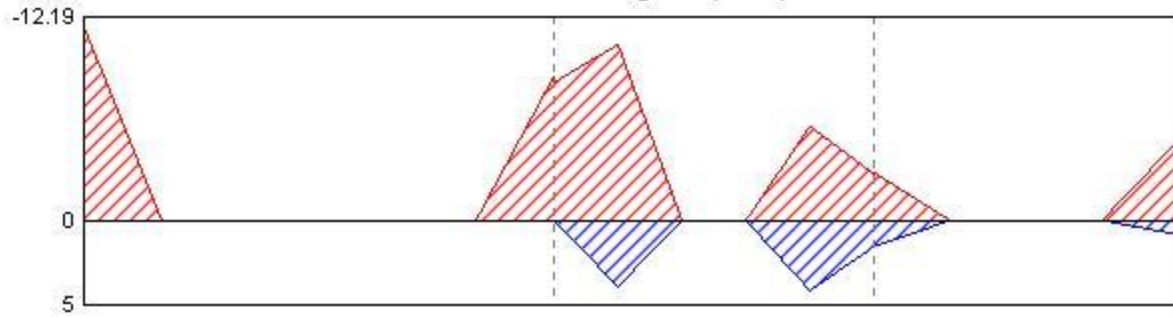


As (top)	0	31.012	31.012	0	0	0	67.914
Combo		Comb1	Comb1		Comb1		Comb1
As (bot)	23.484	0	0	0	0	0	0
Combo	Comb1		Comb1		Comb1		

**Shear Diagram (kN)**

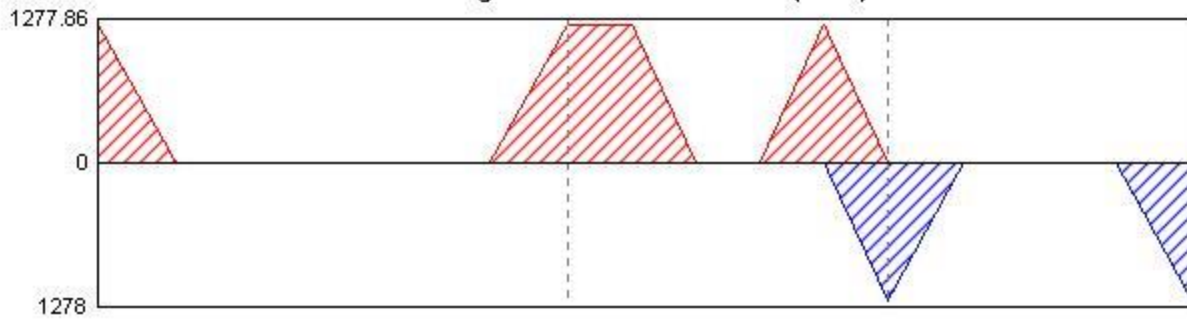


**Moment Diagram (kN-m)**



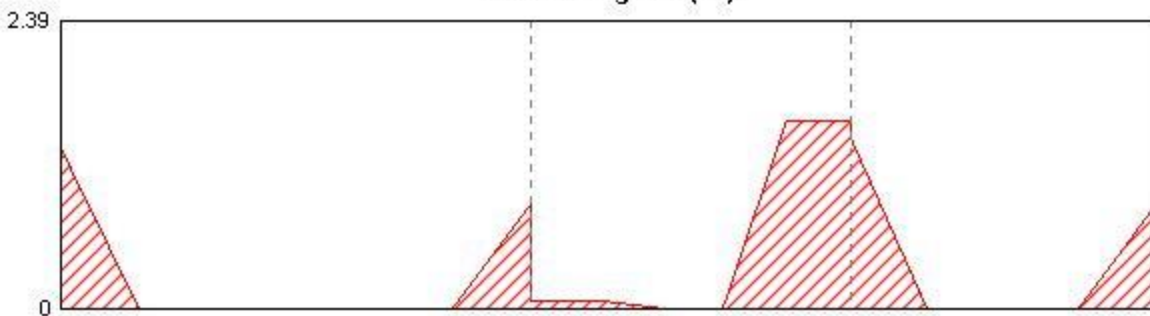
Moment (-)	-11.6107	0	-8.5402	-10.5046	0	-5.6609	-2.7358	0	0
Moment (+)	0	0	0	0	0	4.2269	1.6003	0	0

**Longitudinal Reinforcement (mm2)**

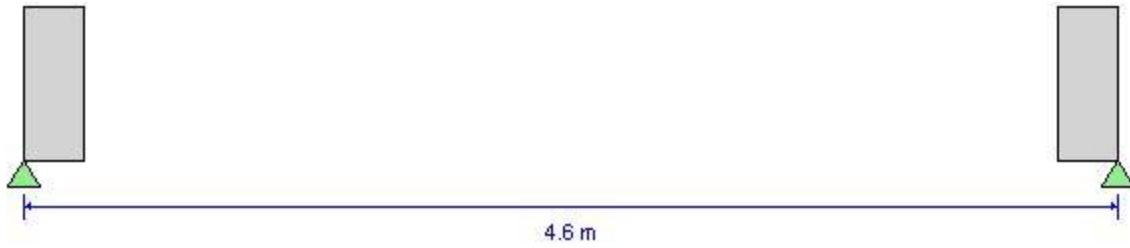


As (top)	67.914	0	49.938	61.437	0	33.092	0	0	0
Combo	Comb1		Comb1	Comb1		Comb1	Comb1		
As (bot)	0	0	0	0	0	0	0	0	0
Combo	Comb4		Comb4			Comb1	Comb1		

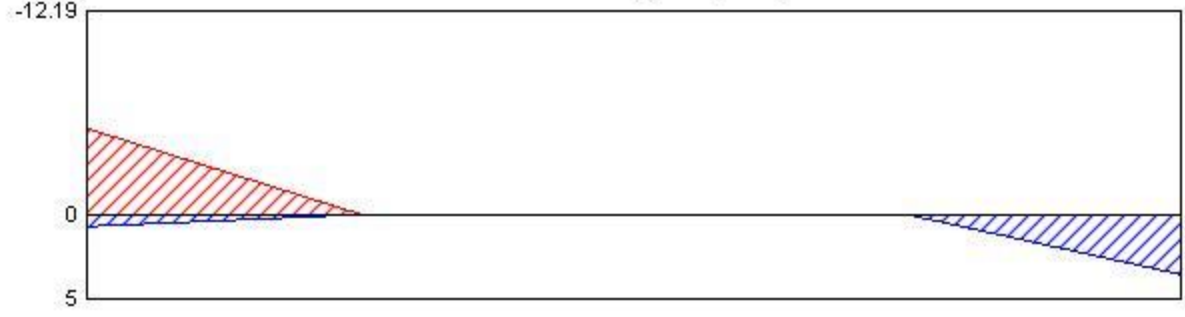
**Shear Diagram (kN)**



Shear	0.981	0	0	0.861	0	1.568	1.568	0	0
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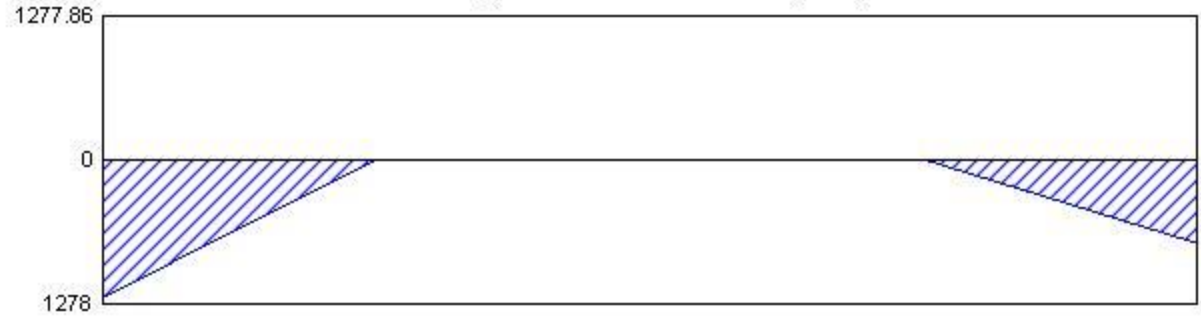


**Moment Diagram (kN-m)**

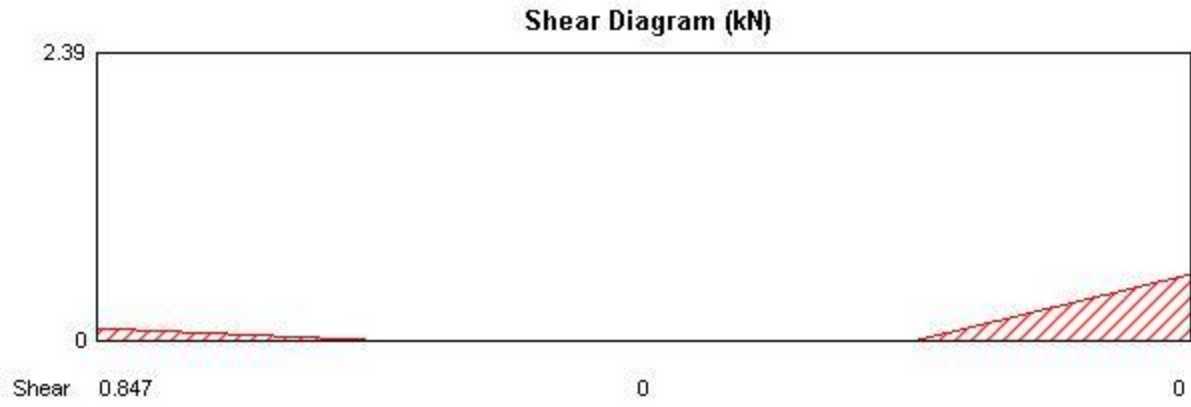


Moment (-)	-4.8322	0	0
Moment (+)	0.7891	0	3.5819

**Longitudinal Reinforcement (mm2)**



As (top)	0	0	0
Combo	Comb1		
As (bot)	0	0	20.939
Combo	Comb1		Comb1



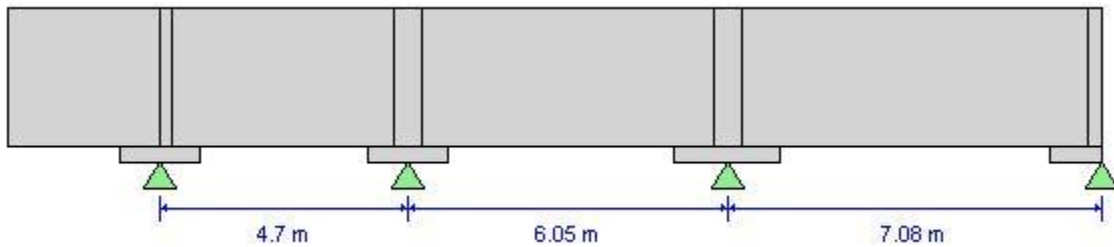
## ACI 318-14 Concrete Strip Design

### Geometric Properties

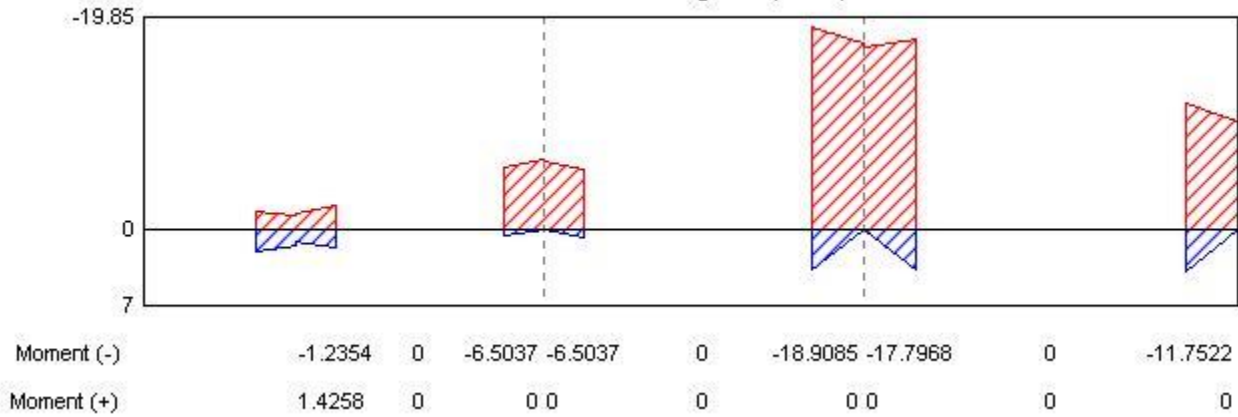
Combination = Overall Envelope  
 Strip Label = SA13  
 Length = 35.45 m  
 Distance to Top Rebar Center = 24.525 mm  
 Distance to Bot Rebar Center = 24.525 mm

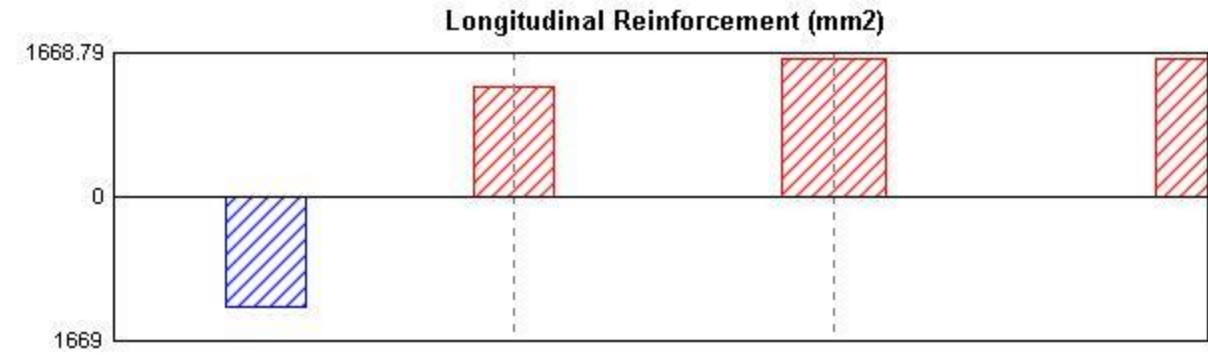
### Material Properties

Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
 Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>

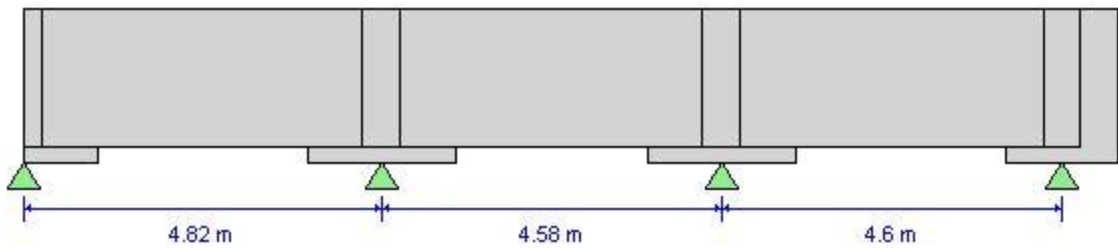
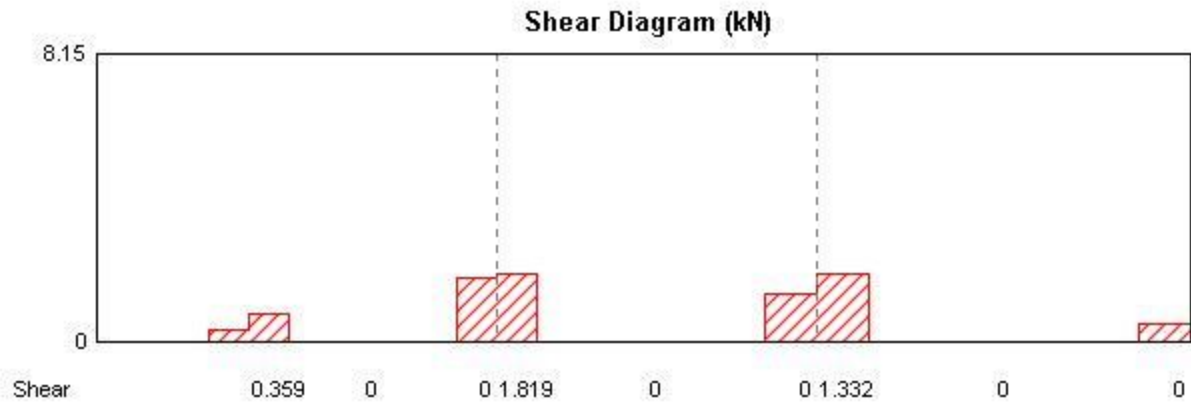


**Moment Diagram (kN-m)**

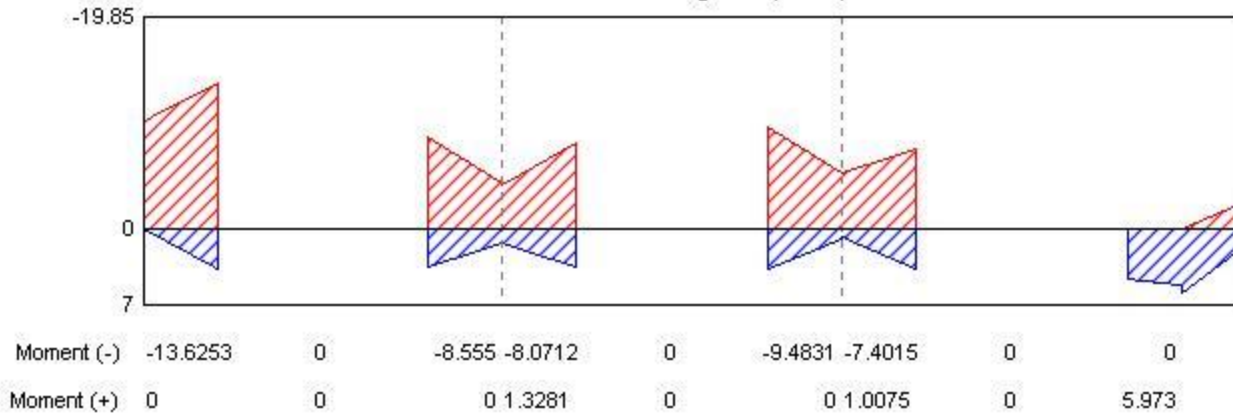




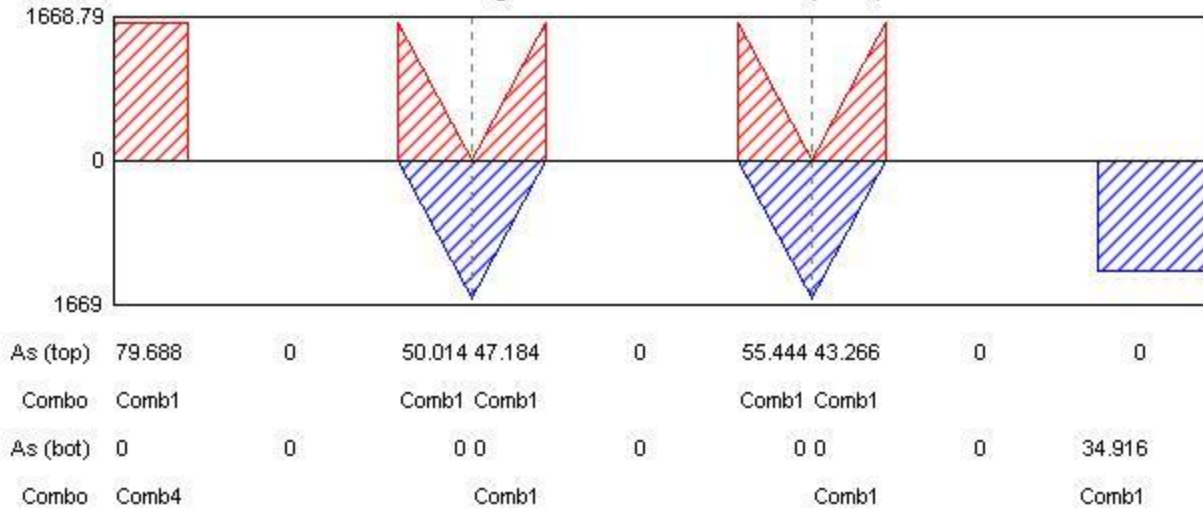
As (top)	0	0	38.02	38.02	0	110.634	104.121	0	68.723
Combo	Comb1		Comb1	Comb1		Comb1	Comb1		Comb1
As (bot)	0	0	0	0	0	0	0	0	0
Combo	Comb1		Comb4			Comb4			



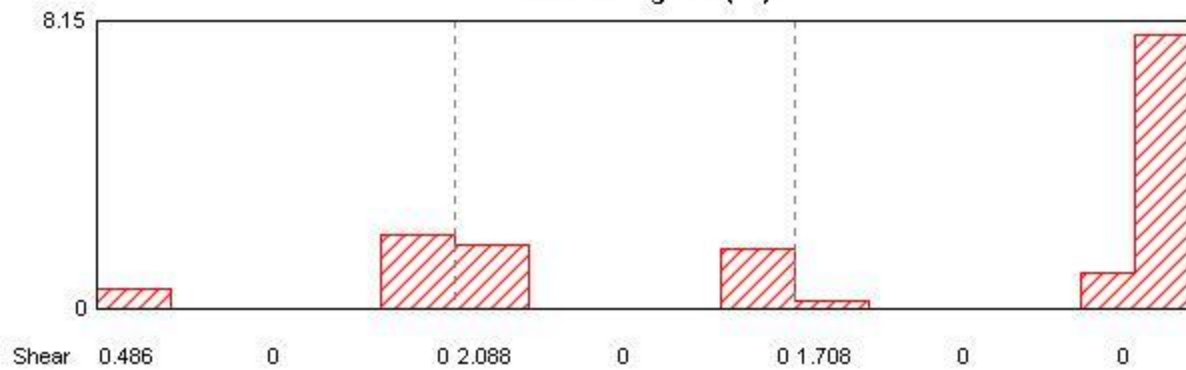
**Moment Diagram (kN-m)**



**Longitudinal Reinforcement (mm2)**



**Shear Diagram (kN)**



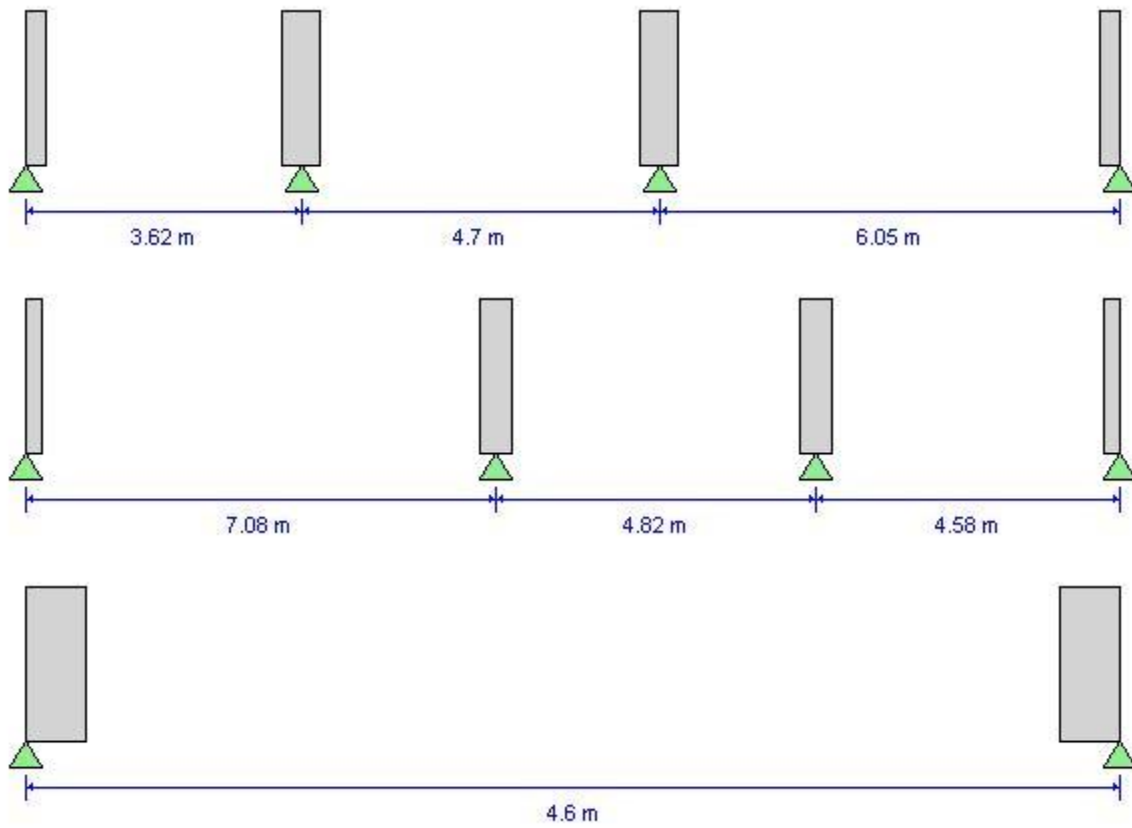
## ACI 318-14 Concrete Strip Design

### Geometric Properties

Combination = Overall Envelope  
Strip Label = SA14  
Length = 35.45 m  
Distance to Top Rebar Center = 24.525 mm  
Distance to Bot Rebar Center = 24.525 mm

### Material Properties

Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



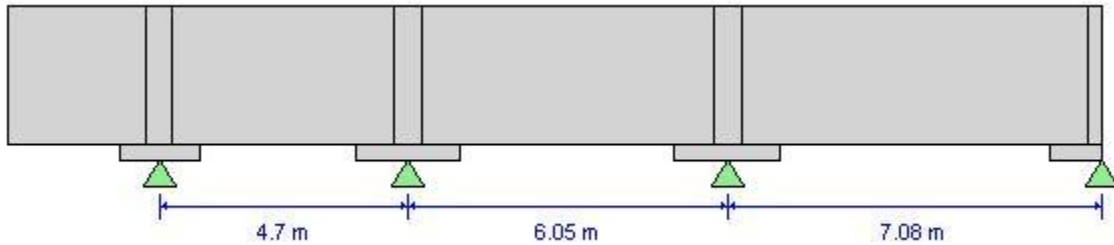
## ACI 318-14 Concrete Strip Design

### Geometric Properties

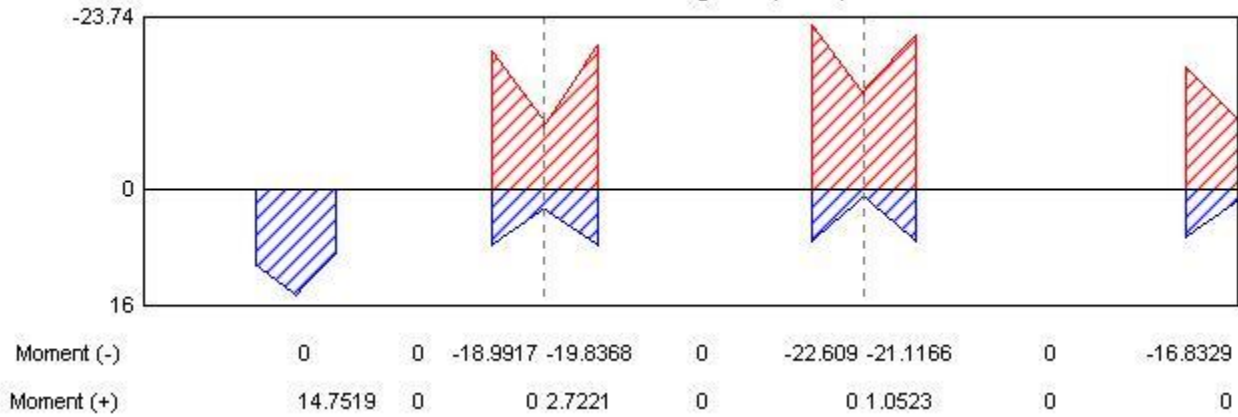
Combination = Overall Envelope  
 Strip Label = SA15  
 Length = 34.7 m  
 Distance to Top Rebar Center = 24.525 mm  
 Distance to Bot Rebar Center = 24.525 mm

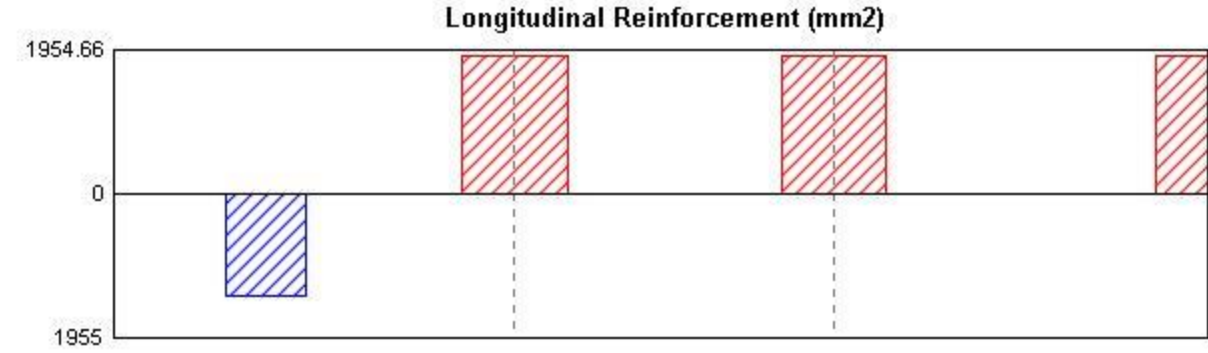
### Material Properties

Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
 Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>

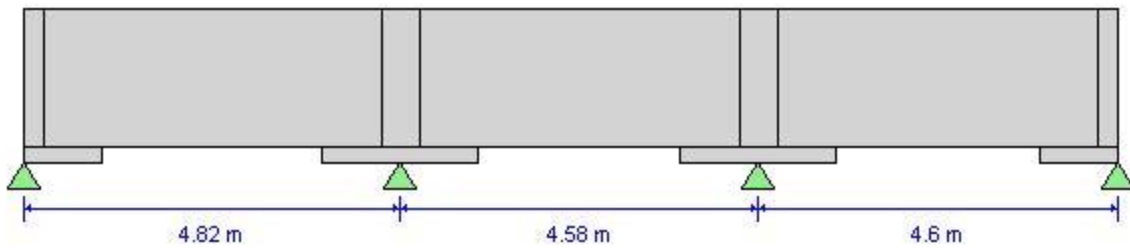
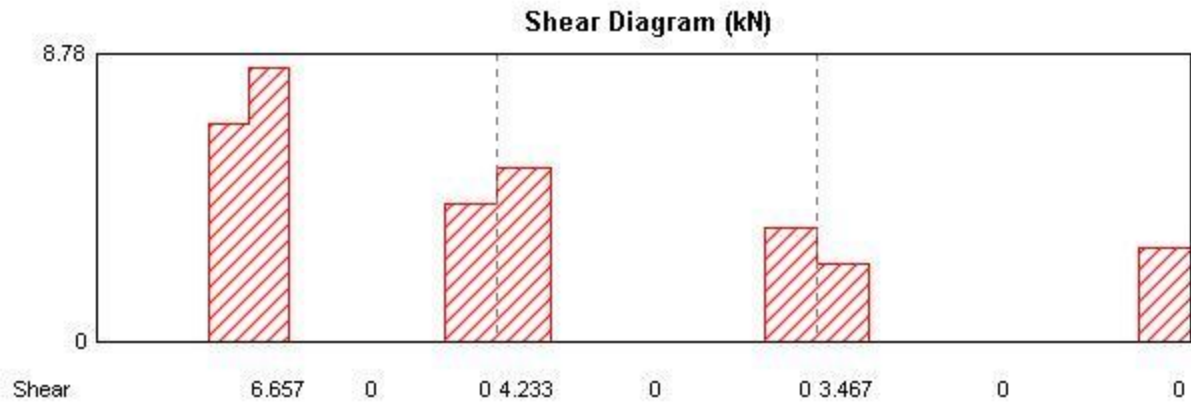


**Moment Diagram (kN-m)**

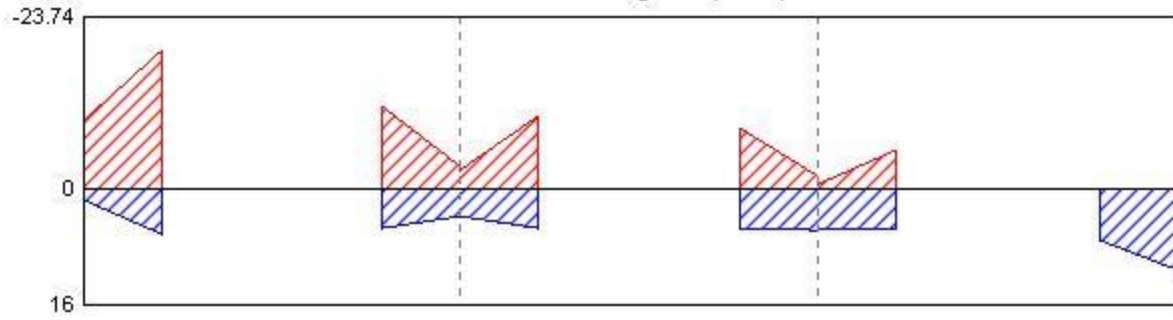




As (top)	0	0	111.097	116.048	0	132.291	123.545	0	98.454
Combo			Comb1	Comb1		Comb1	Comb1		Comb1
As (bot)	86.299	0	0	0	0	0	0	0	0
Combo	Comb1		Comb1			Comb1			

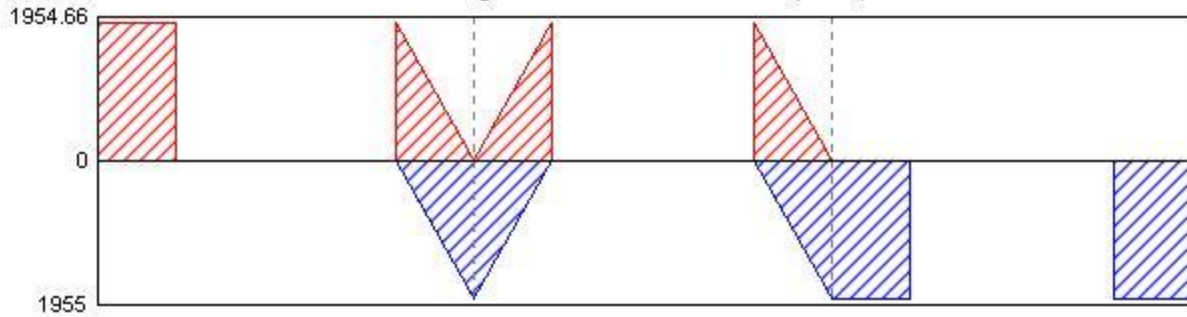


**Moment Diagram (kN-m)**



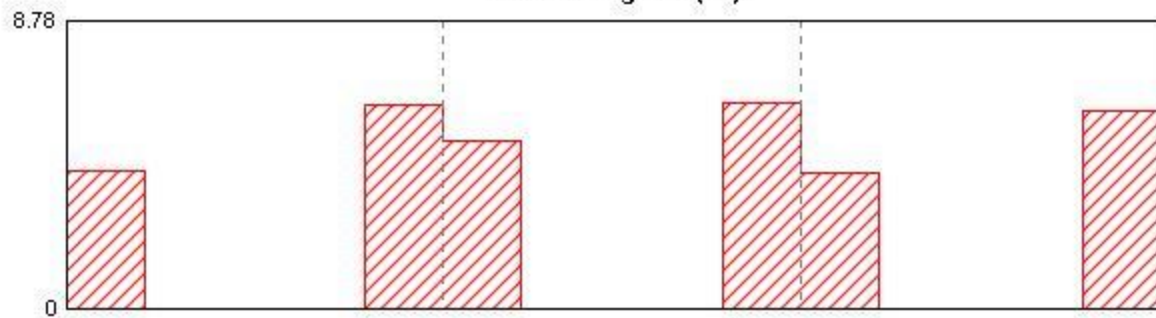
Moment (-)	-18.9212	0	-11.3279	-9.8596	0	-8.3636	-1.5233	0	0
Moment (+)	1.7756	0	0	3.9335	0	0	5.7095	0	11.4001

**Longitudinal Reinforcement (mm2)**



As (top)	110.684	0	66.23	57.64	0	48.889	0	0	0
Combo	Comb1		Comb1	Comb1		Comb1	Comb1		
As (bot)	0	0	0	0	0	0	0	0	66.653
Combo	Comb1		Comb1			Comb1			Comb1

**Shear Diagram (kN)**



Shear	2.847	0	0	6.23	0	0	6.262	0	0
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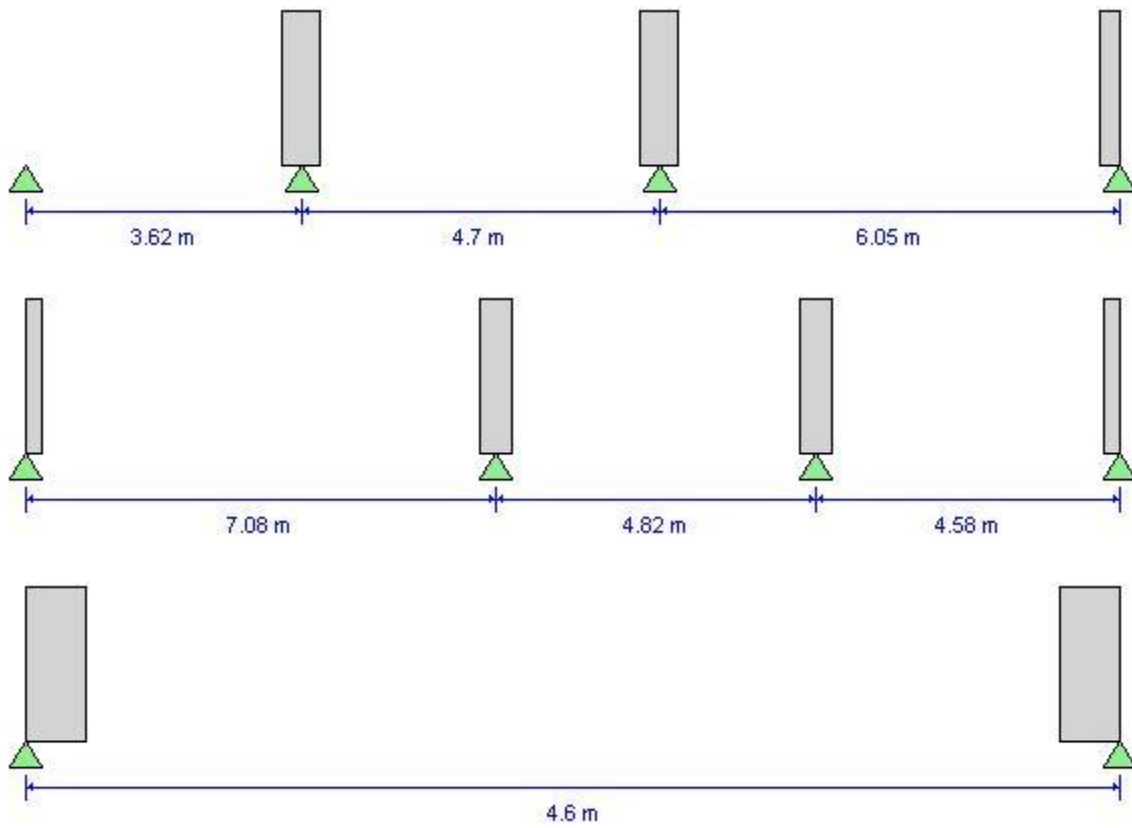
## ACI 318-14 Concrete Strip Design

### Geometric Properties

Combination = Overall Envelope  
Strip Label = SA16  
Length = 35.45 m  
Distance to Top Rebar Center = 24.525 mm  
Distance to Bot Rebar Center = 24.525 mm

### Material Properties

Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



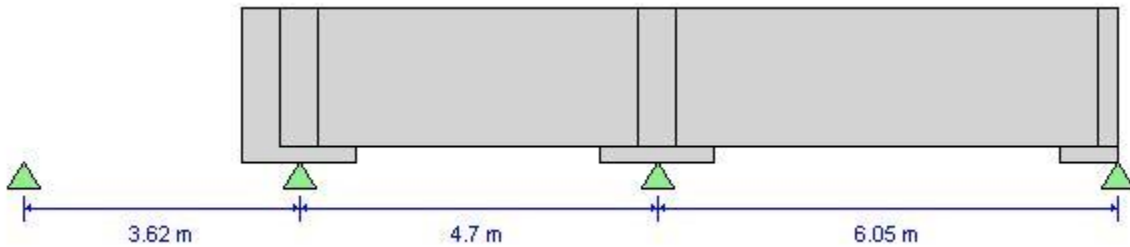
## ACI 318-14 Concrete Strip Design

### Geometric Properties

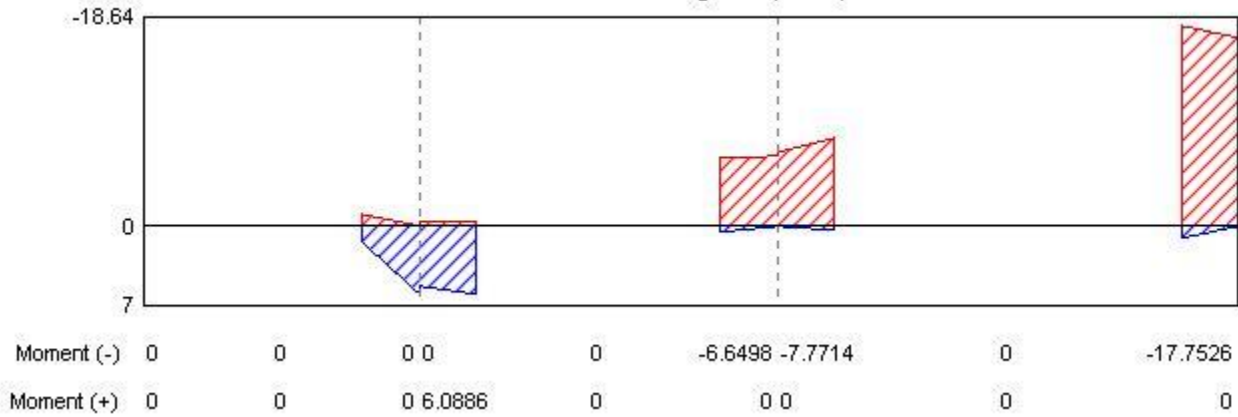
Combination = Overall Envelope  
 Strip Label = SA17  
 Length = 35.45 m  
 Distance to Top Rebar Center = 24.525 mm  
 Distance to Bot Rebar Center = 24.525 mm

### Material Properties

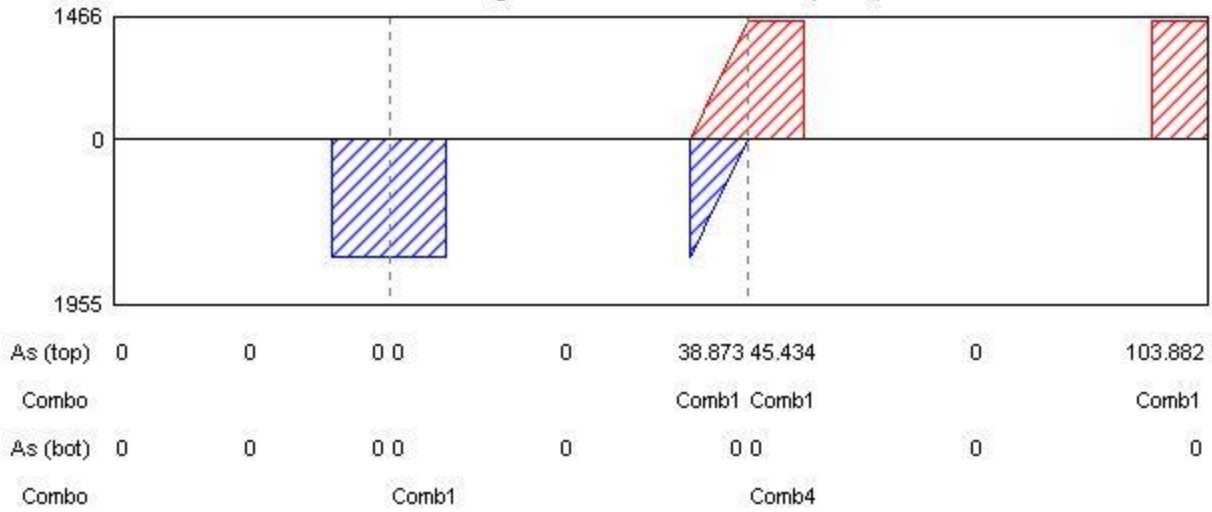
Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
 Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



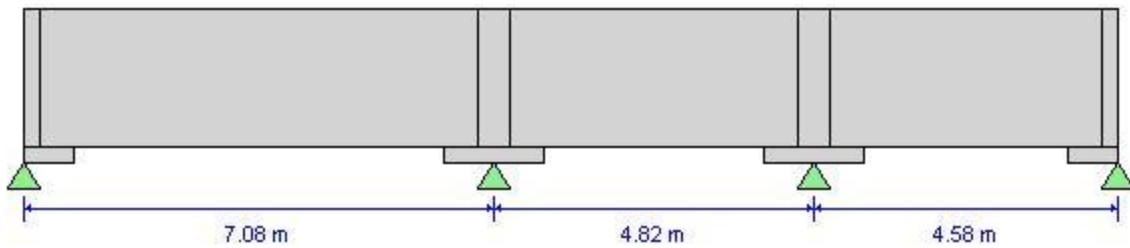
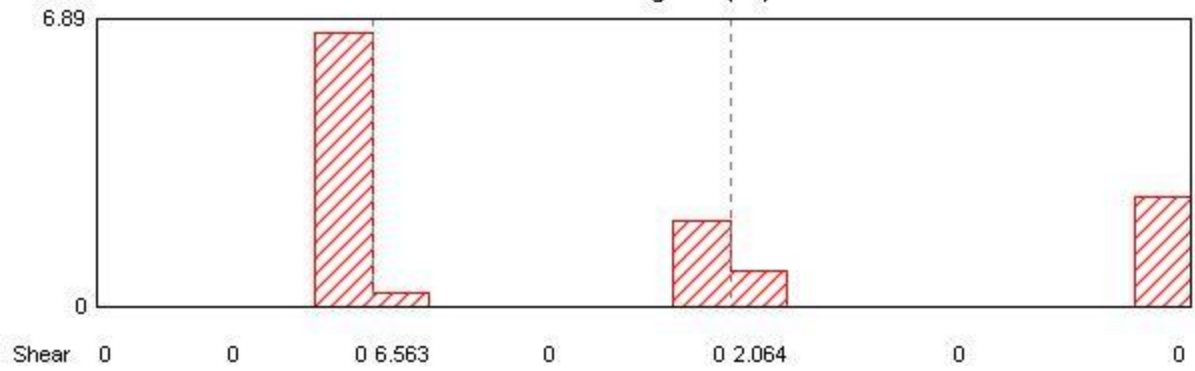
**Moment Diagram (kN-m)**



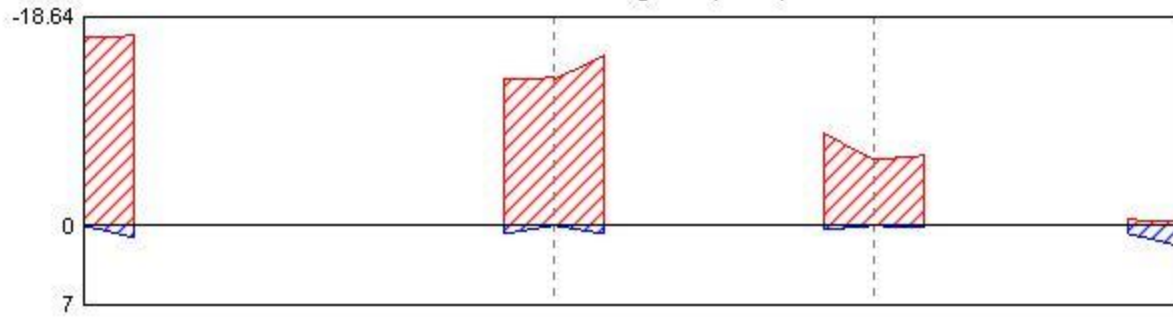
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**

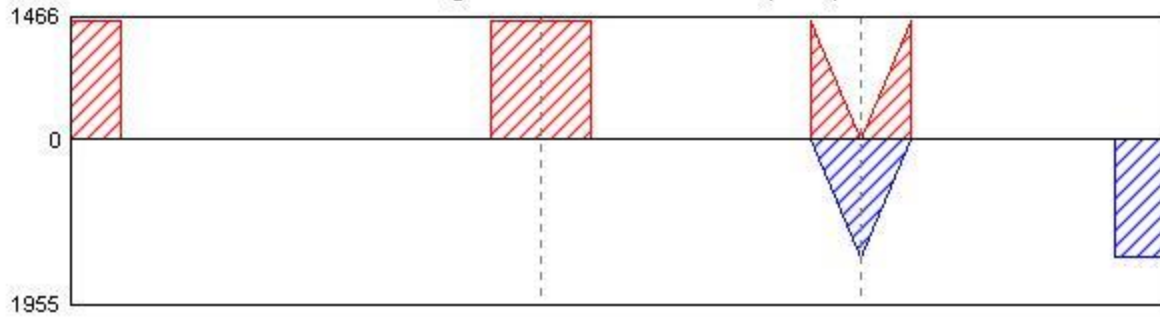


**Moment Diagram (kN-m)**



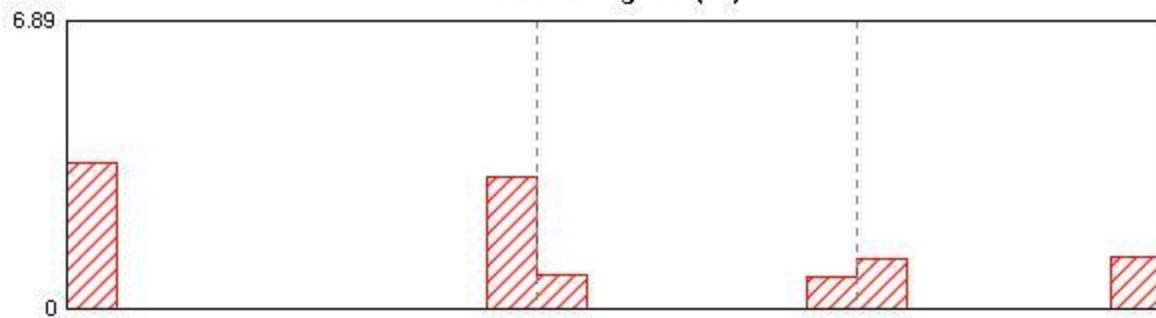
Moment (-)	-16.9637	0	-13.0997	-15.0796	0	-8.1896	-6.1504	0	0
Moment (+)	0	0	0	0	0	0	0	0	0

**Longitudinal Reinforcement (mm2)**

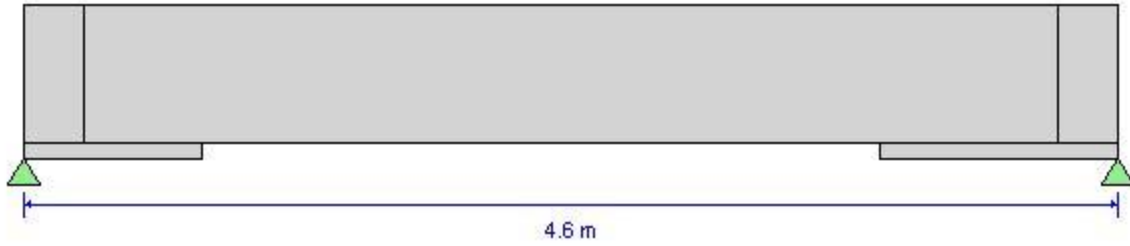


As (top)	99.259	0	76.622	88.219	0	47.881	35.952	0	0
Combo	Comb1		Comb1	Comb1		Comb1	Comb1		
As (bot)	0	0	0	0	0	0	0	0	0
Combo	Comb4		Comb4			Comb4			

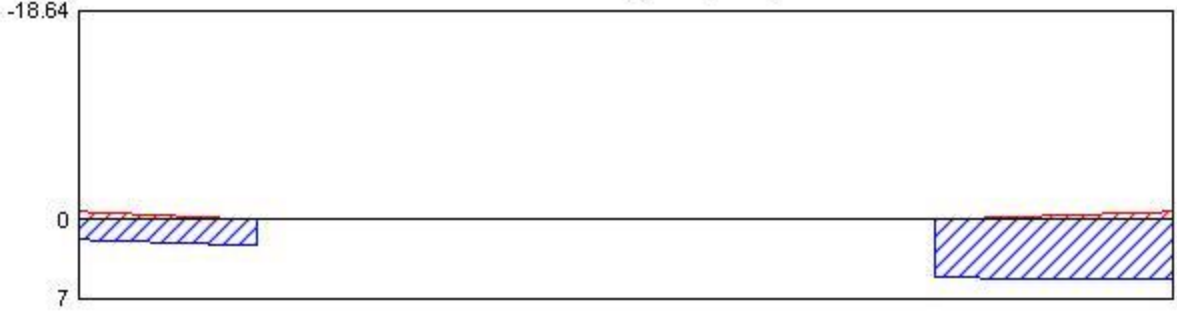
**Shear Diagram (kN)**



Shear	2.614	0	0	3.17	0	0	0.75	0	0
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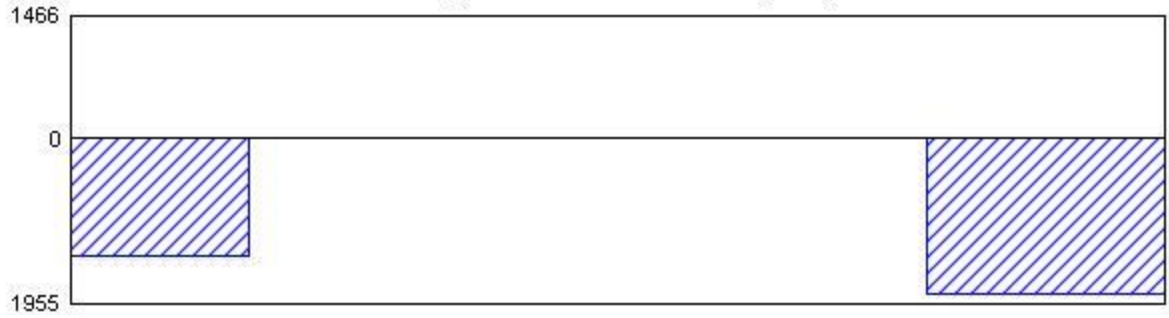


**Moment Diagram (kN-m)**

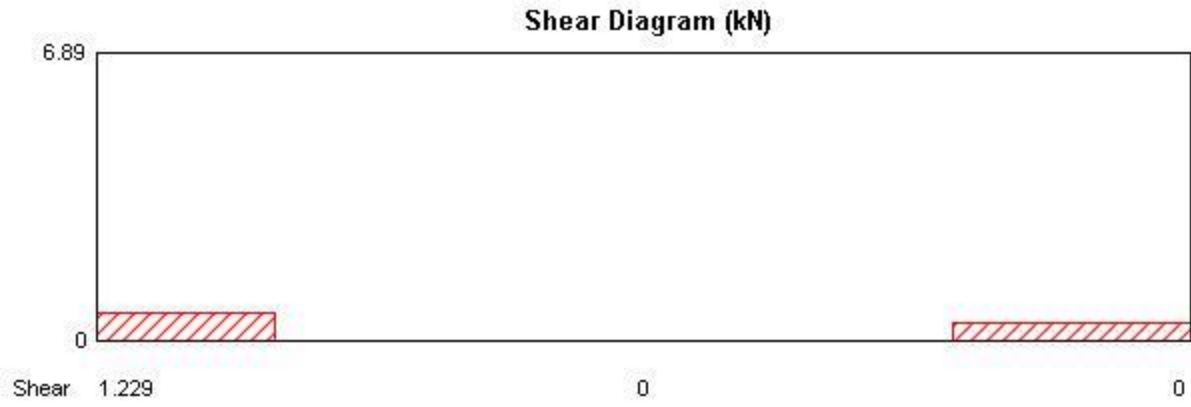


Moment (-)	-0.4444	0	0
Moment (+)	1.8328	0	0

**Longitudinal Reinforcement (mm2)**



As (top)	0	0	0
Combo	Comb1		
As (bot)	0	0	0
Combo	Comb1		



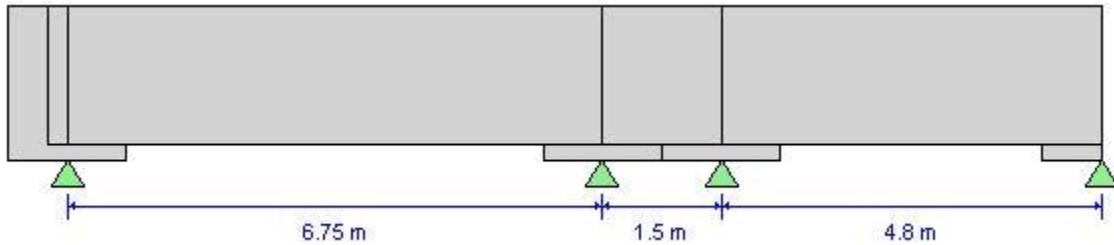
## ACI 318-14 Concrete Strip Design

### Geometric Properties

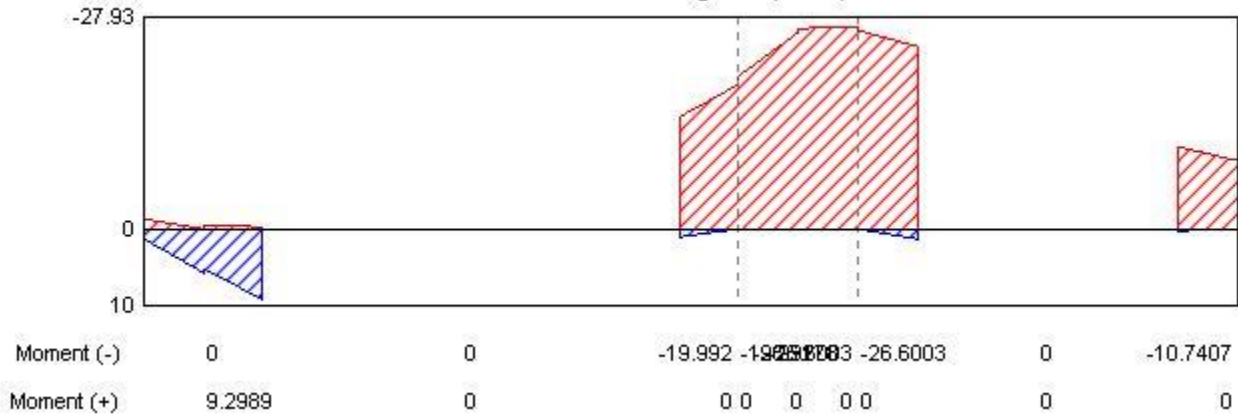
Combination = Overall Envelope  
 Strip Label = SB1  
 Length = 38.75 m  
 Distance to Top Rebar Center = 43.575 mm  
 Distance to Bot Rebar Center = 43.575 mm

### Material Properties

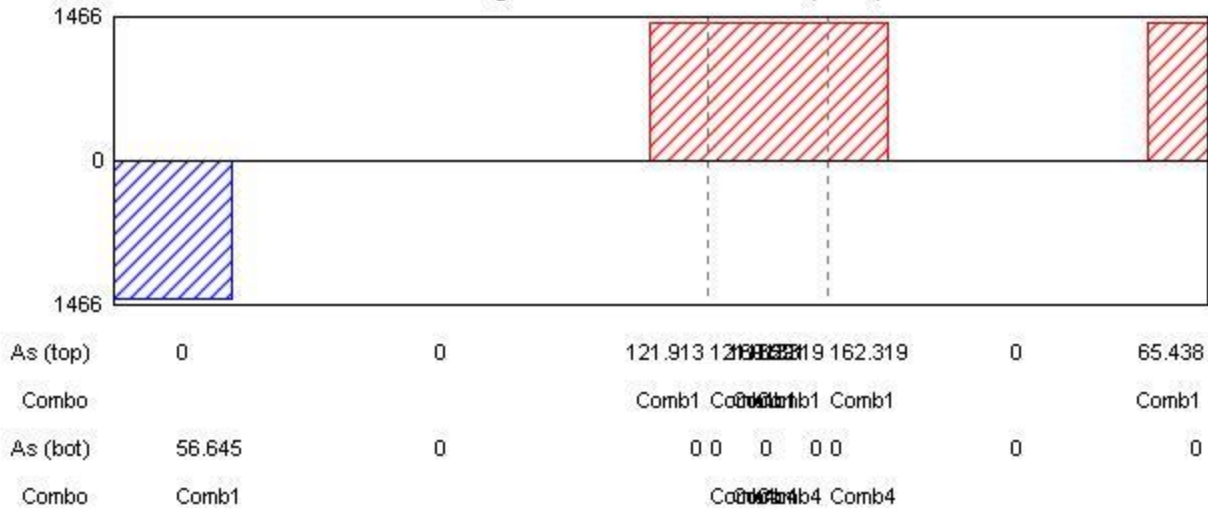
Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
 Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



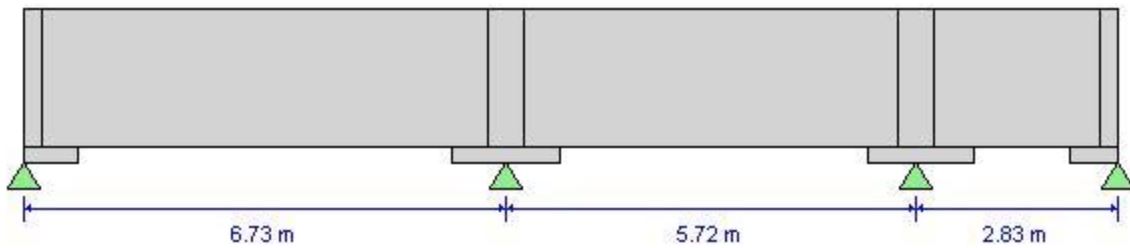
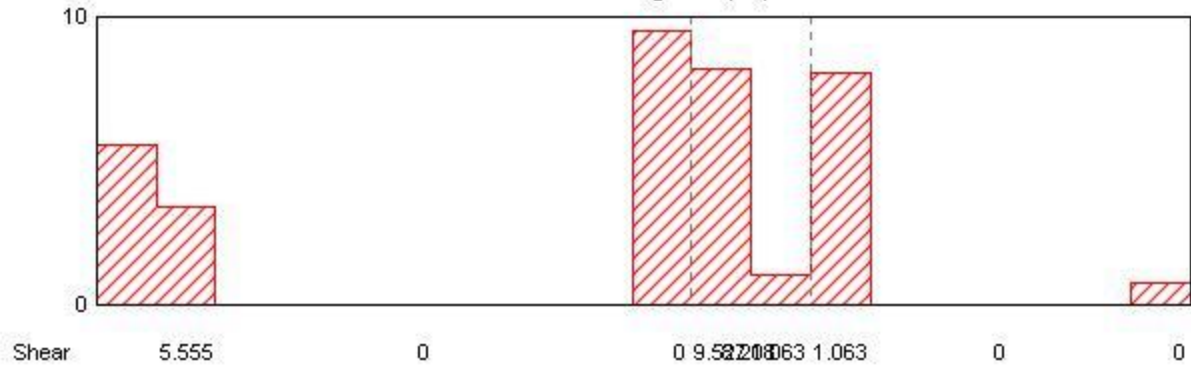
**Moment Diagram (kN-m)**



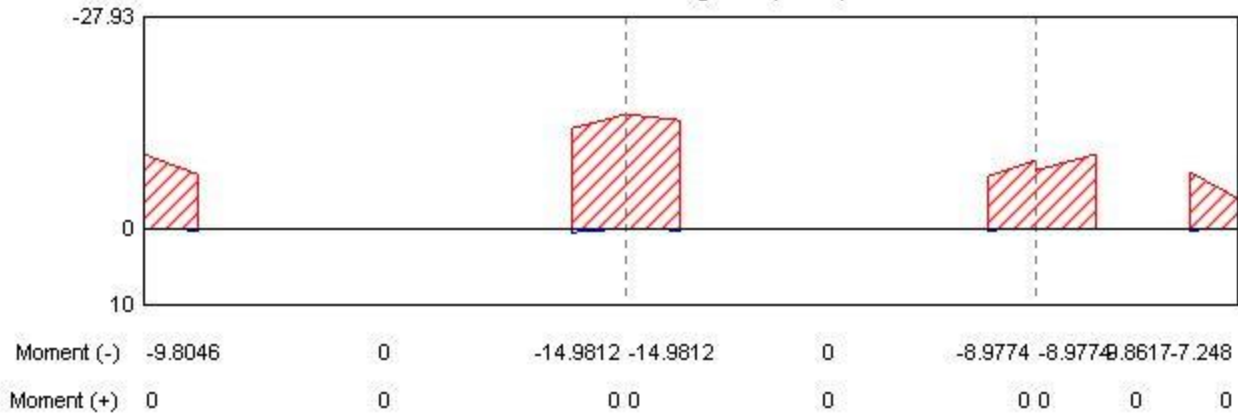
**Longitudinal Reinforcement (mm<sup>2</sup>)**



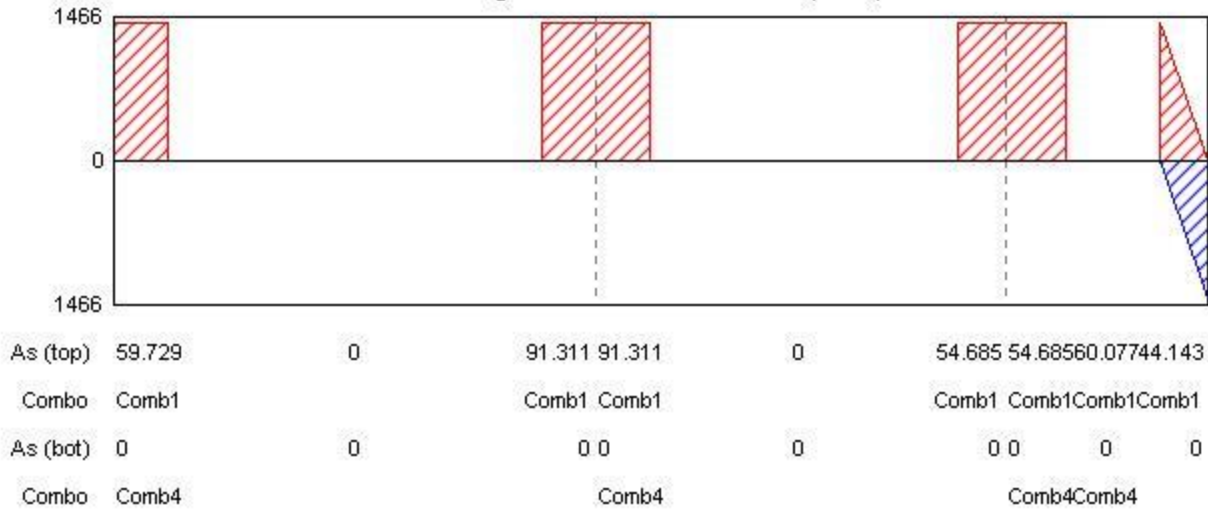
**Shear Diagram (kN)**



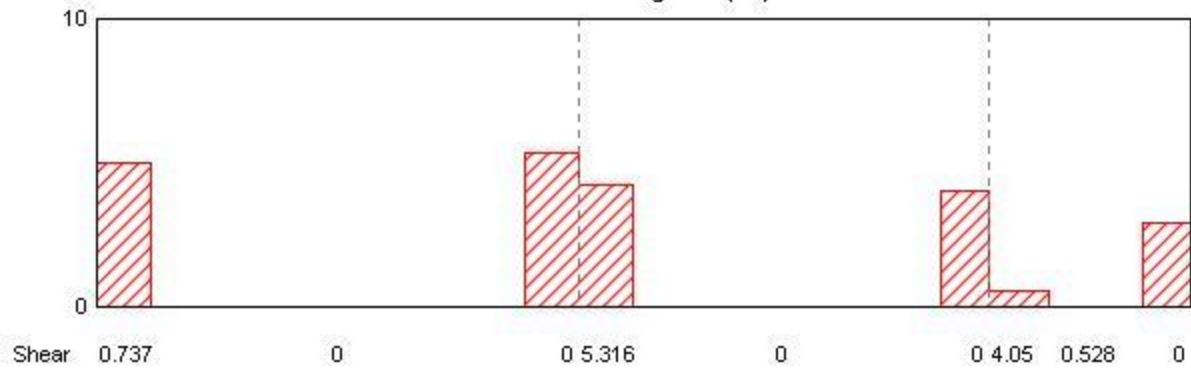
**Moment Diagram (kN-m)**

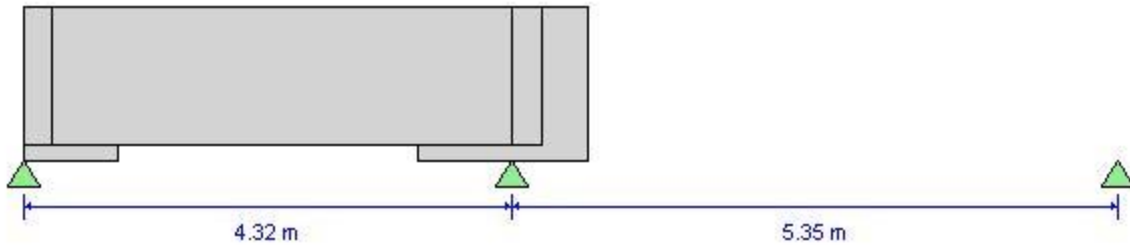


**Longitudinal Reinforcement (mm<sup>2</sup>)**

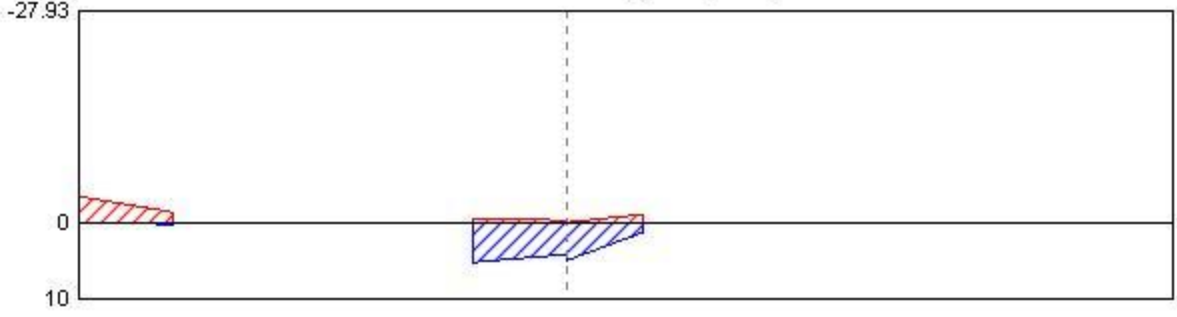


**Shear Diagram (kN)**



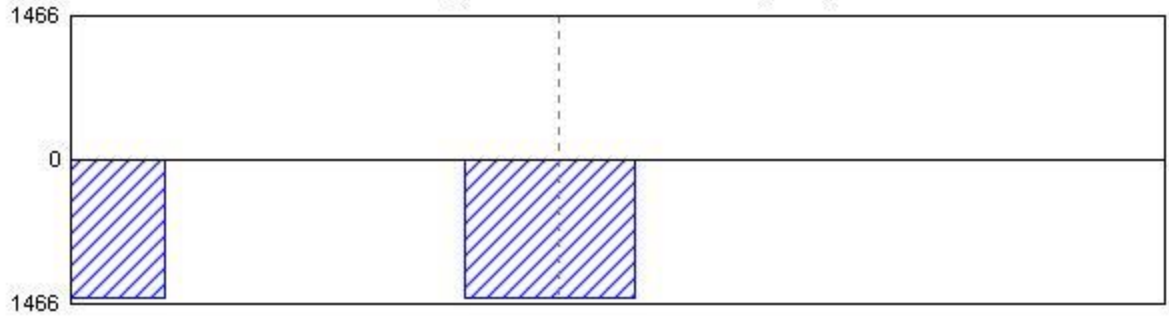


**Moment Diagram (kN-m)**

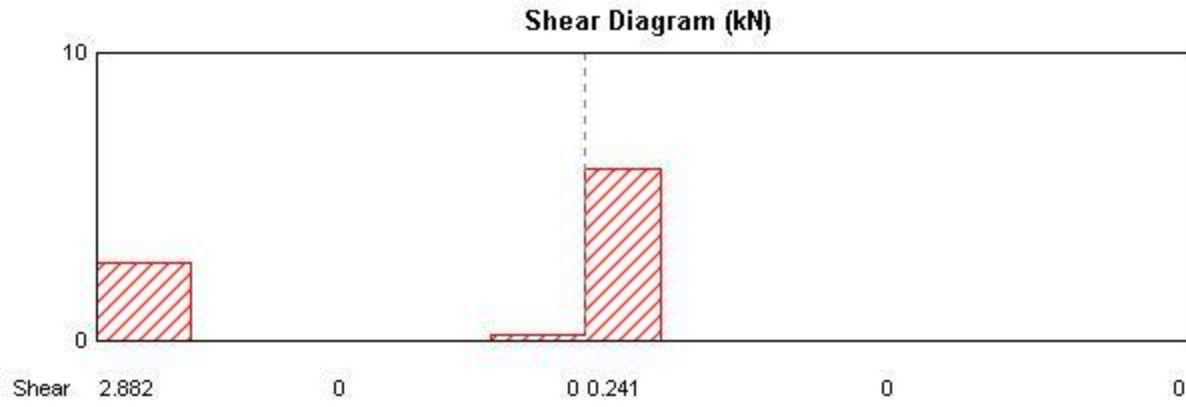


Moment (-)	-3.9414	0	0 -0.3751	0	0
Moment (+)	0	0	0 4.1443	0	0

**Longitudinal Reinforcement (mm2)**



As (top)	0	0	0 0	0	0
Combo	Comb1		Comb1		
As (bot)	0	0	0 0	0	0
Combo	Comb4		Comb1		



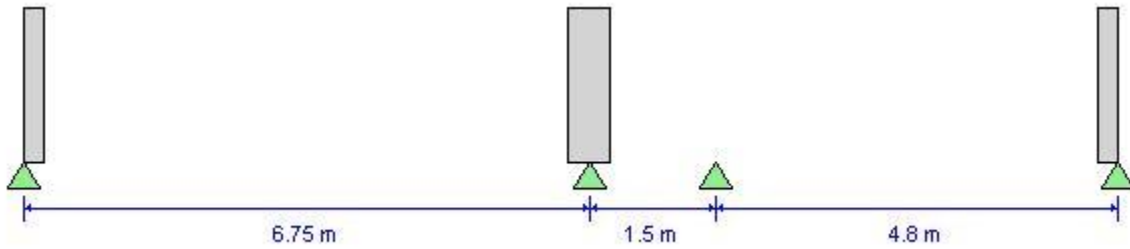
## ACI 318-14 Concrete Strip Design

### Geometric Properties

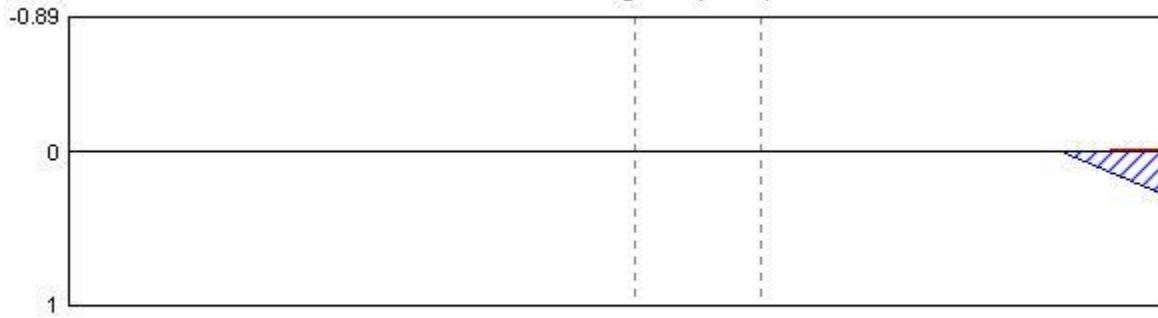
Combination = Overall Envelope  
 Strip Label = SB2  
 Length = 38 m  
 Distance to Top Rebar Center = 43.575 mm  
 Distance to Bot Rebar Center = 43.575 mm

### Material Properties

Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
 Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>

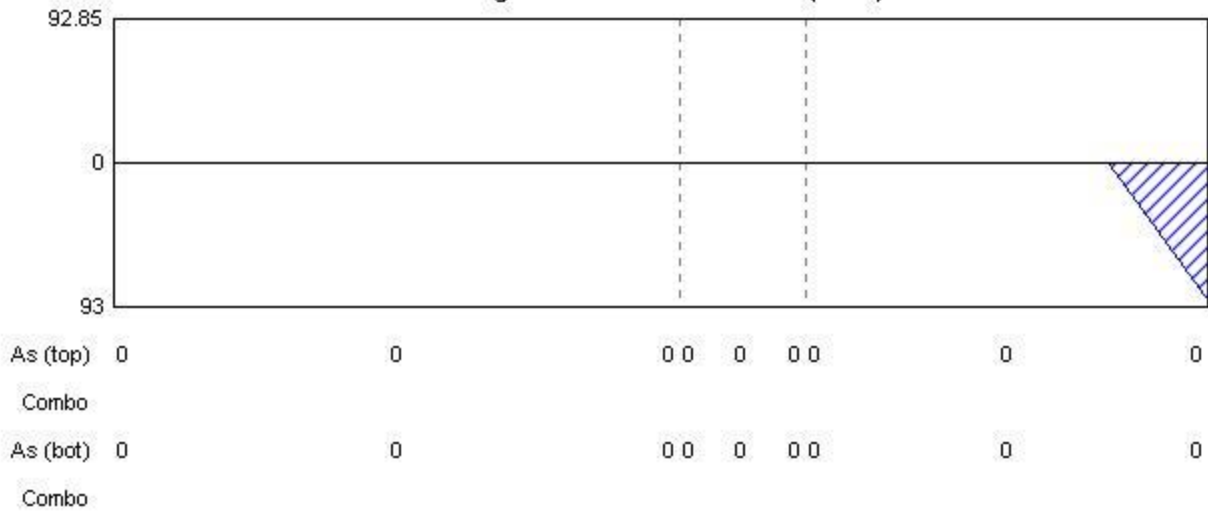


**Moment Diagram (kN-m)**

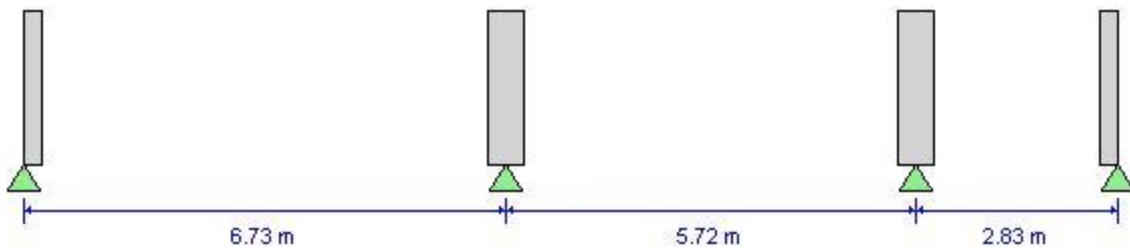
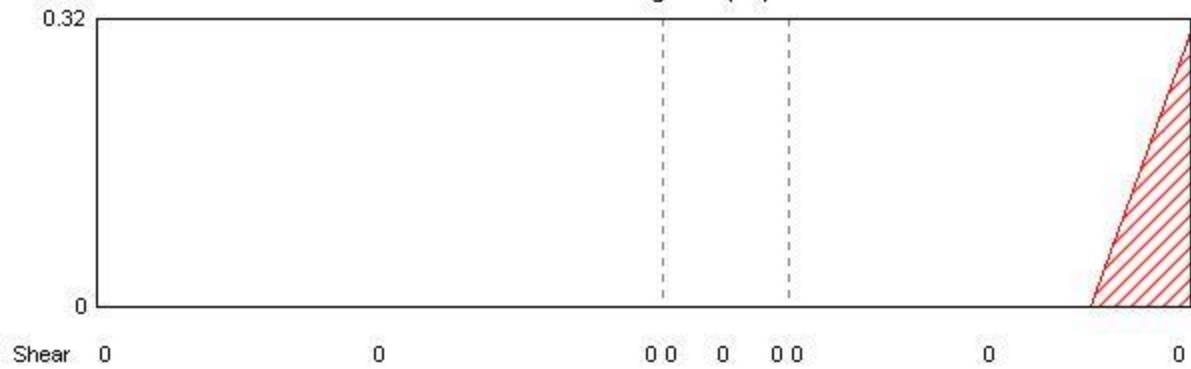


Moment (-)	0	0	0	0	0	0	0
Moment (+)	0	0	0	0	0	0	0

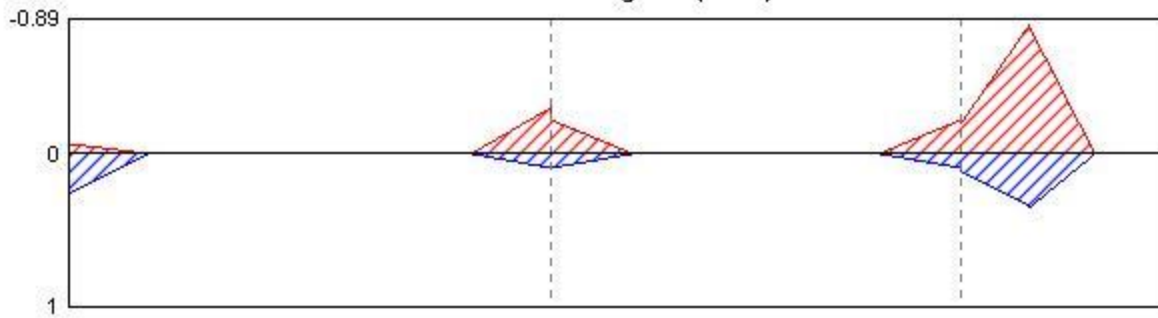
### Longitudinal Reinforcement (mm<sup>2</sup>)



### Shear Diagram (kN)

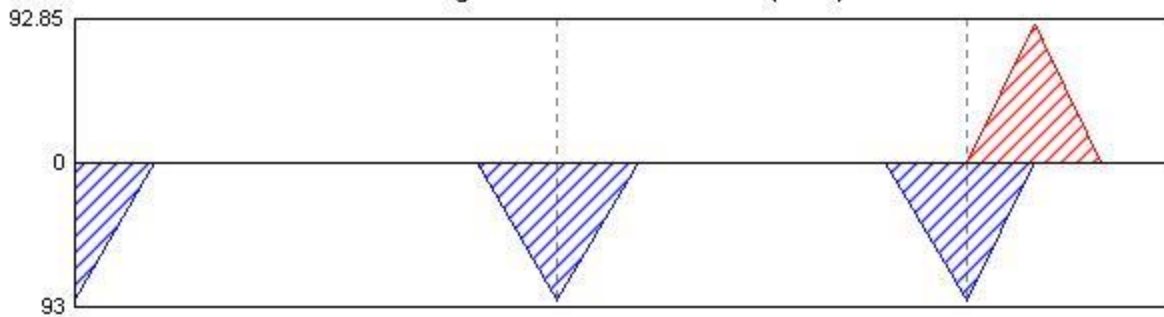


**Moment Diagram (kN-m)**



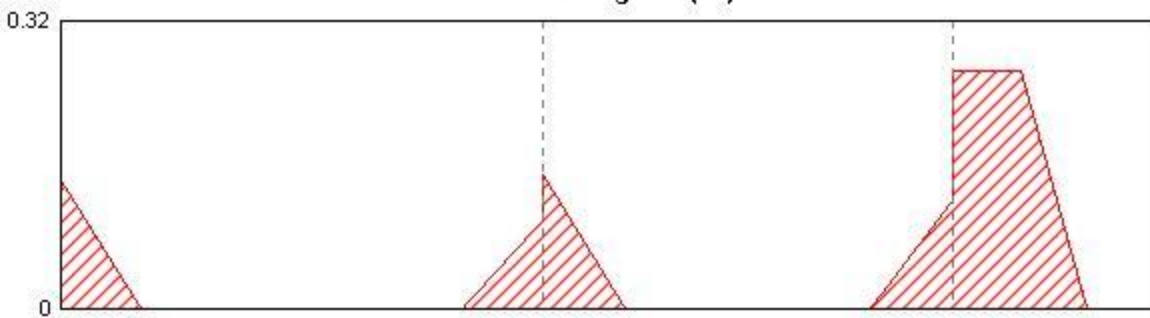
Moment (-)	-0.023	0	0	-0.2992	0	0	-0.2189	0.8437	0
Moment (+)	0.2709	0	0	0.0915	0	0	0.08680	0.3465	0

**Longitudinal Reinforcement (mm2)**

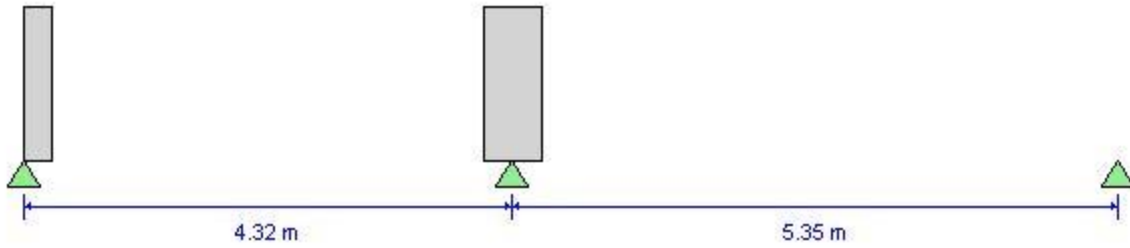


As (top)	0	0	0	0	0	0	0	5.141	0
Combo	Comb1			Comb1				Comb1	Comb1
As (bot)	0	0	0	0	0	0	0	0	0
Combo	Comb1			Comb1				Comb1	Comb1

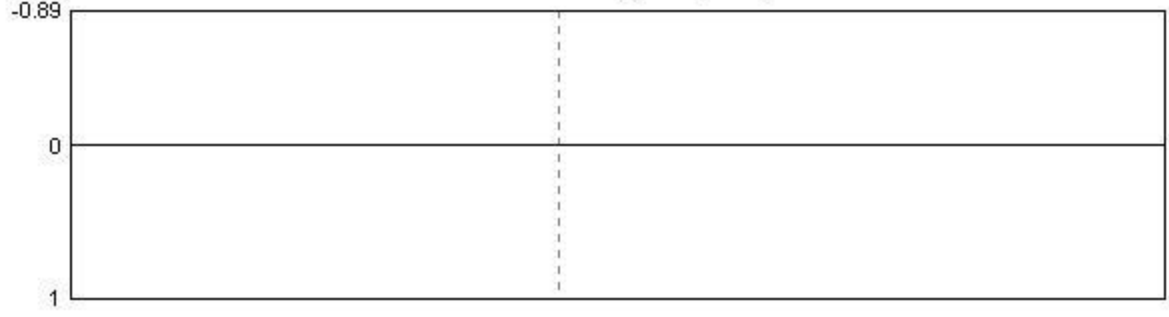
**Shear Diagram (kN)**



Shear	0.305	0	0	0.098	0	0	0.12	0.264	0
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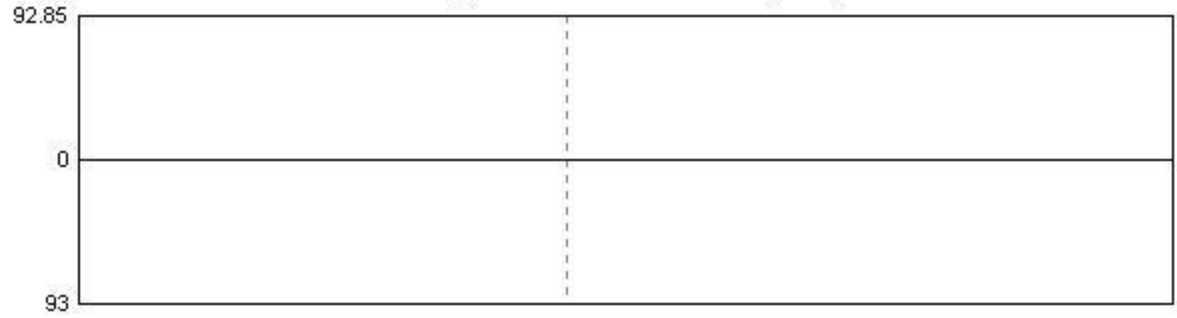


**Moment Diagram (kN-m)**

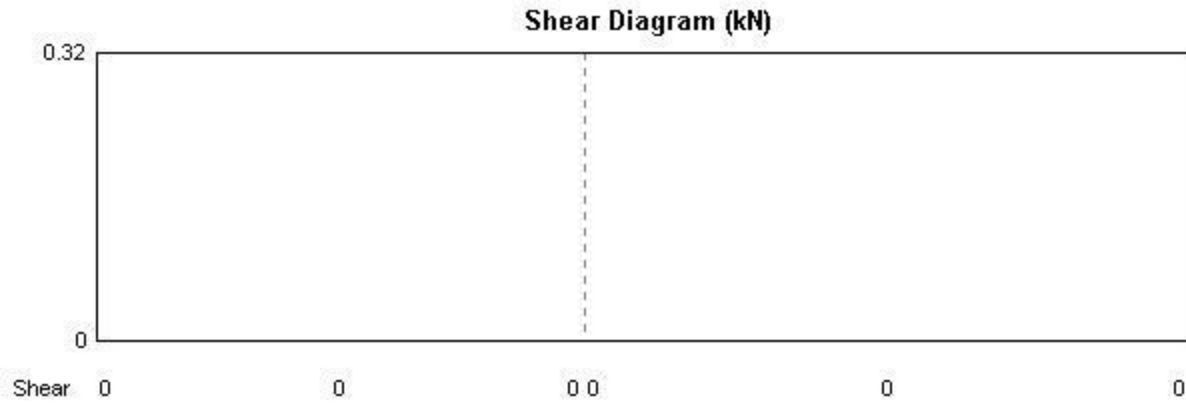


Moment (-)	0	0	0 0	0	0
Moment (+)	0	0	0 0	0	0

**Longitudinal Reinforcement (mm2)**



As (top)	0	0	0 0	0	0
Combo					
As (bot)	0	0	0 0	0	0
Combo					



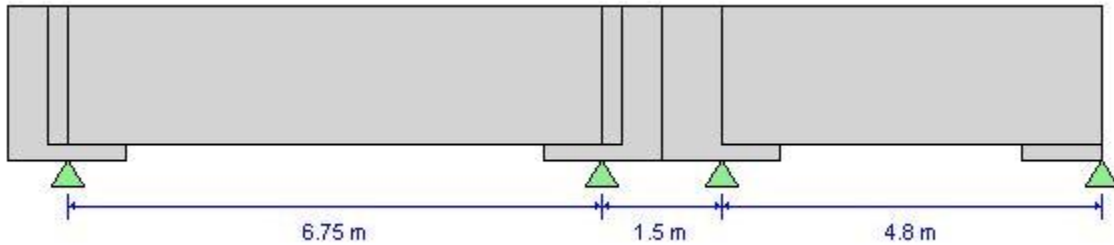
## ACI 318-14 Concrete Strip Design

### Geometric Properties

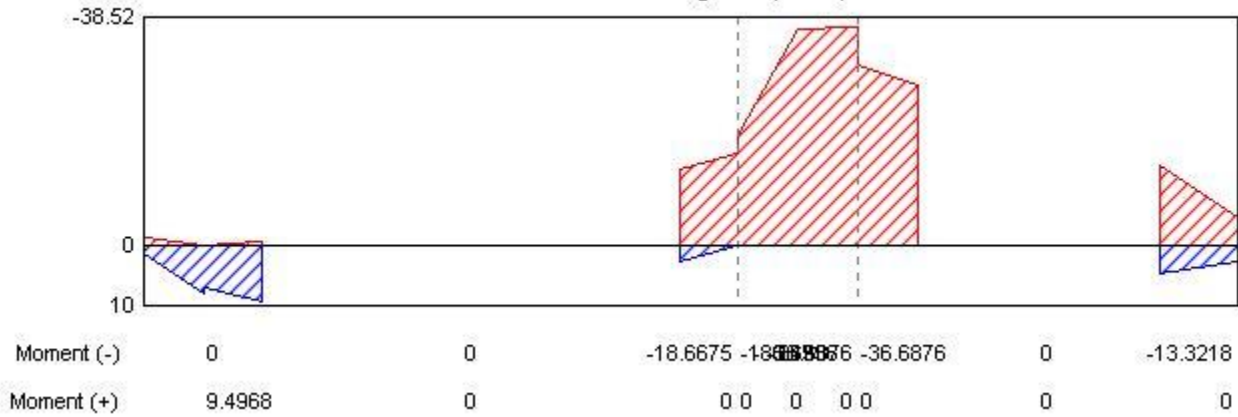
Combination = Overall Envelope  
 Strip Label = SB3  
 Length = 39.41 m  
 Distance to Top Rebar Center = 43.575 mm  
 Distance to Bot Rebar Center = 43.575 mm

### Material Properties

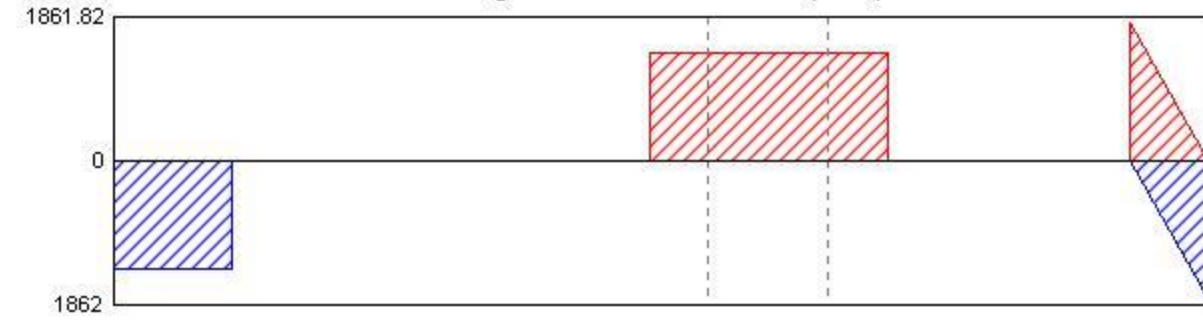
Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
 Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



**Moment Diagram (kN-m)**

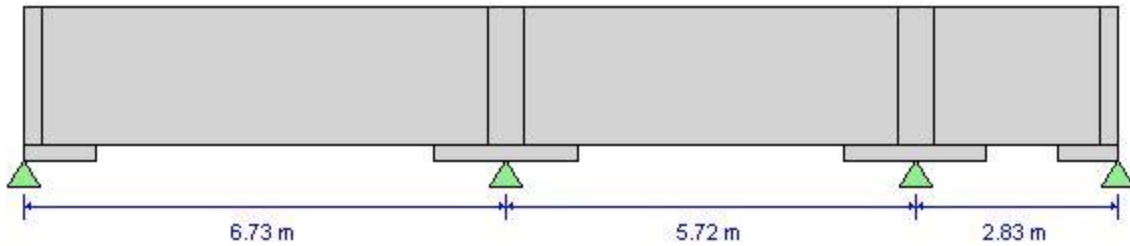
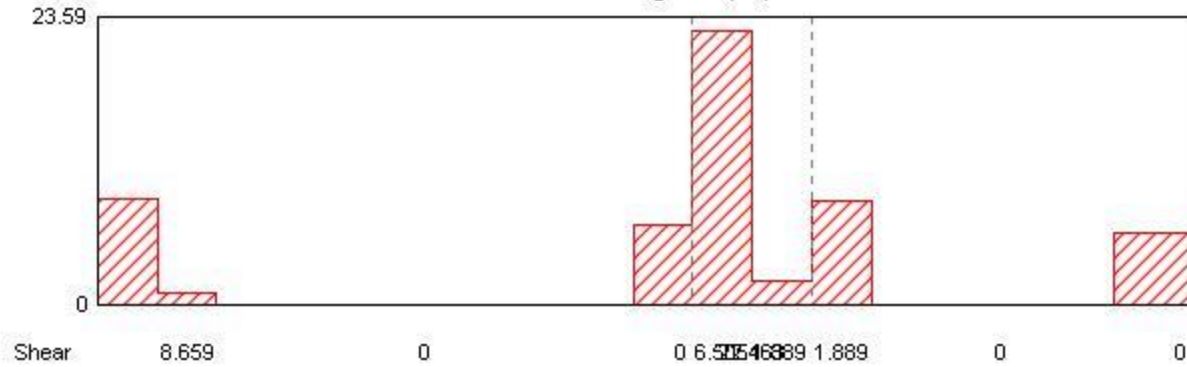


### Longitudinal Reinforcement (mm<sup>2</sup>)

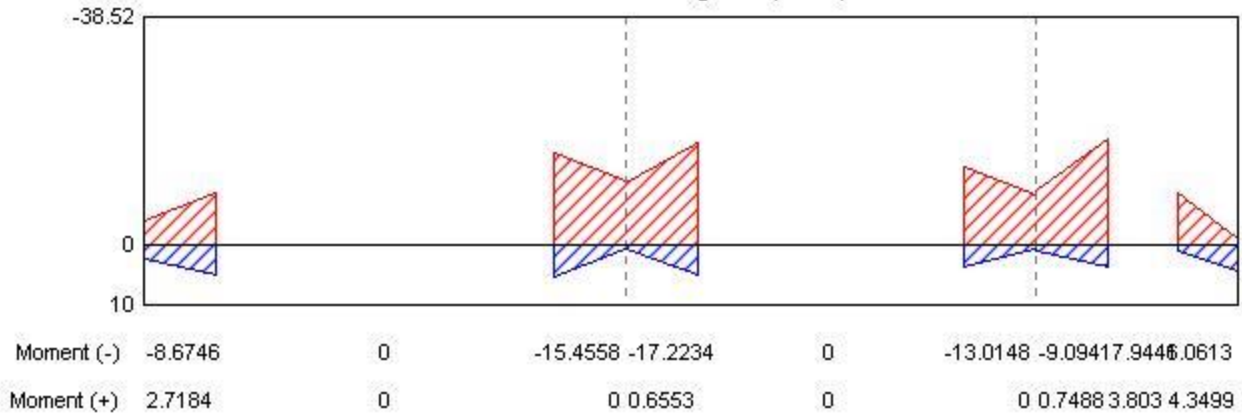


As (top)	0	0	113.822	113.822	224.1	224.1	0	81.161
Combo			Comb1	Comb1	Comb1	Comb1		Comb1
As (bot)	57.852	0	0	0	0	0	0	0
Combo	Comb1		Comb4	Comb4	Comb4	Comb4		

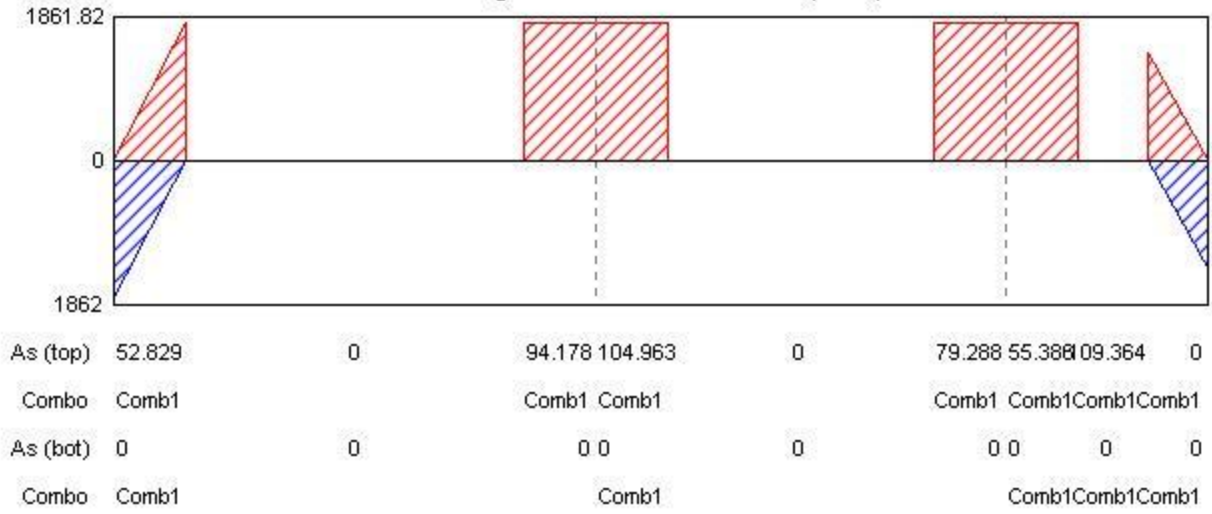
### Shear Diagram (kN)



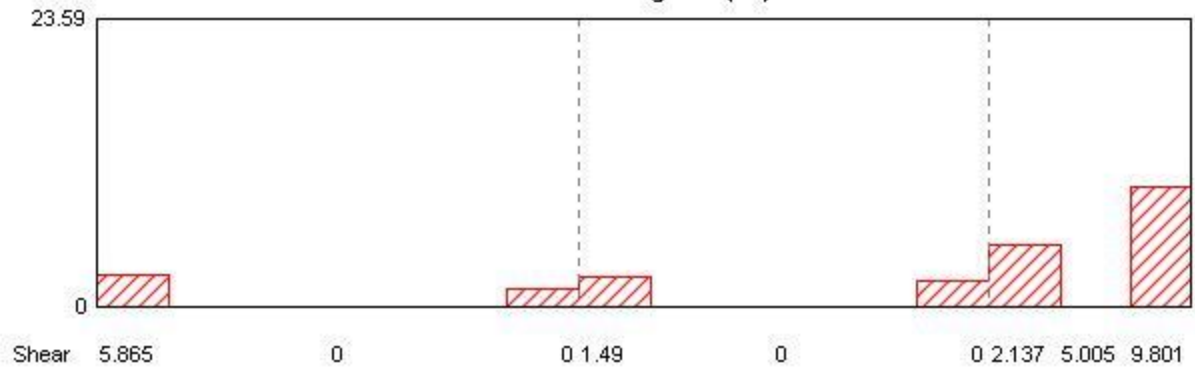
**Moment Diagram (kN-m)**

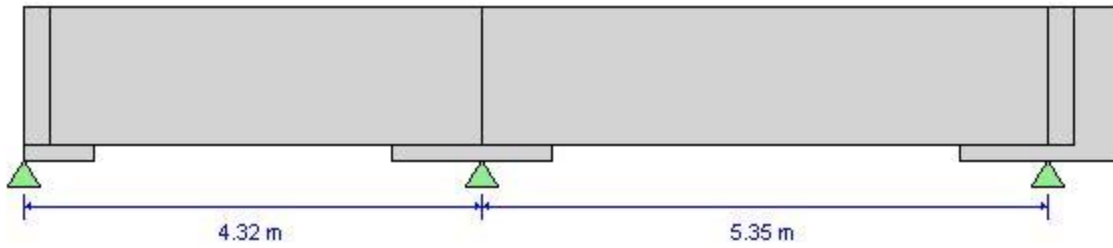


**Longitudinal Reinforcement (mm2)**

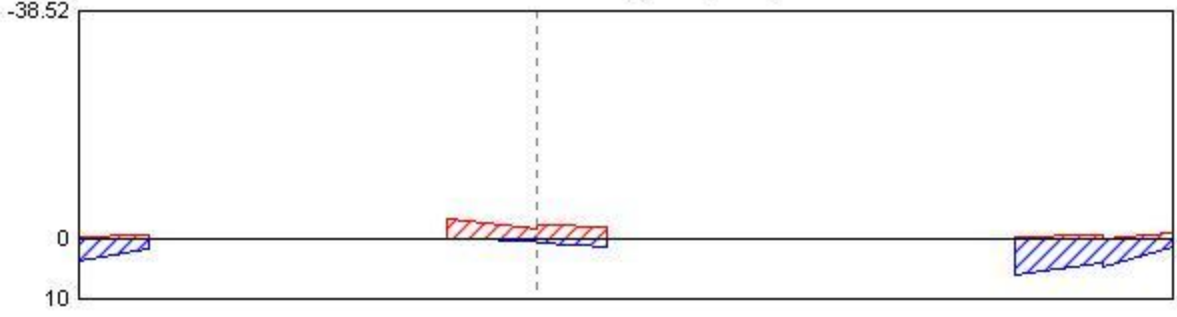


**Shear Diagram (kN)**



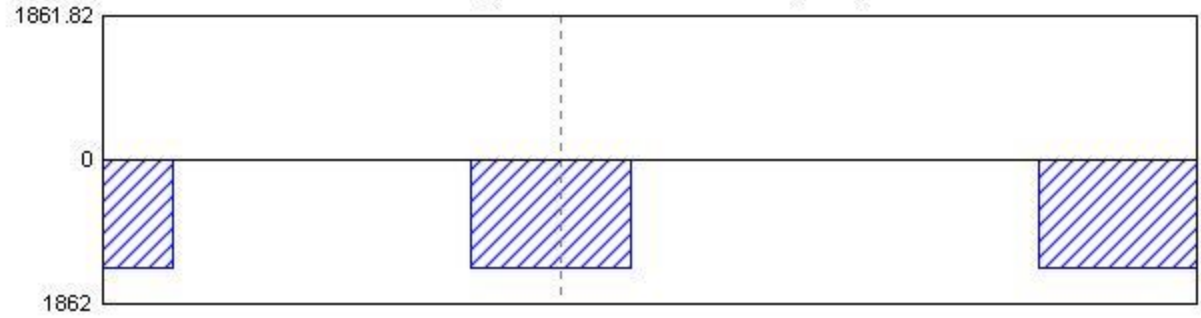


**Moment Diagram (kN-m)**

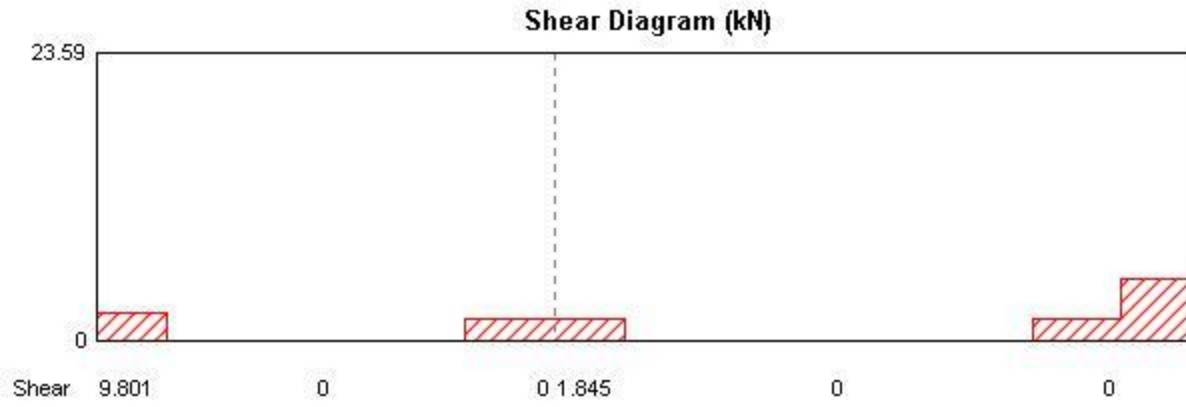


Moment (-)	-1.0613	0	0	-1.7339	0	0
Moment (+)	4.3499	0	0	0.1795	0	6.1557

**Longitudinal Reinforcement (mm2)**



As (top)	0	0	0	0	0	0
Combo	Comb1			Comb1		
As (bot)	0	0	0	0	0	37.486
Combo	Comb1			Comb1		Comb1



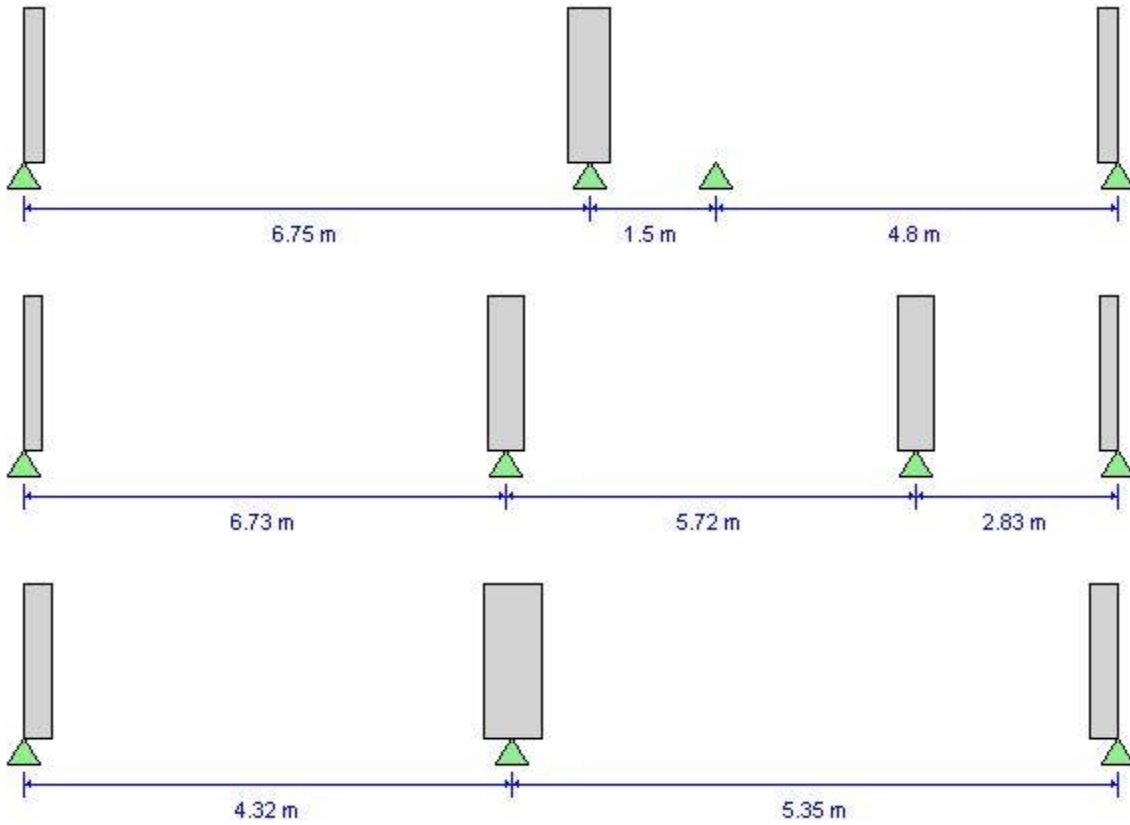
## ACI 318-14 Concrete Strip Design

### Geometric Properties

Combination = Overall Envelope  
Strip Label = SB4  
Length = 38 m  
Distance to Top Rebar Center = 43.575 mm  
Distance to Bot Rebar Center = 43.575 mm

### Material Properties

Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



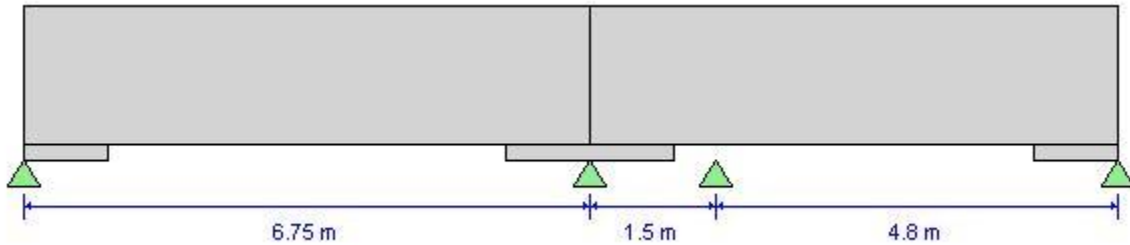
## ACI 318-14 Concrete Strip Design

### Geometric Properties

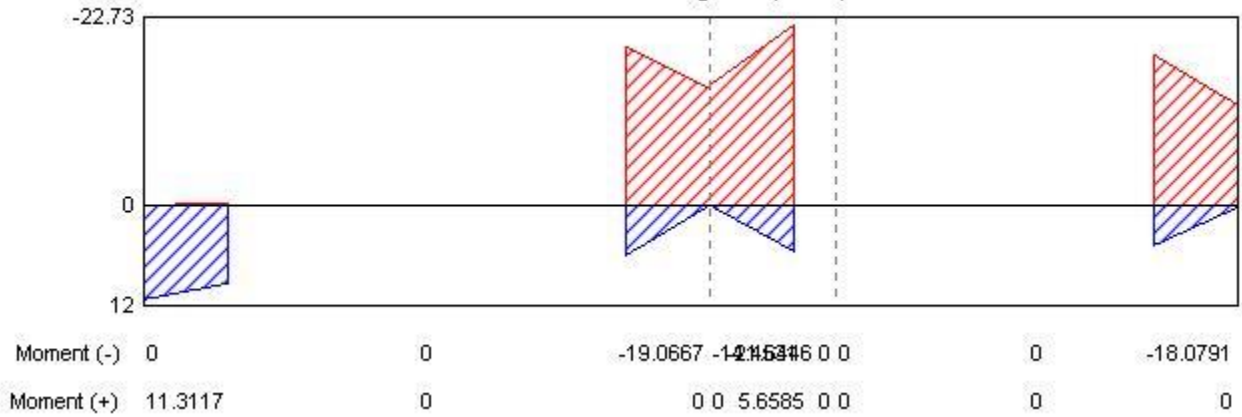
Combination = Overall Envelope  
 Strip Label = SB5  
 Length = 38.66 m  
 Distance to Top Rebar Center = 43.575 mm  
 Distance to Bot Rebar Center = 43.575 mm

### Material Properties

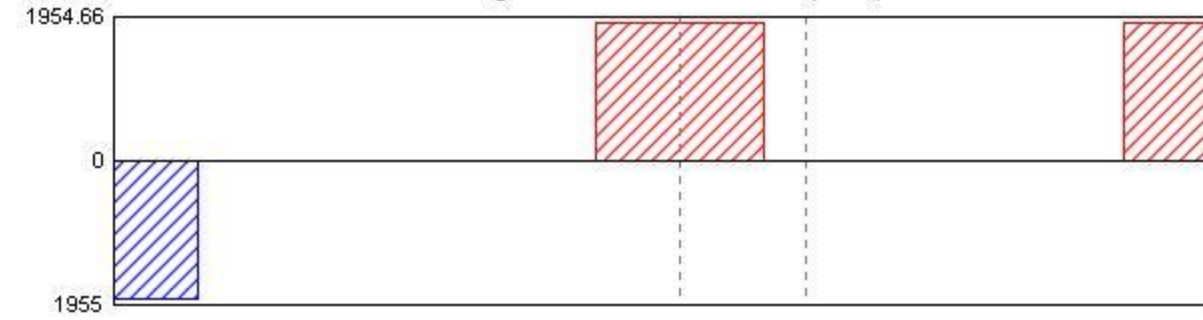
Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
 Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



**Moment Diagram (kN-m)**

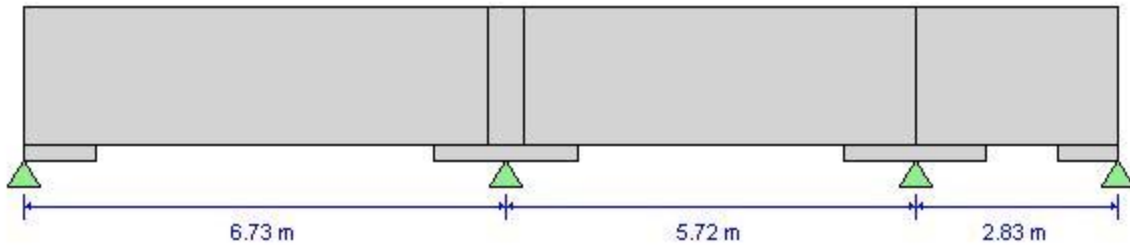
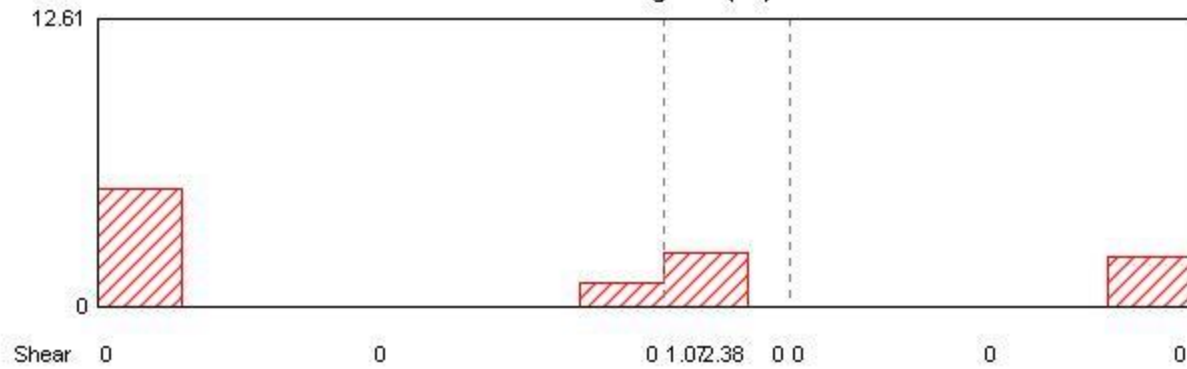


### Longitudinal Reinforcement (mm<sup>2</sup>)

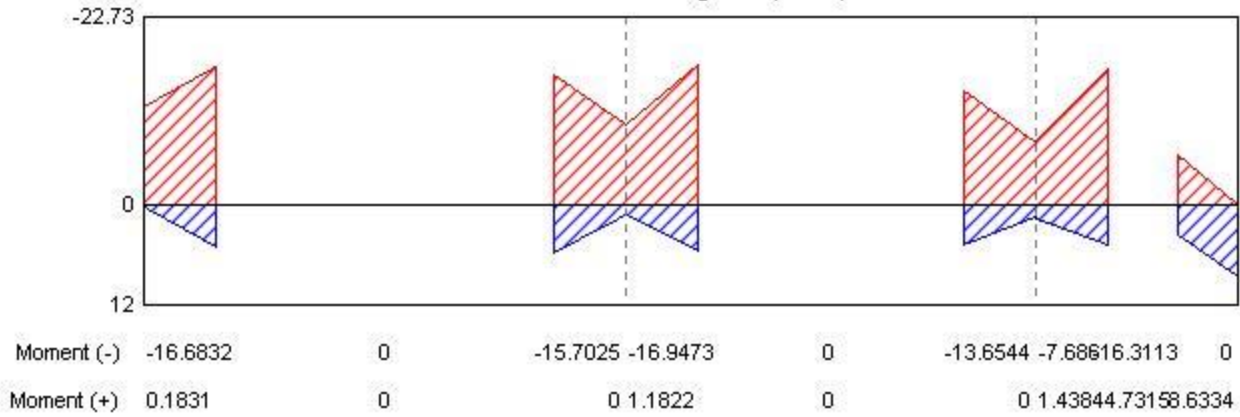


As (top)	0	0	116.205	88.056	94.0	0	0	0	110.178
Combo			Comb1	Comb1	Comb1				Comb1
As (bot)	68.901	0	0	0	0	0	0	0	0
Combo	Comb1								Comb1

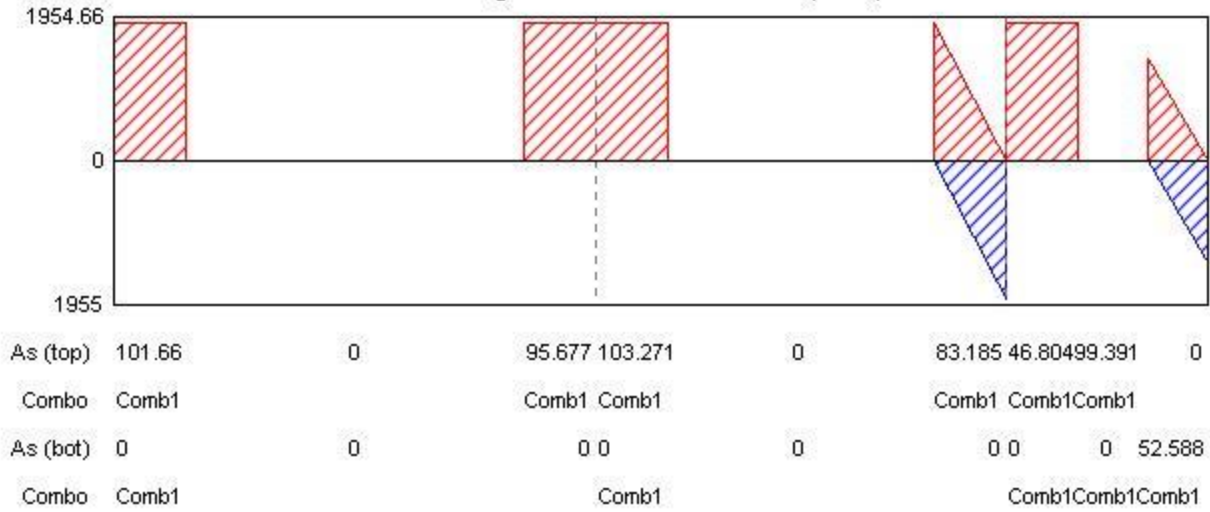
### Shear Diagram (kN)



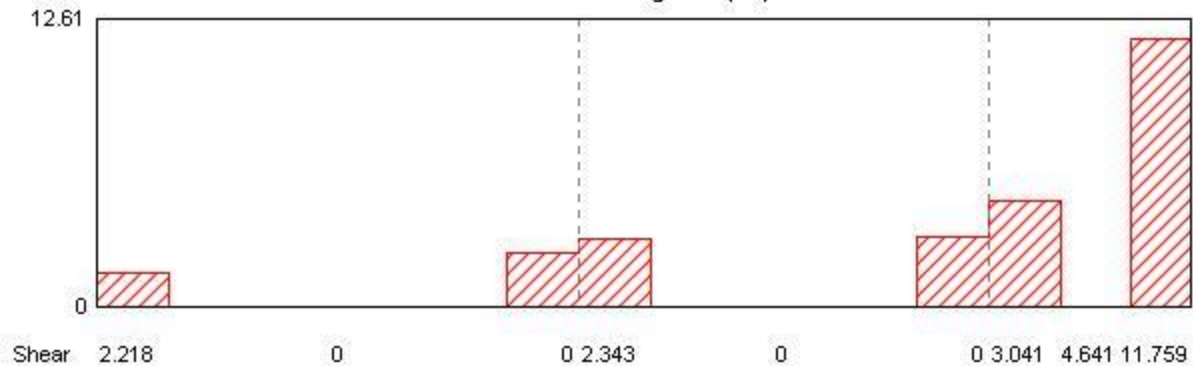
**Moment Diagram (kN-m)**

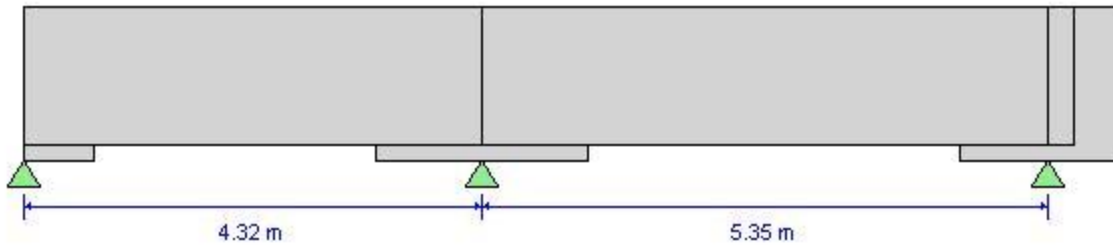


**Longitudinal Reinforcement (mm<sup>2</sup>)**

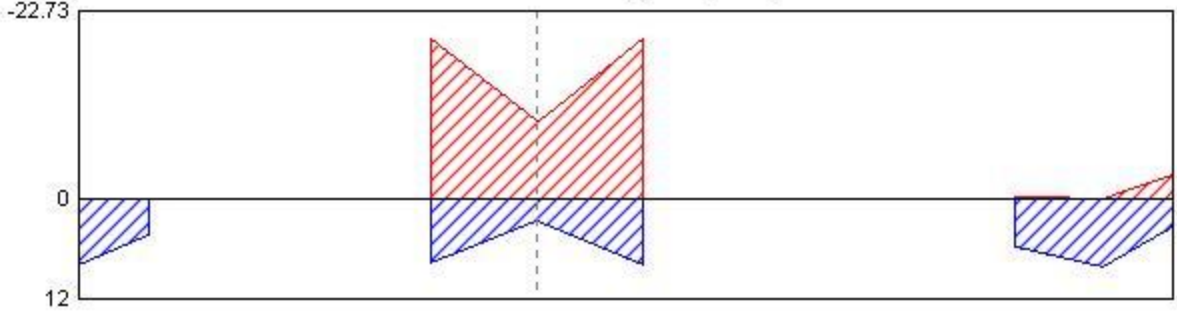


**Shear Diagram (kN)**



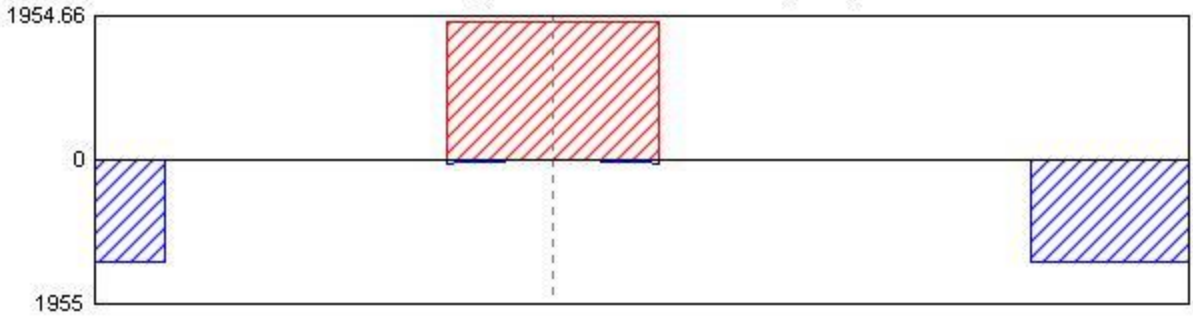


**Moment Diagram (kN-m)**

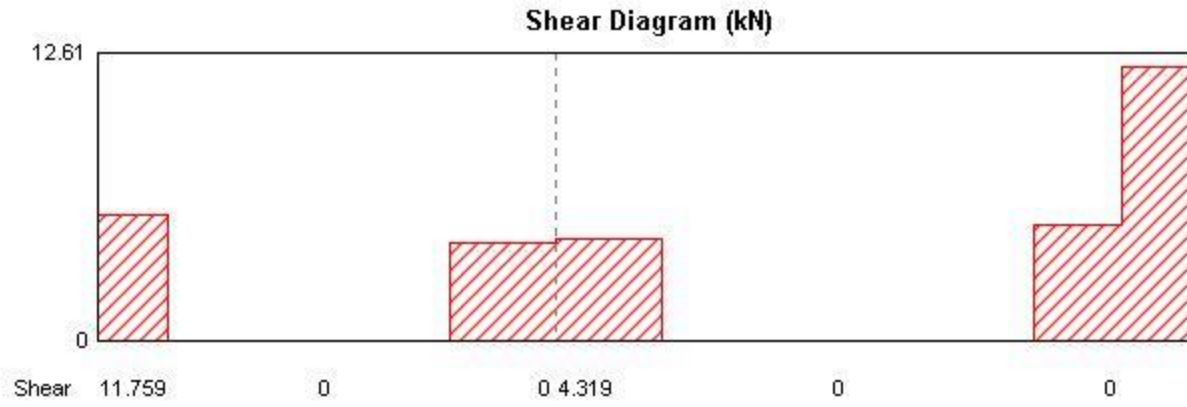


Moment (-)	0	0	-19.2321	-19.3113	0	0
Moment (+)	8.6334	0	7.7308	7.9126	0	8.2305

**Longitudinal Reinforcement (mm2)**



As (top)	0	0	117.214	117.698	0	0
Combo			Comb1	Comb1		
As (bot)	52.588	0	47.076	48.184	0	50.132
Combo	Comb1		Comb1	Comb1		Comb1



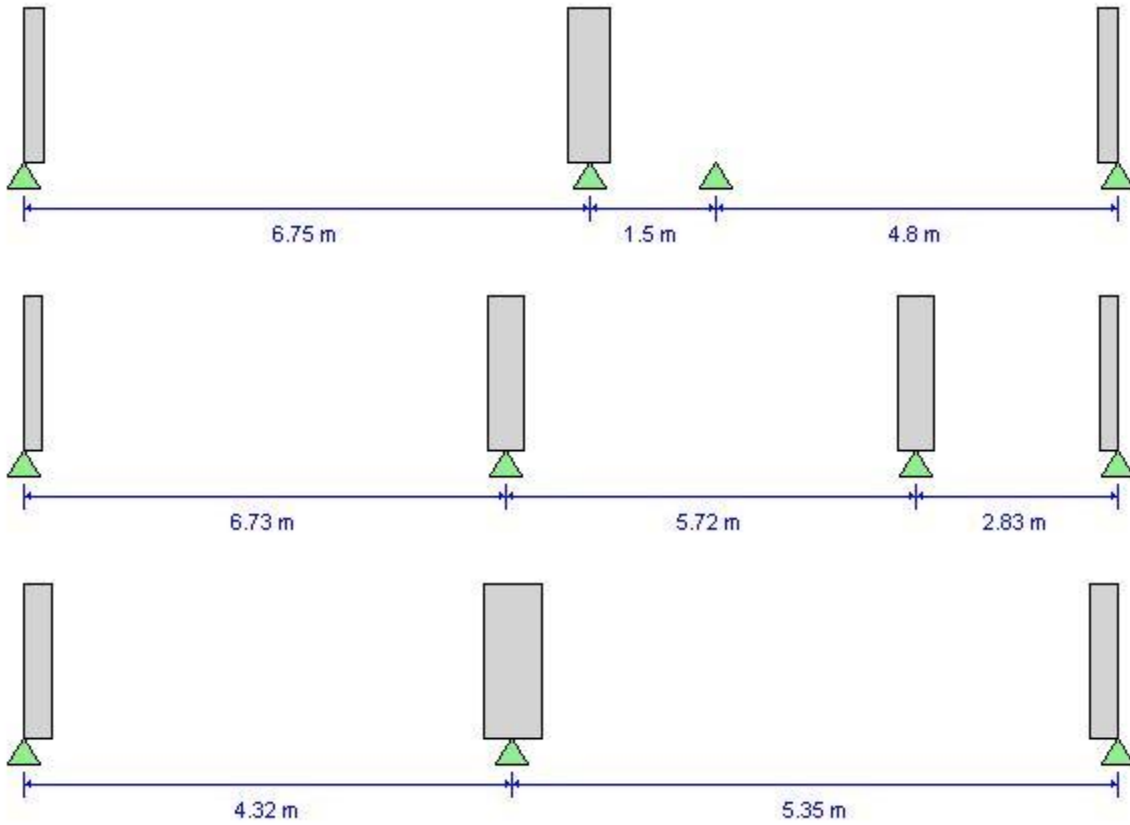
## ACI 318-14 Concrete Strip Design

### Geometric Properties

Combination = Overall Envelope  
Strip Label = SB6  
Length = 38 m  
Distance to Top Rebar Center = 43.575 mm  
Distance to Bot Rebar Center = 43.575 mm

### Material Properties

Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



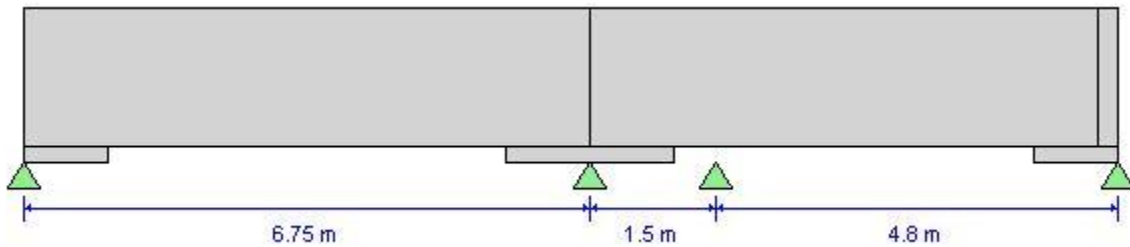
## ACI 318-14 Concrete Strip Design

### Geometric Properties

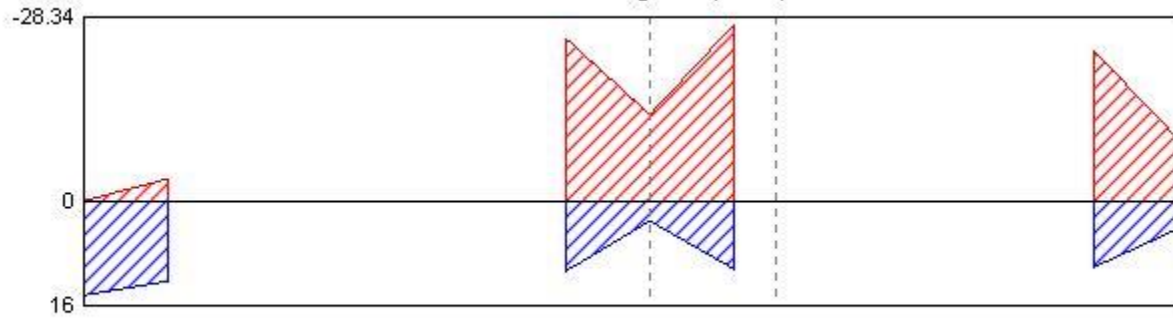
Combination = Overall Envelope  
 Strip Label = SB7  
 Length = 38.66 m  
 Distance to Top Rebar Center = 43.575 mm  
 Distance to Bot Rebar Center = 43.575 mm

### Material Properties

Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
 Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>

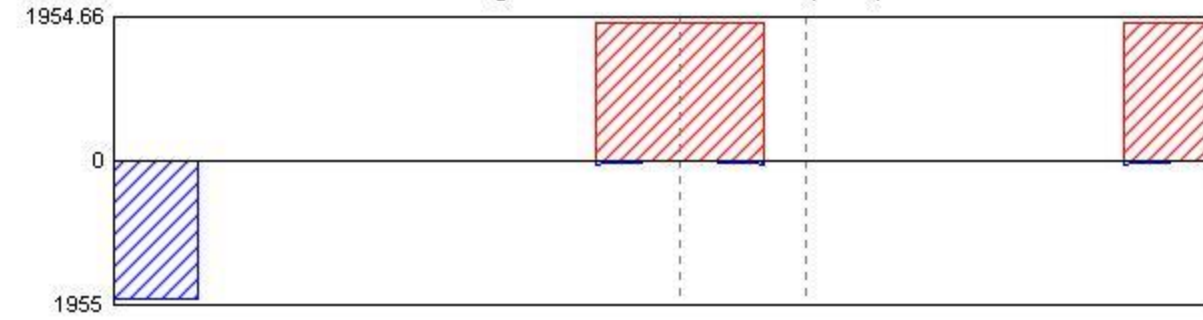


**Moment Diagram (kN-m)**



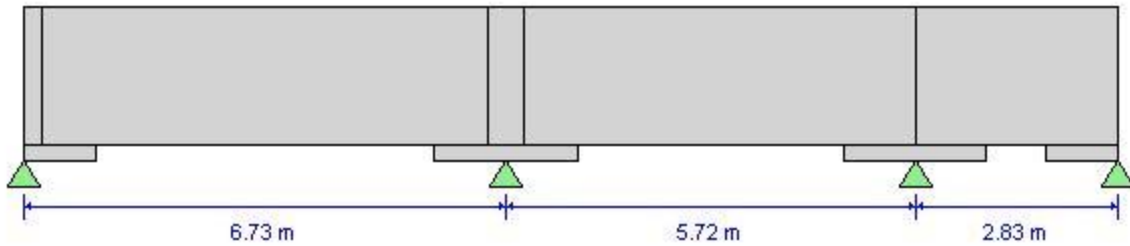
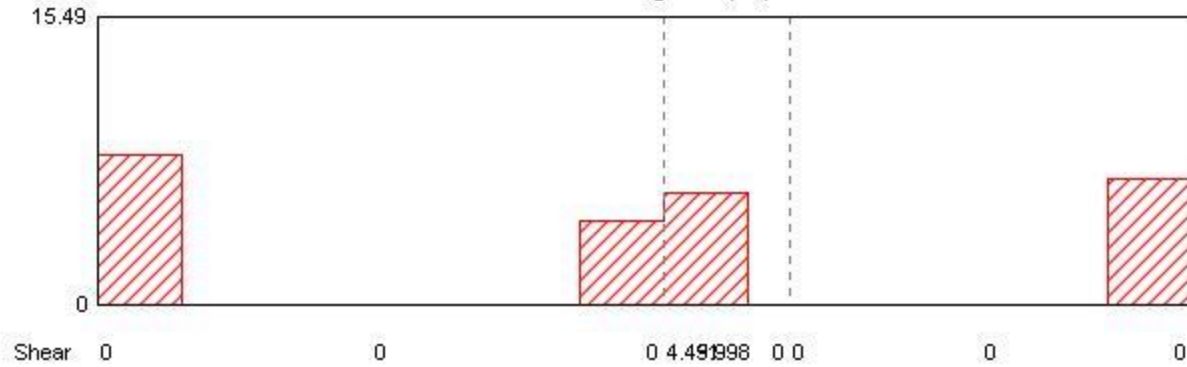
Moment (-)	0	0	-24.9487	-13.2967	0	0	0	-23.1237
Moment (+)	14.3857	0	10.6864	3.1263	19.0	0	0	10.2444

### Longitudinal Reinforcement (mm<sup>2</sup>)

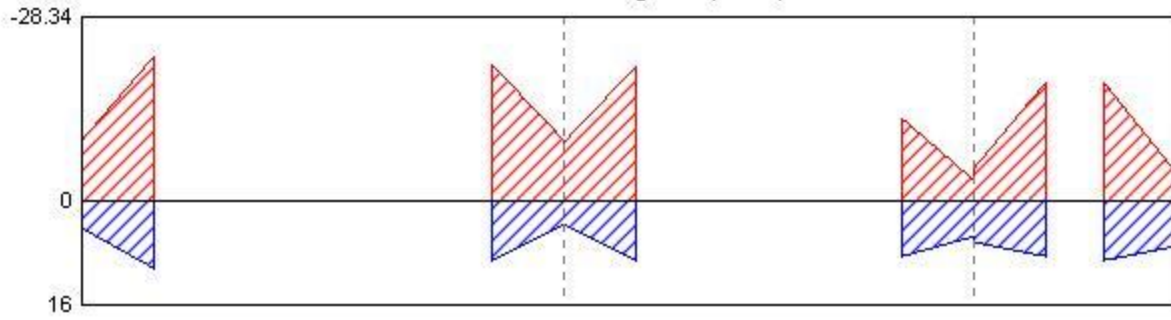


As (top)	0	0	152.121	80.494	574	0	0	0	140.974
Combo			Comb1	Comb1	Comb1				Comb1
As (bot)	87.645	0	65.089	0	63.537	0	0	0	62.394
Combo	Comb1		Comb1	Comb1	Comb1				Comb1

### Shear Diagram (kN)

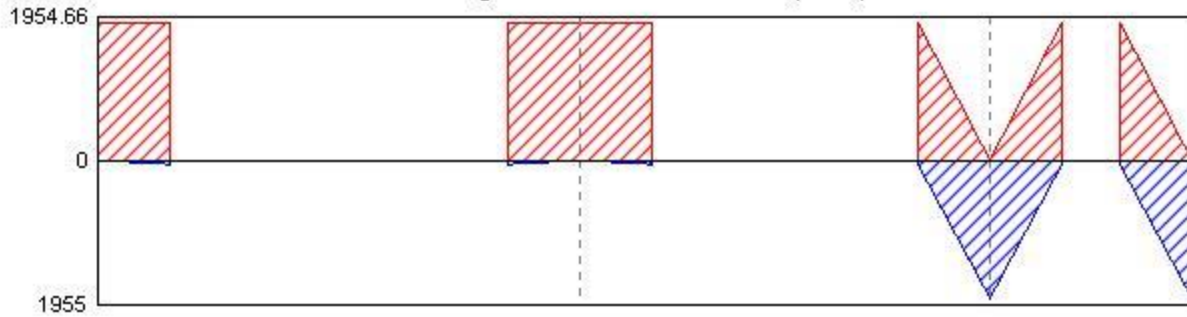


**Moment Diagram (kN-m)**



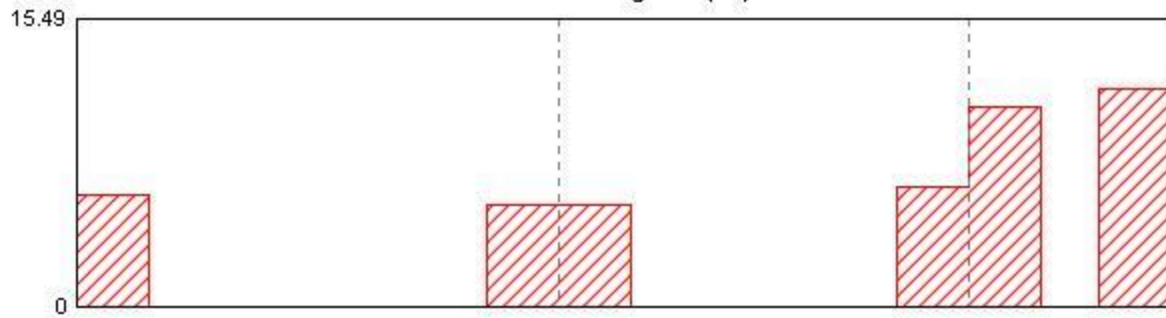
Moment (-)	-22.087	0	-20.9595	-20.7483	0	-12.5512	-3.0038	8.2724	3.332
Moment (+)	10.3698	0	9.3669	9.2136	0	8.6773	5.6281	9.2334	7.2325

**Longitudinal Reinforcement (mm2)**

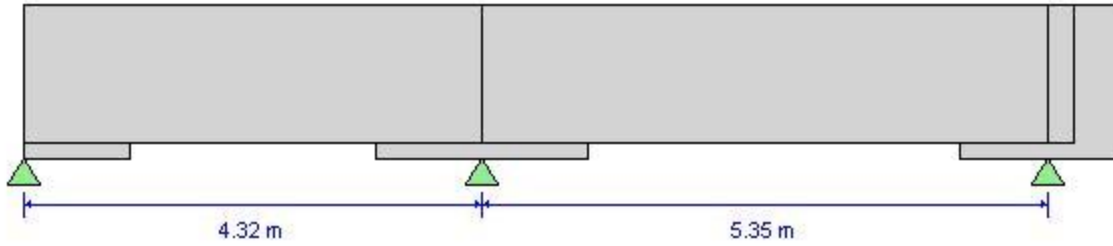


As (top)	134.643	0	127.759	126.469	0	76.458	0	111.357	0
Combo	Comb1		Comb1	Comb1		Comb1	Comb1	Comb1	Comb1
As (bot)	63.159	0	57.047	56.112	0	52.844	0	56.233	0
Combo	Comb1		Comb1	Comb1		Comb1	Comb1	Comb1	Comb1

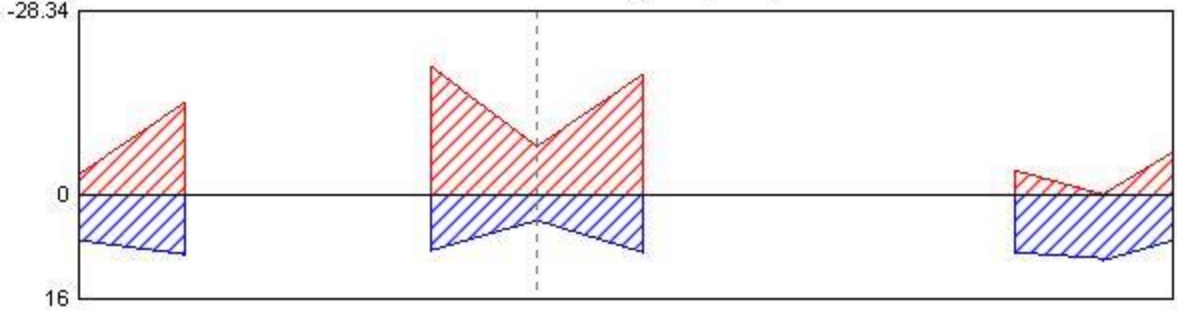
**Shear Diagram (kN)**



Shear	6.725	0	0	5.493	0	0	6.456	10.807	11.741
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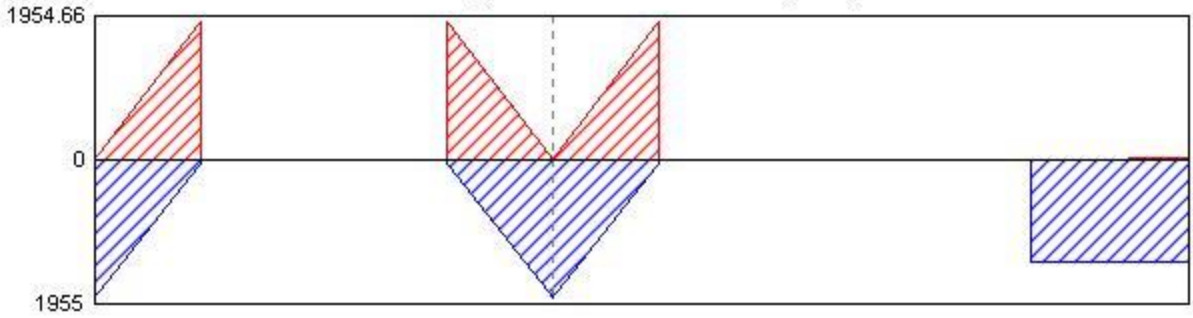


**Moment Diagram (kN-m)**

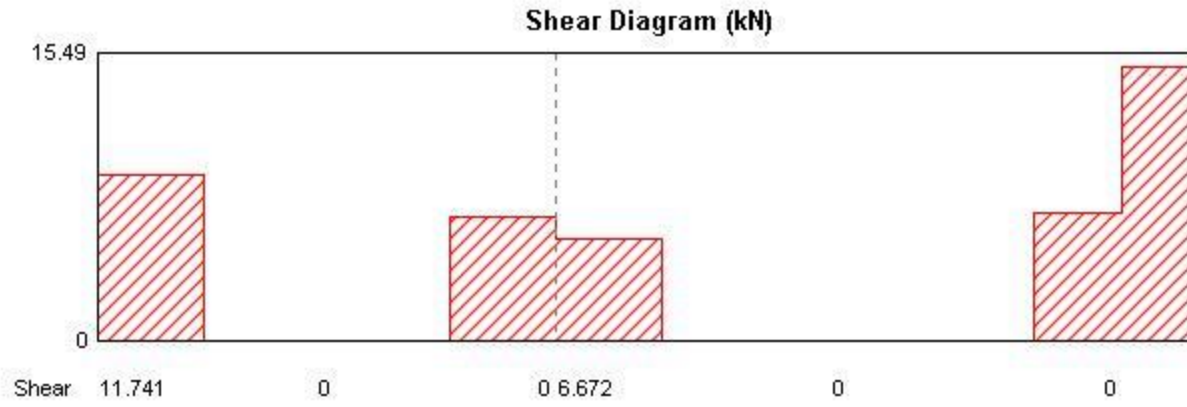


Moment (-)	-14.0421	0	-19.6829	-18.4495	0	0
Moment (+)	9.2363	0	8.6967	8.9881	0	10.2165

**Longitudinal Reinforcement (mm<sup>2</sup>)**



As (top)	85.55	0	119.965	112.438	0	0
Combo	Comb1		Comb1	Comb1		
As (bot)	56.251	0	52.962	54.738	0	62.241
Combo	Comb1		Comb1	Comb1		Comb1



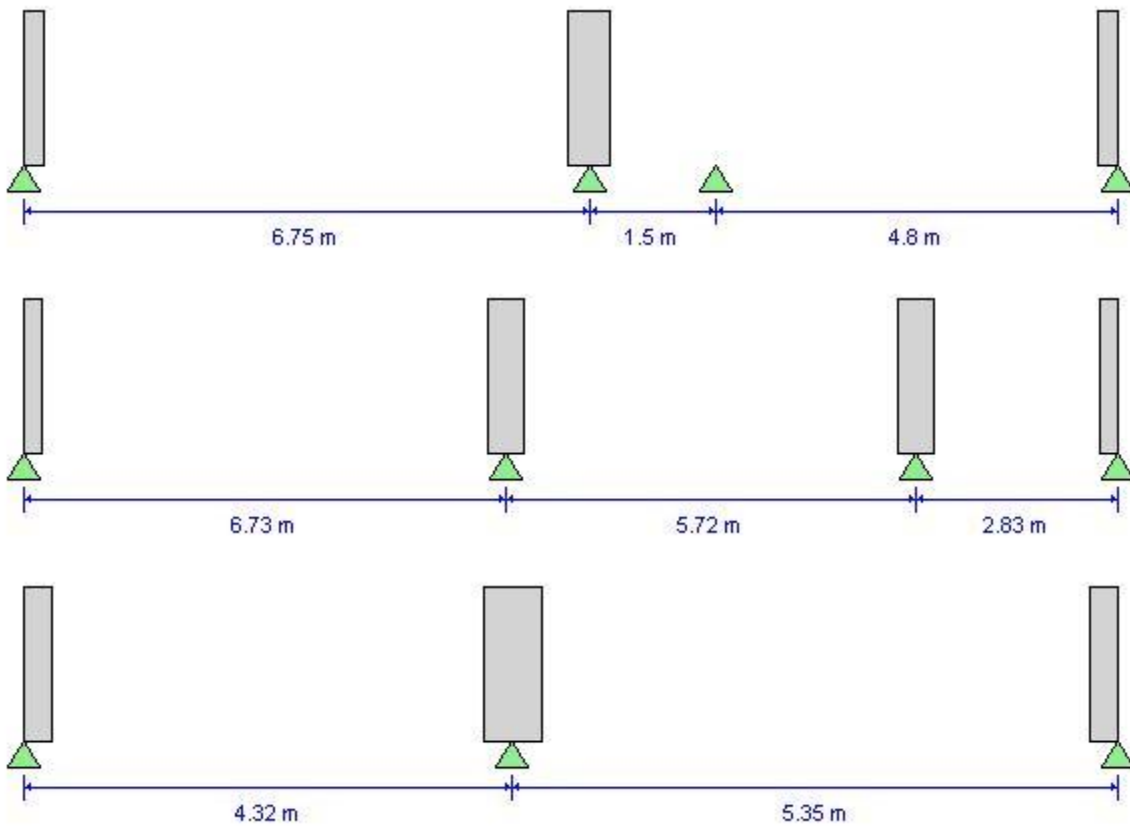
## ACI 318-14 Concrete Strip Design

### Geometric Properties

Combination = Overall Envelope  
Strip Label = SB8  
Length = 38 m  
Distance to Top Rebar Center = 43.575 mm  
Distance to Bot Rebar Center = 43.575 mm

### Material Properties

Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



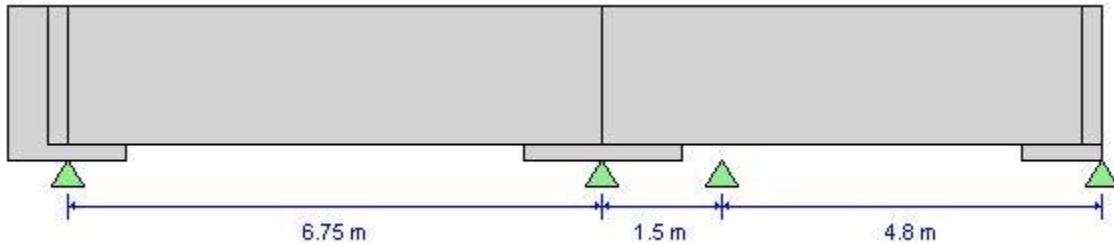
## ACI 318-14 Concrete Strip Design

### Geometric Properties

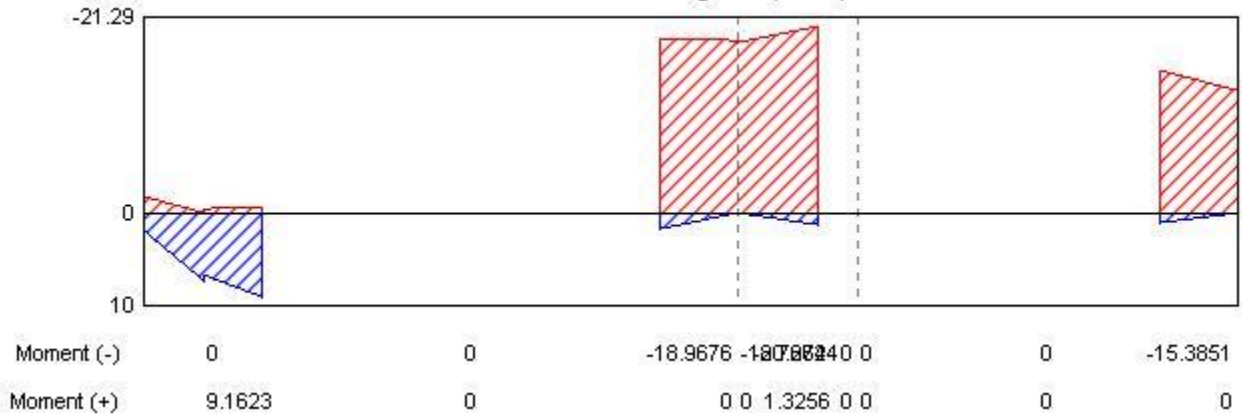
Combination = Overall Envelope  
 Strip Label = SB9  
 Length = 39.41 m  
 Distance to Top Rebar Center = 43.575 mm  
 Distance to Bot Rebar Center = 43.575 mm

### Material Properties

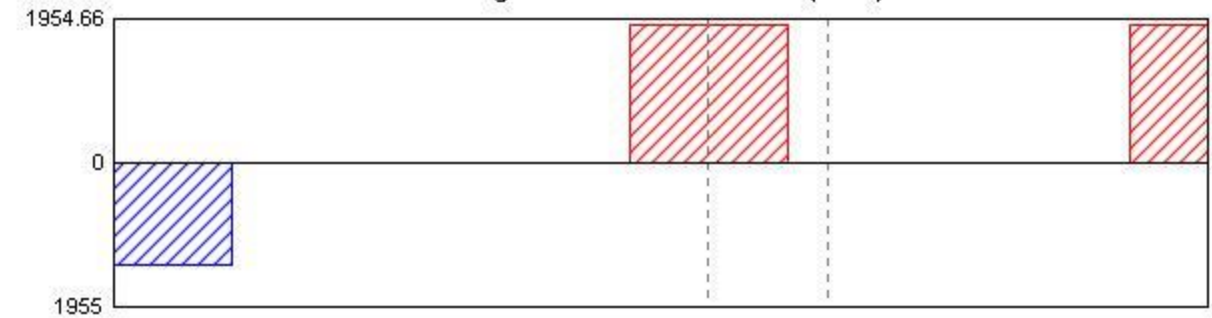
Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
 Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



**Moment Diagram (kN-m)**

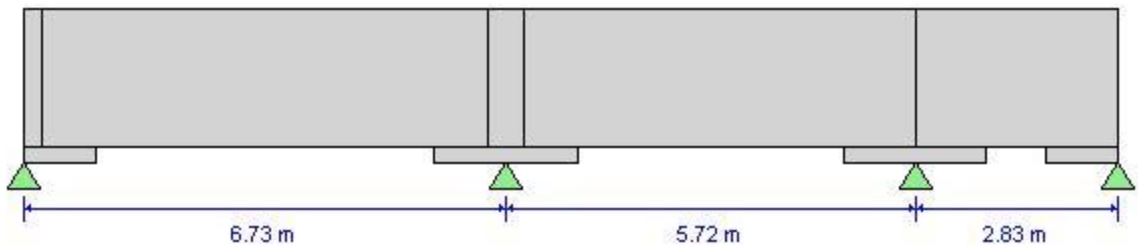
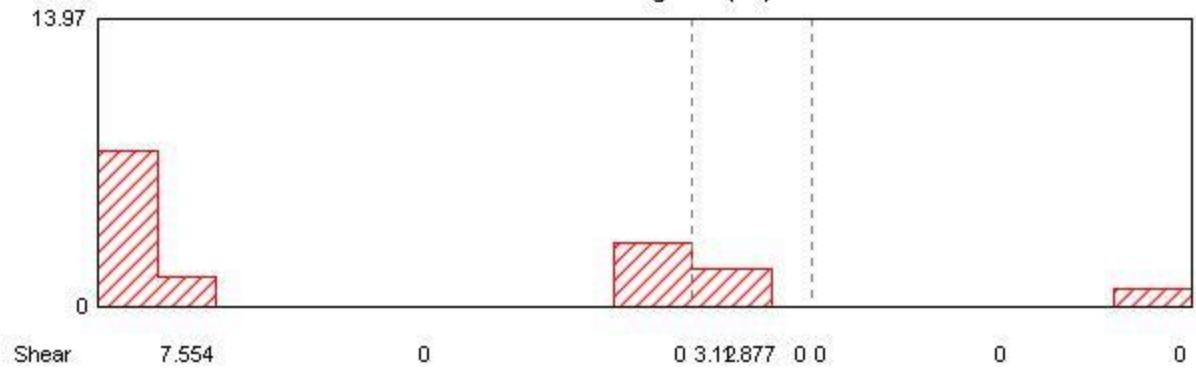


**Longitudinal Reinforcement (mm<sup>2</sup>)**

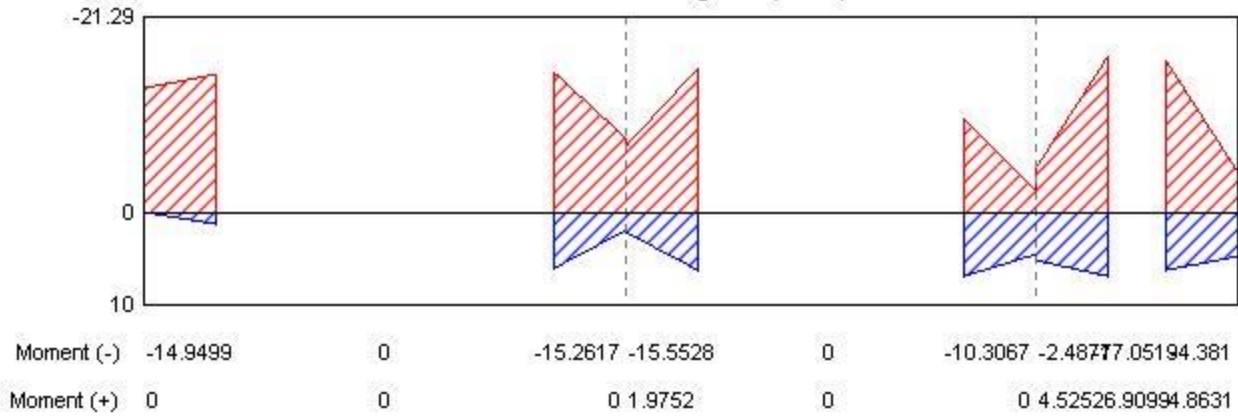


As (top)	0	0	115.61	1142.37	540.00	0	0	93.741
Combo			Comb1	Comb1	Comb1			Comb1
As (bot)	55.812	0	0.00	0.00	0.00	0	0	0
Combo	Comb1		Comb1	Comb1	Comb1			

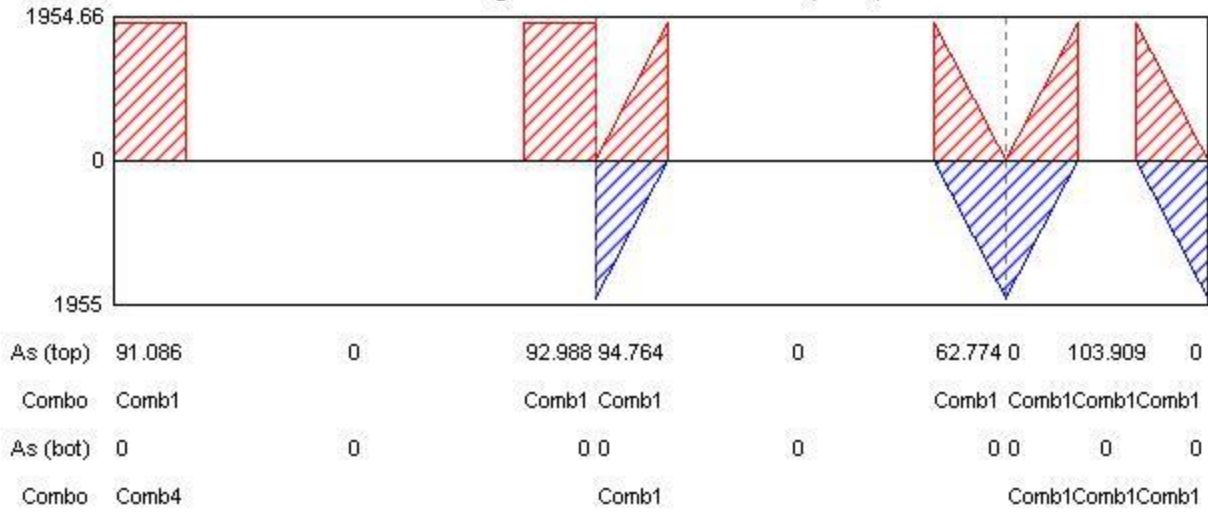
**Shear Diagram (kN)**



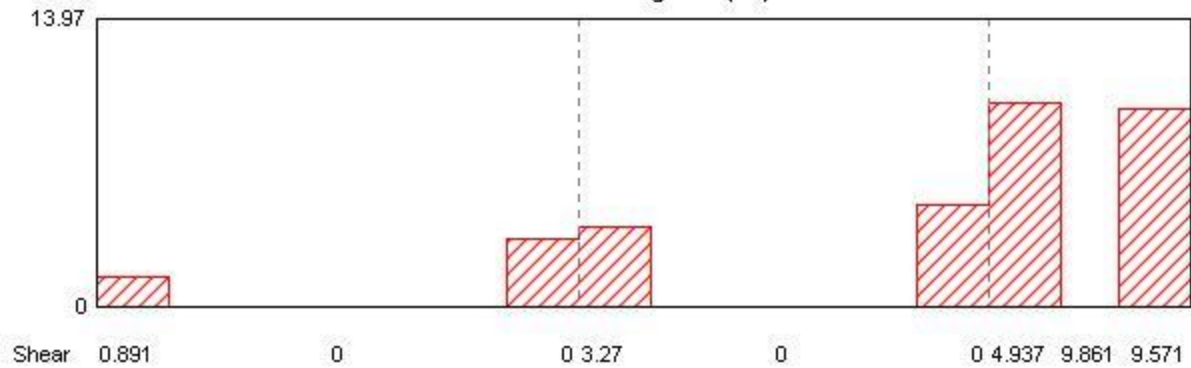
**Moment Diagram (kN-m)**

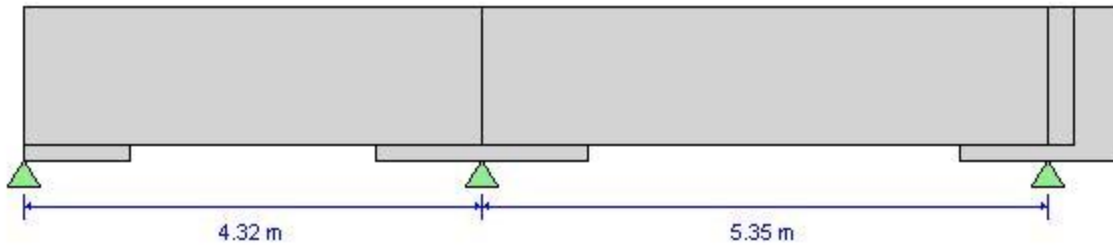


**Longitudinal Reinforcement (mm2)**

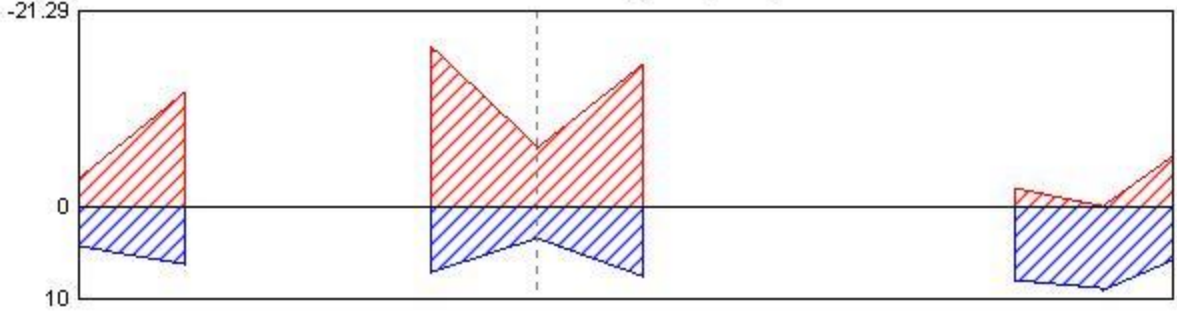


**Shear Diagram (kN)**



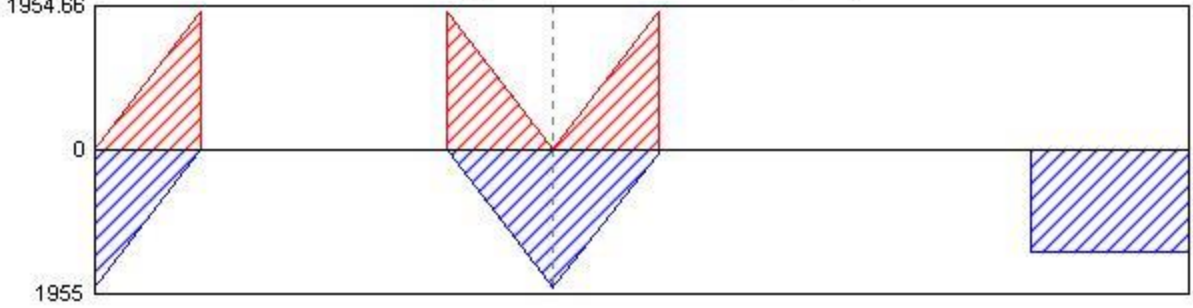


**Moment Diagram (kN-m)**

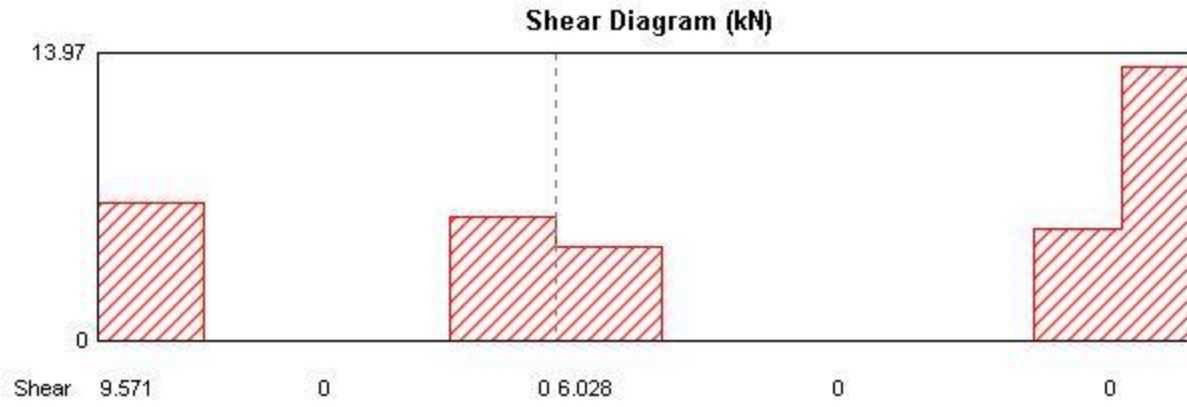


Moment (-)	-12.462	0	-17.2878	-15.4875	0	0
Moment (+)	4.8631	0	0	7.5486	0	9.1706

**Longitudinal Reinforcement (mm2)**



As (top)	75.914	0	105.349	94.365	0	0
Combo	Comb1		Comb1	Comb1		
As (bot)	0	0	0	45.966	0	55.863
Combo	Comb1			Comb1		Comb1



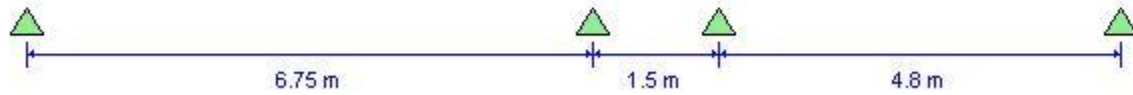
## ACI 318-14 Concrete Strip Design

### Geometric Properties

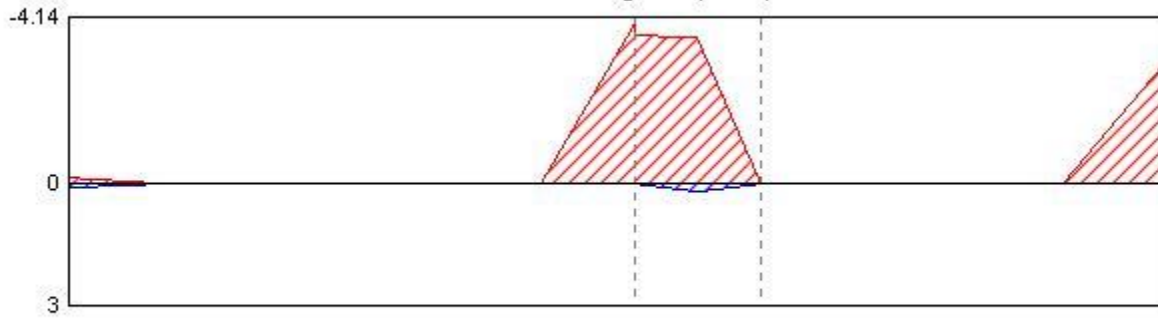
Combination = Overall Envelope  
 Strip Label = SB10  
 Length = 38 m  
 Distance to Top Rebar Center = 43.575 mm  
 Distance to Bot Rebar Center = 43.575 mm

### Material Properties

Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
 Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>

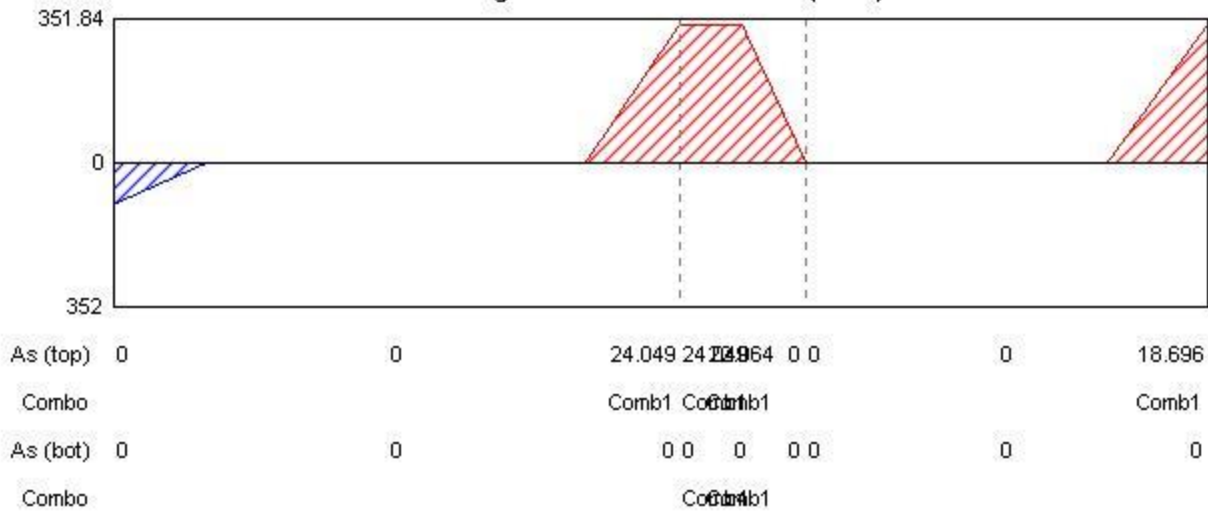


**Moment Diagram (kN-m)**

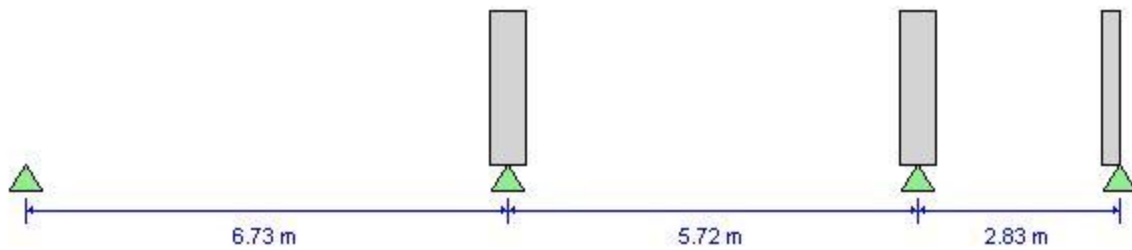
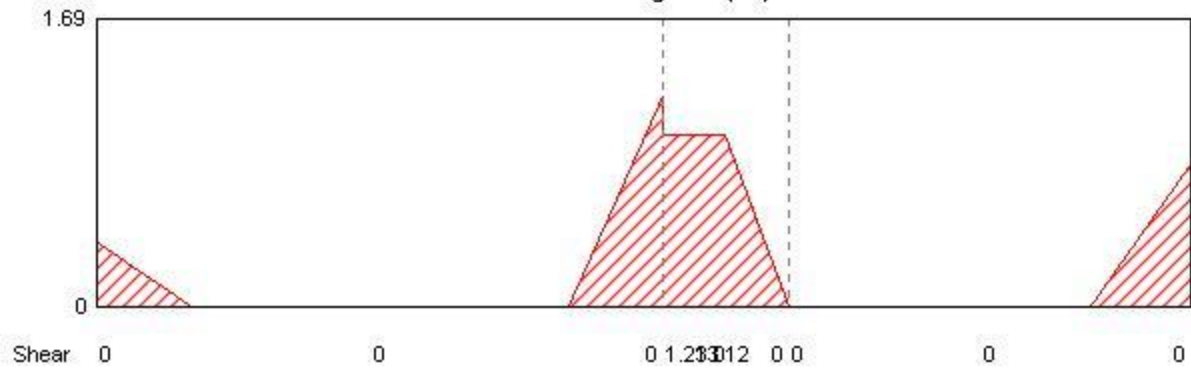


Moment (-)	0	0	-3.9451	-3.9451	0	0	0	-3.0681
Moment (+)	0	0	0	0	0.2033	0	0	0

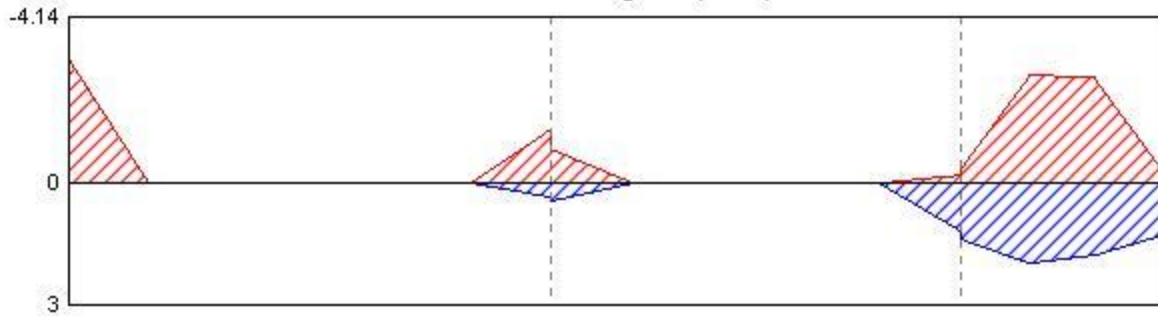
### Longitudinal Reinforcement (mm<sup>2</sup>)



### Shear Diagram (kN)

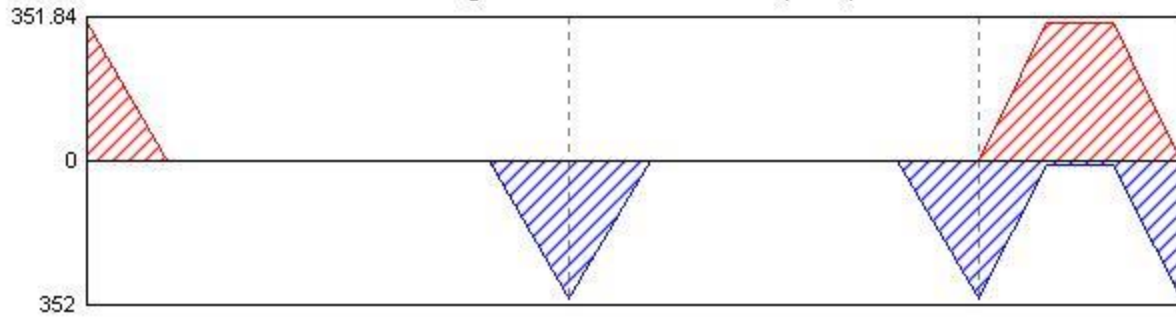


**Moment Diagram (kN-m)**



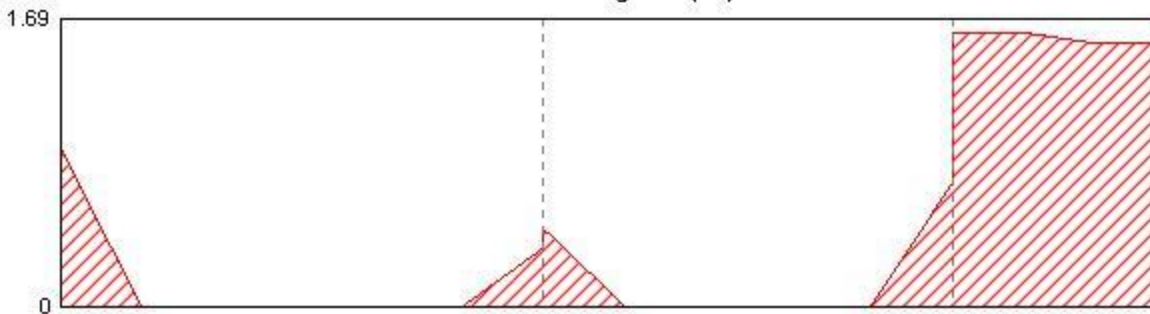
Moment (-)	-3.0681	0	0	-1.3206	0	0	-0.2168	2.6672	-0.318	
Moment (+)	0	0	0	0.3534	0	0	1.3907	1.3907	1.9929	1.2922

**Longitudinal Reinforcement (mm2)**

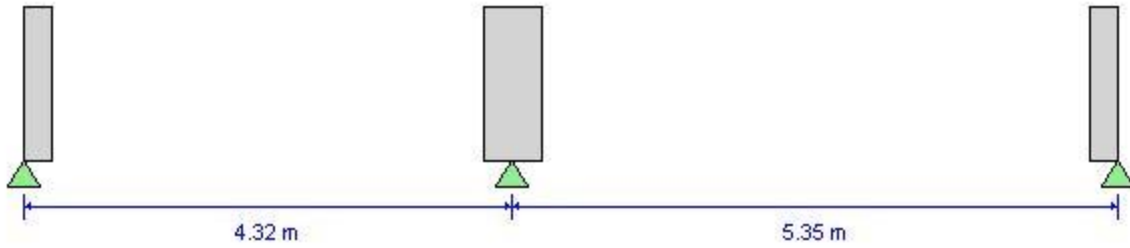


As (top)	18.696	0	0	0	0	0	0	16.251	0	
Combo	Comb1			Comb1				Comb1	Comb1	Comb1
As (bot)	0	0	0	0	0	8.469	8.469	12.139	0	
Combo	Comb4			Comb1				Comb1	Comb1	Comb1

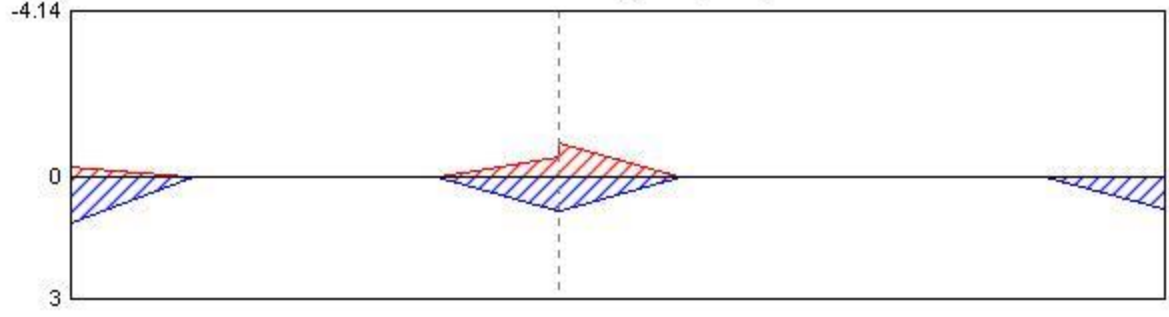
**Shear Diagram (kN)**



Shear	0.828	0	0	0.346	0	0	0.723	1.606	1.549
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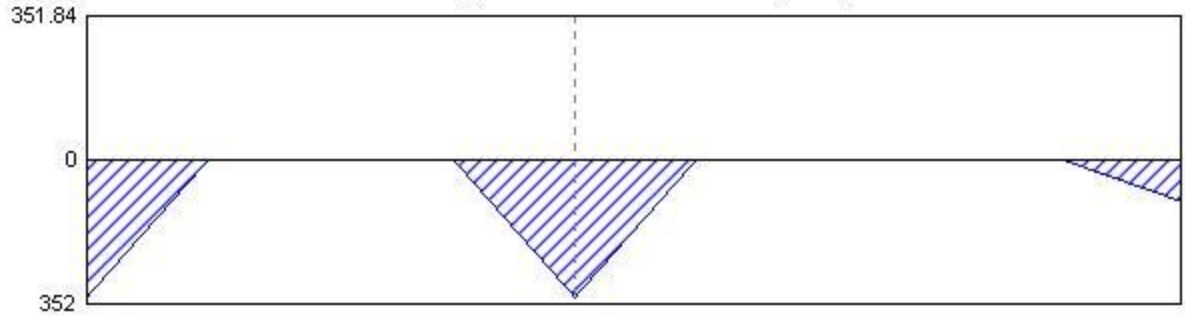


**Moment Diagram (kN-m)**

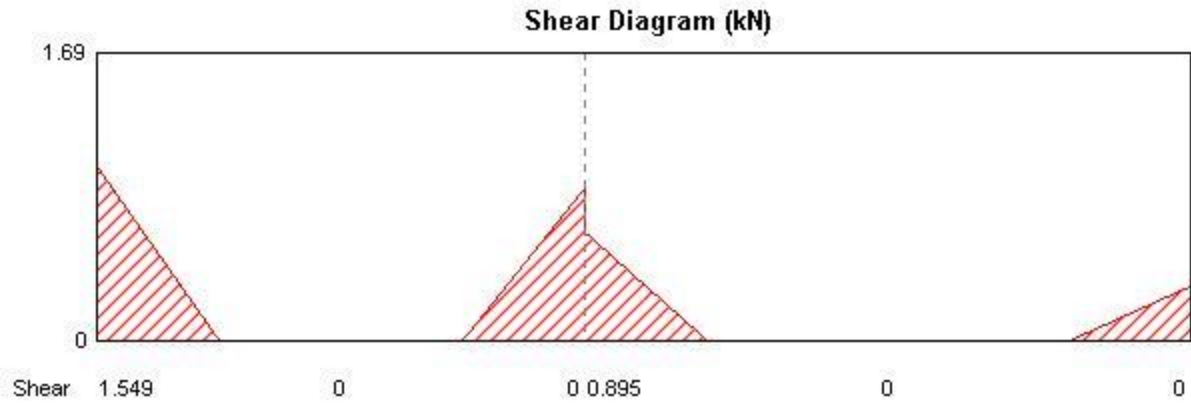


Moment (-)	-0.318	0	0 -0.5169	0	0
Moment (+)	1.2922	0	0 0.8518	0	0.7722

**Longitudinal Reinforcement (mm2)**



As (top)	0	0	0 0	0	0
Combo	Comb1		Comb1		
As (bot)	0	0	0 0	0	4.705
Combo	Comb1		Comb1		Comb1



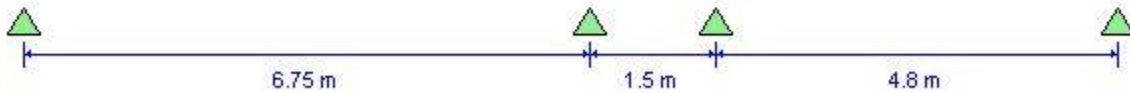
## ACI 318-14 Concrete Strip Design

### Geometric Properties

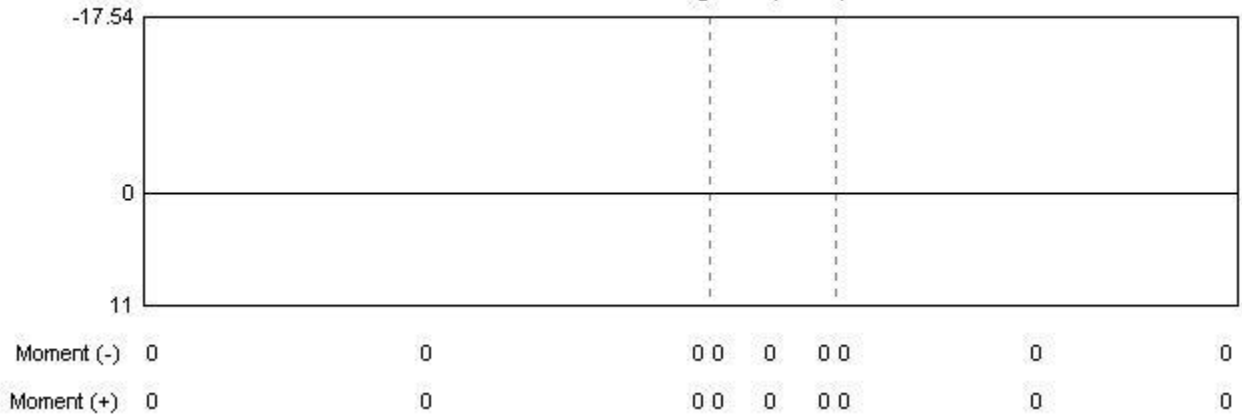
Combination = Overall Envelope  
 Strip Label = SB11  
 Length = 38.66 m  
 Distance to Top Rebar Center = 43.575 mm  
 Distance to Bot Rebar Center = 43.575 mm

### Material Properties

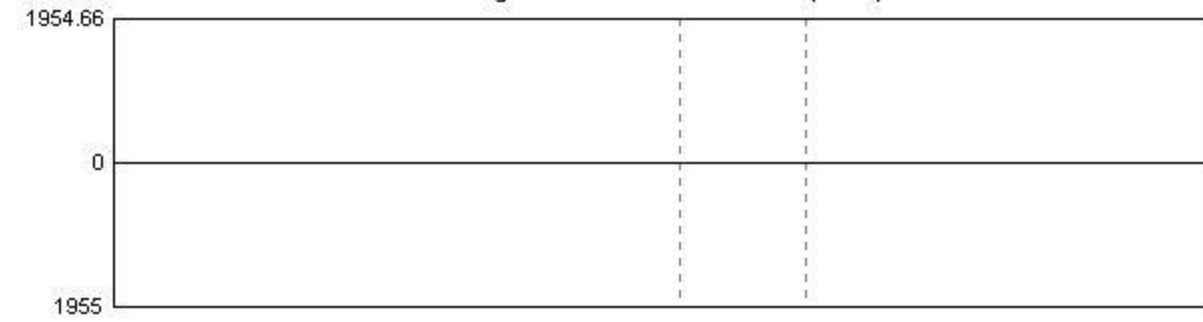
Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
 Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



**Moment Diagram (kN-m)**

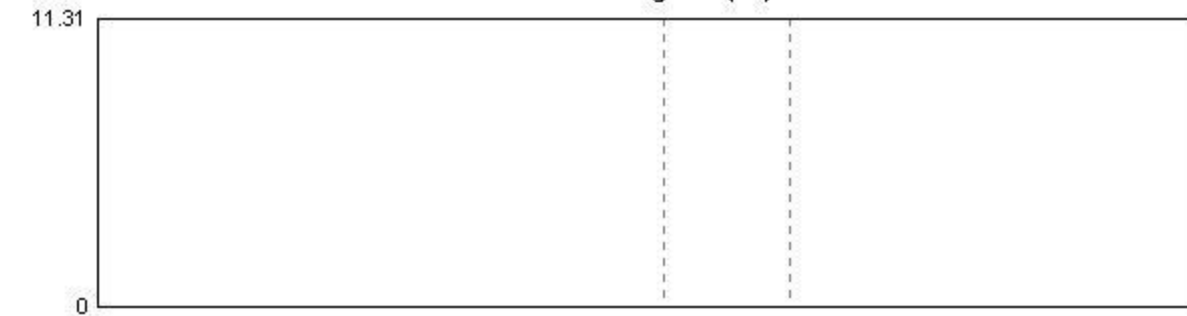


**Longitudinal Reinforcement (mm<sup>2</sup>)**

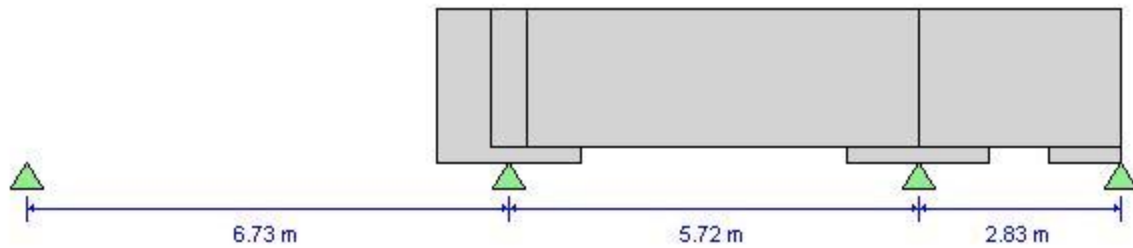


As (top)	0	0	0 0	0	0 0	0	0
Combo							
As (bot)	0	0	0 0	0	0 0	0	0
Combo							

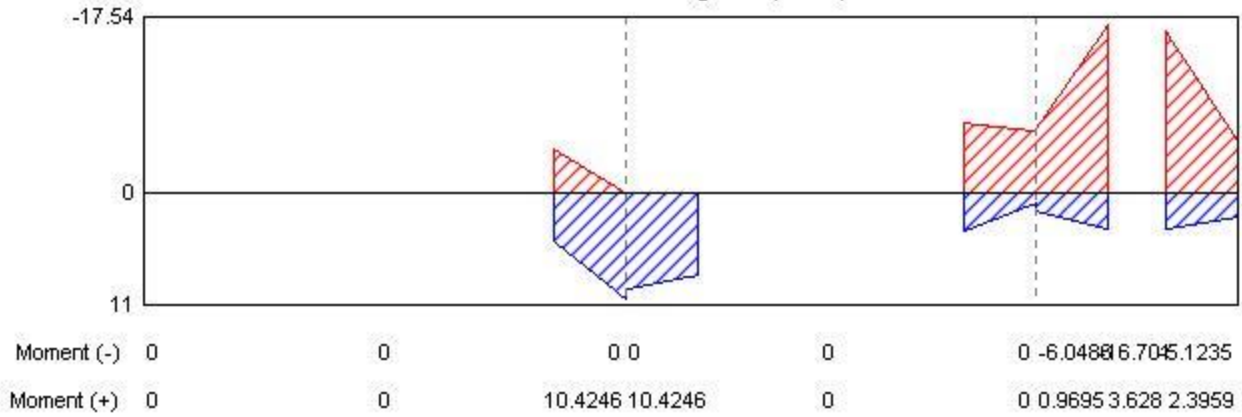
**Shear Diagram (kN)**



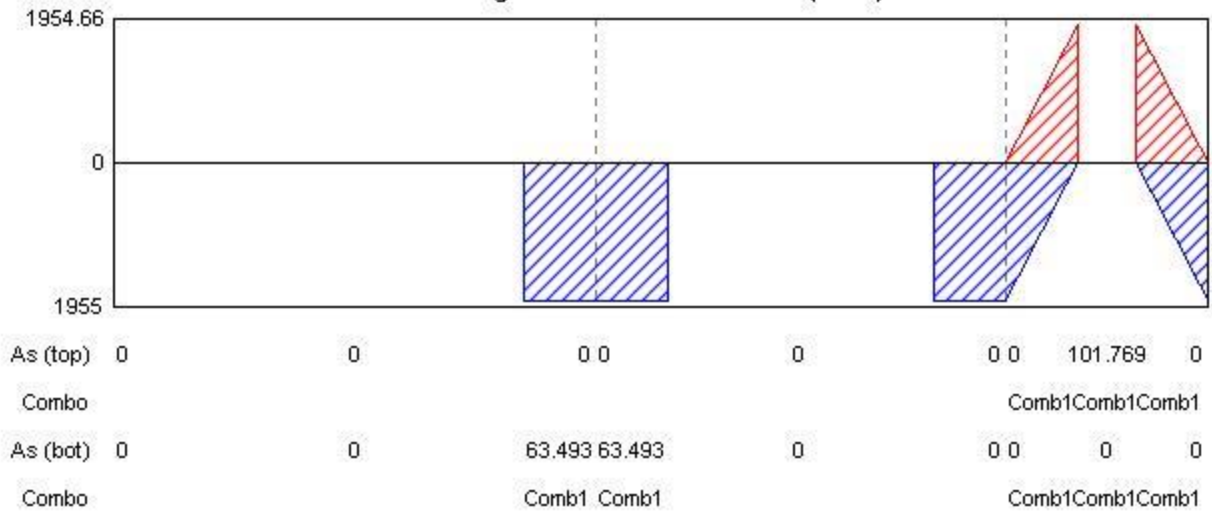
Shear	0	0	0 0	0	0 0	0	0
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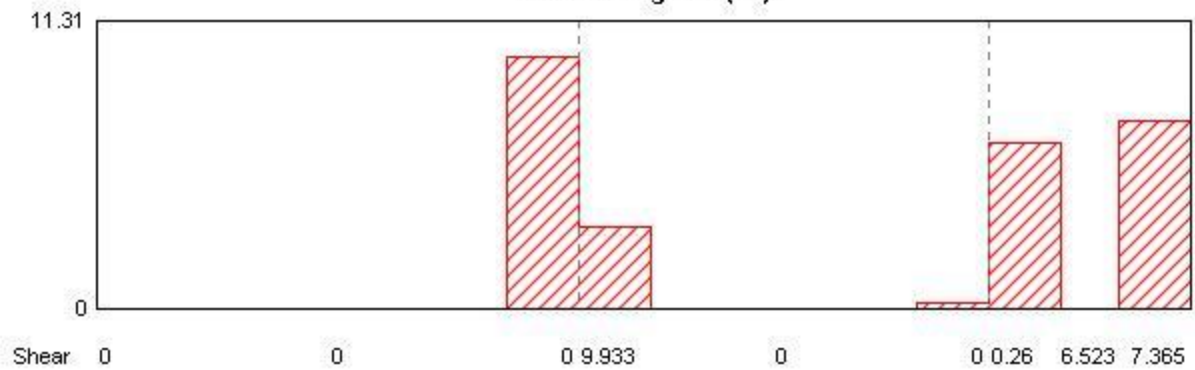
**Moment Diagram (kN-m)**

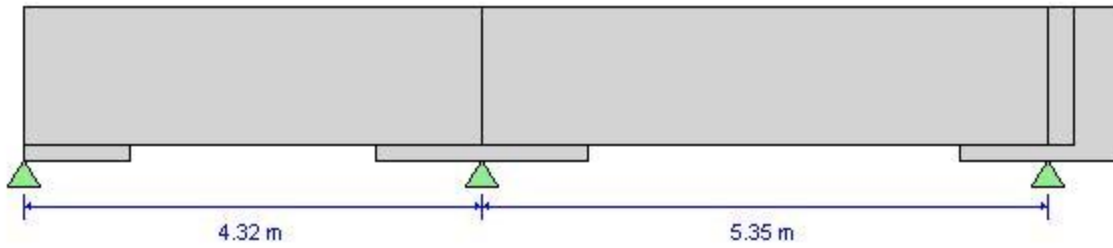


**Longitudinal Reinforcement (mm2)**

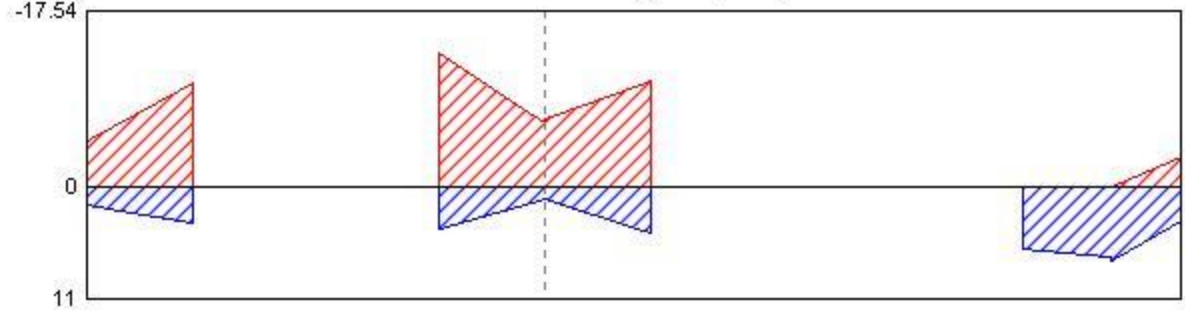


**Shear Diagram (kN)**



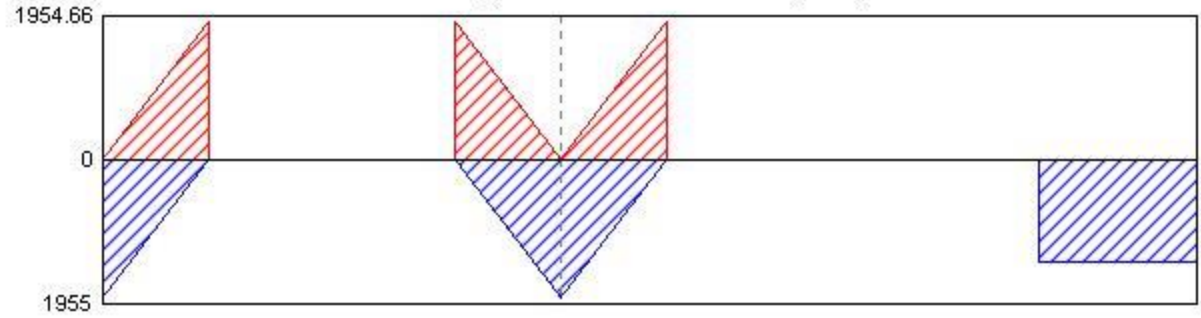


**Moment Diagram (kN-m)**

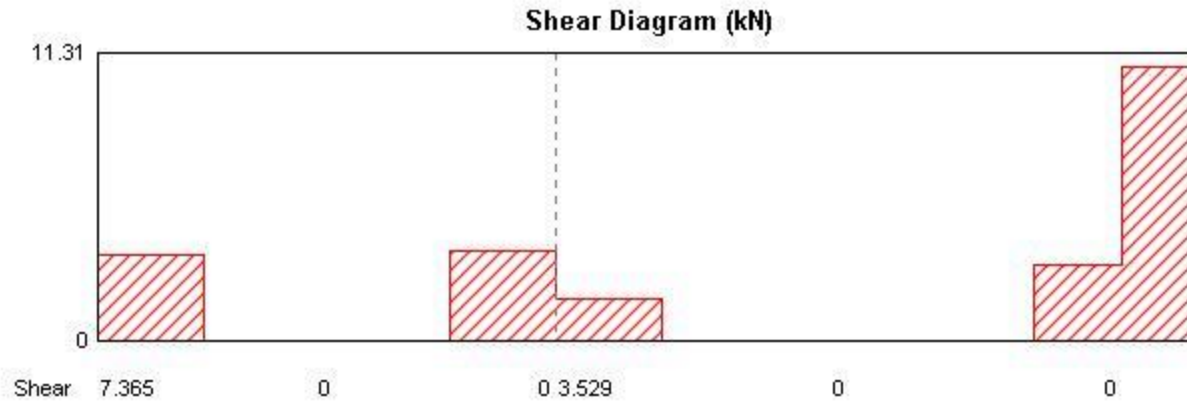


Moment (-)	-10.3236	0	-13.3753	-10.5608	0	0
Moment (+)	2.3959	0	0	1.2313	0	7.37

**Longitudinal Reinforcement (mm2)**



As (top)	62.878	0	81.483	64.323	0	0
Combo	Comb1		Comb1	Comb1		
As (bot)	0	0	0	0	0	44.887
Combo	Comb1		Comb1	Comb1		Comb1



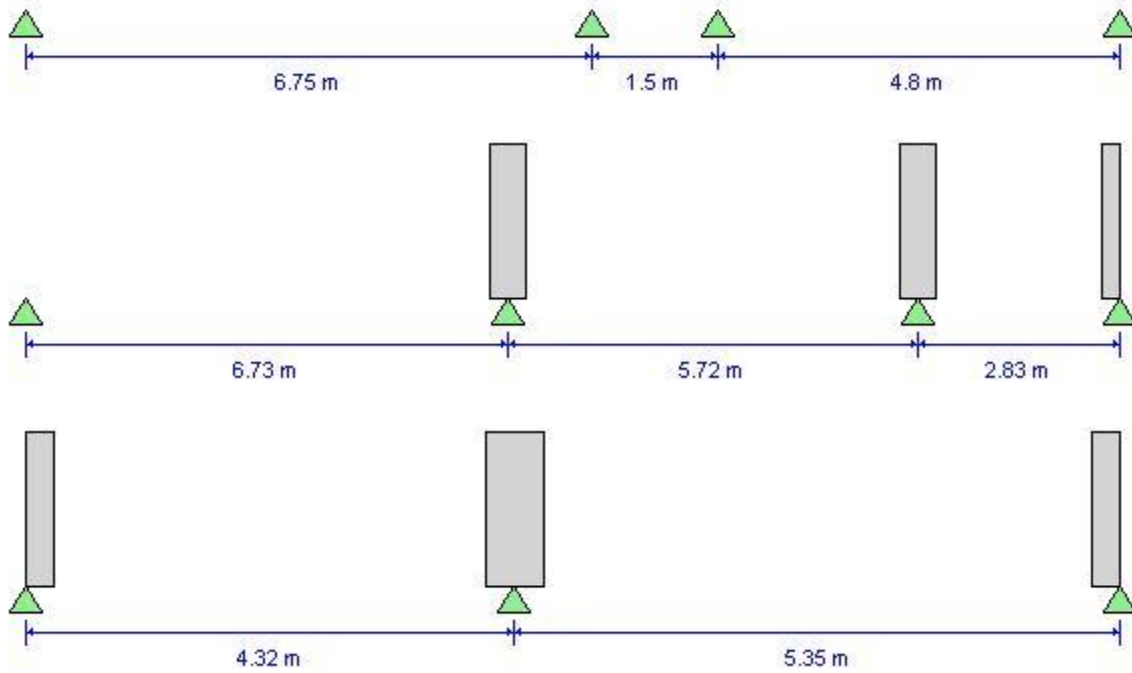
## ACI 318-14 Concrete Strip Design

### Geometric Properties

Combination = Overall Envelope  
Strip Label = SB12  
Length = 38 m  
Distance to Top Rebar Center = 43.575 mm  
Distance to Bot Rebar Center = 43.575 mm

### Material Properties

Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



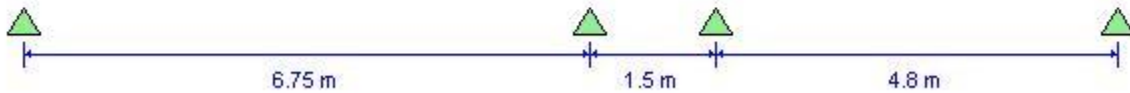
## ACI 318-14 Concrete Strip Design

### Geometric Properties

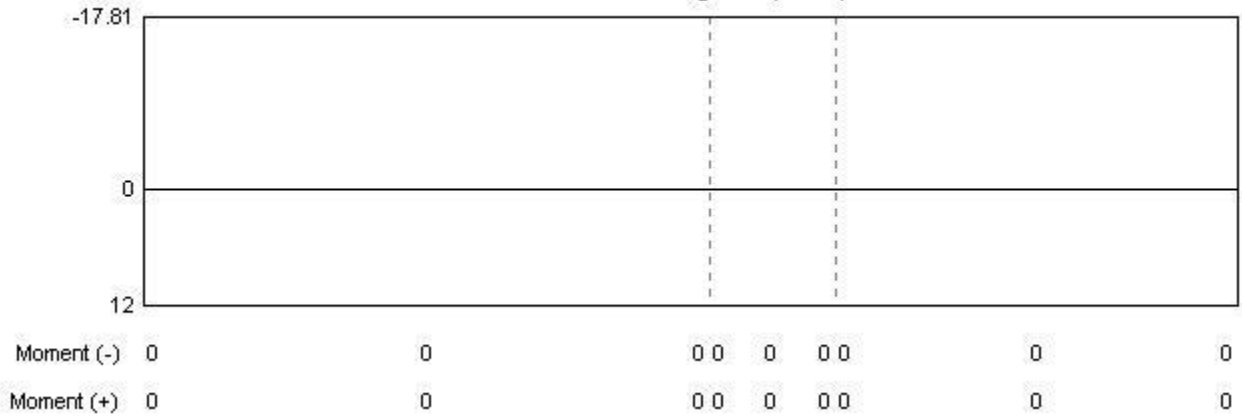
Combination = Overall Envelope  
 Strip Label = SB13  
 Length = 38.66 m  
 Distance to Top Rebar Center = 43.575 mm  
 Distance to Bot Rebar Center = 43.575 mm

### Material Properties

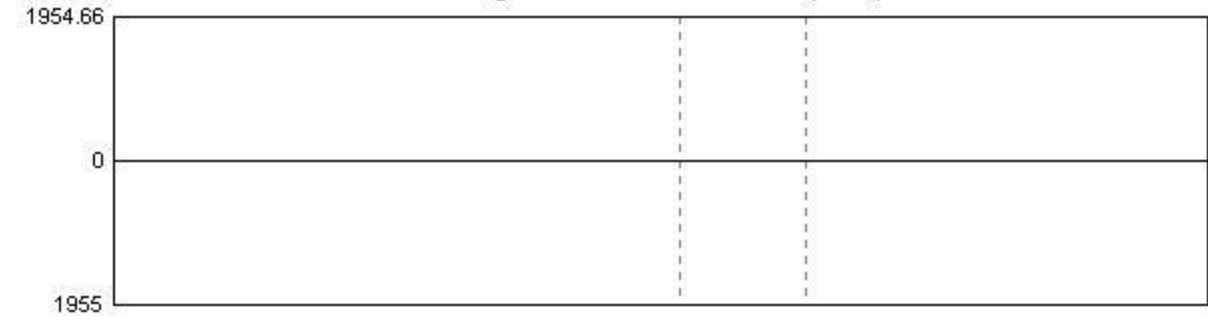
Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
 Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



**Moment Diagram (kN-m)**

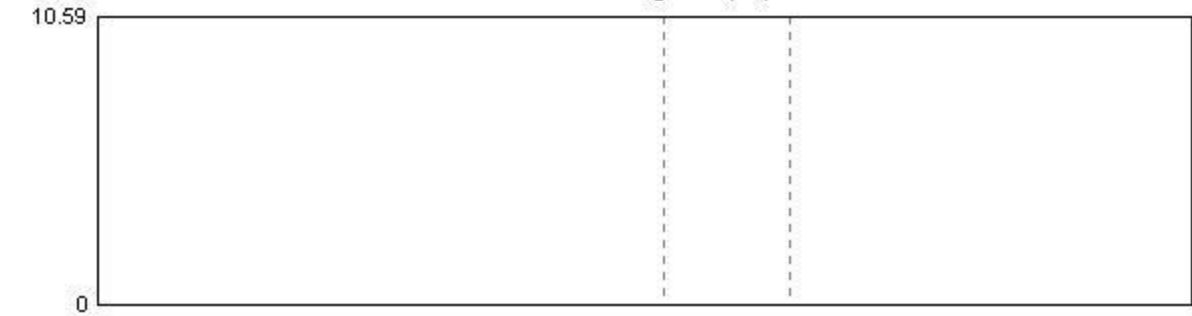


**Longitudinal Reinforcement (mm<sup>2</sup>)**

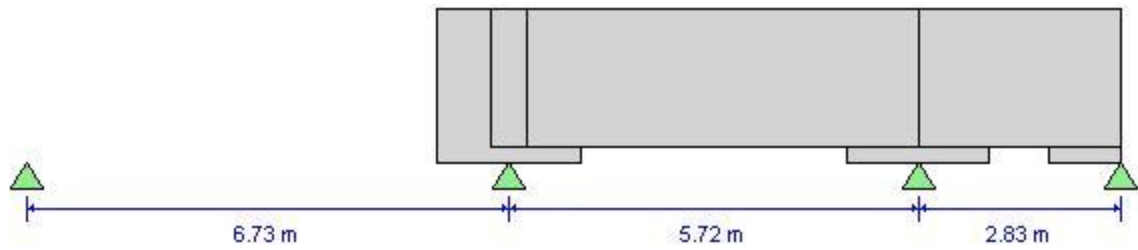


As (top)	0	0	0 0	0	0 0	0	0
Combo							
As (bot)	0	0	0 0	0	0 0	0	0
Combo							

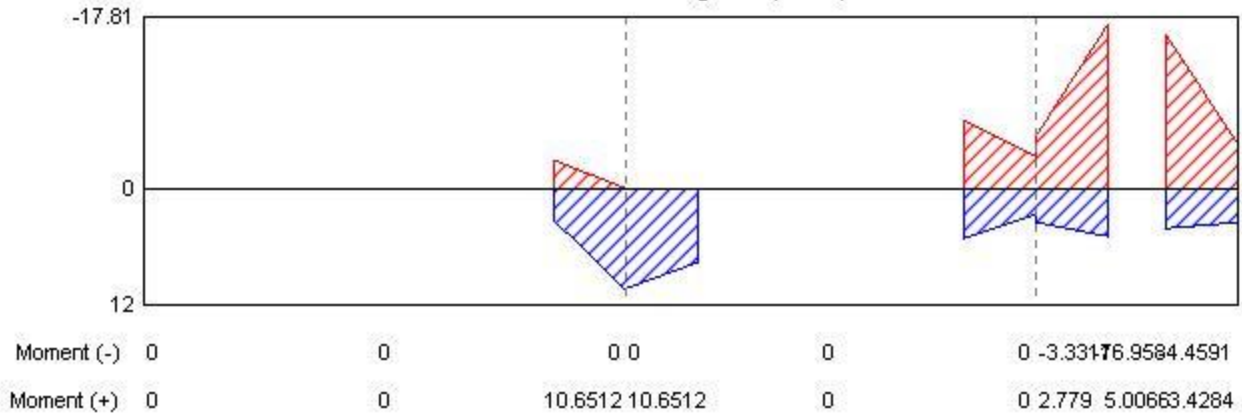
**Shear Diagram (kN)**



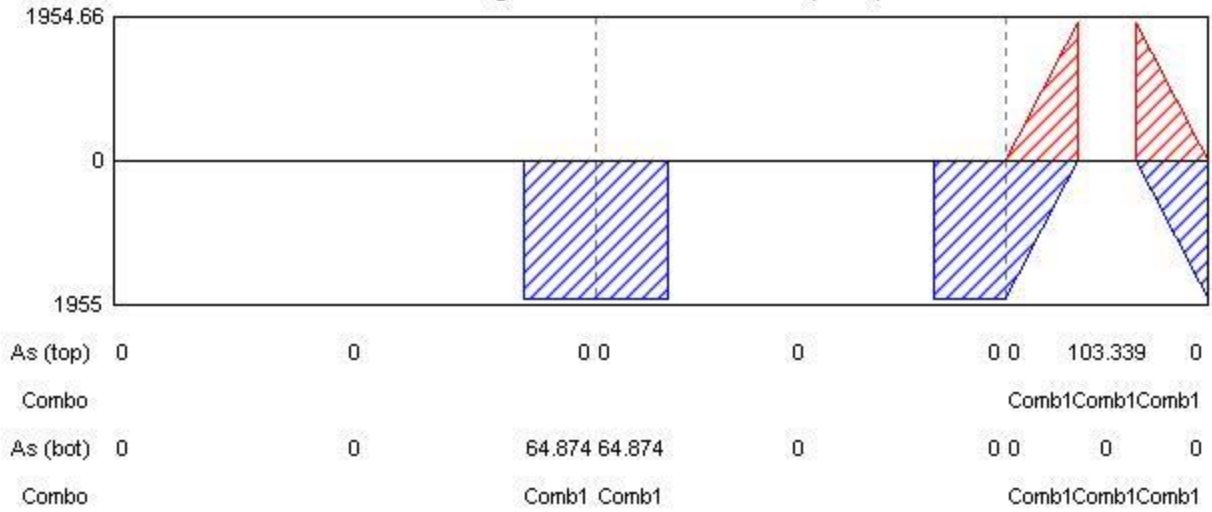
Shear	0	0	0 0	0	0 0	0	0
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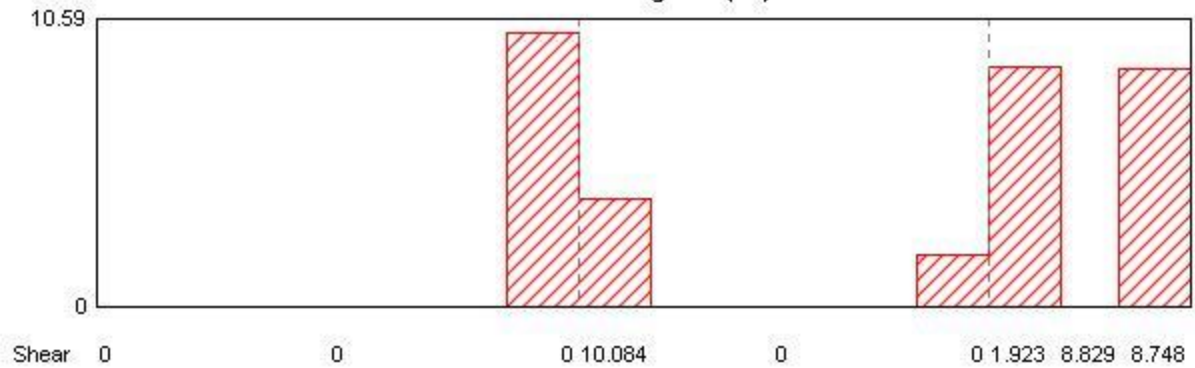
**Moment Diagram (kN-m)**

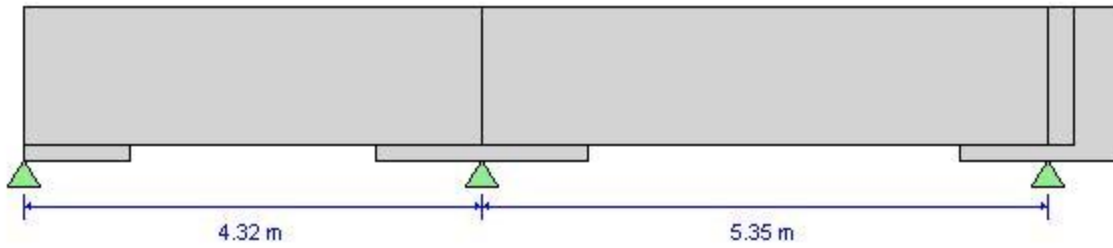


**Longitudinal Reinforcement (mm2)**

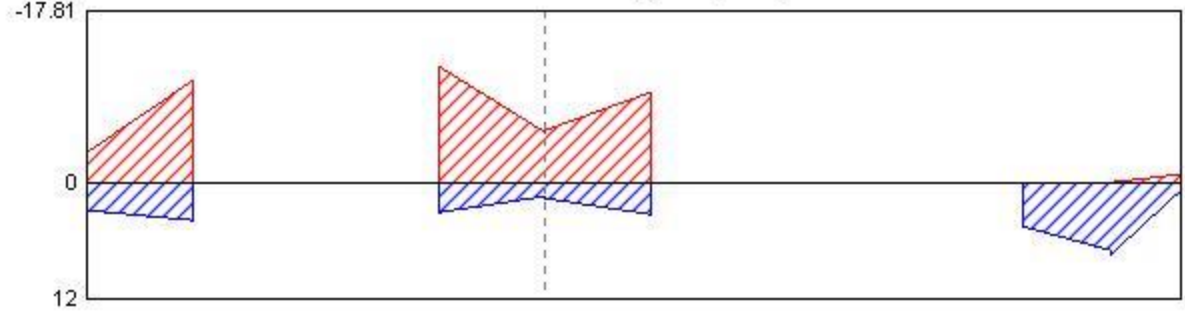


**Shear Diagram (kN)**



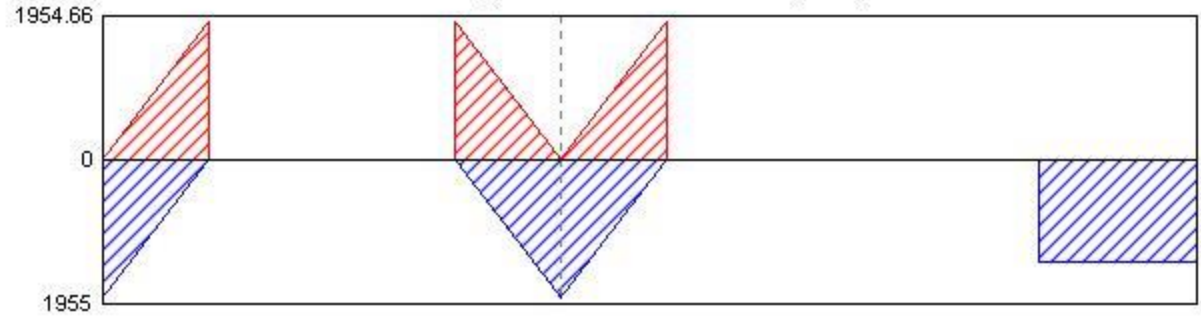


**Moment Diagram (kN-m)**

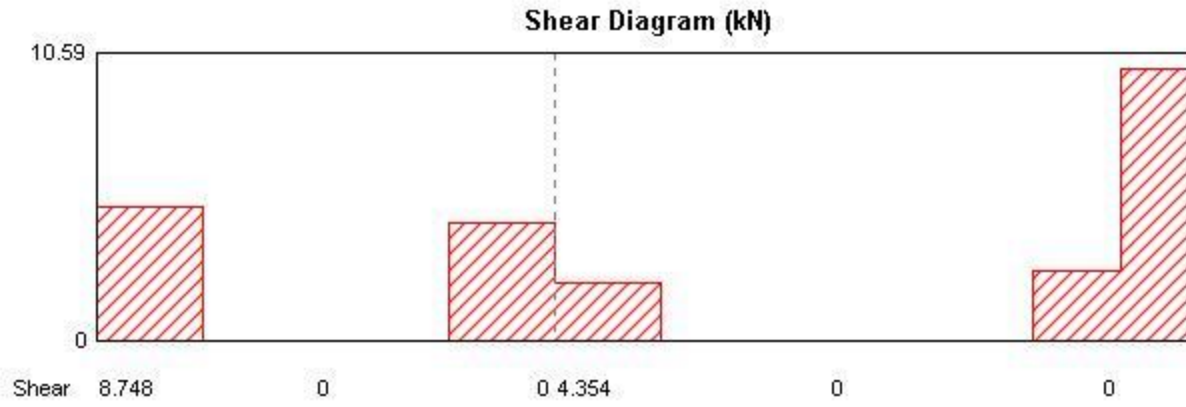


Moment (-)	-10.5814	0	-11.9809	-9.2513	0	0
Moment (+)	3.4284	0	0	1.4347	0	7.4306

**Longitudinal Reinforcement (mm2)**



As (top)	64.449	0	72.981	56.342	0	0
Combo	Comb1		Comb1	Comb1		
As (bot)	0	0	0	0	0	45.256
Combo	Comb1		Comb1	Comb1		Comb1



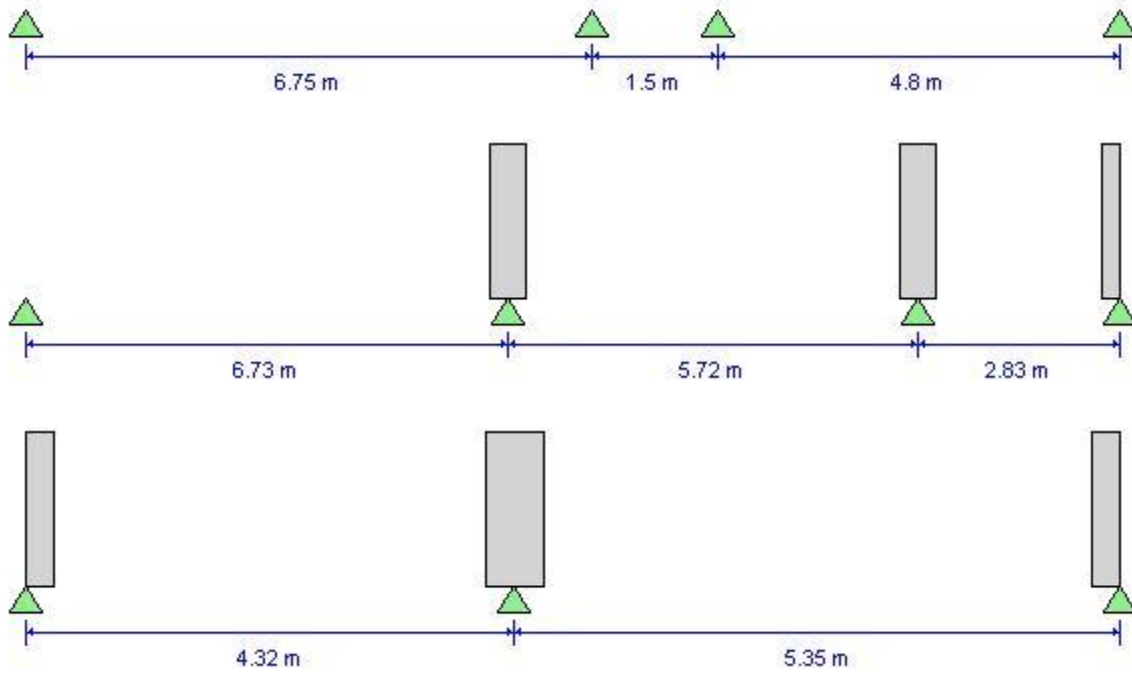
## ACI 318-14 Concrete Strip Design

### Geometric Properties

Combination = Overall Envelope  
Strip Label = SB14  
Length = 38 m  
Distance to Top Rebar Center = 43.575 mm  
Distance to Bot Rebar Center = 43.575 mm

### Material Properties

Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>



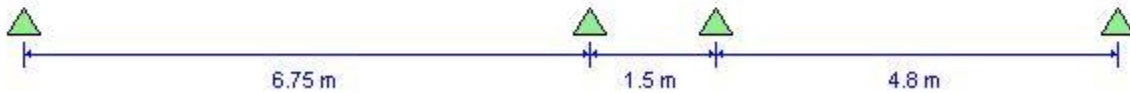
## ACI 318-14 Concrete Strip Design

### Geometric Properties

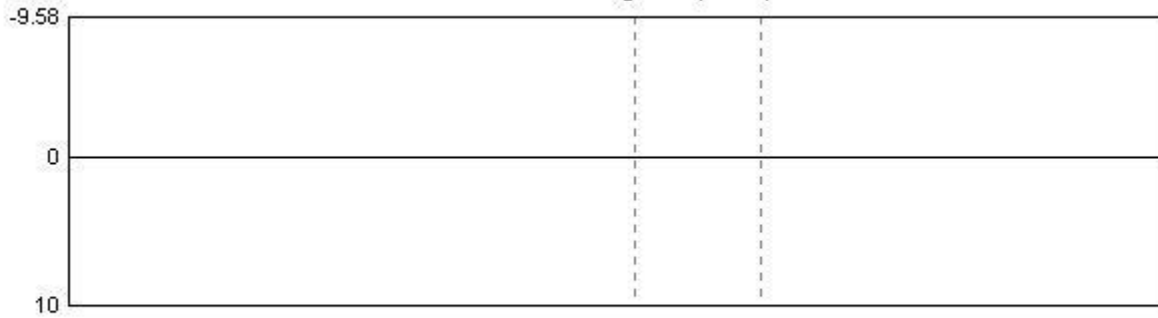
Combination = Overall Envelope  
 Strip Label = SB15  
 Length = 38 m  
 Distance to Top Rebar Center = 43.575 mm  
 Distance to Bot Rebar Center = 43.575 mm

### Material Properties

Concrete Comp. Strength = 21 N/mm<sup>2</sup>  
 Concrete Modulus = 21538.11 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 400 N/mm<sup>2</sup>

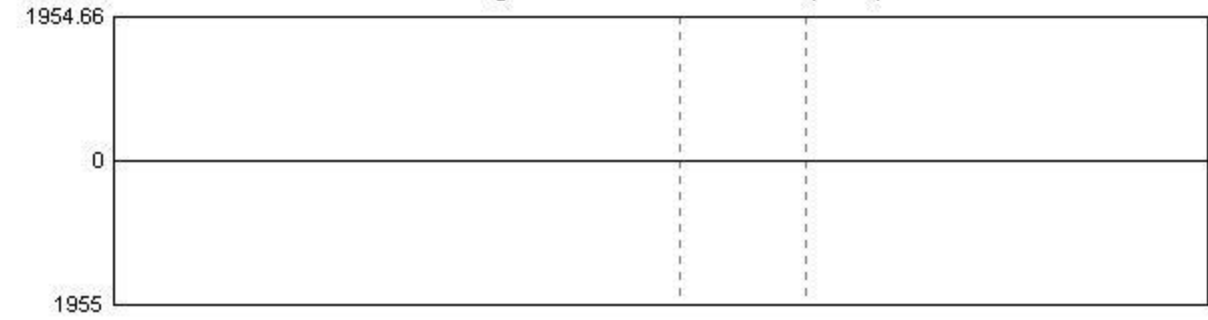


**Moment Diagram (kN-m)**



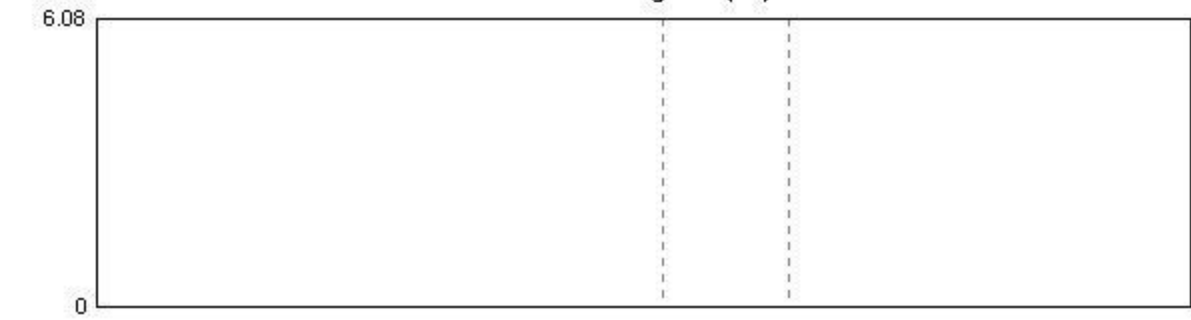
Moment (-)	0	0	0	0	0	0	0
Moment (+)	0	0	0	0	0	0	0

**Longitudinal Reinforcement (mm<sup>2</sup>)**

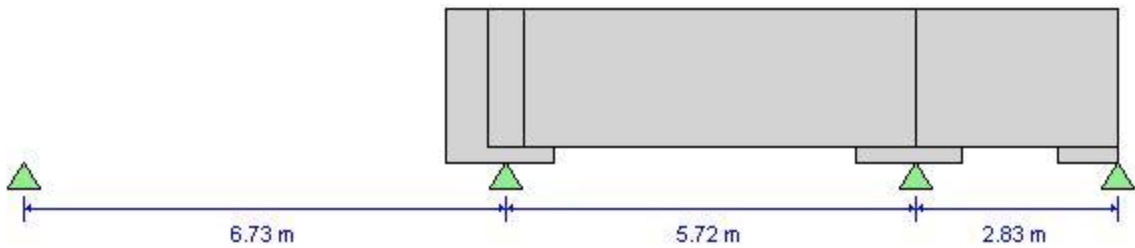


As (top)	0	0	0 0	0	0 0	0	0
Combo							
As (bot)	0	0	0 0	0	0 0	0	0
Combo							

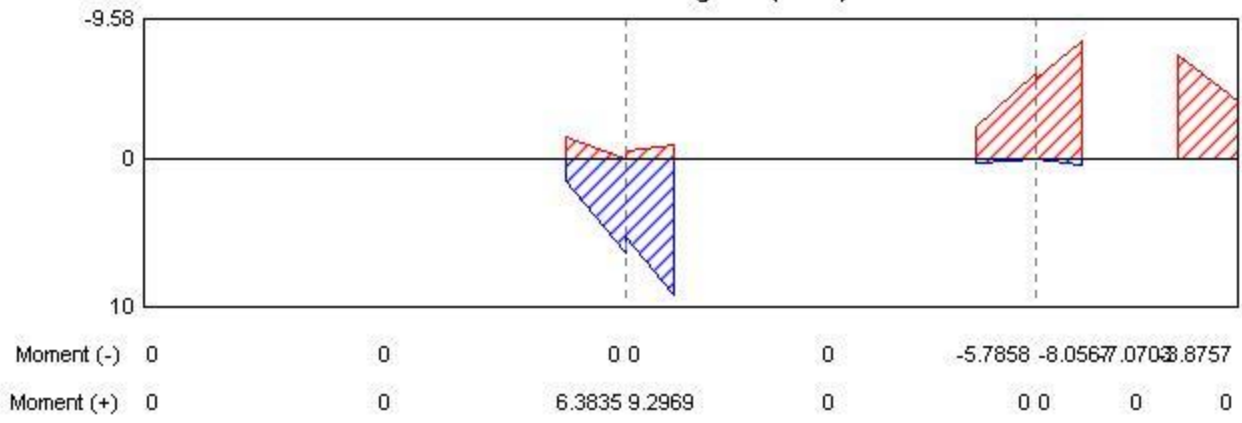
**Shear Diagram (kN)**



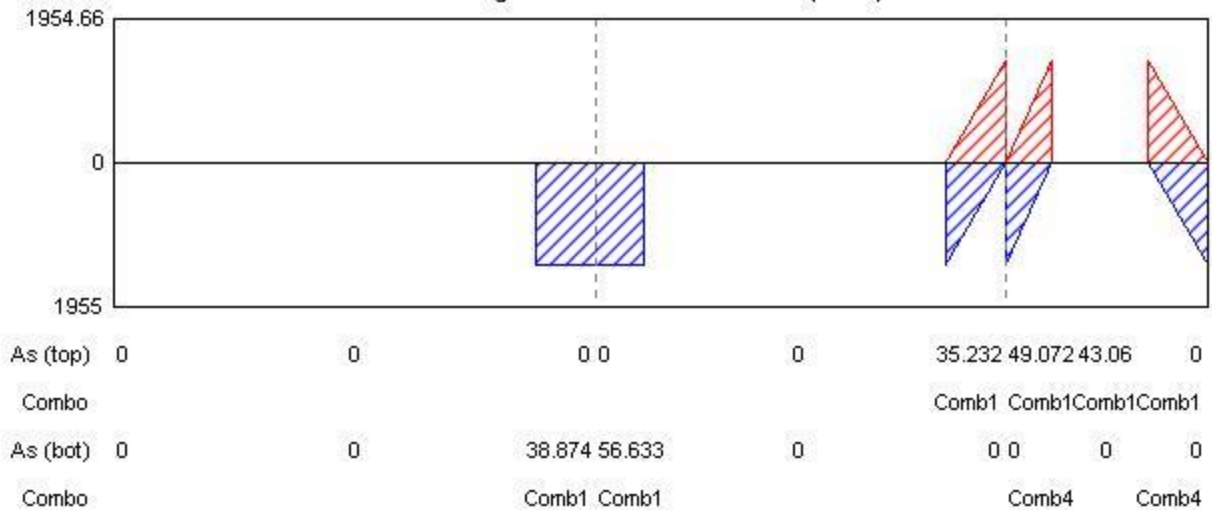
Shear	0	0	0 0	0	0 0	0	0
-------	---	---	-----	---	-----	---	---



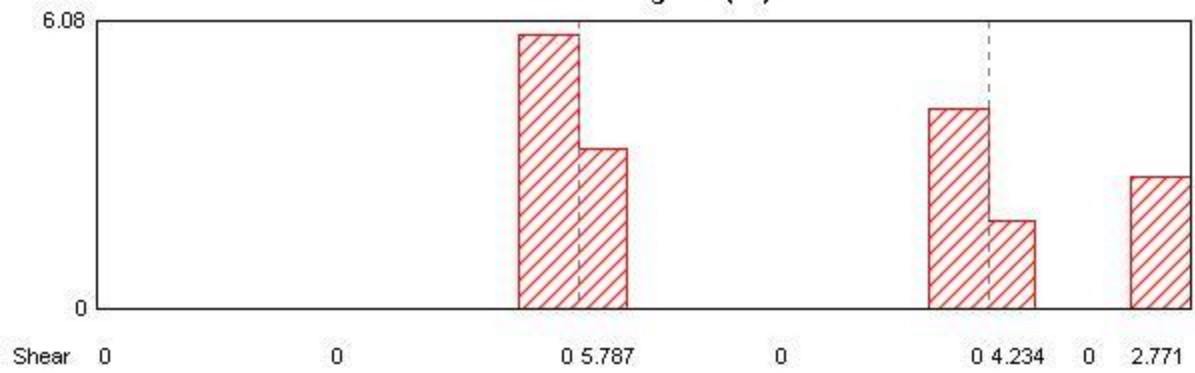
**Moment Diagram (kN-m)**

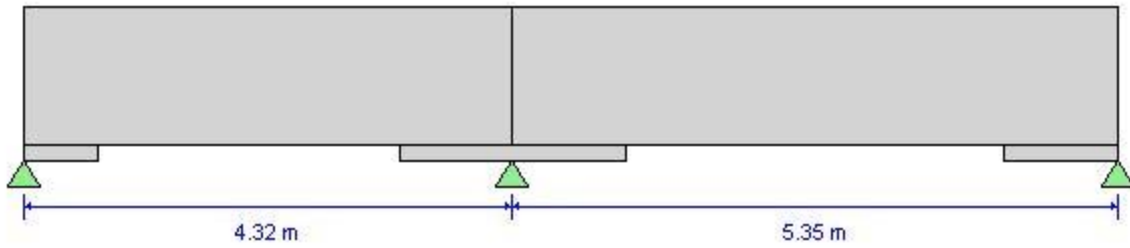


**Longitudinal Reinforcement (mm2)**

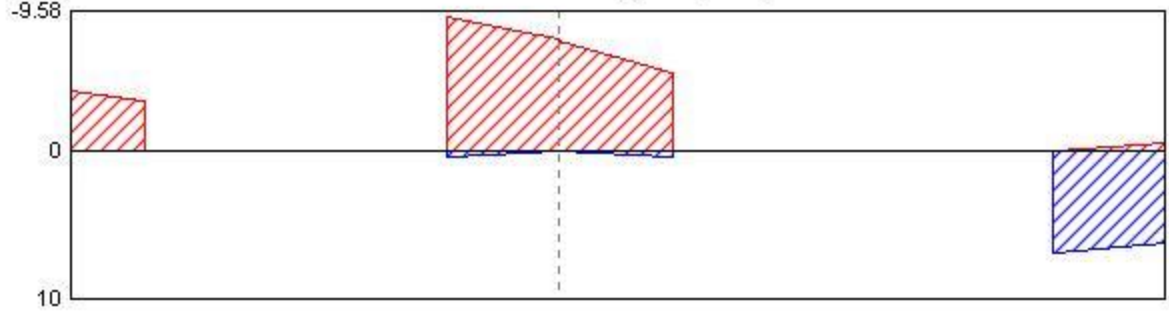


**Shear Diagram (kN)**



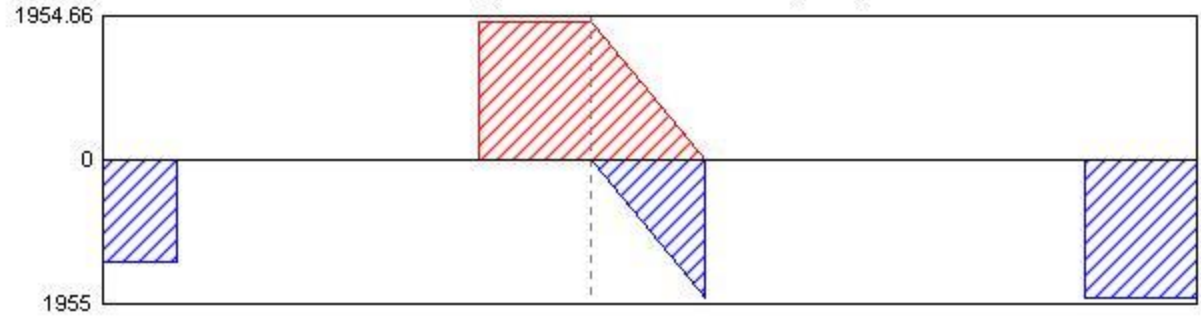


**Moment Diagram (kN-m)**

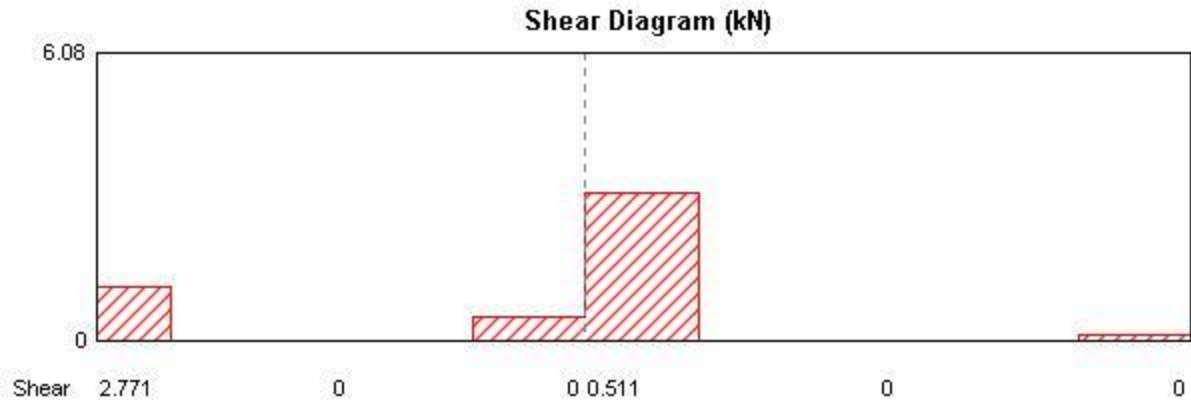


Moment (-)	-3.8757	0	-9.1243	-7.6135	0	0
Moment (+)	0	0	0	0	0	0

**Longitudinal Reinforcement (mm2)**



As (top)	0	0	55.568	46.362	0	0
Combo	Comb1		Comb1	Comb1		
As (bot)	0	0	0	0	0	0
Combo	Comb4			Comb4		



### 6.4. Beam design

**Table 32: Concrete Beam Design Summary 01 - Flexural And Shear Data, Part 1 of 3**

Table 32: Concrete Beam Design Summary 01 - Flexural And Shear Data, Part 1 of 3

Line	SpanID	Location	FTopCombo	FTopMoment kN-m	FTopArea mm2
B1	Span 1	Start	Comb1	-13.1799	86.418
B1	Span 1	Middle		0.0000	0.000
B1	Span 1	End	Comb1	-6.3155	41.328
B2	Span 1	Start	Comb1	-14.7996	97.084
B2	Span 1	Middle		0.0000	0.000
B2	Span 1	End		0.0000	0.000
B3	Span 1	Start		0.0000	0.000
B3	Span 1	Middle	Comb1	-6.7342	44.073
B3	Span 1	End	Comb1	-2.3957	15.660
B4	Span 1	Start		0.0000	0.000
B4	Span 1	Middle	Comb1	-6.7864	44.415
B4	Span 1	End	Comb1	-2.0370	13.313
B7	Span 1	Start		0.0000	0.000
B7	Span 1	Middle	Comb1	-3.9826	26.045
B7	Span 1	End	Comb1	-1.7008	11.116
B14	Span 1	Start		0.0000	0.000
B14	Span 1	Middle		0.0000	0.000
B14	Span 1	End	Comb1	-5.5327	36.197
B15	Span 1	Start	Comb1	-7.0692	46.270
B15	Span 1	Middle		0.0000	0.000
B15	Span 1	End	Comb1	-16.4747	108.124
B16	Span 1	Start	Comb1	-15.4578	101.420
B16	Span 1	Middle		0.0000	0.000
B16	Span 1	End	Comb1	-11.5755	75.863
B17	Span 1	Start	Comb1	-14.2562	93.504
B17	Span 1	Middle	Comb1	-2.8550	18.664
B17	Span 1	End	Comb1	-7.8290	51.254
B18	Span 1	Start	Comb1	-5.7284	37.480
B18	Span 1	Middle		0.0000	0.000
B18	Span 1	End	Comb1	-0.9920	0.000
B19	Span 1	Start	Comb1	-0.8693	0.000
B19	Span 1	Middle		0.0000	0.000
B19	Span 1	End	Comb1	-0.1922	0.000
B20	Span 1	Start		0.0000	0.000
B20	Span 1	Middle		0.0000	0.000
B20	Span 1	End		0.0000	0.000
B22	Span 1	Start		0.0000	0.000
B22	Span 1	Middle		0.0000	0.000
B22	Span 1	End	Comb1	-10.1412	66.436
B23	Span 1	Start	Comb1	-11.1845	73.293
B23	Span 1	Middle	Comb1	-1.7526	11.454
B23	Span 1	End	Comb1	-14.1089	92.534
B24	Span 1	Start	Comb1	-12.6688	83.055
B24	Span 1	Middle		0.0000	0.000
B24	Span 1	End	Comb1	-9.4987	62.215
B25	Span 1	Start	Comb1	-11.6356	76.258
B25	Span 1	Middle	Comb1	-2.9922	19.562
B25	Span 1	End	Comb1	-5.7454	37.591

**Table 32: Concrete Beam Design Summary 01 - Flexural And Shear Data, Part 1 of 3**

Line	SpanID	Location	FTopCombo	FTopMomen t kN-m	FTopArea mm2
B26	Span 1	Start	Comb1	-4.3400	28.384
B26	Span 1	Middle		0.0000	0.000
B26	Span 1	End	Comb1	-3.1350	20.496
B27	Span 1	Start	Comb1	-0.9571	0.000
B27	Span 1	Middle		0.0000	0.000
B27	Span 1	End		0.0000	0.000
B28	Span 1	Start		0.0000	0.000
B28	Span 1	Middle		0.0000	0.000
B28	Span 1	End	Comb1	-1.0994	0.000
B29	Span 1	Start	Comb1	-1.1912	0.000
B29	Span 1	Middle		0.0000	0.000
B29	Span 1	End	Comb1	-6.4247	42.044
B30	Span 1	Start	Comb1	-6.0772	39.766
B30	Span 1	Middle	Comb1	-0.9171	0.000
B30	Span 1	End	Comb1	-16.6702	109.413
B31	Span 1	Start	Comb1	-15.3490	100.703
B31	Span 1	Middle		0.0000	0.000
B31	Span 1	End	Comb1	-8.7223	57.117
B32	Span 1	Start	Comb1	-10.6202	69.583
B32	Span 1	Middle	Comb1	-2.1503	14.054
B32	Span 1	End	Comb1	-5.2505	34.348
B33	Span 1	Start	Comb1	-4.7517	31.081
B33	Span 1	Middle	Comb1	-0.1086	0.000
B33	Span 1	End	Comb1	-6.1741	40.401
B34	Span 1	Start	Comb1	-3.8670	25.287
B34	Span 1	Middle		0.0000	0.000
B34	Span 1	End		0.0000	0.000
B35	Span 1	Start	Comb1	-5.0643	33.128
B35	Span 1	Middle		0.0000	0.000
B35	Span 1	End	Comb1	-5.8081	38.002
B36	Span 1	Start	Comb1	-4.8317	31.605
B36	Span 1	Middle	Comb1	-0.2902	0.000
B36	Span 1	End	Comb1	-14.2767	93.639
B37	Span 1	Start	Comb1	-13.6479	89.498
B37	Span 1	Middle		0.0000	0.000
B37	Span 1	End	Comb1	-9.7698	63.996
B38	Span 1	Start	Comb1	-11.7914	77.283
B38	Span 1	Middle	Comb1	-2.6588	17.381
B38	Span 1	End	Comb1	-4.4336	28.998
B39	Span 1	Start	Comb1	-4.3059	28.161
B39	Span 1	Middle	Comb1	-0.7931	0.000
B39	Span 1	End	Comb1	-7.4237	48.595
B40	Span 1	Start	Comb1	-5.6055	36.674
B40	Span 1	Middle		0.0000	0.000
B40	Span 1	End		0.0000	0.000
B41	Span 1	Start	Comb1	-7.8622	51.472
B41	Span 1	Middle	Comb1	-0.9380	0.000
B41	Span 1	End	Comb1	-5.4606	35.725
B42	Span 1	Start	Comb1	-4.4958	29.405
B42	Span 1	Middle	Comb1	-1.7490	11.431
B42	Span 1	End	Comb1	-16.3338	107.195
B43	Span 1	Start		0.0000	0.000
B43	Span 1	Middle		0.0000	0.000

**Table 32: Concrete Beam Design Summary 01 - Flexural And Shear Data, Part 1 of 3**

Line	SpanID	Location	FTopCombo	FTopMomen t kN-m	FTopArea mm2
B43	Span 1	End	Comb1	-2.4070	15.733
B44	Span 1	Start	Comb1	-3.6376	23.786
B44	Span 1	Middle		0.0000	0.000
B44	Span 1	End	Comb1	-6.3628	41.638
B45	Span 1	Start	Comb1	-6.5625	42.947
B45	Span 1	Middle	Comb1	-2.4319	15.896
B45	Span 1	End	Comb1	-16.5554	108.656
B46	Span 1	Start		0.0000	0.000
B46	Span 1	Middle		0.0000	0.000
B46	Span 1	End		0.0000	0.000
B47	Span 1	Start		0.0000	0.000
B47	Span 1	Middle		0.0000	0.000
B47	Span 1	End	Comb1	-9.8263	64.367
B48	Span 1	Start	Comb1	-10.6790	69.970
B48	Span 1	Middle	Comb1	-5.5840	36.533
B48	Span 1	End	Comb1	-19.3860	127.338
B49	Span 1	Start	Comb1	-14.6994	96.423
B49	Span 1	Middle		0.0000	0.000
B49	Span 1	End		0.0000	0.000
B50	Span 1	Start	Comb1	-17.5719	115.361
B50	Span 1	Middle		0.0000	0.000
B50	Span 1	End		0.0000	0.000
B51	Span 1	Start	Comb1	-1.9301	12.614
B51	Span 1	Middle		0.0000	0.000
B51	Span 1	End		0.0000	0.000
B52	Span 1	Start	Comb1	-3.5240	23.043
B52	Span 1	Middle	Comb1	-10.6384	69.703
B52	Span 1	End	Comb1	-7.4178	48.557
B53	Span 1	Start	Comb1	-13.7408	90.110
B53	Span 1	Middle		0.0000	0.000
B53	Span 1	End	Comb1	-6.3015	41.236
B54	Span 1	Start	Comb1	-6.2276	40.752
B54	Span 1	Middle		0.0000	0.000
B54	Span 1	End	Comb1	-12.4434	81.571
B56	Span 1	Start		0.0000	0.000
B56	Span 1	Middle		0.0000	0.000
B56	Span 1	End	Comb1	-13.5177	88.641
B57	Span 1	Start	Comb1	-1.9905	13.009
B57	Span 1	Middle		0.0000	0.000
B57	Span 1	End		0.0000	0.000
B58	Span 1	Start	Comb1	-0.3004	0.000
B58	Span 1	Middle		0.0000	0.000
B58	Span 1	End	Comb1	-4.2803	27.993
B59	Span 1	Start	Comb1	-3.3608	21.974
B59	Span 1	Middle	Comb1	-13.6395	89.443
B59	Span 1	End	Comb1	-0.5404	0.000
B60	Span 1	Start	Comb1	-11.6324	76.237
B60	Span 1	Middle	Comb1	-1.2135	0.000
B60	Span 1	End	Comb1	-9.1889	60.180
B61	Span 1	Start	Comb1	-3.7577	24.572
B61	Span 1	Middle		0.0000	0.000
B61	Span 1	End	Comb1	-10.0807	66.038
B63	Span 1	Start		0.0000	0.000

**Table 32: Concrete Beam Design Summary 01 - Flexural And Shear Data, Part 1 of 3**

Line	SpanID	Location	FTopCombo	FTopMomen t kN-m	FTopArea mm2
B63	Span 1	Middle		0.0000	0.000
B63	Span 1	End	Comb1	-9.6525	63.225
B64	Span 1	Start	Comb1	-10.4229	68.287
B64	Span 1	Middle		0.0000	0.000
B64	Span 1	End		0.0000	0.000
B65	Span 1	Start		0.0000	0.000
B65	Span 1	Middle		0.0000	0.000
B65	Span 1	End	Comb1	-10.5530	69.141
B66	Span 1	Start	Comb1	-3.0409	19.880
B66	Span 1	Middle	Comb1	-10.8863	71.332
B66	Span 1	End		0.0000	0.000
B67	Span 1	Start	Comb1	-10.6416	69.724
B67	Span 1	Middle	Comb1	-0.3341	0.000
B67	Span 1	End	Comb1	-8.6434	56.599
B68	Span 1	Start	Comb1	-11.3959	74.682
B68	Span 1	Middle		0.0000	0.000
B68	Span 1	End	Comb1	-9.5701	62.684
B69	Span 1	Start	Comb1	-15.0816	98.941
B69	Span 1	Middle	Comb1	-1.4150	0.000
B69	Span 1	End	Comb1	-12.8343	84.144
B70	Span 1	Start		0.0000	0.000
B70	Span 1	Middle		0.0000	0.000
B70	Span 1	End	Comb1	-12.5110	82.016
B71	Span 1	Start	Comb1	-8.7453	57.268
B71	Span 1	Middle		0.0000	0.000
B71	Span 1	End		0.0000	0.000
B72	Span 1	Start	Comb1	-5.0493	33.030
B72	Span 1	Middle	Comb1	-2.6612	17.397
B72	Span 1	End	Comb1	-10.4459	68.438
B73	Span 1	Start	Comb1	-1.4455	0.000
B73	Span 1	Middle	Comb1	-9.6089	62.939
B73	Span 1	End	Comb1	-1.0089	0.000
B74	Span 1	Start	Comb1	-10.7228	70.257
B74	Span 1	Middle		0.0000	0.000
B74	Span 1	End	Comb1	-3.9160	25.609
B75	Span 1	Start	Comb1	-10.8314	70.971
B75	Span 1	Middle		0.0000	0.000
B75	Span 1	End	Comb1	-10.6706	69.914
B76	Span 1	Start	Comb1	-15.1972	99.703
B76	Span 1	Middle	Comb1	-1.2916	0.000
B76	Span 1	End	Comb1	-11.9942	78.617
B77	Span 1	Start		0.0000	0.000
B77	Span 1	Middle		0.0000	0.000
B77	Span 1	End	Comb1	-12.8862	84.485
B78	Span 1	Start	Comb1	-7.3199	47.914
B78	Span 1	Middle		0.0000	0.000
B78	Span 1	End		0.0000	0.000
B79	Span 1	Start	Comb1	-6.0485	39.578
B79	Span 1	Middle	Comb1	-2.7277	17.831
B79	Span 1	End	Comb1	-9.5795	62.746
B80	Span 1	Start	Comb1	-1.5628	10.213
B80	Span 1	Middle	Comb1	-9.9411	65.121
B80	Span 1	End	Comb1	-1.5134	0.000

**Table 32: Concrete Beam Design Summary 01 - Flexural And Shear Data, Part 1 of 3**

Line	SpanID	Location	FTopCombo	FTopMomen t kN-m	FTopArea mm2
B81	Span 1	Start	Comb1	-8.8558	57.994
B81	Span 1	Middle		0.0000	0.000
B81	Span 1	End	Comb1	-3.2307	21.123
B82	Span 1	Start	Comb1	-12.5596	82.336
B82	Span 1	Middle		0.0000	0.000
B82	Span 1	End	Comb1	-8.7087	57.028
B83	Span 1	Start	Comb1	-17.8275	117.048
B83	Span 1	Middle	Comb1	-3.6187	23.662
B83	Span 1	End	Comb1	-13.4111	87.940
B84	Span 1	Start		0.0000	0.000
B84	Span 1	Middle		0.0000	0.000
B84	Span 1	End	Comb1	-15.9414	104.608
B85	Span 1	Start	Comb1	-6.2301	40.768
B85	Span 1	Middle		0.0000	0.000
B85	Span 1	End		0.0000	0.000
B86	Span 1	Start	Comb1	-6.4491	42.204
B86	Span 1	Middle	Comb1	-2.5906	16.935
B86	Span 1	End	Comb1	-8.9049	58.316
B87	Span 1	Start	Comb1	-2.5653	16.769
B87	Span 1	Middle	Comb1	-12.3300	80.826
B87	Span 1	End	Comb1	-2.0813	13.603
B88	Span 1	Start		0.0000	0.000
B88	Span 1	Middle		0.0000	0.000
B88	Span 1	End	Comb1	-3.2806	21.449
B89	Span 1	Start	Comb1	-5.9571	38.979
B89	Span 1	Middle		0.0000	0.000
B89	Span 1	End		0.0000	0.000
B90	Span 1	Start	Comb1	-6.2313	40.776
B90	Span 1	Middle	Comb1	-2.4705	16.149
B90	Span 1	End	Comb1	-8.8824	58.168
B91	Span 1	Start	Comb1	-2.0398	13.332
B91	Span 1	Middle	Comb1	-11.4478	75.023
B91	Span 1	End	Comb1	-1.8320	11.973
B92	Span 1	Start		0.0000	0.000
B92	Span 1	Middle		0.0000	0.000
B92	Span 1	End	Comb1	-2.0084	13.127
B93	Span 1	Start	Comb1	-4.8968	32.031
B93	Span 1	Middle		0.0000	0.000
B93	Span 1	End		0.0000	0.000
B94	Span 1	Start	Comb1	-3.5187	23.007
B94	Span 1	Middle	Comb1	-0.9976	0.000
B94	Span 1	End	Comb1	-8.6523	56.658
B95	Span 1	Start	Comb1	-8.7822	57.510
B95	Span 1	Middle	Comb1	-8.0587	52.762
B95	Span 1	End	Comb1	-2.2173	14.493
B96	Span 1	Start		0.0000	0.000
B96	Span 1	Middle		0.0000	0.000
B96	Span 1	End	Comb1	-2.8636	18.721
B104	Span 1	Start	Comb1	-5.7001	37.294
B104	Span 1	Middle	Comb1	-7.5272	49.274
B104	Span 1	End	Comb1	-6.9433	45.444
B108	Span 1	Start	Comb1	-22.9501	150.905
B108	Span 1	Middle	Comb1	-9.7998	64.193

**Table 32: Concrete Beam Design Summary 01 - Flexural And Shear Data, Part 1 of 3**

Line	SpanID	Location	FTopCombo	FTopMomen t kN-m	FTopArea mm2
B108	Span 1	End	Comb1	-10.9421	71.699
B129	Span 1	Start	Comb1	-26.2593	172.830
B129	Span 1	Middle	Comb1	-12.5345	82.171
B129	Span 1	End	Comb1	-8.5270	55.835
B130	Span 1	Start	Comb1	-7.5467	49.402
B130	Span 1	Middle	Comb1	-1.6035	10.479
B130	Span 1	End	Comb1	-7.8172	51.177
B131	Span 1	Start	Comb1	-6.2406	40.837
B131	Span 1	Middle	Comb1	-0.4048	0.000
B131	Span 1	End	Comb1	-13.9599	91.553
B132	Span 1	Start	Comb1	-8.3805	54.874
B132	Span 1	Middle	Comb1	-2.2239	14.536
B132	Span 1	End	Comb1	-9.1656	60.028
B133	Span 1	Start	Comb1	-8.1418	53.307
B133	Span 1	Middle	Comb1	-2.0721	13.543
B133	Span 1	End	Comb1	-6.7067	43.893
B134	Span 1	Start	Comb1	-3.4947	22.851
B134	Span 1	Middle		0.0000	0.000
B134	Span 1	End		0.0000	0.000

**Table 32: Concrete Beam Design Summary 01 - Flexural And Shear Data, Part 2 of 3**

**Table 32: Concrete Beam Design Summary 01 - Flexural And Shear Data, Part 2 of 3**

Line	SpanID	Location	FBotCombo	FBotMomen t kN-m	FBotArea mm2
B1	Span 1	Start		0.0000	0.000
B1	Span 1	Middle	Comb1	14.3503	94.124
B1	Span 1	End		0.0000	0.000
B2	Span 1	Start		0.0000	0.000
B2	Span 1	Middle	Comb1	20.8638	137.104
B2	Span 1	End	Comb1	5.6202	36.771
B3	Span 1	Start	Comb1	3.5573	23.260
B3	Span 1	Middle	Comb1	1.7161	11.215
B3	Span 1	End		0.0000	0.000
B4	Span 1	Start	Comb1	3.8140	24.940
B4	Span 1	Middle	Comb1	1.8184	11.884
B4	Span 1	End		0.0000	0.000
B7	Span 1	Start	Comb1	4.3263	28.294
B7	Span 1	Middle	Comb1	3.4764	22.731
B7	Span 1	End		0.0000	0.000
B14	Span 1	Start	Comb1	5.5412	36.253
B14	Span 1	Middle	Comb1	10.4515	68.475
B14	Span 1	End		0.0000	0.000
B15	Span 1	Start		0.0000	0.000
B15	Span 1	Middle	Comb1	7.7919	51.011
B15	Span 1	End		0.0000	0.000
B16	Span 1	Start		0.0000	0.000
B16	Span 1	Middle	Comb1	15.1186	99.185
B16	Span 1	End		0.0000	0.000
B17	Span 1	Start		0.0000	0.000
B17	Span 1	Middle		0.0000	0.000
B17	Span 1	End		0.0000	0.000

**Table 32: Concrete Beam Design Summary 01 - Flexural And Shear Data, Part 2 of 3**

Line	SpanID	Location	FBotCombo	FBotMomen t kN-m	FBotArea mm2
B18	Span 1	Start		0.0000	0.000
B18	Span 1	Middle	Comb1	5.9785	39.119
B18	Span 1	End		0.0000	0.000
B19	Span 1	Start	Comb1	2.0319	13.280
B19	Span 1	Middle	Comb1	10.3698	67.938
B19	Span 1	End	Comb1	4.3044	28.151
B20	Span 1	Start	Comb1	6.1110	39.988
B20	Span 1	Middle	Comb1	13.4203	88.001
B20	Span 1	End	Comb1	12.2352	80.202
B22	Span 1	Start	Comb1	10.7794	70.630
B22	Span 1	Middle	Comb1	11.1160	72.842
B22	Span 1	End		0.0000	0.000
B23	Span 1	Start		0.0000	0.000
B23	Span 1	Middle	Comb1	2.8536	18.655
B23	Span 1	End		0.0000	0.000
B24	Span 1	Start		0.0000	0.000
B24	Span 1	Middle	Comb1	12.6448	82.897
B24	Span 1	End		0.0000	0.000
B25	Span 1	Start		0.0000	0.000
B25	Span 1	Middle		0.0000	0.000
B25	Span 1	End		0.0000	0.000
B26	Span 1	Start		0.0000	0.000
B26	Span 1	Middle	Comb1	2.0547	13.430
B26	Span 1	End		0.0000	0.000
B27	Span 1	Start		0.0000	0.000
B27	Span 1	Middle	Comb1	9.4575	61.944
B27	Span 1	End	Comb1	5.8698	38.407
B28	Span 1	Start	Comb1	4.7583	31.124
B28	Span 1	Middle	Comb1	6.6791	43.712
B28	Span 1	End	Comb1	0.1054	0.000
B29	Span 1	Start		0.0000	0.000
B29	Span 1	Middle	Comb1	6.0117	39.337
B29	Span 1	End		0.0000	0.000
B30	Span 1	Start		0.0000	0.000
B30	Span 1	Middle	Comb1	6.0994	39.911
B30	Span 1	End		0.0000	0.000
B31	Span 1	Start		0.0000	0.000
B31	Span 1	Middle	Comb1	12.0386	78.909
B31	Span 1	End		0.0000	0.000
B32	Span 1	Start		0.0000	0.000
B32	Span 1	Middle		0.0000	0.000
B32	Span 1	End		0.0000	0.000
B33	Span 1	Start		0.0000	0.000
B33	Span 1	Middle	Comb1	0.3655	0.000
B33	Span 1	End		0.0000	0.000
B34	Span 1	Start		0.0000	0.000
B34	Span 1	Middle	Comb1	9.7942	64.156
B34	Span 1	End	Comb1	6.3905	41.819
B35	Span 1	Start		0.0000	0.000
B35	Span 1	Middle	Comb1	0.8114	0.000
B35	Span 1	End		0.0000	0.000
B36	Span 1	Start		0.0000	0.000
B36	Span 1	Middle	Comb1	5.9462	38.907

**Table 32: Concrete Beam Design Summary 01 - Flexural And Shear Data, Part 2 of 3**

Line	SpanID	Location	FBotCombo	FBotMomen t kN-m	FBotArea mm2
B36	Span 1	End		0.0000	0.000
B37	Span 1	Start		0.0000	0.000
B37	Span 1	Middle	Comb1	12.0905	79.250
B37	Span 1	End		0.0000	0.000
B38	Span 1	Start		0.0000	0.000
B38	Span 1	Middle		0.0000	0.000
B38	Span 1	End		0.0000	0.000
B39	Span 1	Start		0.0000	0.000
B39	Span 1	Middle	Comb1	0.2462	0.000
B39	Span 1	End		0.0000	0.000
B40	Span 1	Start		0.0000	0.000
B40	Span 1	Middle	Comb1	9.3000	60.911
B40	Span 1	End	Comb1	6.5185	42.659
B41	Span 1	Start		0.0000	0.000
B41	Span 1	Middle		0.0000	0.000
B41	Span 1	End		0.0000	0.000
B42	Span 1	Start		0.0000	0.000
B42	Span 1	Middle	Comb1	5.0856	33.268
B42	Span 1	End		0.0000	0.000
B43	Span 1	Start	Comb1	3.6848	24.095
B43	Span 1	Middle	Comb1	4.8861	31.961
B43	Span 1	End	Comb1	0.1610	0.000
B44	Span 1	Start		0.0000	0.000
B44	Span 1	Middle	Comb1	2.7641	18.070
B44	Span 1	End		0.0000	0.000
B45	Span 1	Start		0.0000	0.000
B45	Span 1	Middle	Comb1	3.9414	25.775
B45	Span 1	End		0.0000	0.000
B46	Span 1	Start	Comb1	6.0122	39.340
B46	Span 1	Middle	Comb1	10.2015	66.832
B46	Span 1	End	Comb1	5.8964	38.581
B47	Span 1	Start	Comb1	4.5535	29.783
B47	Span 1	Middle	Comb1	7.0703	46.277
B47	Span 1	End		0.0000	0.000
B48	Span 1	Start		0.0000	0.000
B48	Span 1	Middle	Comb1	0.4679	0.000
B48	Span 1	End		0.0000	0.000
B49	Span 1	Start		0.0000	0.000
B49	Span 1	Middle	Comb1	21.1035	138.688
B49	Span 1	End	Comb1	5.9529	38.951
B50	Span 1	Start		0.0000	0.000
B50	Span 1	Middle	Comb1	24.1201	158.651
B50	Span 1	End	Comb1	8.9604	58.680
B51	Span 1	Start		0.0000	0.000
B51	Span 1	Middle	Comb1	8.5887	56.240
B51	Span 1	End	Comb1	4.5178	29.549
B52	Span 1	Start		0.0000	0.000
B52	Span 1	Middle		0.0000	0.000
B52	Span 1	End		0.0000	0.000
B53	Span 1	Start		0.0000	0.000
B53	Span 1	Middle	Comb1	7.4519	48.780
B53	Span 1	End		0.0000	0.000
B54	Span 1	Start		0.0000	0.000

**Table 32: Concrete Beam Design Summary 01 - Flexural And Shear Data, Part 2 of 3**

Line	SpanID	Location	FBotCombo	FBotMomen t kN-m	FBotArea mm2
B54	Span 1	Middle	Comb1	16.1007	105.658
B54	Span 1	End		0.0000	0.000
B56	Span 1	Start	Comb1	9.1154	59.698
B56	Span 1	Middle	Comb1	25.0669	164.925
B56	Span 1	End		0.0000	0.000
B57	Span 1	Start	Comb1	0.2119	0.000
B57	Span 1	Middle	Comb1	16.5099	108.356
B57	Span 1	End	Comb1	5.8937	38.563
B58	Span 1	Start	Comb1	1.5702	10.261
B58	Span 1	Middle	Comb1	6.3000	41.227
B58	Span 1	End		0.0000	0.000
B59	Span 1	Start		0.0000	0.000
B59	Span 1	Middle		0.0000	0.000
B59	Span 1	End		0.0000	0.000
B60	Span 1	Start		0.0000	0.000
B60	Span 1	Middle	Comb1	2.6667	17.432
B60	Span 1	End		0.0000	0.000
B61	Span 1	Start		0.0000	0.000
B61	Span 1	Middle	Comb1	14.2232	93.287
B61	Span 1	End		0.0000	0.000
B63	Span 1	Start	Comb1	9.0905	59.534
B63	Span 1	Middle	Comb1	26.5980	175.076
B63	Span 1	End		0.0000	0.000
B64	Span 1	Start		0.0000	0.000
B64	Span 1	Middle	Comb1	9.9753	65.345
B64	Span 1	End	Comb1	4.6510	30.421
B65	Span 1	Start	Comb1	5.8834	38.496
B65	Span 1	Middle	Comb1	6.3481	41.542
B65	Span 1	End		0.0000	0.000
B66	Span 1	Start		0.0000	0.000
B66	Span 1	Middle		0.0000	0.000
B66	Span 1	End	Comb1	1.1190	0.000
B67	Span 1	Start		0.0000	0.000
B67	Span 1	Middle	Comb1	3.4348	22.458
B67	Span 1	End		0.0000	0.000
B68	Span 1	Start		0.0000	0.000
B68	Span 1	Middle	Comb1	10.6594	69.841
B68	Span 1	End		0.0000	0.000
B69	Span 1	Start		0.0000	0.000
B69	Span 1	Middle	Comb1	3.5151	22.984
B69	Span 1	End		0.0000	0.000
B70	Span 1	Start	Comb1	6.4954	42.507
B70	Span 1	Middle	Comb1	18.3138	120.258
B70	Span 1	End		0.0000	0.000
B71	Span 1	Start		0.0000	0.000
B71	Span 1	Middle	Comb1	10.2986	67.470
B71	Span 1	End	Comb1	4.2972	28.104
B72	Span 1	Start		0.0000	0.000
B72	Span 1	Middle		0.0000	0.000
B72	Span 1	End		0.0000	0.000
B73	Span 1	Start		0.0000	0.000
B73	Span 1	Middle		0.0000	0.000
B73	Span 1	End		0.0000	0.000

**Table 32: Concrete Beam Design Summary 01 - Flexural And Shear Data, Part 2 of 3**

Line	SpanID	Location	FBotCombo	FBotMomen t kN-m	FBotArea mm2
B74	Span 1	Start		0.0000	0.000
B74	Span 1	Middle	Comb1	5.7579	37.673
B74	Span 1	End		0.0000	0.000
B75	Span 1	Start		0.0000	0.000
B75	Span 1	Middle	Comb1	10.3914	68.080
B75	Span 1	End		0.0000	0.000
B76	Span 1	Start		0.0000	0.000
B76	Span 1	Middle	Comb1	3.8774	25.356
B76	Span 1	End		0.0000	0.000
B77	Span 1	Start	Comb1	6.1607	40.313
B77	Span 1	Middle	Comb1	17.9588	117.915
B77	Span 1	End		0.0000	0.000
B78	Span 1	Start		0.0000	0.000
B78	Span 1	Middle	Comb1	11.0272	72.258
B78	Span 1	End	Comb1	4.6774	30.594
B79	Span 1	Start		0.0000	0.000
B79	Span 1	Middle		0.0000	0.000
B79	Span 1	End		0.0000	0.000
B80	Span 1	Start		0.0000	0.000
B80	Span 1	Middle		0.0000	0.000
B80	Span 1	End		0.0000	0.000
B81	Span 1	Start		0.0000	0.000
B81	Span 1	Middle	Comb1	7.0340	46.039
B81	Span 1	End		0.0000	0.000
B82	Span 1	Start		0.0000	0.000
B82	Span 1	Middle	Comb1	10.5083	68.848
B82	Span 1	End		0.0000	0.000
B83	Span 1	Start		0.0000	0.000
B83	Span 1	Middle	Comb1	1.8537	12.115
B83	Span 1	End		0.0000	0.000
B84	Span 1	Start	Comb1	8.7471	57.280
B84	Span 1	Middle	Comb1	21.5517	141.652
B84	Span 1	End		0.0000	0.000
B85	Span 1	Start		0.0000	0.000
B85	Span 1	Middle	Comb1	11.8440	77.629
B85	Span 1	End	Comb1	5.3578	35.051
B86	Span 1	Start		0.0000	0.000
B86	Span 1	Middle		0.0000	0.000
B86	Span 1	End		0.0000	0.000
B87	Span 1	Start		0.0000	0.000
B87	Span 1	Middle		0.0000	0.000
B87	Span 1	End		0.0000	0.000
B88	Span 1	Start	Comb1	6.8172	44.617
B88	Span 1	Middle	Comb1	14.8456	97.386
B88	Span 1	End		0.0000	0.000
B89	Span 1	Start		0.0000	0.000
B89	Span 1	Middle	Comb1	12.0486	78.975
B89	Span 1	End	Comb1	5.5282	36.168
B90	Span 1	Start		0.0000	0.000
B90	Span 1	Middle		0.0000	0.000
B90	Span 1	End		0.0000	0.000
B91	Span 1	Start		0.0000	0.000
B91	Span 1	Middle		0.0000	0.000

**Table 32: Concrete Beam Design Summary 01 - Flexural And Shear Data, Part 2 of 3**

Line	SpanID	Location	FBotCombo	FBotMomen t kN-m	FBotArea mm2
B91	Span 1	End		0.0000	0.000
B92	Span 1	Start	Comb1	7.1098	46.536
B92	Span 1	Middle	Comb1	15.6280	102.542
B92	Span 1	End		0.0000	0.000
B93	Span 1	Start		0.0000	0.000
B93	Span 1	Middle	Comb1	11.9056	78.034
B93	Span 1	End	Comb1	6.1665	40.351
B94	Span 1	Start		0.0000	0.000
B94	Span 1	Middle	Comb1	0.7136	0.000
B94	Span 1	End		0.0000	0.000
B95	Span 1	Start		0.0000	0.000
B95	Span 1	Middle		0.0000	0.000
B95	Span 1	End		0.0000	0.000
B96	Span 1	Start	Comb1	8.8742	58.114
B96	Span 1	Middle	Comb1	20.2604	133.115
B96	Span 1	End		0.0000	0.000
B104	Span 1	Start		0.0000	0.000
B104	Span 1	Middle		0.0000	0.000
B104	Span 1	End		0.0000	0.000
B108	Span 1	Start		0.0000	0.000
B108	Span 1	Middle		0.0000	0.000
B108	Span 1	End		0.0000	0.000
B129	Span 1	Start		0.0000	0.000
B129	Span 1	Middle		0.0000	0.000
B129	Span 1	End		0.0000	0.000
B130	Span 1	Start		0.0000	0.000
B130	Span 1	Middle		0.0000	0.000
B130	Span 1	End		0.0000	0.000
B131	Span 1	Start		0.0000	0.000
B131	Span 1	Middle	Comb1	5.4001	35.329
B131	Span 1	End		0.0000	0.000
B132	Span 1	Start		0.0000	0.000
B132	Span 1	Middle		0.0000	0.000
B132	Span 1	End		0.0000	0.000
B133	Span 1	Start		0.0000	0.000
B133	Span 1	Middle		0.0000	0.000
B133	Span 1	End		0.0000	0.000
B134	Span 1	Start		0.0000	0.000
B134	Span 1	Middle	Comb1	9.9311	65.055
B134	Span 1	End	Comb1	6.4096	41.945

**Table 32: Concrete Beam Design Summary 01 - Flexural And Shear Data, Part 3 of 3**

**Table 32: Concrete Beam Design Summary 01 - Flexural And Shear Data, Part 3 of 3**

Line	SpanID	Location	VCombo	VForce kN	VArea mm2/m
B1	Span 1	Start	Comb1	20.554	0.000
B1	Span 1	Middle	Comb1	12.873	0.000
B1	Span 1	End	Comb1	17.851	0.000
B2	Span 1	Start	Comb1	23.222	0.000
B2	Span 1	Middle	Comb1	15.541	0.000
B2	Span 1	End	Comb1	15.183	0.000
B3	Span 1	Start	Comb1	3.267	0.000

**Table 32: Concrete Beam Design Summary 01 - Flexural And Shear Data, Part 3 of 3**

Line	SpanID	Location	VCombo	VForce kN	VArea mm2/m
B3	Span 1	Middle	Comb1	12.572	0.000
B3	Span 1	End	Comb1	4.359	0.000
B4	Span 1	Start	Comb1	3.568	0.000
B4	Span 1	Middle	Comb1	12.737	0.000
B4	Span 1	End	Comb1	4.020	0.000
B7	Span 1	Start	Comb1	2.966	0.000
B7	Span 1	Middle	Comb1	11.512	0.000
B7	Span 1	End	Comb1	4.198	0.000
B14	Span 1	Start	Comb1	8.635	0.000
B14	Span 1	Middle	Comb1	7.493	0.000
B14	Span 1	End	Comb1	15.557	0.000
B15	Span 1	Start	Comb1	15.132	0.000
B15	Span 1	Middle	Comb1	10.667	0.000
B15	Span 1	End	Comb1	19.266	0.000
B16	Span 1	Start	Comb1	21.788	0.000
B16	Span 1	Middle	Comb1	13.351	0.000
B16	Span 1	End	Comb1	20.397	0.000
B17	Span 1	Start	Comb1	14.486	0.000
B17	Span 1	Middle	Comb1	6.119	0.000
B17	Span 1	End	Comb1	10.614	0.000
B18	Span 1	Start	Comb1	13.463	0.000
B18	Span 1	Middle	Comb1	5.701	0.000
B18	Span 1	End	Comb1	9.822	0.000
B19	Span 1	Start	Comb1	11.570	0.000
B19	Span 1	Middle	Comb1	4.388	0.000
B19	Span 1	End	Comb1	9.976	0.000
B20	Span 1	Start	Comb1	10.902	0.000
B20	Span 1	Middle	Comb1	2.889	0.000
B20	Span 1	End	Comb1	5.125	0.000
B22	Span 1	Start	Comb1	4.059	0.000
B22	Span 1	Middle	Comb1	10.809	0.000
B22	Span 1	End	Comb1	18.243	0.000
B23	Span 1	Start	Comb1	14.587	0.000
B23	Span 1	Middle	Comb1	8.377	0.000
B23	Span 1	End	Comb1	16.031	0.000
B24	Span 1	Start	Comb1	19.826	0.000
B24	Span 1	Middle	Comb1	12.145	0.000
B24	Span 1	End	Comb1	18.578	0.000
B25	Span 1	Start	Comb1	12.748	0.000
B25	Span 1	Middle	Comb1	5.642	0.000
B25	Span 1	End	Comb1	8.571	0.000
B26	Span 1	Start	Comb1	10.219	0.000
B26	Span 1	Middle	Comb1	3.718	0.000
B26	Span 1	End	Comb1	9.285	0.000
B27	Span 1	Start	Comb1	12.240	0.000
B27	Span 1	Middle	Comb1	5.688	0.000
B27	Span 1	End	Comb1	7.416	0.000
B28	Span 1	Start	Comb1	5.819	0.000
B28	Span 1	Middle	Comb1	2.195	0.000
B28	Span 1	End	Comb1	10.208	0.000
B29	Span 1	Start	Comb1	10.298	0.000
B29	Span 1	Middle	Comb1	5.830	0.000
B29	Span 1	End	Comb1	13.894	0.000
B30	Span 1	Start	Comb1	13.791	0.000

**Table 32: Concrete Beam Design Summary 01 - Flexural And Shear Data, Part 3 of 3**

Line	SpanID	Location	VCombo	VForce kN	VArea mm2/m
B30	Span 1	Middle	Comb1	10.590	0.000
B30	Span 1	End	Comb1	18.717	0.000
B31	Span 1	Start	Comb1	20.507	0.000
B31	Span 1	Middle	Comb1	12.826	0.000
B31	Span 1	End	Comb1	17.898	0.000
B32	Span 1	Start	Comb1	12.564	0.000
B32	Span 1	Middle	Comb1	5.457	0.000
B32	Span 1	End	Comb1	8.755	0.000
B33	Span 1	Start	Comb1	9.201	0.000
B33	Span 1	Middle	Comb1	3.802	0.000
B33	Span 1	End	Comb1	10.304	0.000
B34	Span 1	Start	Comb1	14.372	0.000
B34	Span 1	Middle	Comb1	7.190	0.000
B34	Span 1	End	Comb1	7.174	0.000
B35	Span 1	Start	Comb1	9.931	0.000
B35	Span 1	Middle	Comb1	3.677	0.000
B35	Span 1	End	Comb1	10.481	0.000
B36	Span 1	Start	Comb1	12.977	0.000
B36	Span 1	Middle	Comb1	9.987	0.000
B36	Span 1	End	Comb1	17.641	0.000
B37	Span 1	Start	Comb1	19.966	0.000
B37	Span 1	Middle	Comb1	12.285	0.000
B37	Span 1	End	Comb1	18.439	0.000
B38	Span 1	Start	Comb1	13.269	0.000
B38	Span 1	Middle	Comb1	6.162	0.000
B38	Span 1	End	Comb1	8.050	0.000
B39	Span 1	Start	Comb1	8.544	0.000
B39	Span 1	Middle	Comb1	4.459	0.000
B39	Span 1	End	Comb1	10.961	0.000
B40	Span 1	Start	Comb1	15.027	0.000
B40	Span 1	Middle	Comb1	7.845	0.000
B40	Span 1	End	Comb1	6.519	0.000
B41	Span 1	Start	Comb1	11.095	0.000
B41	Span 1	Middle	Comb1	4.291	0.000
B41	Span 1	End	Comb1	9.317	0.000
B42	Span 1	Start	Comb1	12.386	0.000
B42	Span 1	Middle	Comb1	10.577	0.000
B42	Span 1	End	Comb1	18.232	0.000
B43	Span 1	Start	Comb1	5.140	0.000
B43	Span 1	Middle	Comb1	2.873	0.000
B43	Span 1	End	Comb1	10.887	0.000
B44	Span 1	Start	Comb1	10.227	0.000
B44	Span 1	Middle	Comb1	4.641	0.000
B44	Span 1	End	Comb1	12.075	0.000
B45	Span 1	Start	Comb1	12.842	0.000
B45	Span 1	Middle	Comb1	10.122	0.000
B45	Span 1	End	Comb1	17.776	0.000
B46	Span 1	Start	Comb1	7.959	0.000
B46	Span 1	Middle	Comb1	0.055	0.000
B46	Span 1	End	Comb1	8.068	0.000
B47	Span 1	Start	Comb1	6.276	0.000
B47	Span 1	Middle	Comb1	8.592	0.000
B47	Span 1	End	Comb1	16.026	0.000
B48	Span 1	Start	Comb1	13.159	0.000

**Table 32: Concrete Beam Design Summary 01 - Flexural And Shear Data, Part 3 of 3**

Line	SpanID	Location	VCombo	VForce kN	VArea mm2/m
B48	Span 1	Middle	Comb1	9.804	0.000
B48	Span 1	End	Comb1	17.459	0.000
B49	Span 1	Start	Comb1	23.268	0.000
B49	Span 1	Middle	Comb1	15.587	0.000
B49	Span 1	End	Comb1	15.137	0.000
B50	Span 1	Start	Comb1	25.125	0.000
B50	Span 1	Middle	Comb1	17.066	0.000
B50	Span 1	End	Comb1	15.169	0.000
B51	Span 1	Start	Comb1	12.086	0.000
B51	Span 1	Middle	Comb1	5.408	0.000
B51	Span 1	End	Comb1	7.948	0.000
B52	Span 1	Start	Comb1	3.516	0.000
B52	Span 1	Middle	Comb1	7.449	0.000
B52	Span 1	End	Comb1	2.793	0.000
B53	Span 1	Start	Comb1	17.984	0.000
B53	Span 1	Middle	Comb1	9.857	0.000
B53	Span 1	End	Comb1	14.524	0.000
B54	Span 1	Start	Comb1	18.581	0.000
B54	Span 1	Middle	Comb1	13.050	0.000
B54	Span 1	End	Comb1	20.958	0.000
B56	Span 1	Start	Comb1	15.534	0.000
B56	Span 1	Middle	Comb1	16.218	0.000
B56	Span 1	End	Comb1	24.156	0.000
B57	Span 1	Start	Comb1	16.315	0.000
B57	Span 1	Middle	Comb1	9.038	0.000
B57	Span 1	End	Comb1	12.791	0.000
B58	Span 1	Start	Comb1	8.585	0.000
B58	Span 1	Middle	Comb1	5.628	0.000
B58	Span 1	End	Comb1	12.734	0.000
B59	Span 1	Start	Comb1	3.729	0.000
B59	Span 1	Middle	Comb1	9.851	0.000
B59	Span 1	End	Comb1	0.946	0.000
B60	Span 1	Start	Comb1	14.718	0.000
B60	Span 1	Middle	Comb1	7.688	0.000
B60	Span 1	End	Comb1	13.405	0.000
B61	Span 1	Start	Comb1	16.543	0.000
B61	Span 1	Middle	Comb1	10.276	0.000
B61	Span 1	End	Comb1	19.216	0.000
B63	Span 1	Start	Comb1	16.275	0.000
B63	Span 1	Middle	Comb1	15.477	0.000
B63	Span 1	End	Comb1	23.415	0.000
B64	Span 1	Start	Comb1	17.562	0.000
B64	Span 1	Middle	Comb1	8.717	0.000
B64	Span 1	End	Comb1	8.973	0.000
B65	Span 1	Start	Comb1	3.876	0.000
B65	Span 1	Middle	Comb1	9.531	0.000
B65	Span 1	End	Comb1	16.234	0.000
B66	Span 1	Start	Comb1	4.053	0.000
B66	Span 1	Middle	Comb1	11.815	0.000
B66	Span 1	End	Comb1	0.469	0.000
B67	Span 1	Start	Comb1	14.599	0.000
B67	Span 1	Middle	Comb1	7.568	0.000
B67	Span 1	End	Comb1	13.524	0.000
B68	Span 1	Start	Comb1	18.265	0.000

**Table 32: Concrete Beam Design Summary 01 - Flexural And Shear Data, Part 3 of 3**

Line	SpanID	Location	VCombo	VForce kN	VArea mm2/m
B68	Span 1	Middle	Comb1	9.326	0.000
B68	Span 1	End	Comb1	17.493	0.000
B69	Span 1	Start	Comb1	16.777	0.000
B69	Span 1	Middle	Comb1	8.650	0.000
B69	Span 1	End	Comb1	15.731	0.000
B70	Span 1	Start	Comb1	13.954	0.000
B70	Span 1	Middle	Comb1	12.979	0.000
B70	Span 1	End	Comb1	21.956	0.000
B71	Span 1	Start	Comb1	16.984	0.000
B71	Span 1	Middle	Comb1	8.138	0.000
B71	Span 1	End	Comb1	9.552	0.000
B72	Span 1	Start	Comb1	6.443	0.000
B72	Span 1	Middle	Comb1	2.326	0.000
B72	Span 1	End	Comb1	11.096	0.000
B73	Span 1	Start	Comb1	2.547	0.000
B73	Span 1	Middle	Comb1	5.262	0.000
B73	Span 1	End	Comb1	2.298	0.000
B74	Span 1	Start	Comb1	15.891	0.000
B74	Span 1	Middle	Comb1	8.861	0.000
B74	Span 1	End	Comb1	12.232	0.000
B75	Span 1	Start	Comb1	17.913	0.000
B75	Span 1	Middle	Comb1	8.974	0.000
B75	Span 1	End	Comb1	17.845	0.000
B76	Span 1	Start	Comb1	16.999	0.000
B76	Span 1	Middle	Comb1	8.872	0.000
B76	Span 1	End	Comb1	15.509	0.000
B77	Span 1	Start	Comb1	13.945	0.000
B77	Span 1	Middle	Comb1	12.987	0.000
B77	Span 1	End	Comb1	21.965	0.000
B78	Span 1	Start	Comb1	16.686	0.000
B78	Span 1	Middle	Comb1	7.841	0.000
B78	Span 1	End	Comb1	9.850	0.000
B79	Span 1	Start	Comb1	7.248	0.000
B79	Span 1	Middle	Comb1	1.522	0.000
B79	Span 1	End	Comb1	10.292	0.000
B80	Span 1	Start	Comb1	2.579	0.000
B80	Span 1	Middle	Comb1	4.981	0.000
B80	Span 1	End	Comb1	2.630	0.000
B81	Span 1	Start	Comb1	15.574	0.000
B81	Span 1	Middle	Comb1	8.543	0.000
B81	Span 1	End	Comb1	12.549	0.000
B82	Span 1	Start	Comb1	18.694	0.000
B82	Span 1	Middle	Comb1	9.754	0.000
B82	Span 1	End	Comb1	17.065	0.000
B83	Span 1	Start	Comb1	17.281	0.000
B83	Span 1	Middle	Comb1	9.154	0.000
B83	Span 1	End	Comb1	15.227	0.000
B84	Span 1	Start	Comb1	13.962	0.000
B84	Span 1	Middle	Comb1	16.278	0.000
B84	Span 1	End	Comb1	23.838	0.000
B85	Span 1	Start	Comb1	16.569	0.000
B85	Span 1	Middle	Comb1	7.724	0.000
B85	Span 1	End	Comb1	9.966	0.000
B86	Span 1	Start	Comb1	7.711	0.000

**Table 32: Concrete Beam Design Summary 01 - Flexural And Shear Data, Part 3 of 3**

Line	SpanID	Location	VCombo	VForce kN	VArea mm2/m
B86	Span 1	Middle	Comb1	1.059	0.000
B86	Span 1	End	Comb1	9.828	0.000
B87	Span 1	Start	Comb1	2.982	0.000
B87	Span 1	Middle	Comb1	4.798	0.000
B87	Span 1	End	Comb1	2.762	0.000
B88	Span 1	Start	Comb1	11.347	0.000
B88	Span 1	Middle	Comb1	9.745	0.000
B88	Span 1	End	Comb1	16.776	0.000
B89	Span 1	Start	Comb1	16.540	0.000
B89	Span 1	Middle	Comb1	7.695	0.000
B89	Span 1	End	Comb1	9.996	0.000
B90	Span 1	Start	Comb1	7.627	0.000
B90	Span 1	Middle	Comb1	1.143	0.000
B90	Span 1	End	Comb1	9.912	0.000
B91	Span 1	Start	Comb1	2.687	0.000
B91	Span 1	Middle	Comb1	4.886	0.000
B91	Span 1	End	Comb1	2.674	0.000
B92	Span 1	Start	Comb1	11.610	0.000
B92	Span 1	Middle	Comb1	9.482	0.000
B92	Span 1	End	Comb1	16.513	0.000
B93	Span 1	Start	Comb1	15.965	0.000
B93	Span 1	Middle	Comb1	7.523	0.000
B93	Span 1	End	Comb1	9.361	0.000
B94	Span 1	Start	Comb1	8.125	0.000
B94	Span 1	Middle	Comb1	5.282	0.000
B94	Span 1	End	Comb1	11.985	0.000
B95	Span 1	Start	Comb1	5.571	0.000
B95	Span 1	Middle	Comb1	4.483	0.000
B95	Span 1	End	Comb1	2.908	0.000
B96	Span 1	Start	Comb1	13.372	0.000
B96	Span 1	Middle	Comb1	10.555	0.000
B96	Span 1	End	Comb1	18.531	0.000
B104	Span 1	Start	Comb1	0.399	0.000
B104	Span 1	Middle	Comb1	5.271	0.000
B104	Span 1	End	Comb1	2.233	0.000
B108	Span 1	Start	Comb1	16.113	0.000
B108	Span 1	Middle	Comb1	7.797	0.000
B108	Span 1	End	Comb1	8.835	0.000
B129	Span 1	Start	Comb1	17.343	0.000
B129	Span 1	Middle	Comb1	9.657	0.000
B129	Span 1	End	Comb1	5.715	0.000
B130	Span 1	Start	Comb1	10.106	0.000
B130	Span 1	Middle	Comb1	3.502	0.000
B130	Span 1	End	Comb1	10.306	0.000
B131	Span 1	Start	Comb1	13.403	0.000
B131	Span 1	Middle	Comb1	9.560	0.000
B131	Span 1	End	Comb1	17.215	0.000
B132	Span 1	Start	Comb1	10.381	0.000
B132	Span 1	Middle	Comb1	3.832	0.000
B132	Span 1	End	Comb1	10.938	0.000
B133	Span 1	Start	Comb1	10.309	0.000
B133	Span 1	Middle	Comb1	3.807	0.000
B133	Span 1	End	Comb1	9.196	0.000
B134	Span 1	Start	Comb1	14.248	0.000

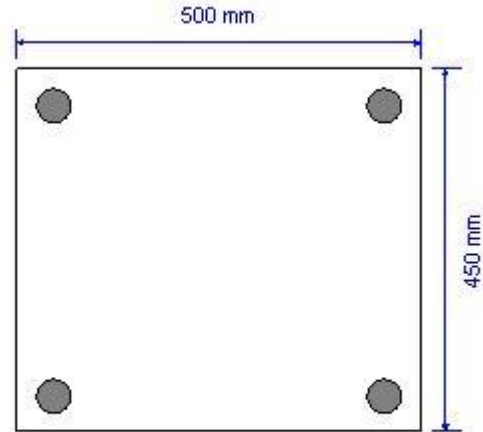
**Table 32: Concrete Beam Design Summary 01 - Flexural And Shear Data, Part 3 of 3**

Line	SpanID	Location	VCombo	VForce kN	VArea mm2/m
B134	Span 1	Middle	Comb1	7.066	0.000
B134	Span 1	End	Comb1	7.298	0.000

## ACI 318-14 Concrete Beam Design

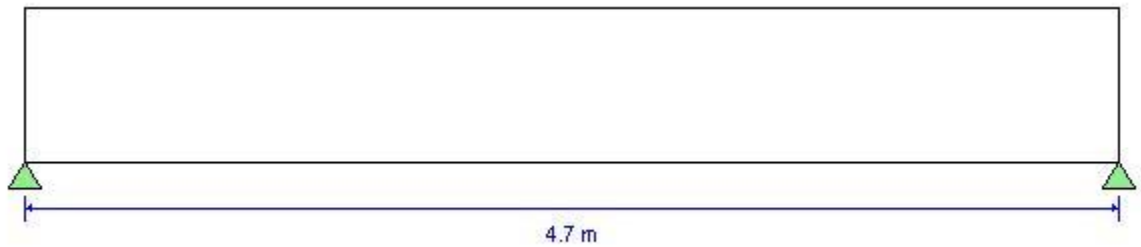
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B14  
Section Property = Viga45\*50  
Length = 4.7 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

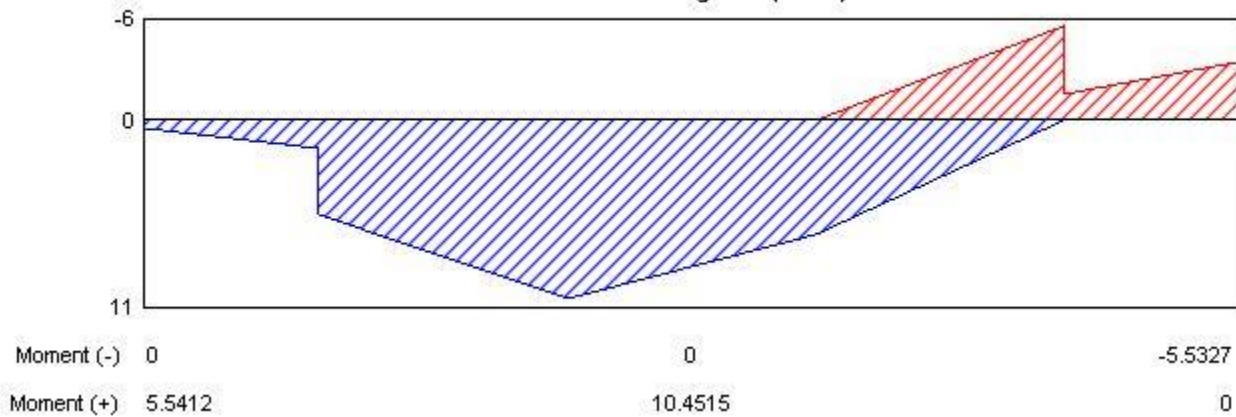


### Material Properties

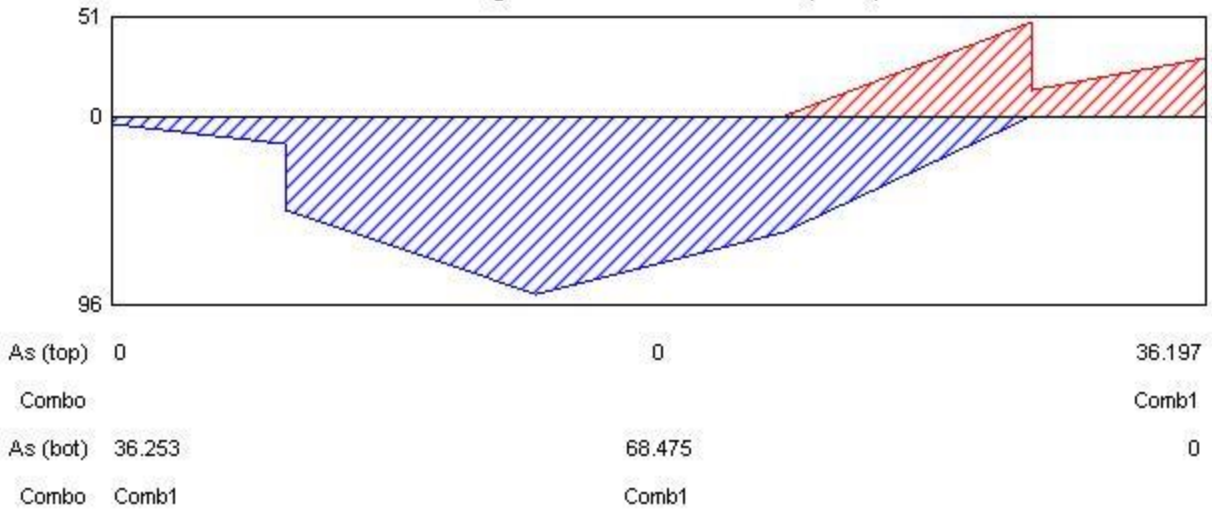
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



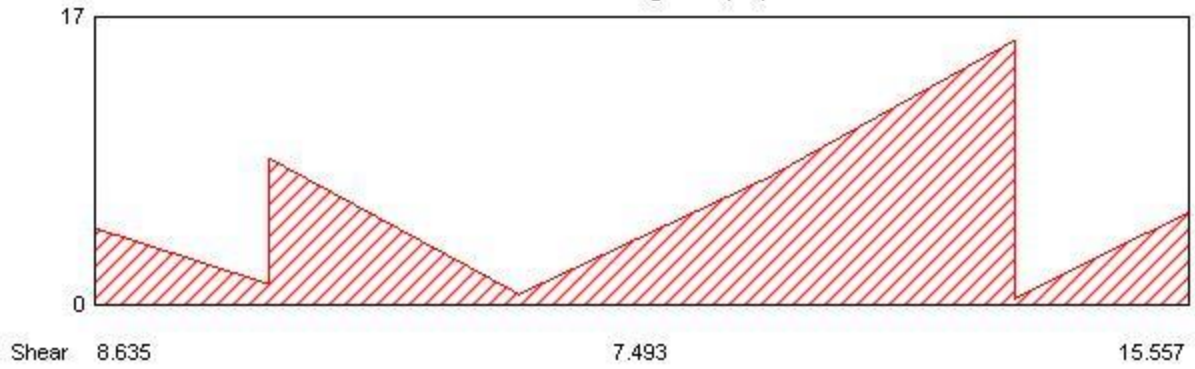
**Moment Diagram (kN-m)**



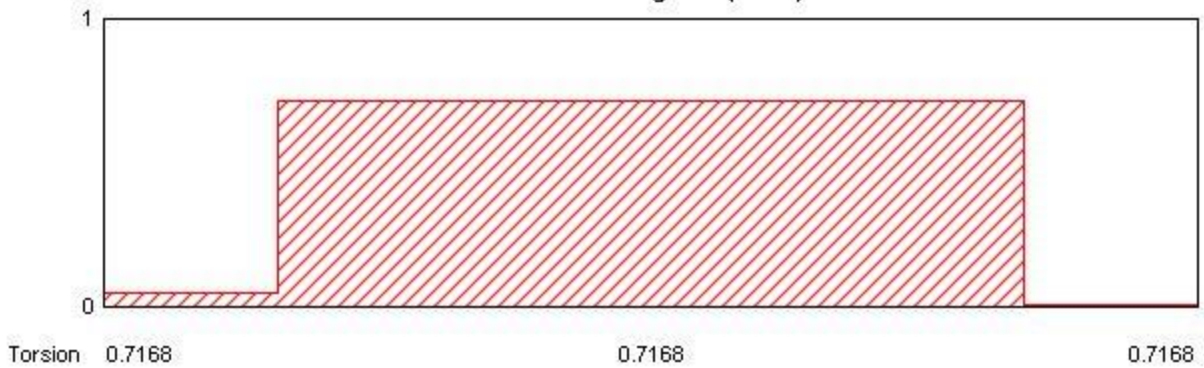
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



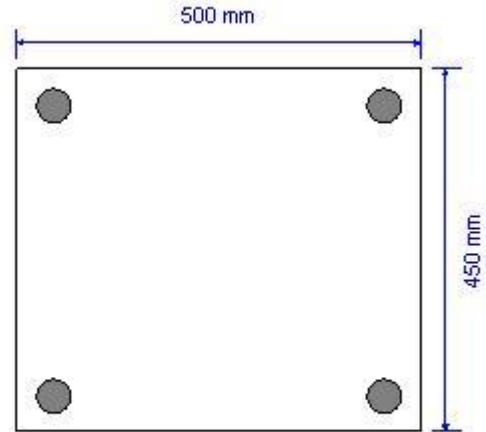
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

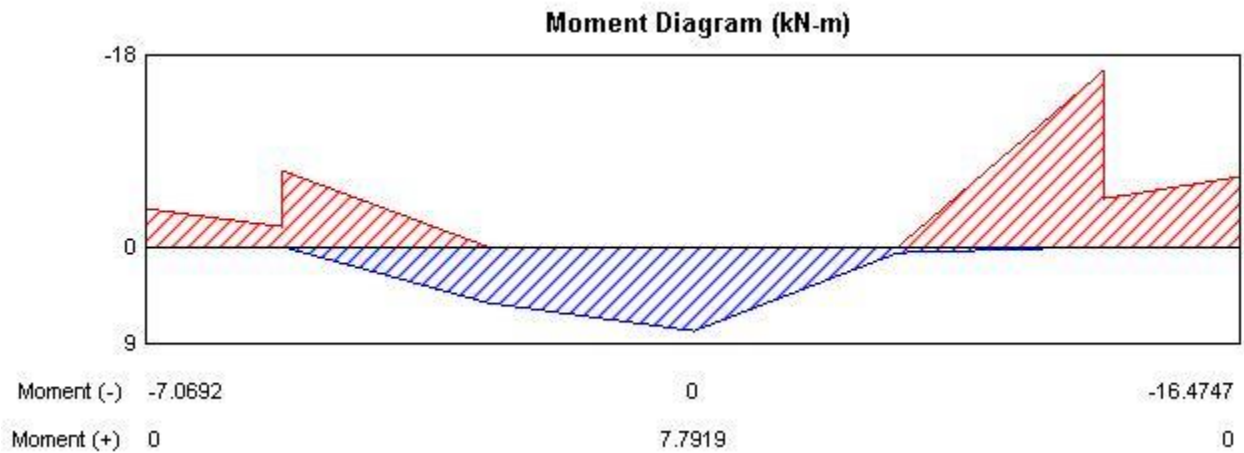
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B15  
Section Property = Viga45\*50  
Length = 6.05 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

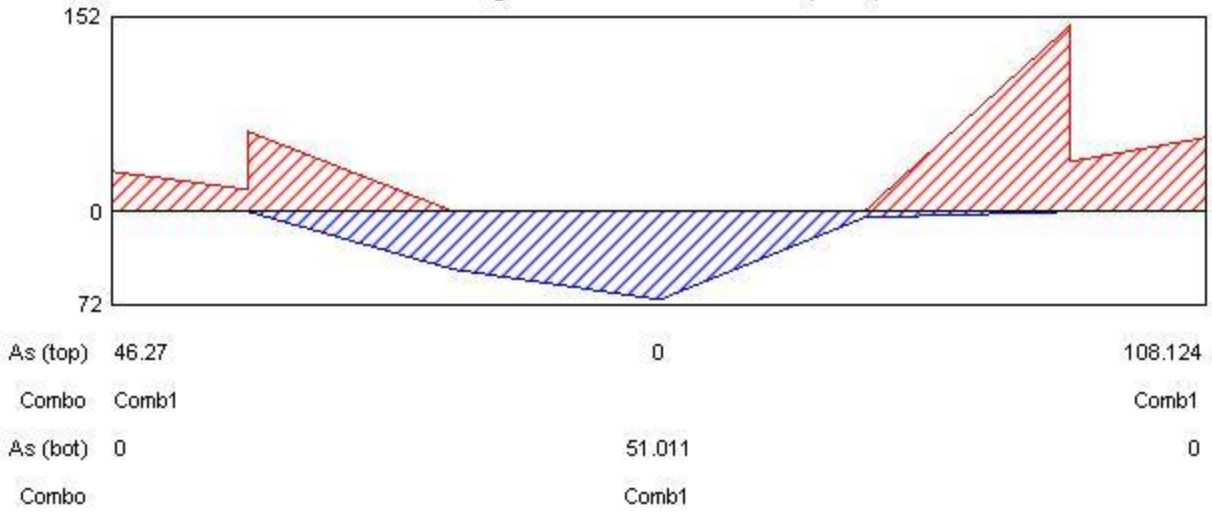


### Material Properties

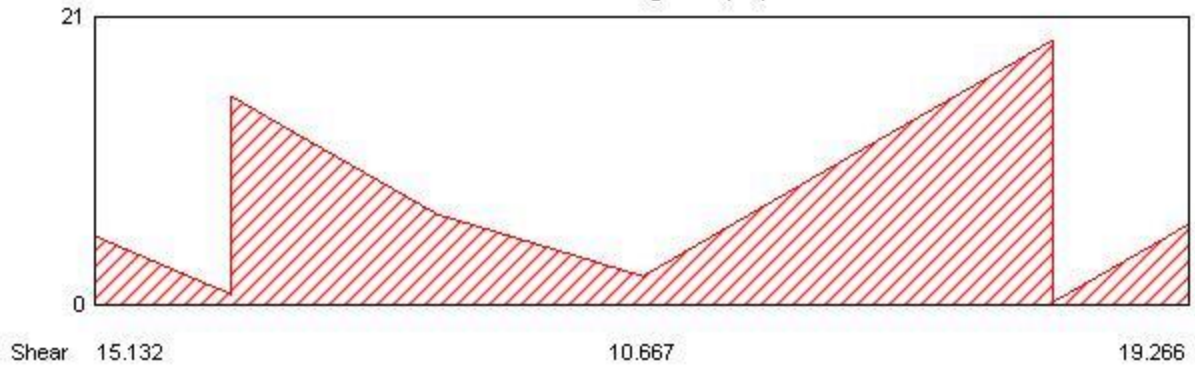
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



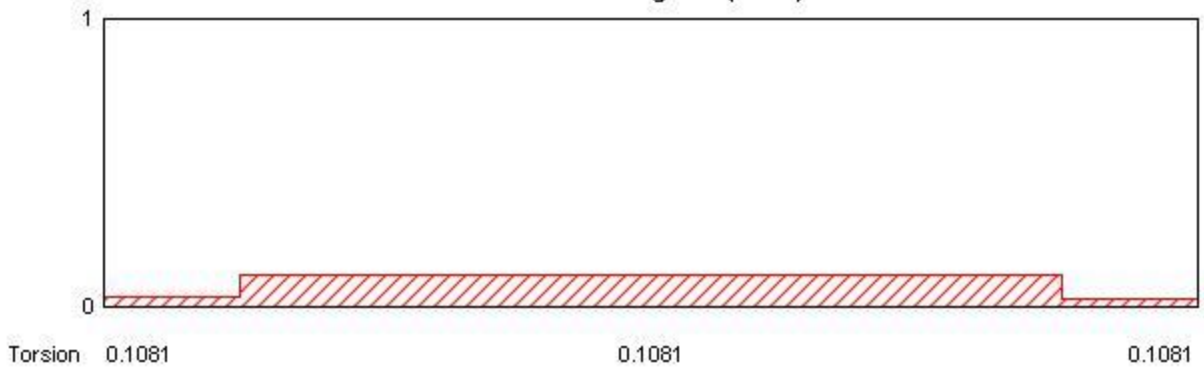
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



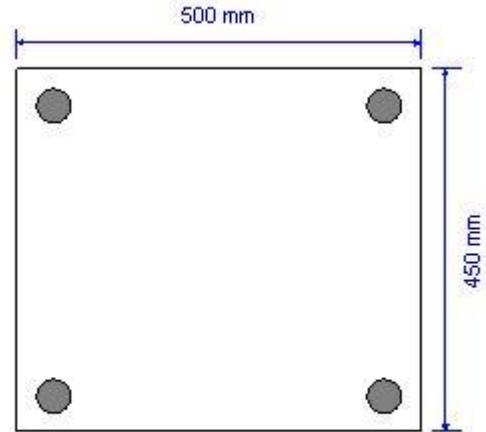
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B16  
Section Property = Viga45\*50  
Length = 7.08 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

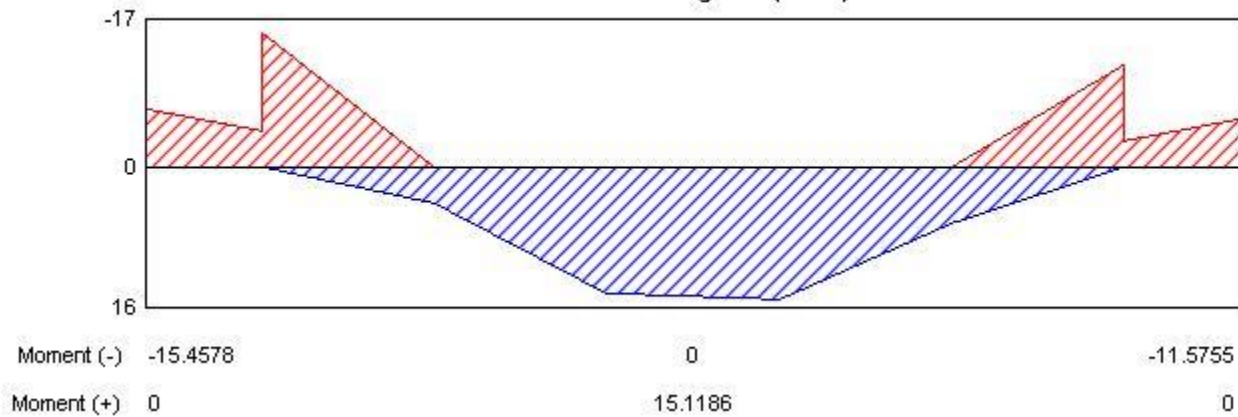


### Material Properties

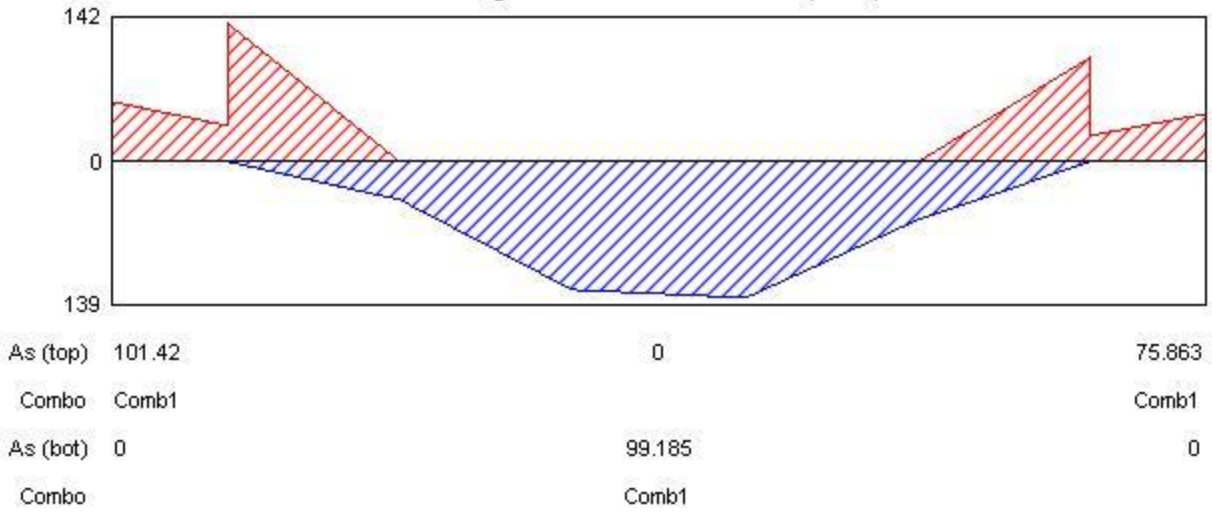
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



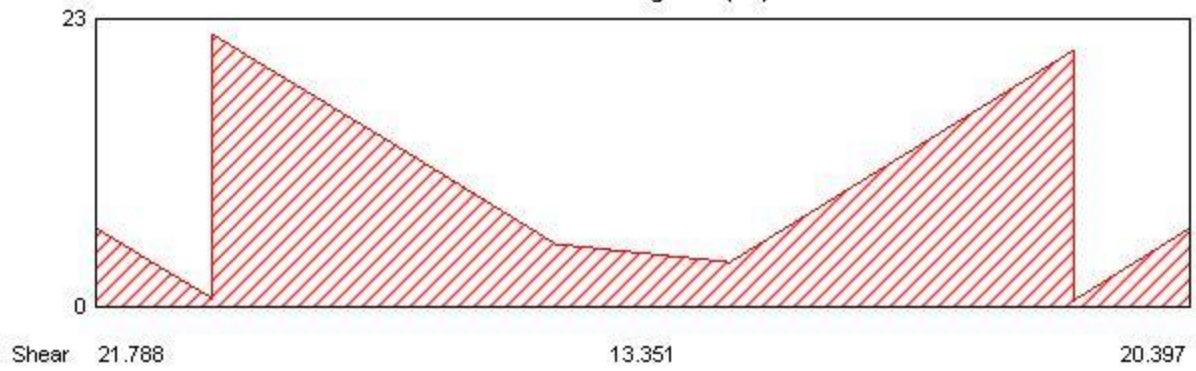
**Moment Diagram (kN-m)**



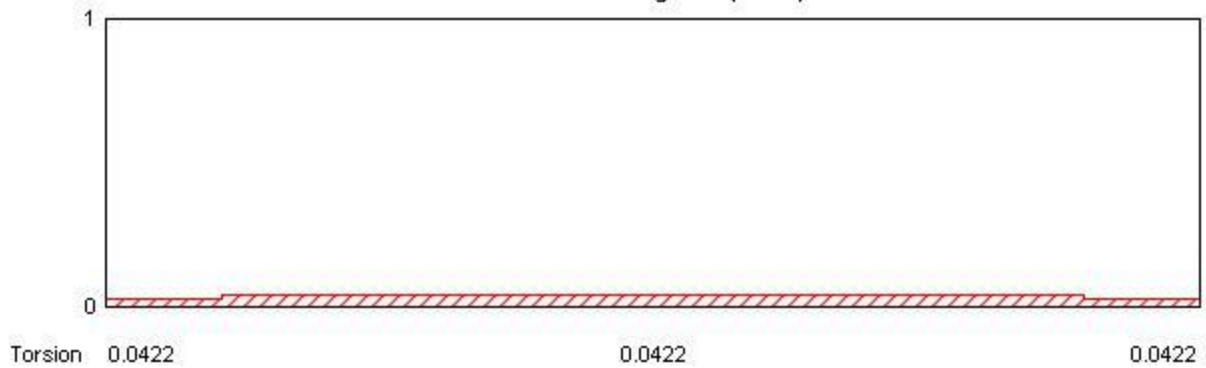
### Longitudinal Reinforcement (mm<sup>2</sup>)



### Shear Diagram (kN)



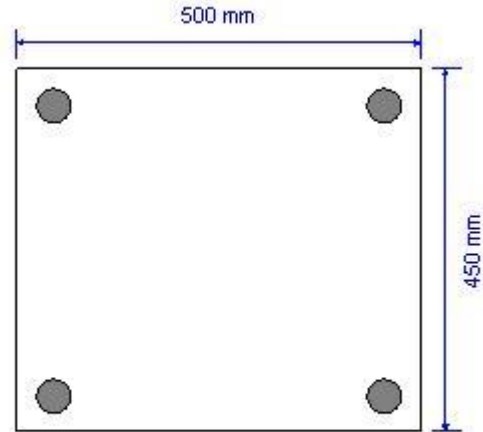
### Torsion Diagram (kN-m)



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B17  
Section Property = Viga45\*50  
Length = 4.82 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

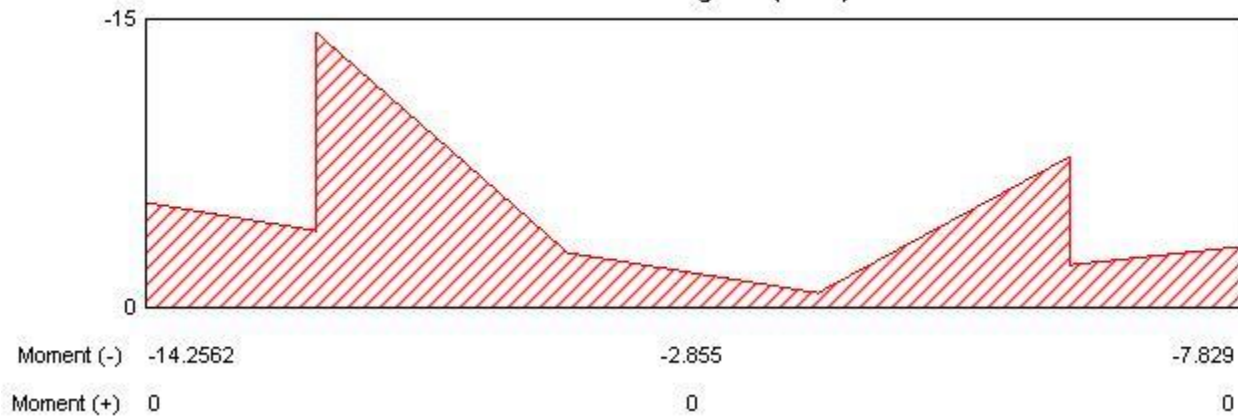


### Material Properties

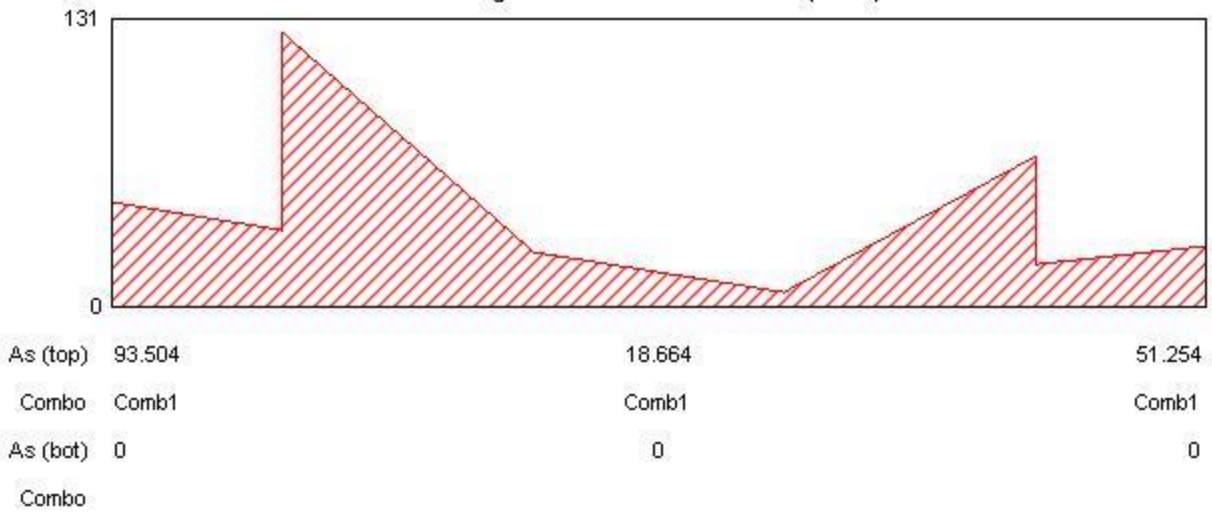
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



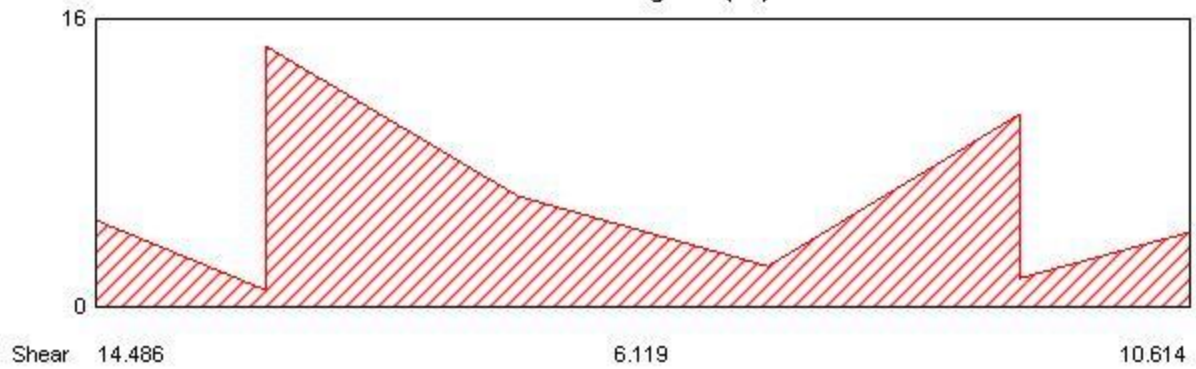
**Moment Diagram (kN-m)**



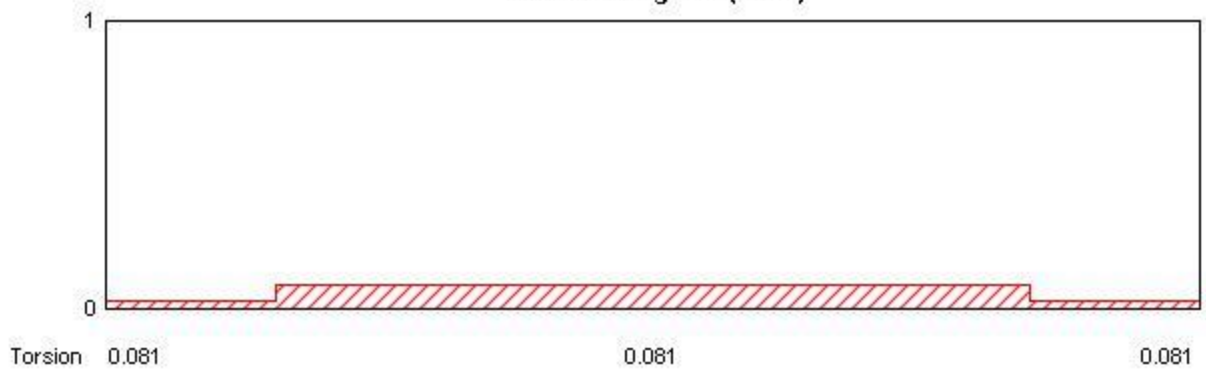
### Longitudinal Reinforcement (mm<sup>2</sup>)



### Shear Diagram (kN)



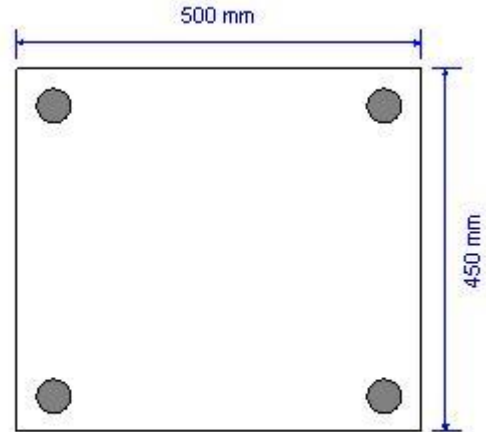
### Torsion Diagram (kN-m)



## ACI 318-14 Concrete Beam Design

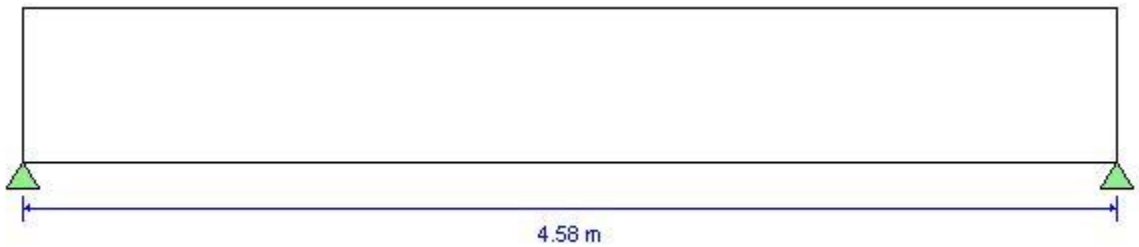
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B18  
Section Property = Viga45\*50  
Length = 4.58 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

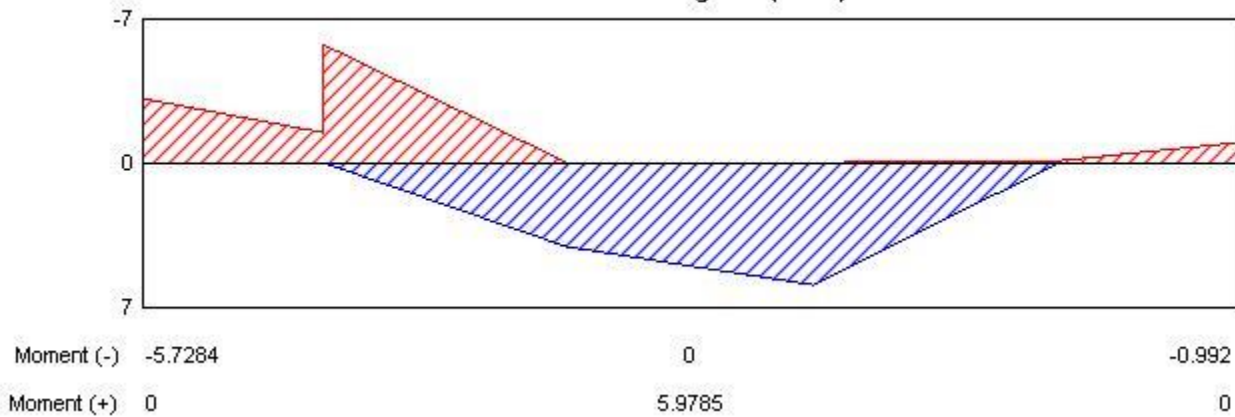


### Material Properties

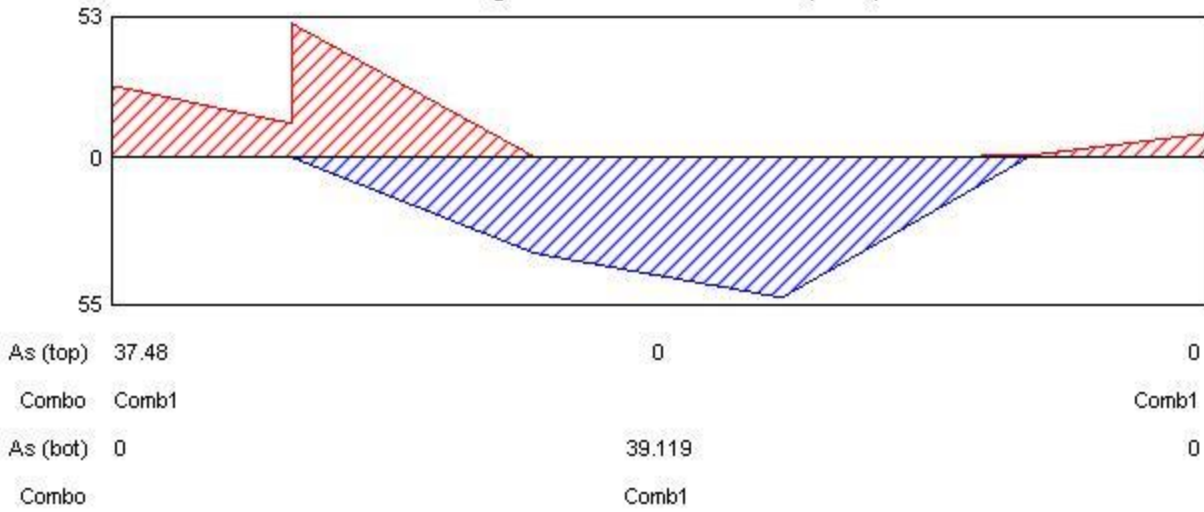
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



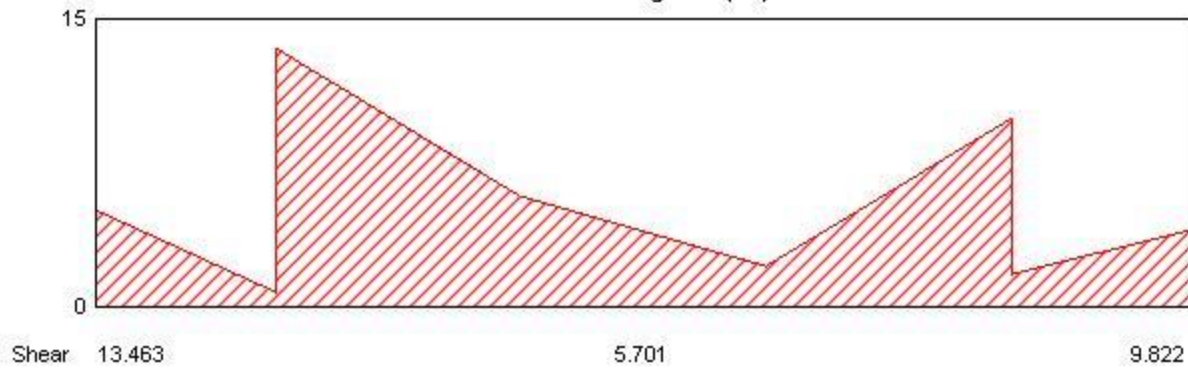
**Moment Diagram (kN-m)**



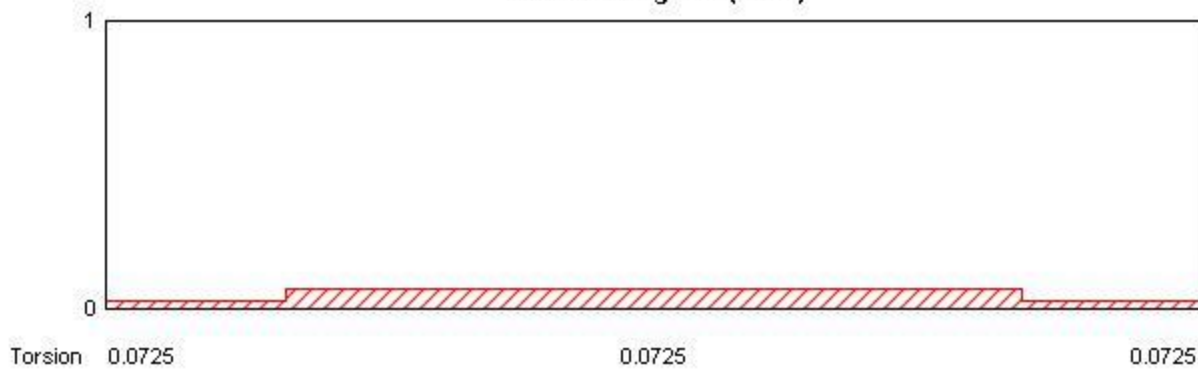
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



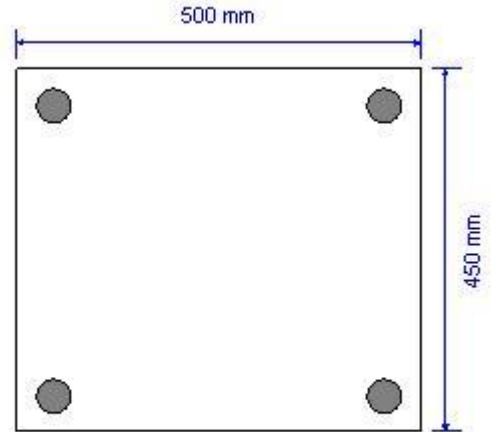
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

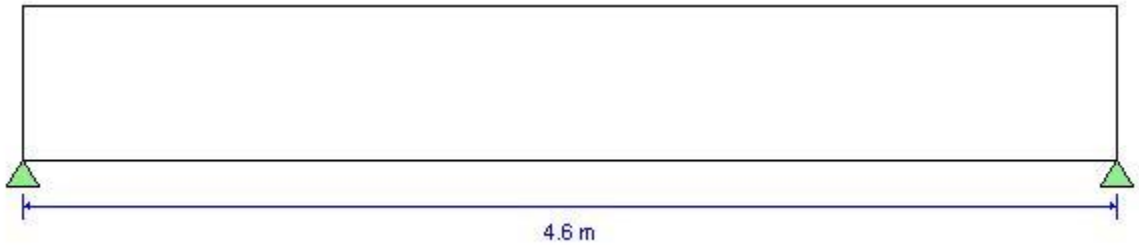
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B19  
Section Property = Viga45\*50  
Length = 4.6 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

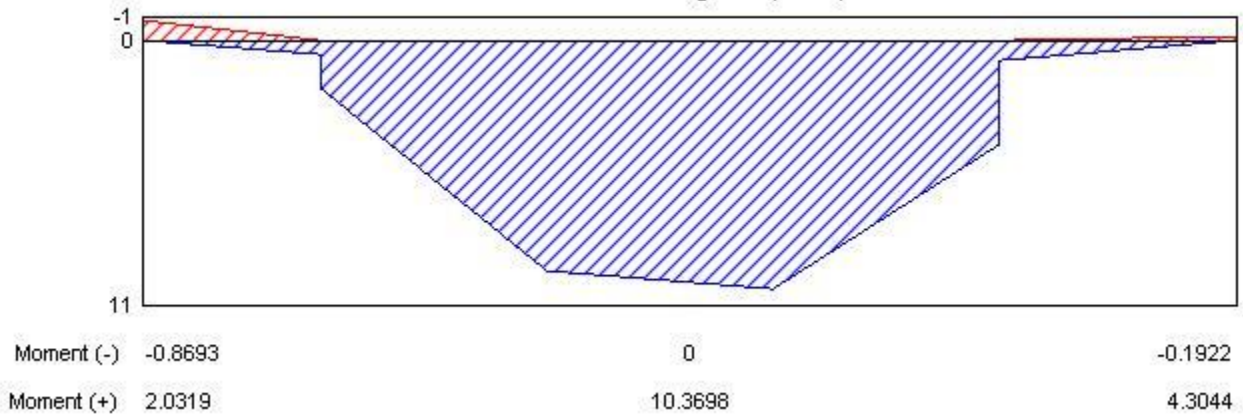


### Material Properties

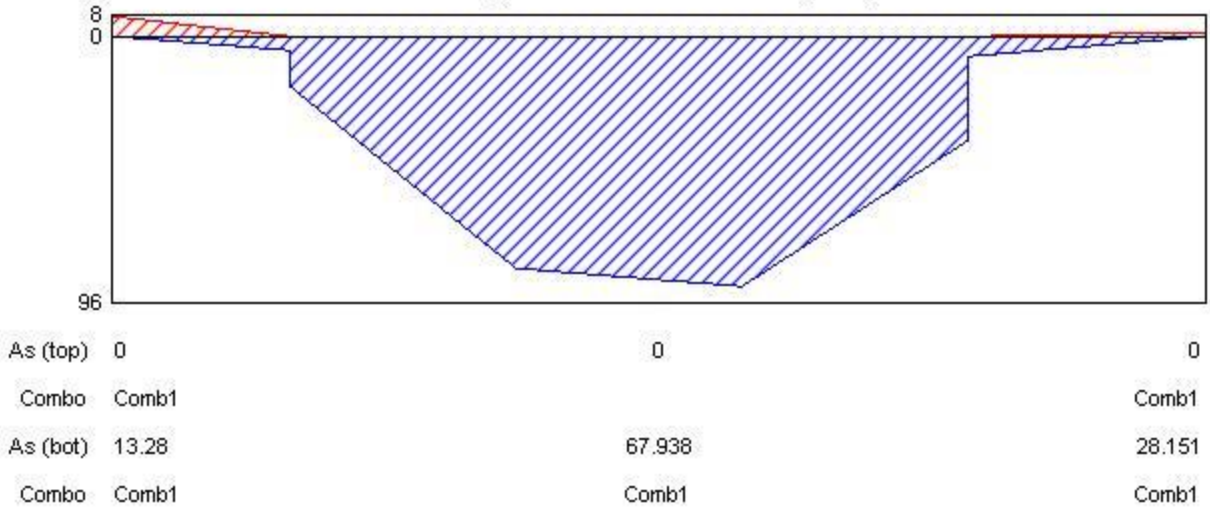
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



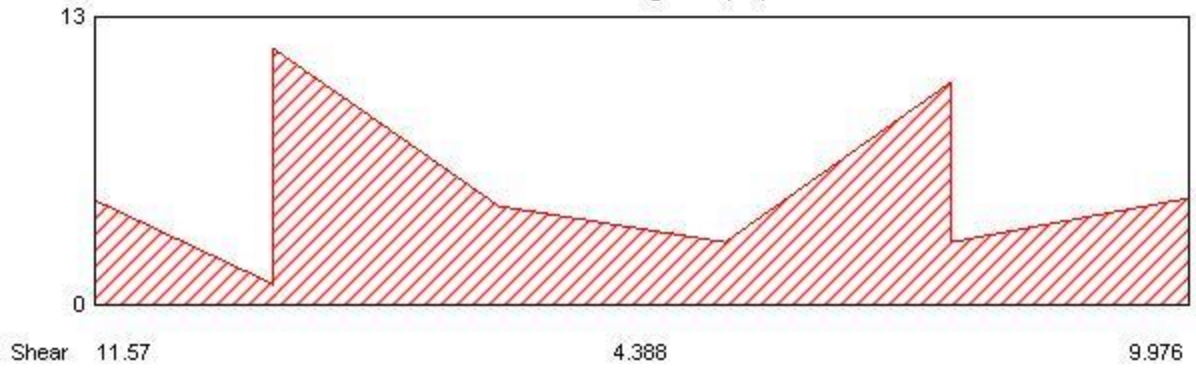
**Moment Diagram (kN-m)**



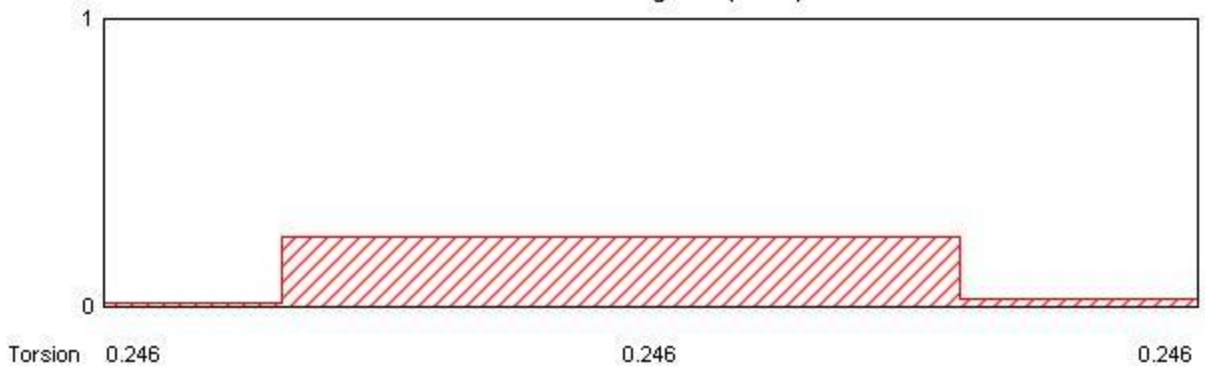
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



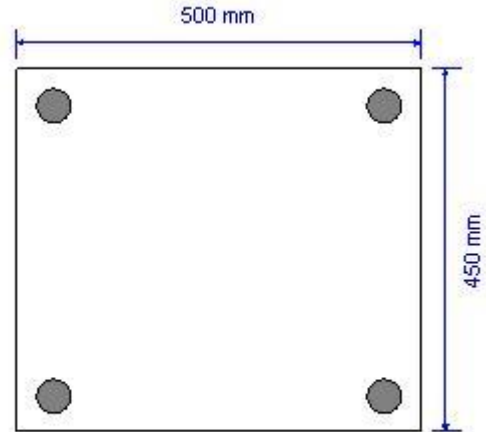
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B20  
Section Property = Viga45\*50  
Length = 3.62 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

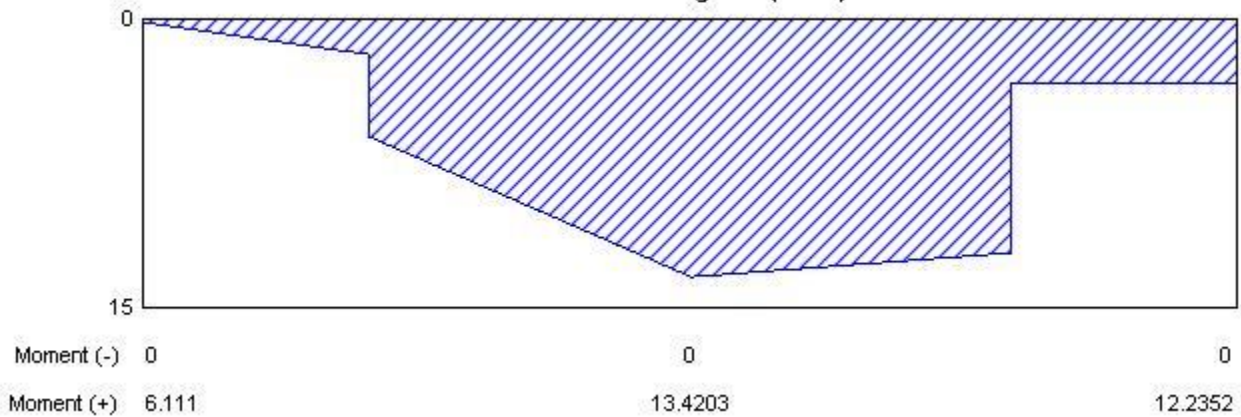


### Material Properties

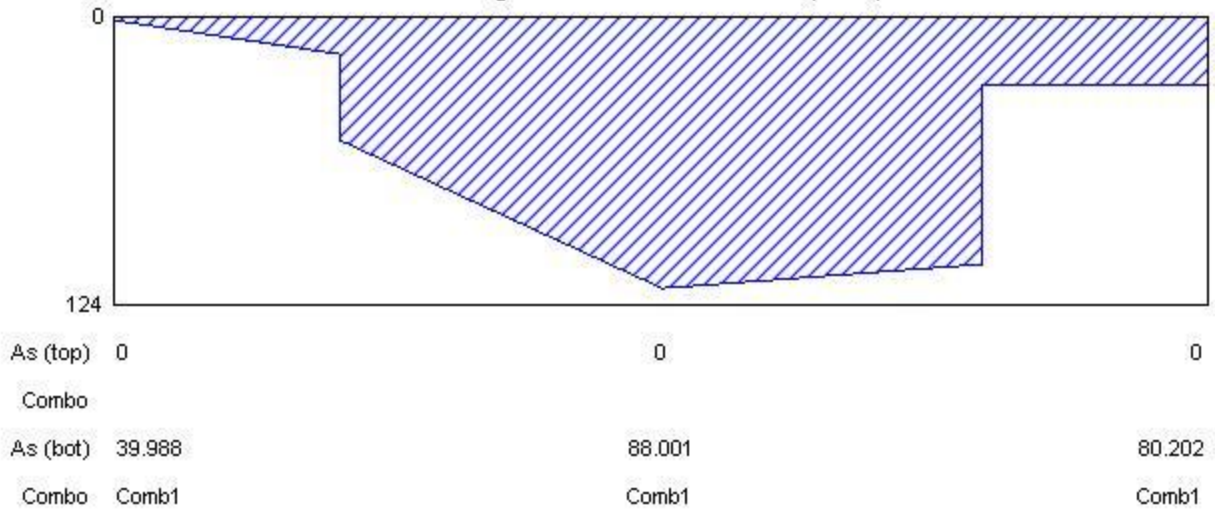
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



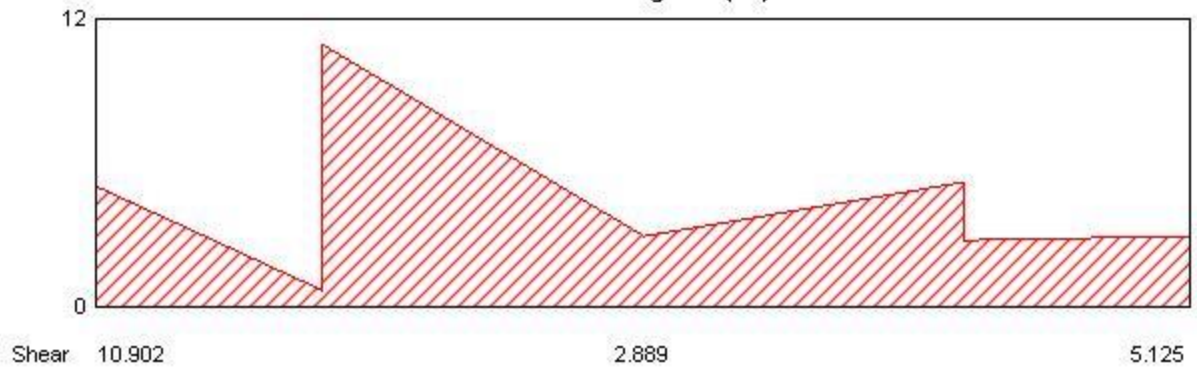
**Moment Diagram (kN-m)**



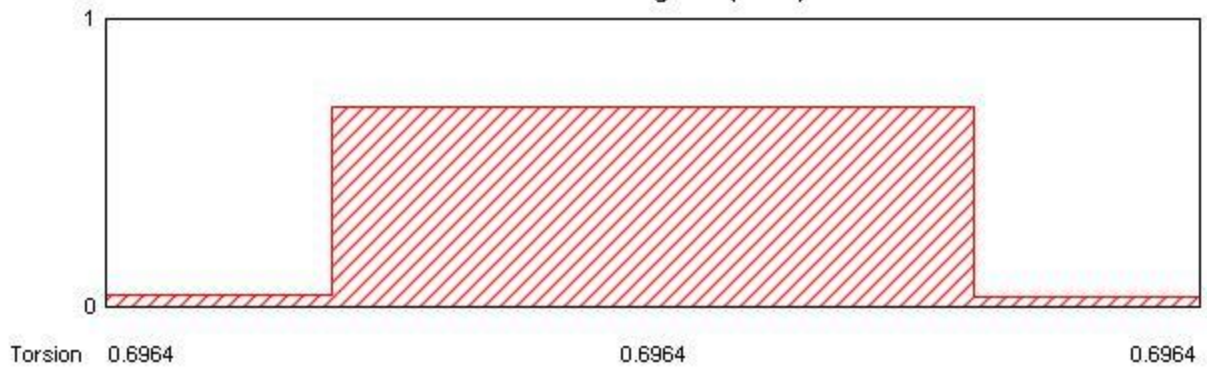
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



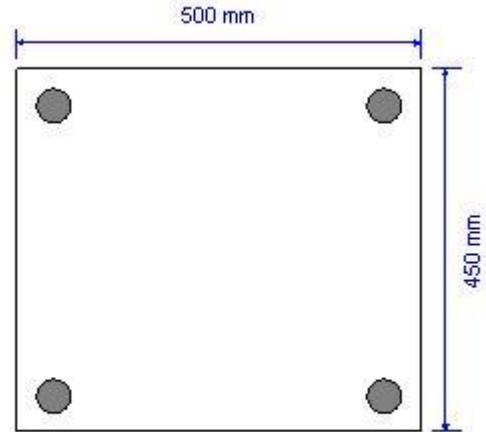
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

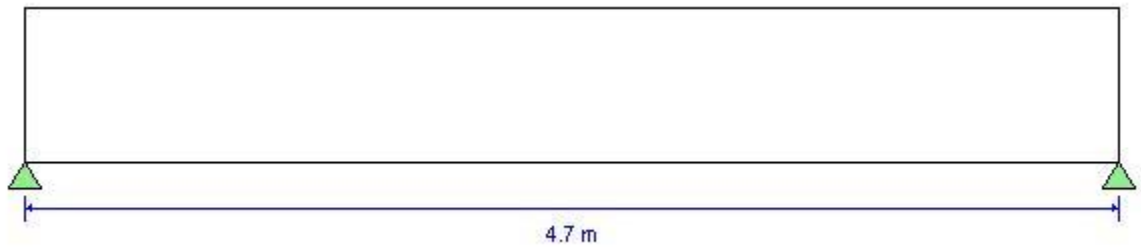
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B22  
Section Property = Viga45\*50  
Length = 4.7 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

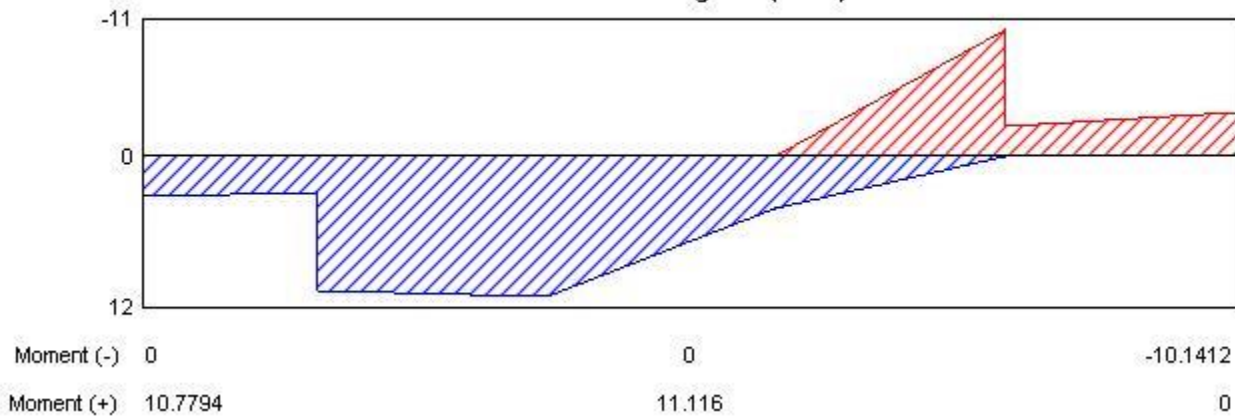


### Material Properties

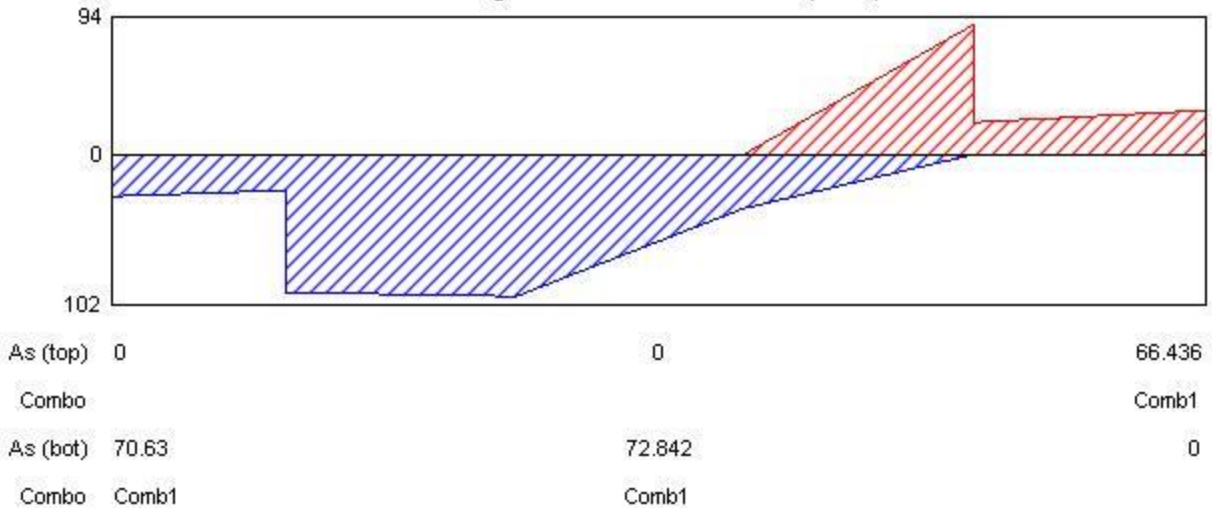
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



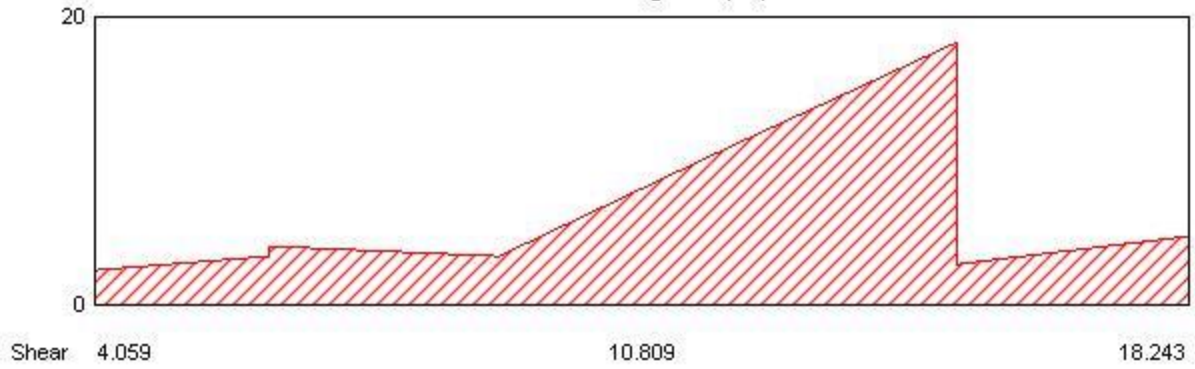
**Moment Diagram (kN-m)**



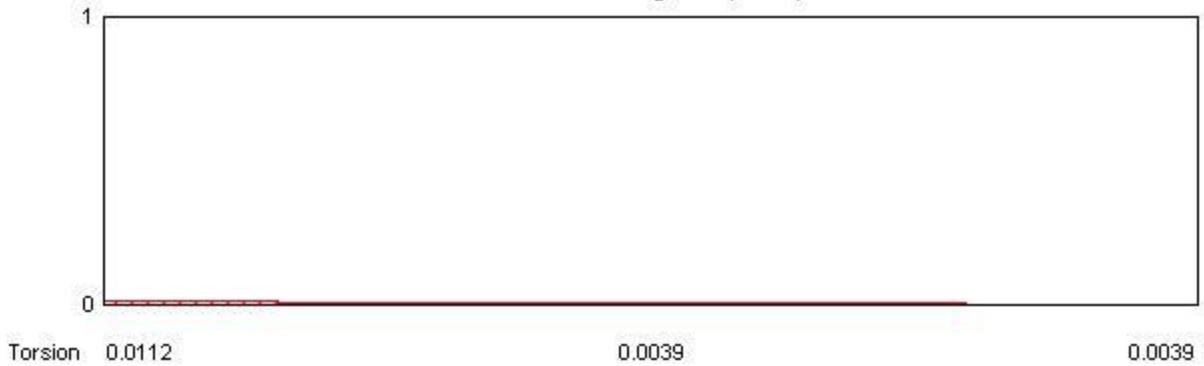
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



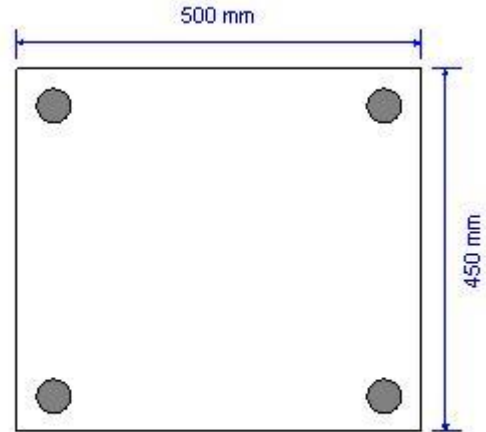
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B23  
Section Property = Viga45\*50  
Length = 6.05 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

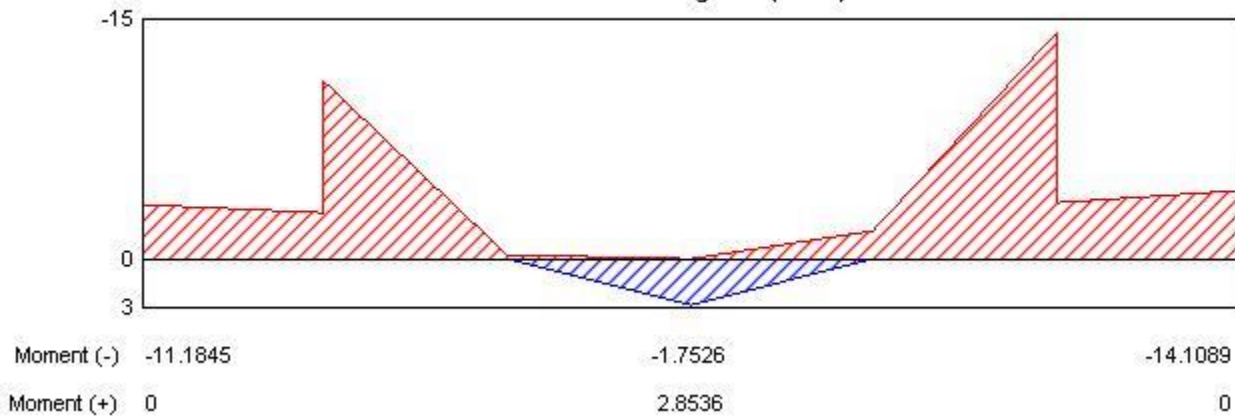


### Material Properties

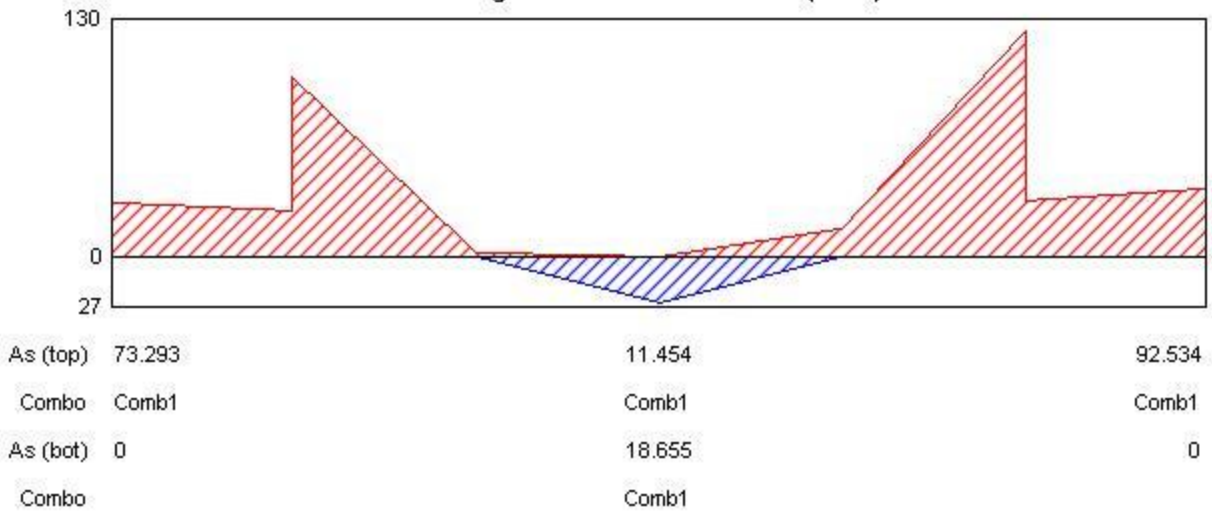
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



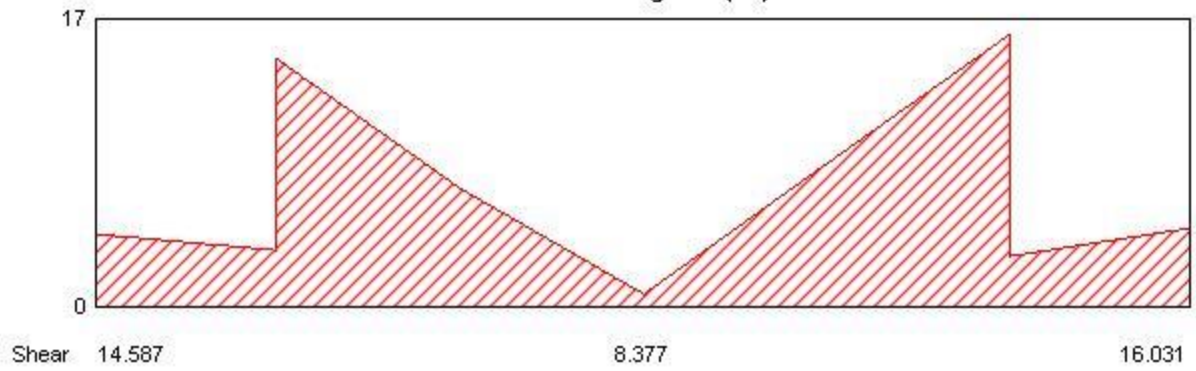
**Moment Diagram (kN-m)**



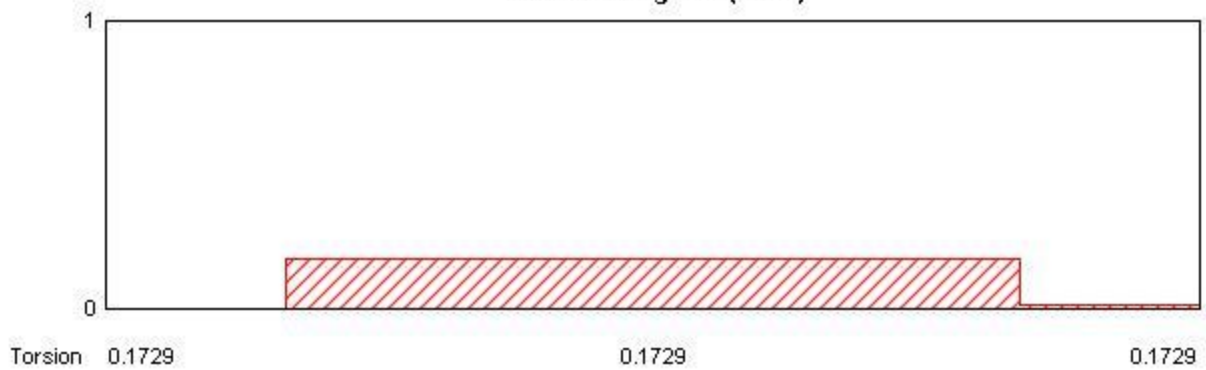
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



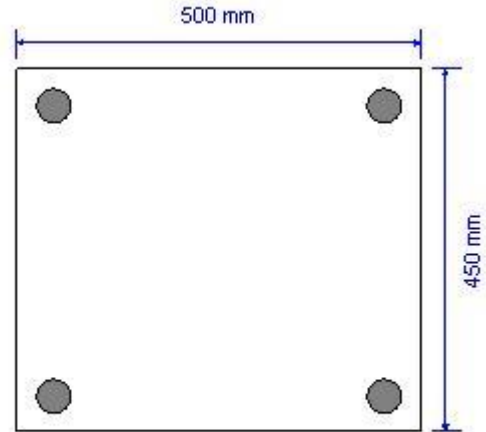
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B24  
Section Property = Viga45\*50  
Length = 7.08 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

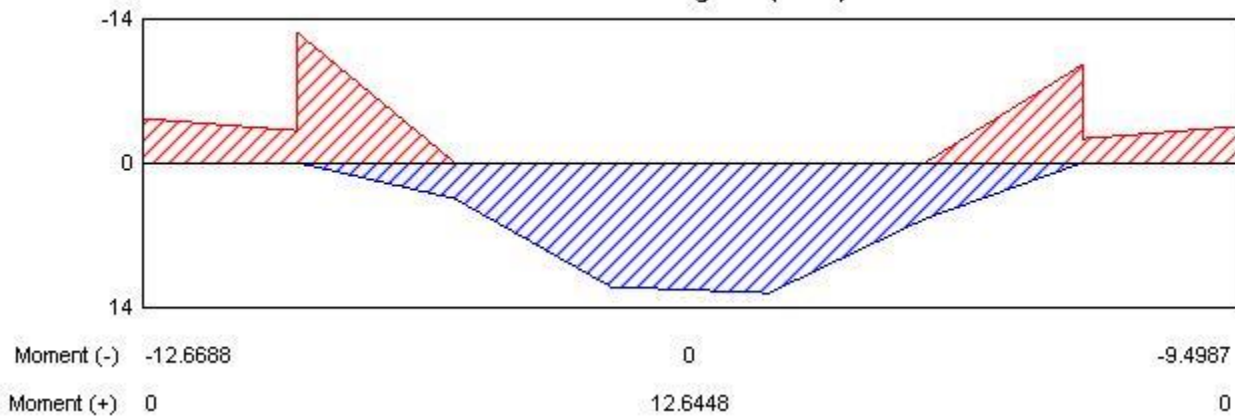


### Material Properties

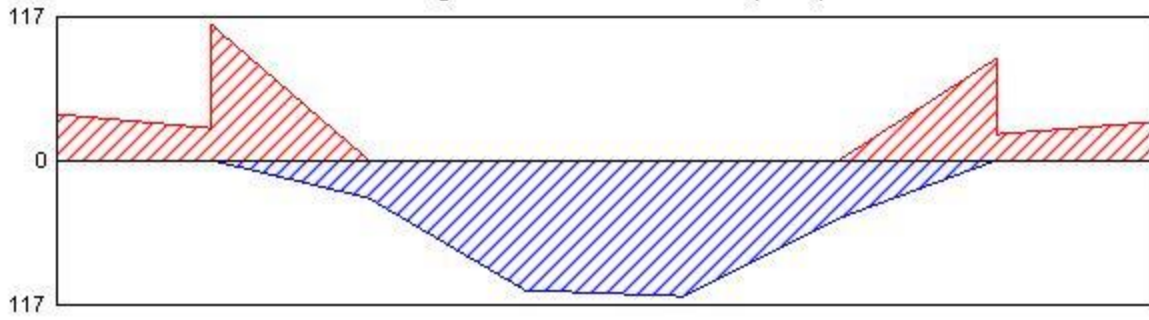
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



**Moment Diagram (kN-m)**

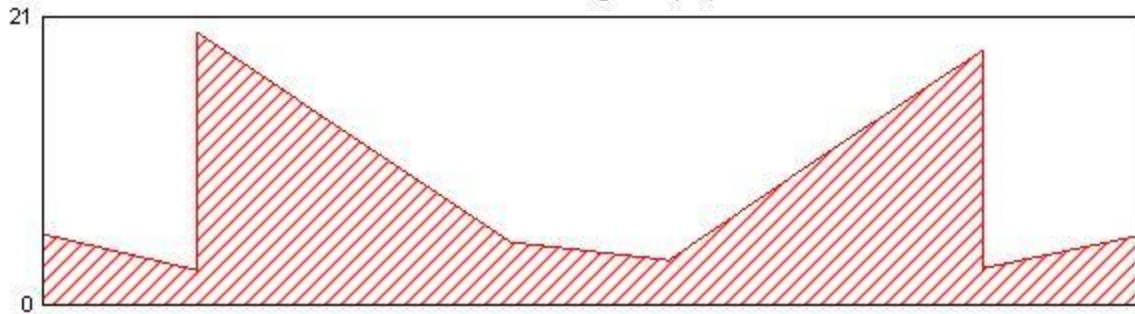


**Longitudinal Reinforcement (mm<sup>2</sup>)**



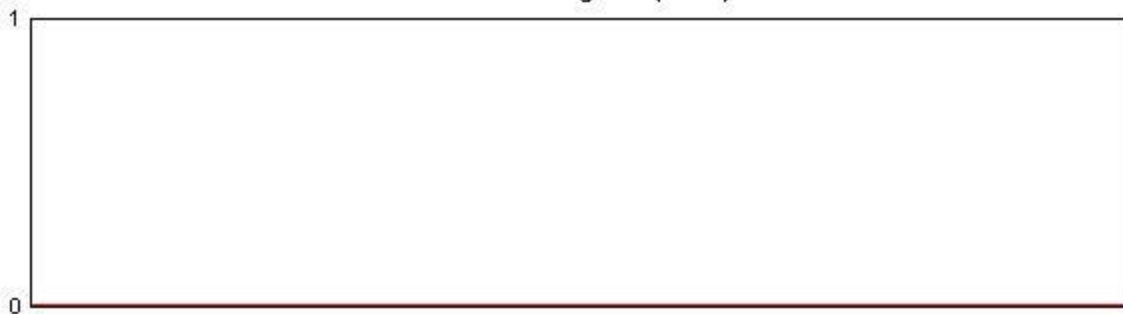
As (top)	83.055	0	62.215
Combo	Comb1		Comb1
As (bot)	0	82.897	0
Combo		Comb1	

**Shear Diagram (kN)**



Shear	19.826	12.145	18.578
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**Torsion Diagram (kN-m)**

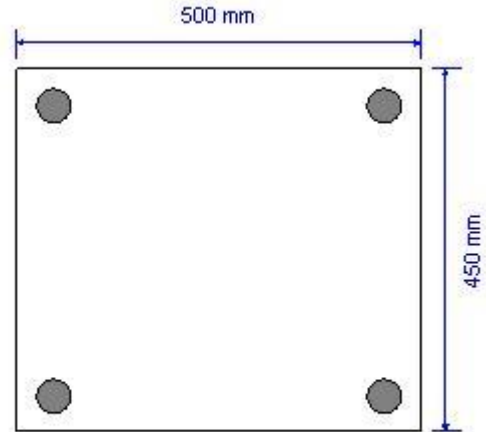


Torsion	0.0078	0.0051	0.0102
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## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B25  
Section Property = Viga45\*50  
Length = 4.82 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

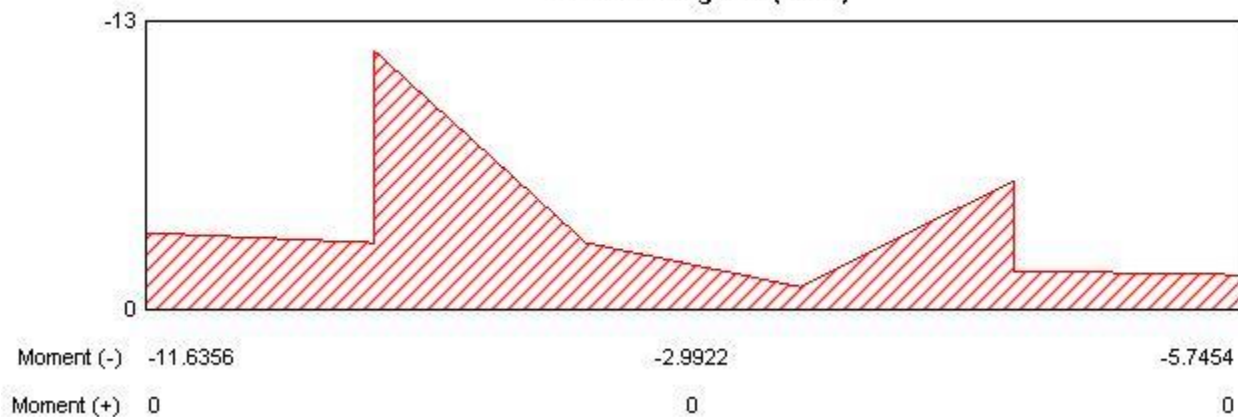


### Material Properties

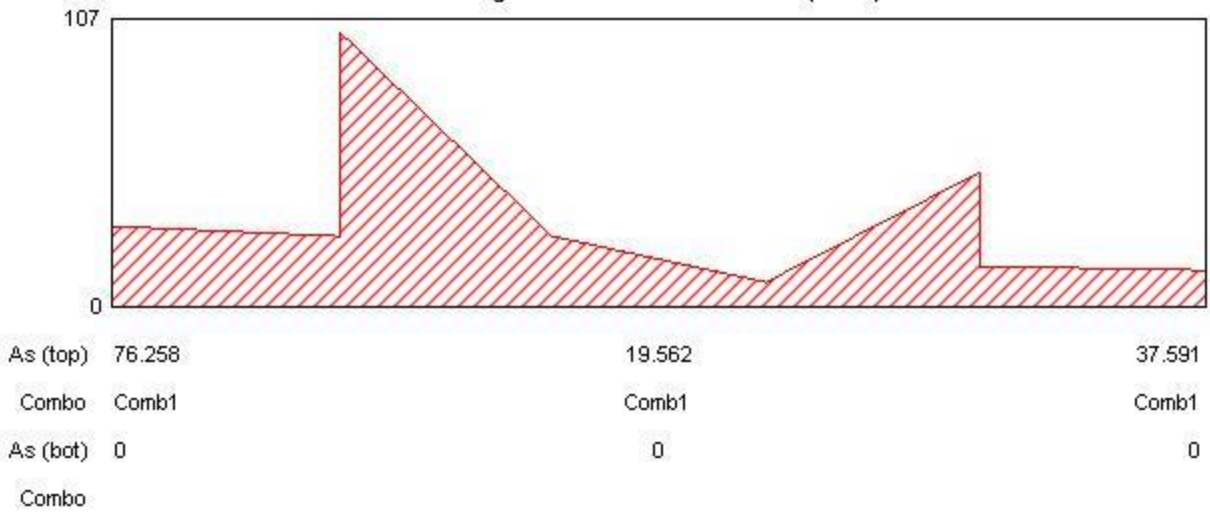
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



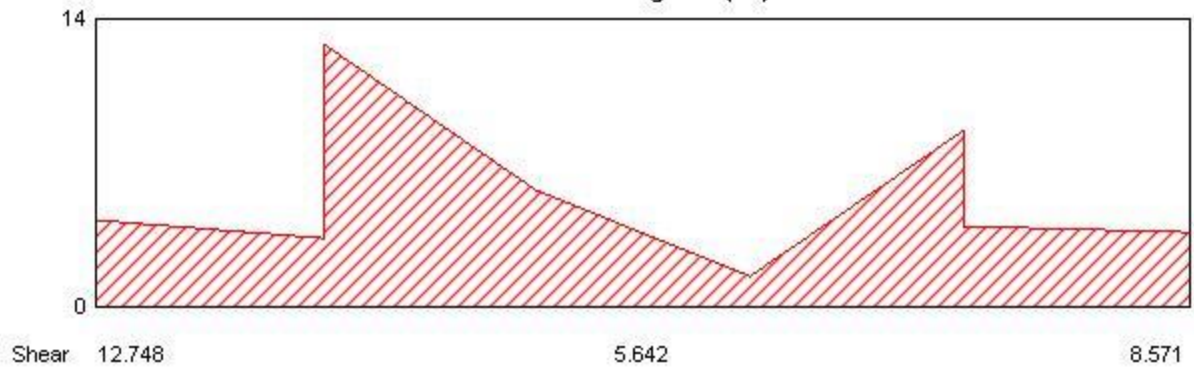
**Moment Diagram (kN-m)**



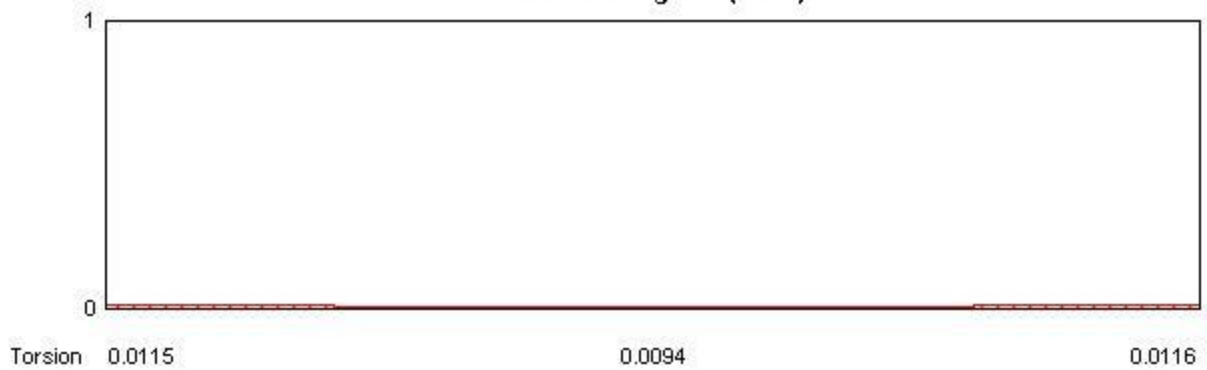
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



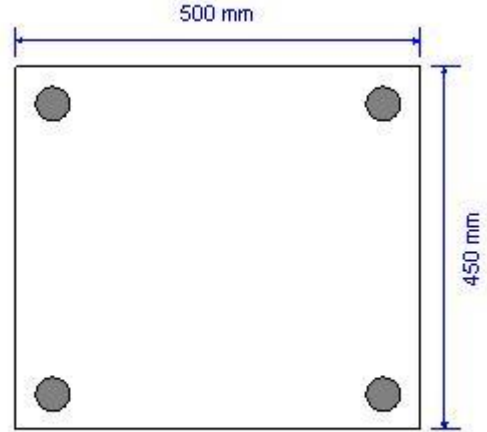
**Torsion Diagram (kN-m)**



# ACI 318-14 Concrete Beam Design

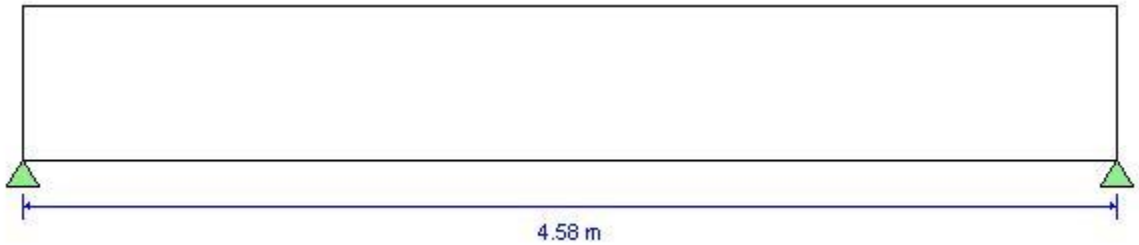
## Geometric Properties

Combination = Overall Envelope  
 Beam Label = B26  
 Section Property = Viga45\*50  
 Length = 4.58 m  
 Section Width = 500 mm  
 Section Depth = 450 mm  
 Distance to Top Rebar Center = 45 mm  
 Distance to Bot Rebar Center = 45 mm

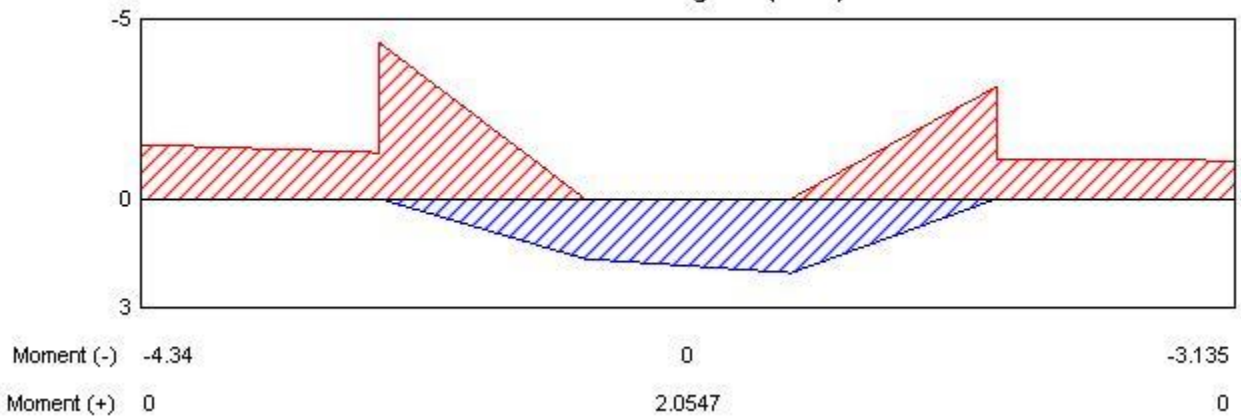


## Material Properties

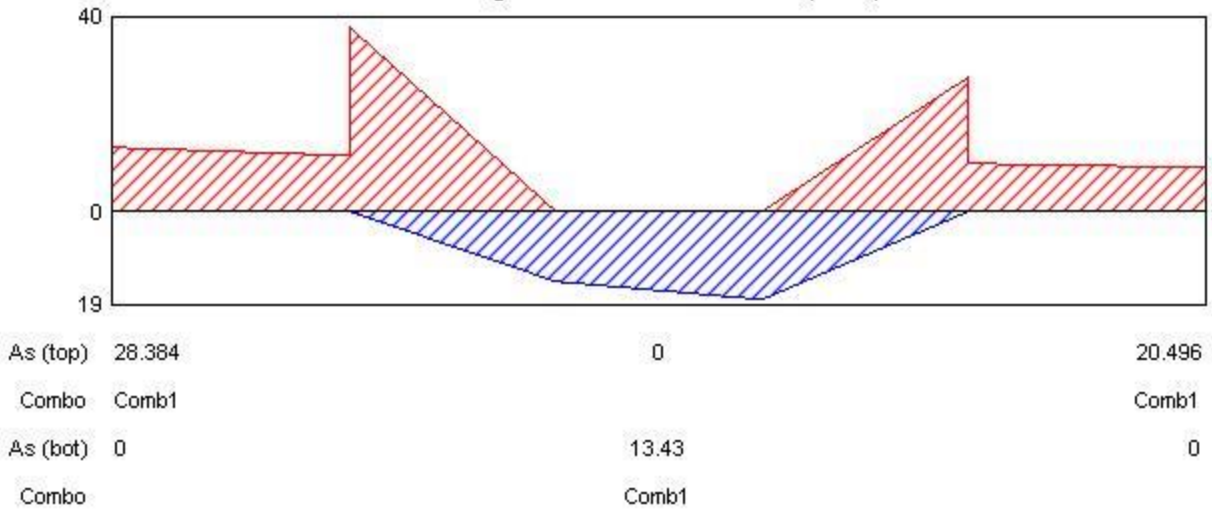
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
 Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
 Shear Rebar Yield = 420 N/mm<sup>2</sup>



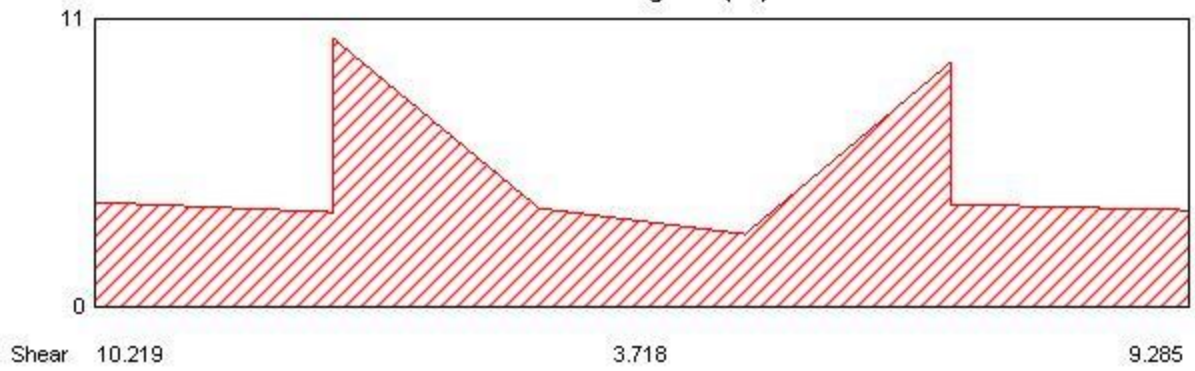
**Moment Diagram (kN-m)**



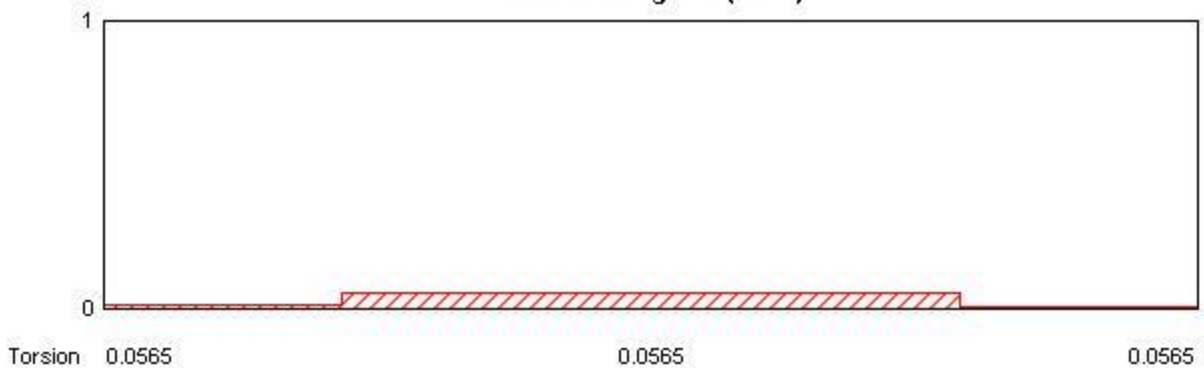
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



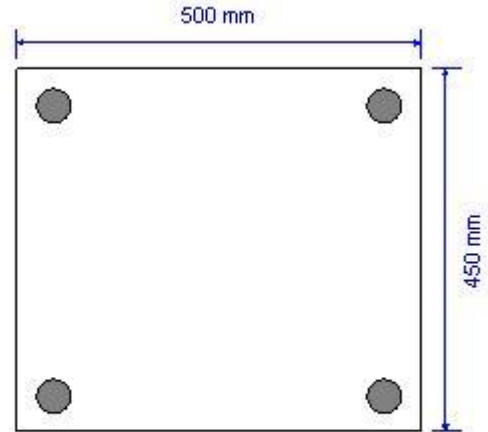
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

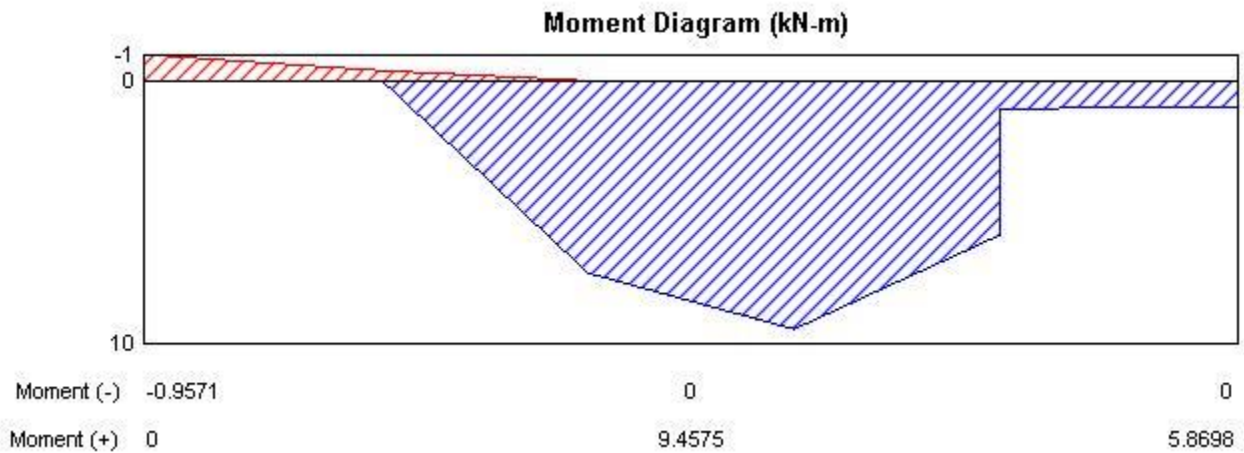
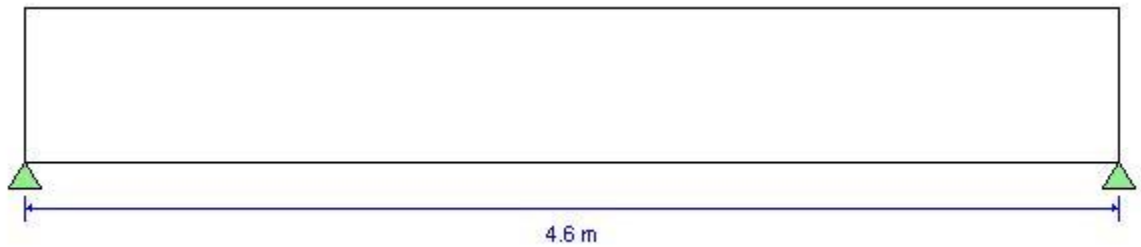
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B27  
Section Property = Viga45\*50  
Length = 4.6 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

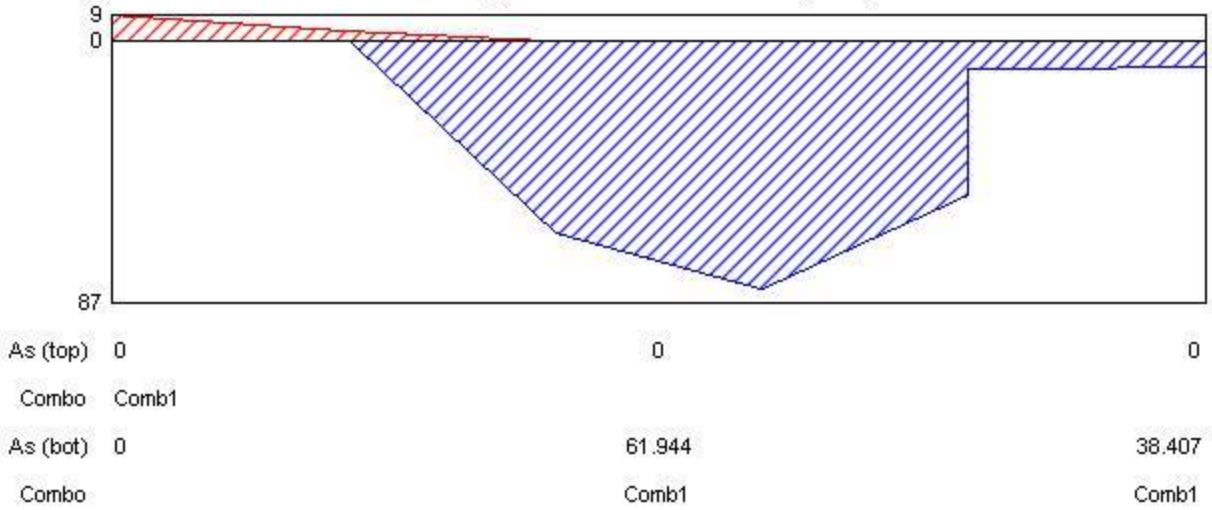


### Material Properties

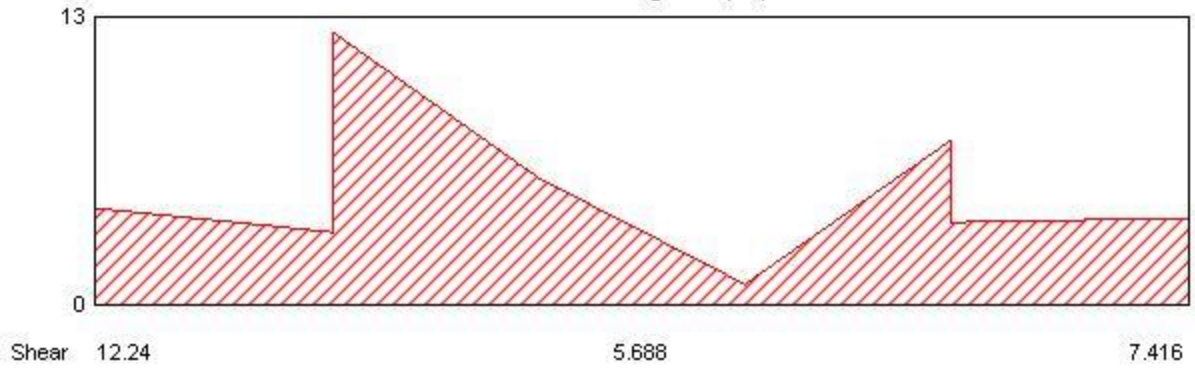
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



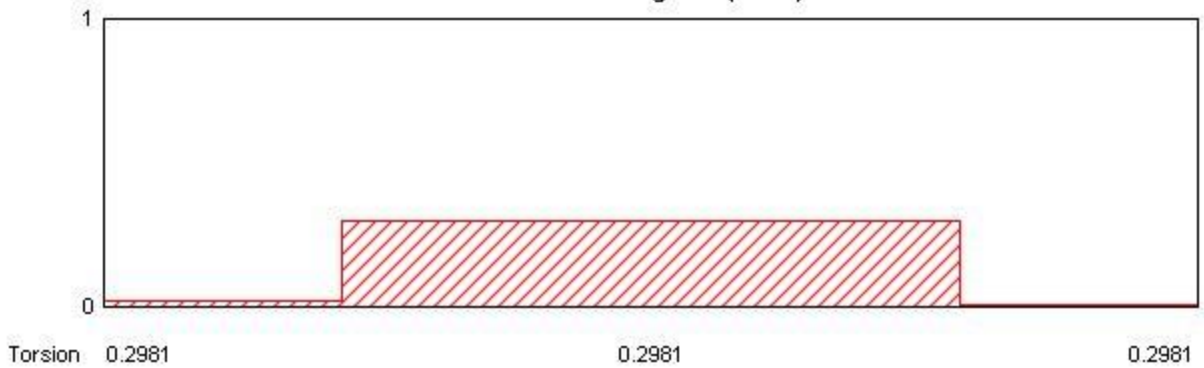
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



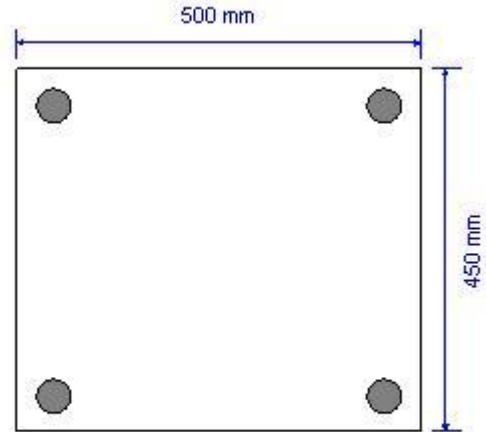
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

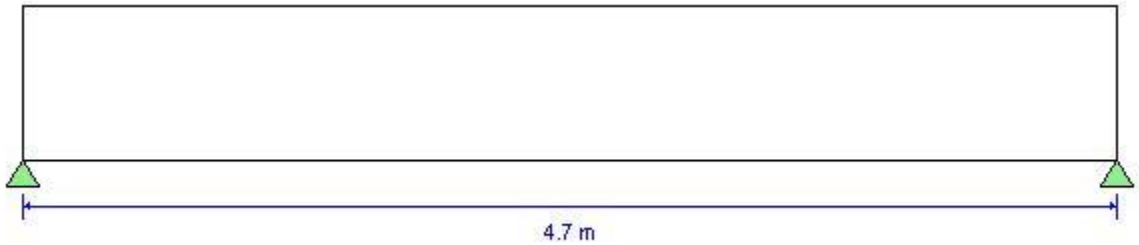
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B29  
Section Property = Viga45\*50  
Length = 4.7 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

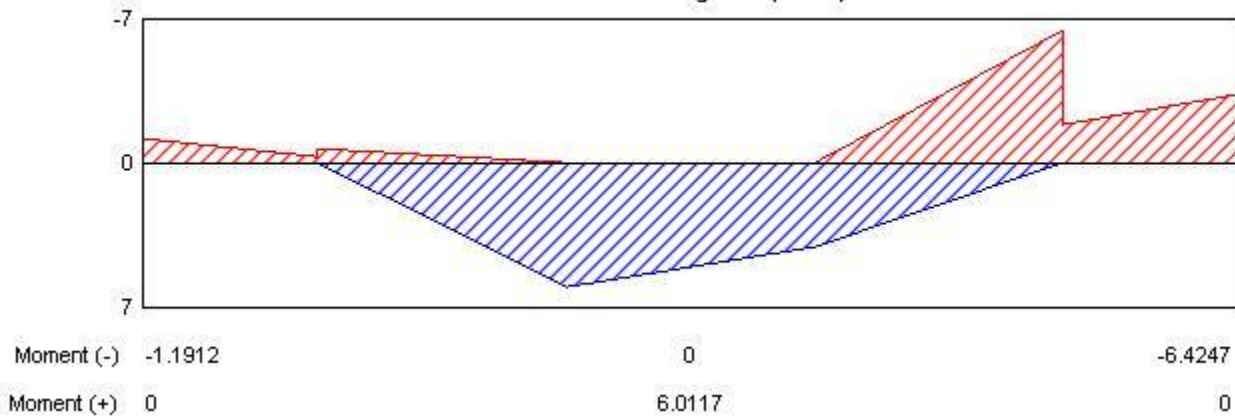


### Material Properties

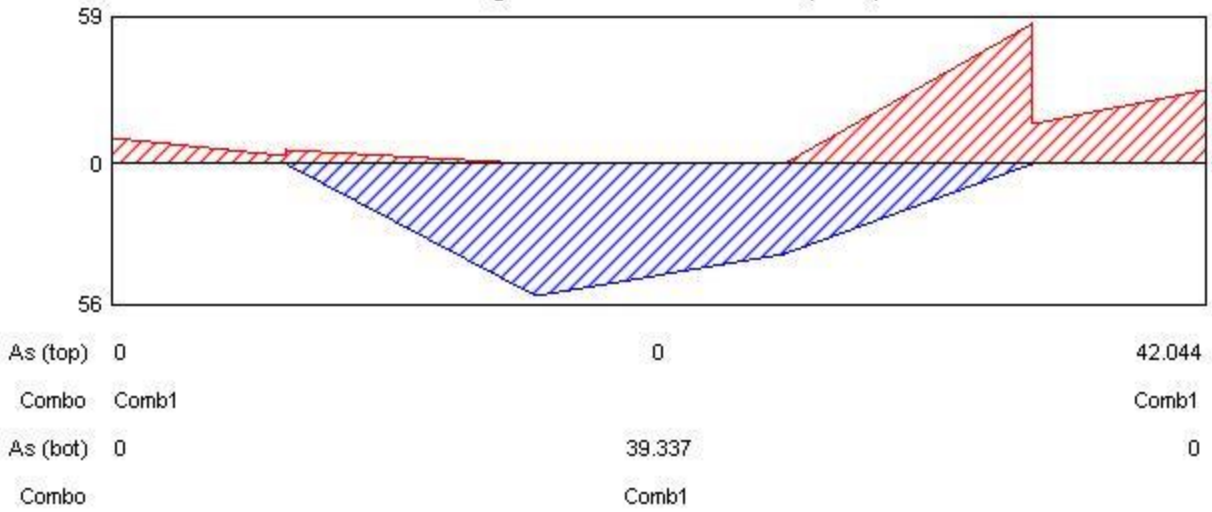
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



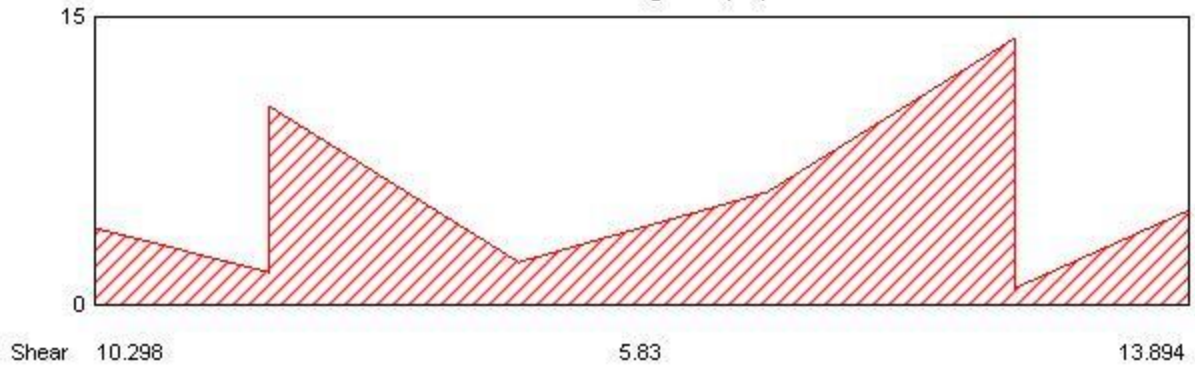
**Moment Diagram (kN-m)**



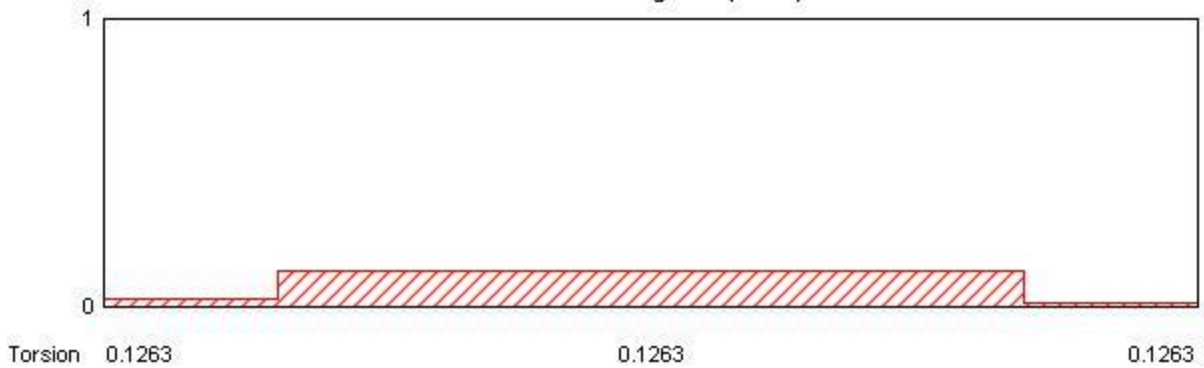
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



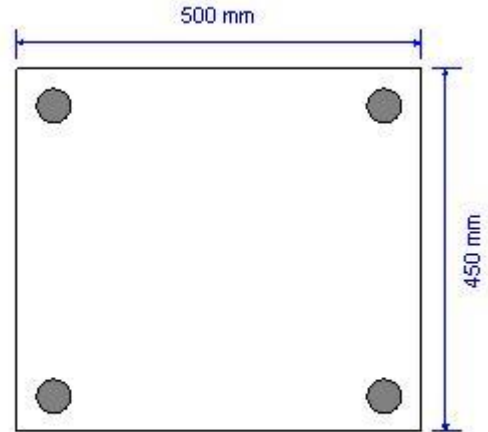
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B30  
Section Property = Viga45\*50  
Length = 6.05 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

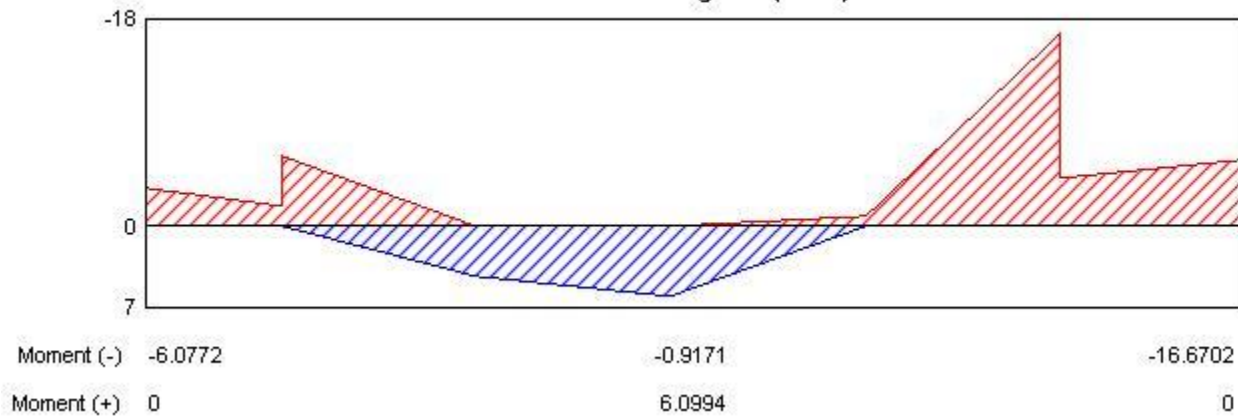


### Material Properties

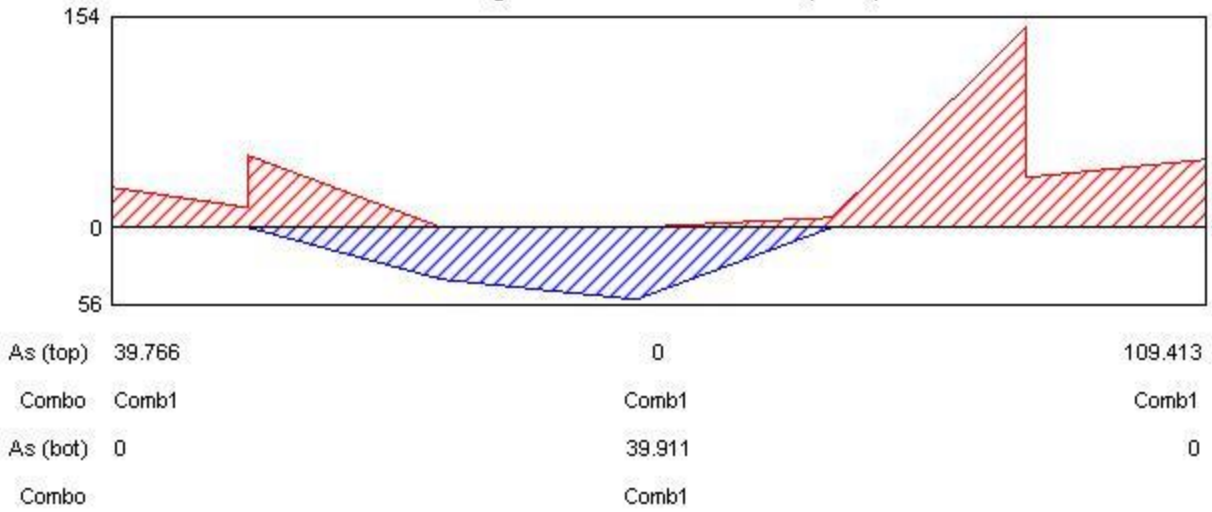
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



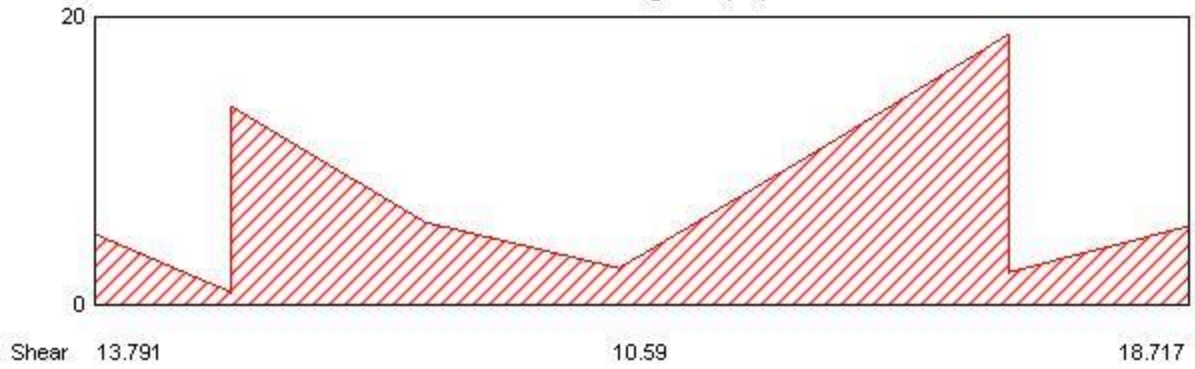
Moment Diagram (kN-m)



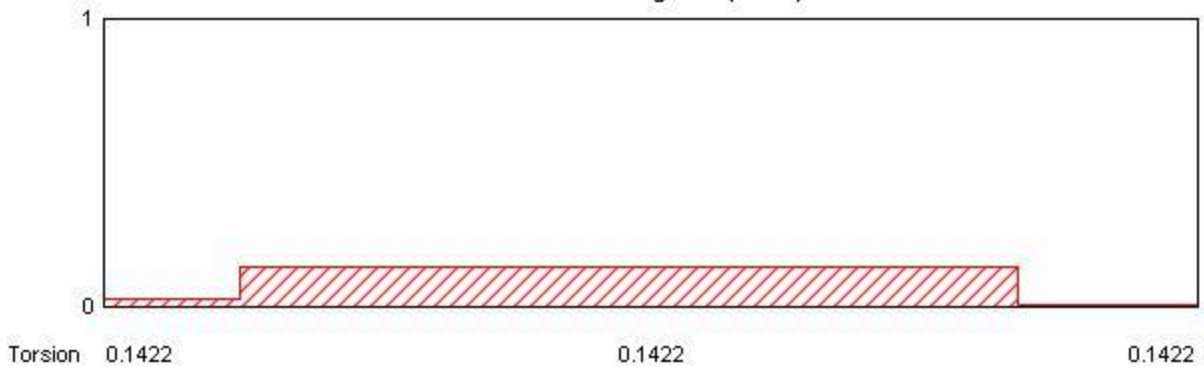
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



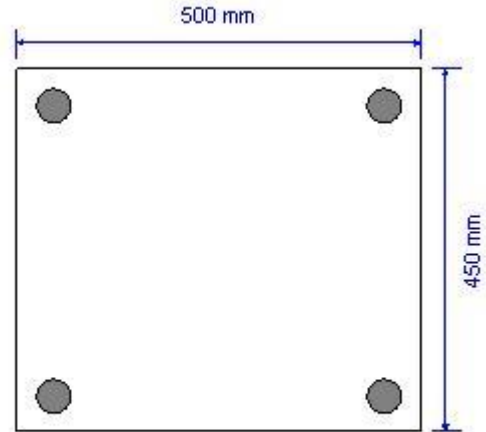
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B31  
Section Property = Viga45\*50  
Length = 7.08 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

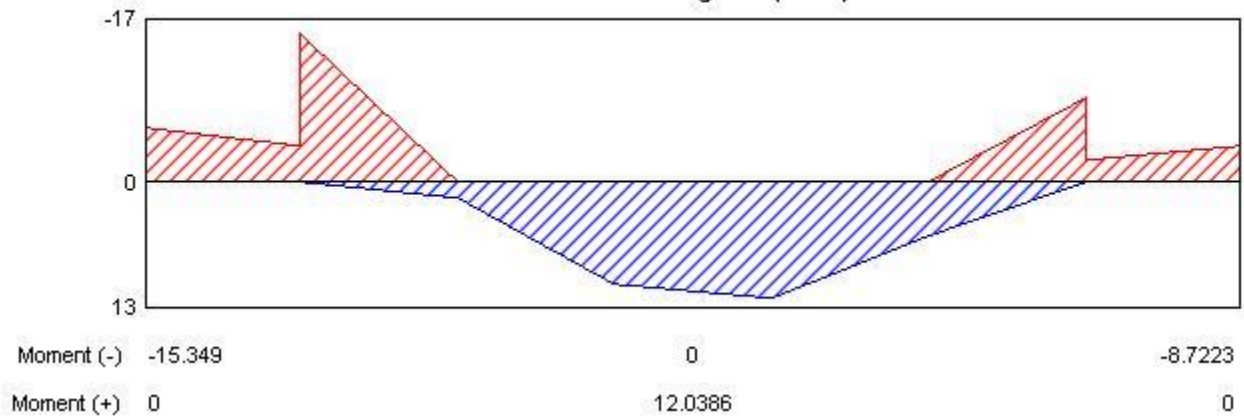


### Material Properties

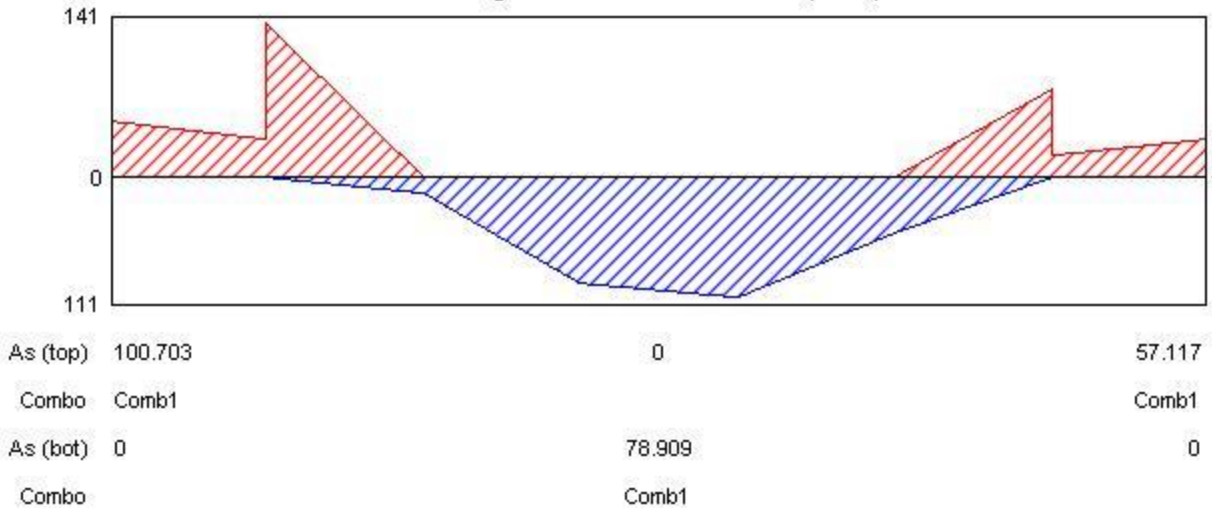
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



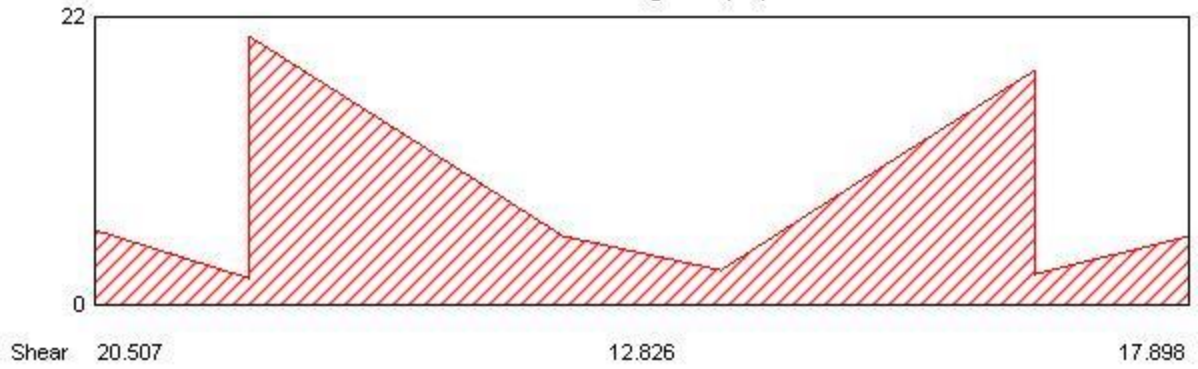
**Moment Diagram (kN-m)**



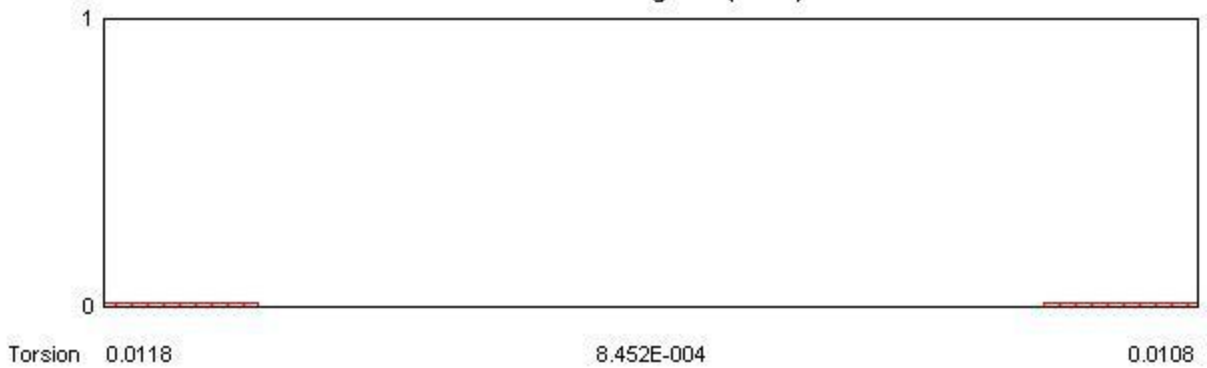
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



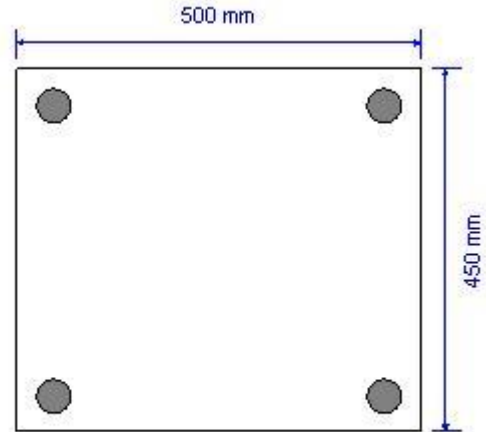
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

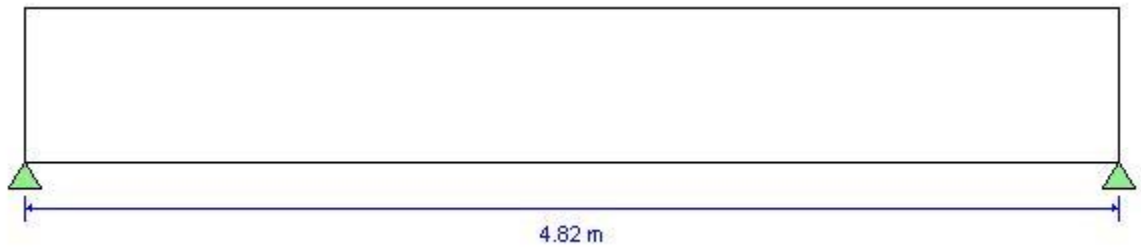
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B32  
Section Property = Viga45\*50  
Length = 4.82 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

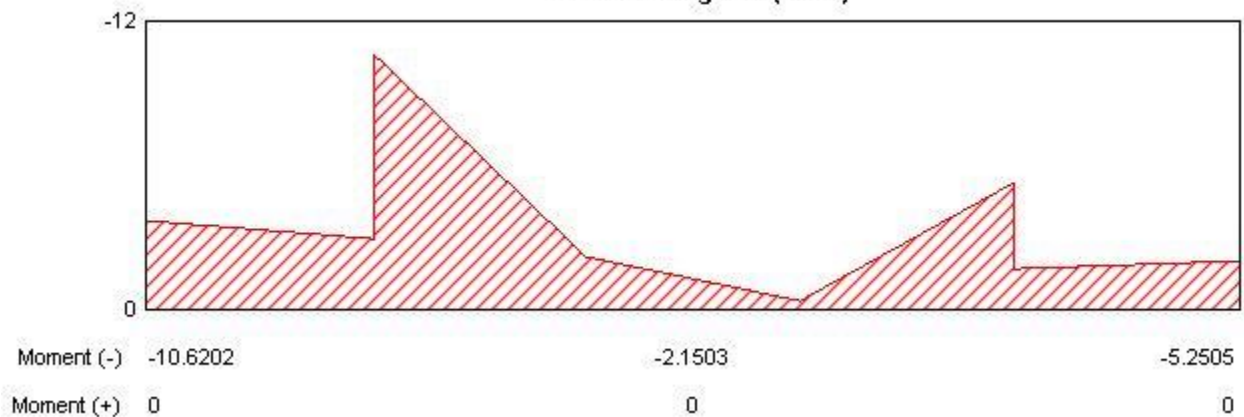


### Material Properties

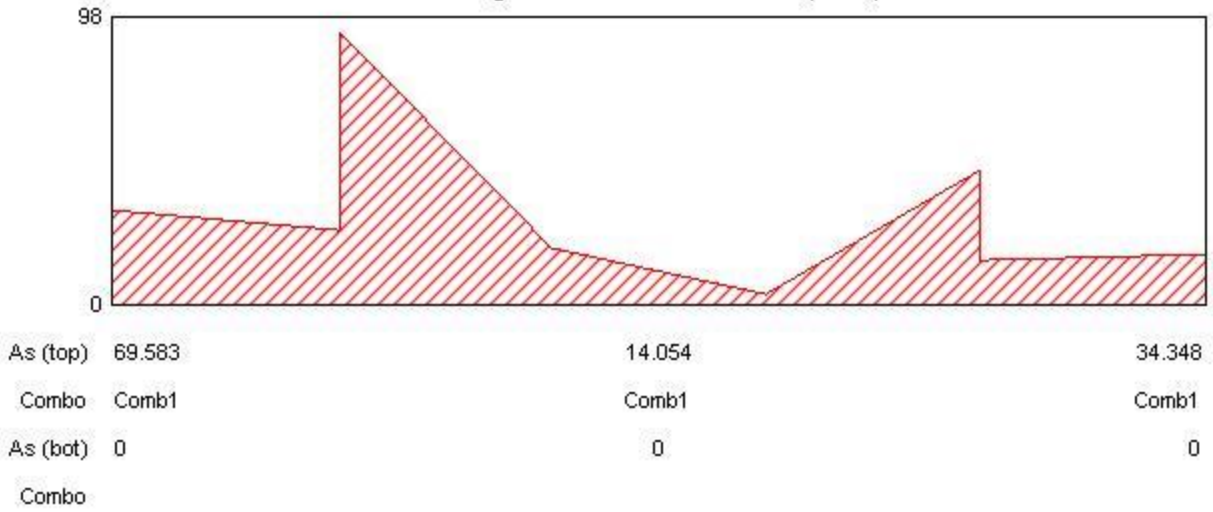
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



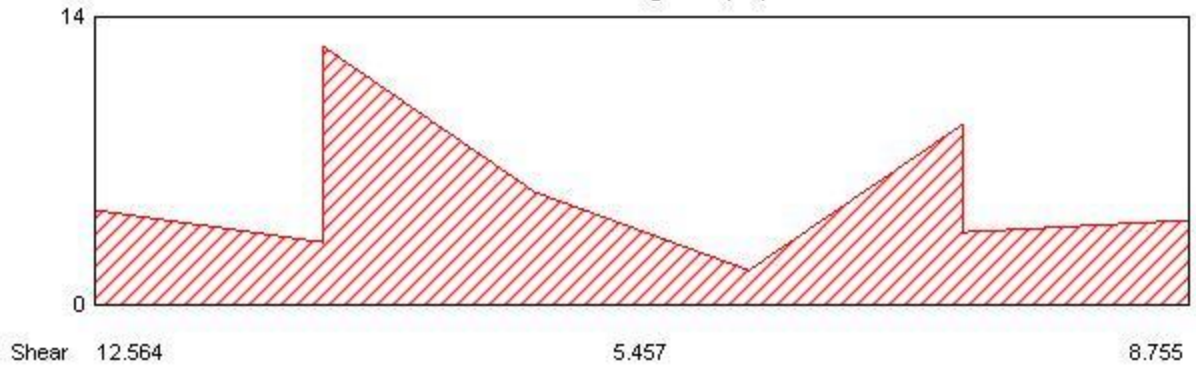
**Moment Diagram (kN-m)**



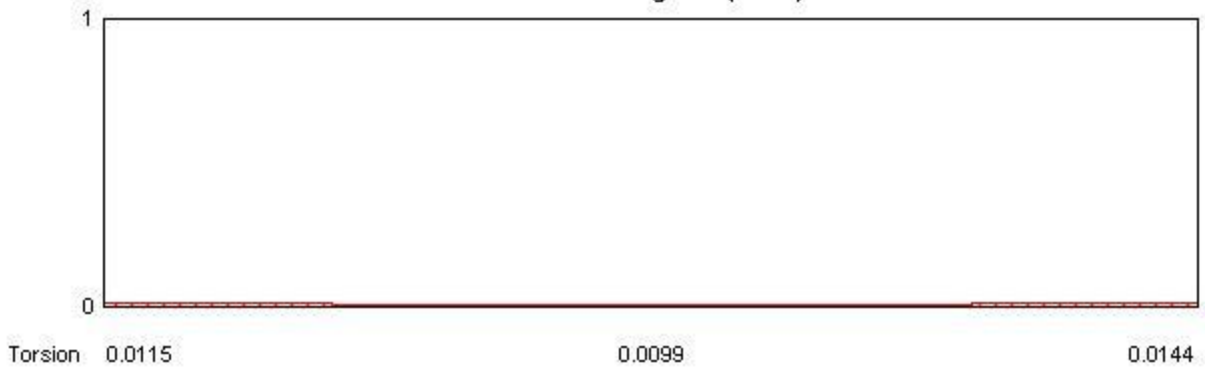
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



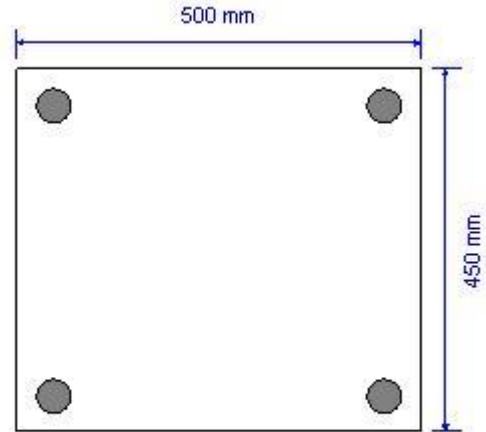
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

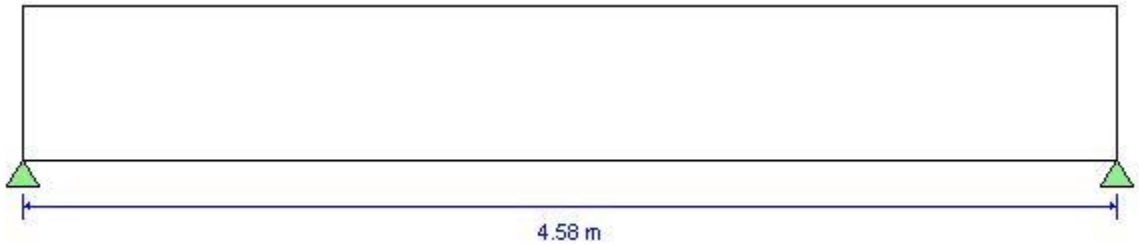
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B33  
Section Property = Viga45\*50  
Length = 4.58 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

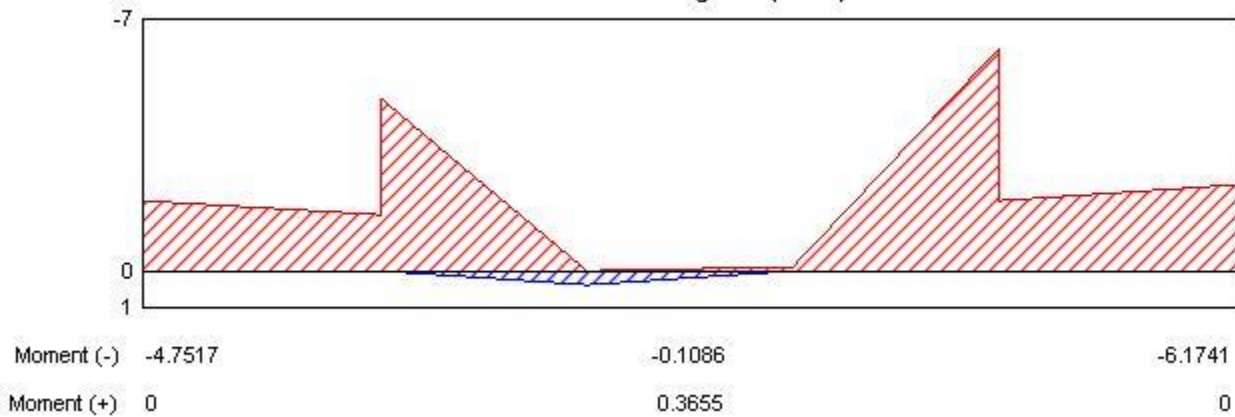


### Material Properties

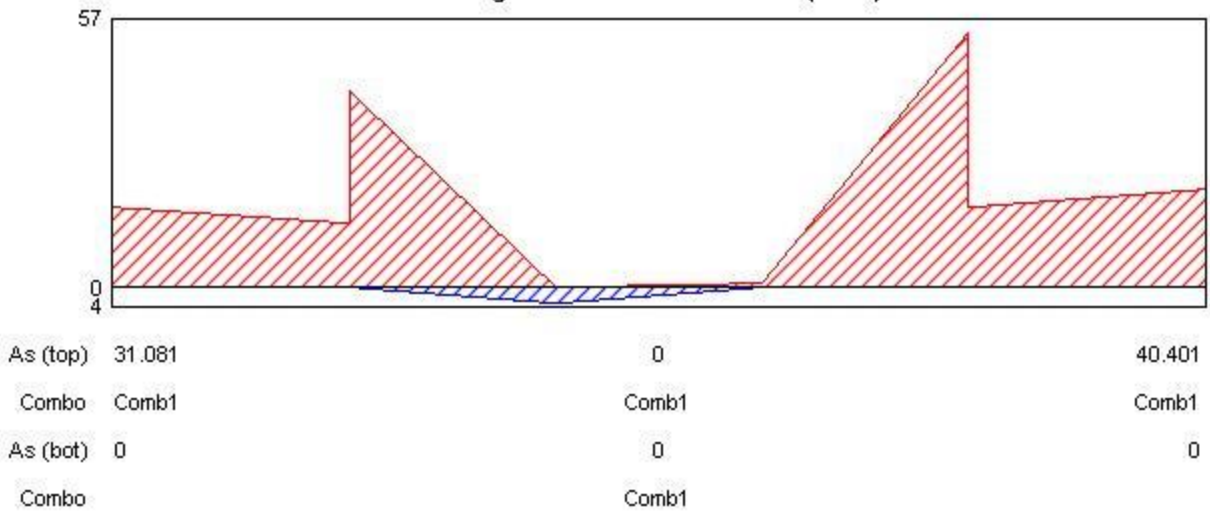
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



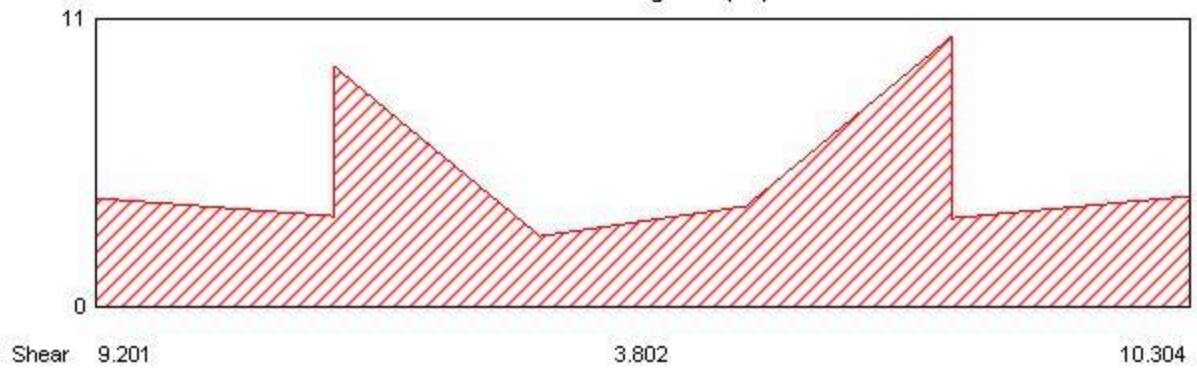
**Moment Diagram (kN-m)**



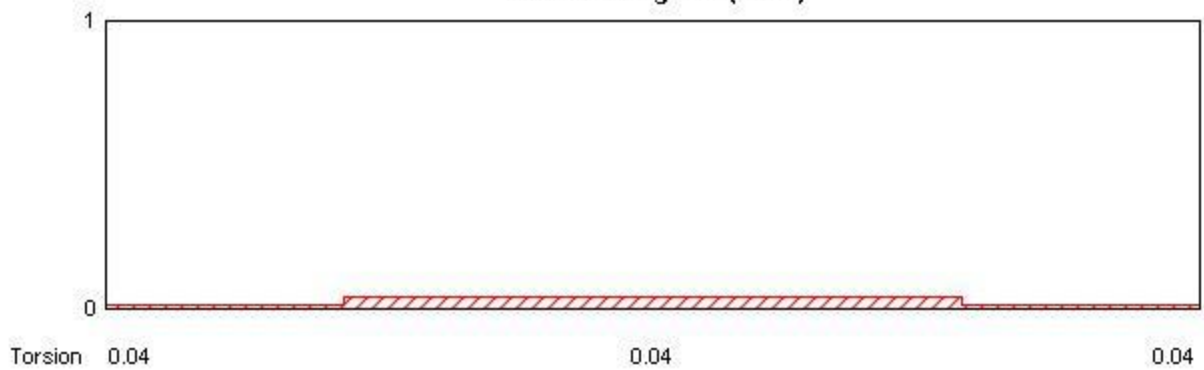
### Longitudinal Reinforcement (mm<sup>2</sup>)



### Shear Diagram (kN)



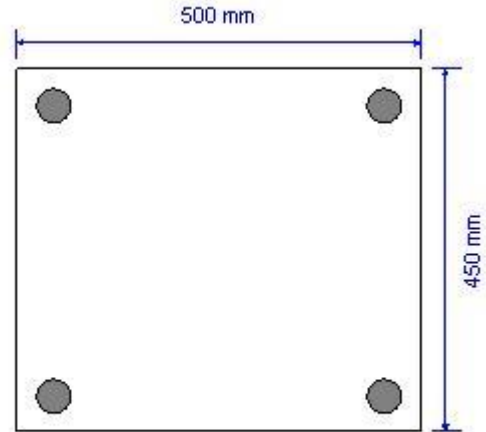
### Torsion Diagram (kN-m)



## ACI 318-14 Concrete Beam Design

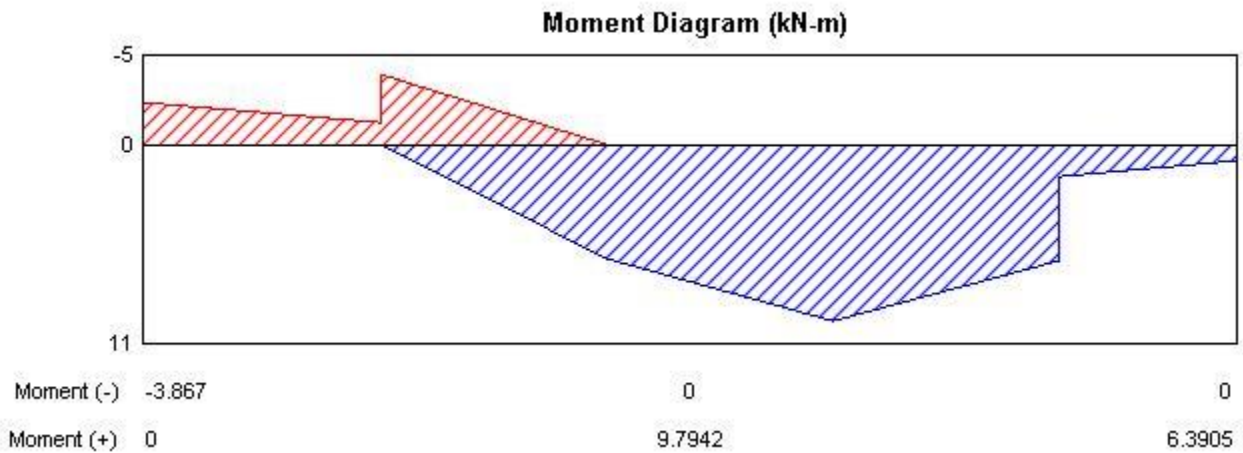
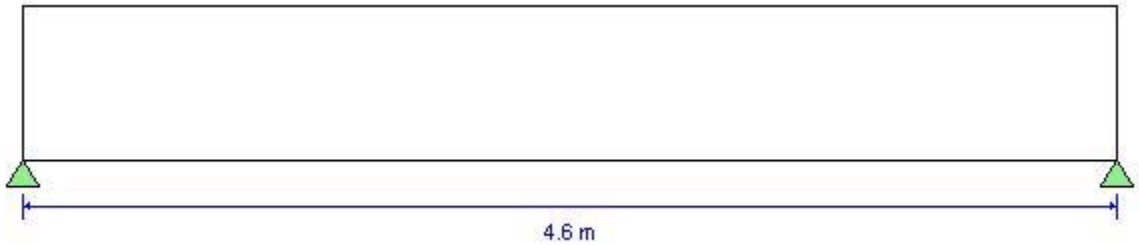
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B34  
Section Property = Viga45\*50  
Length = 4.6 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

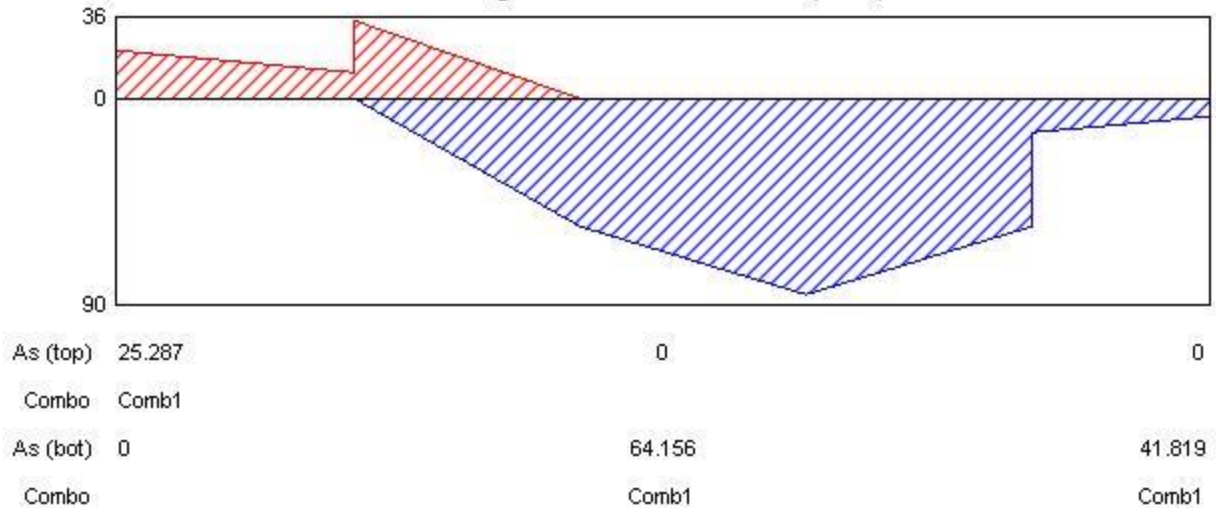


### Material Properties

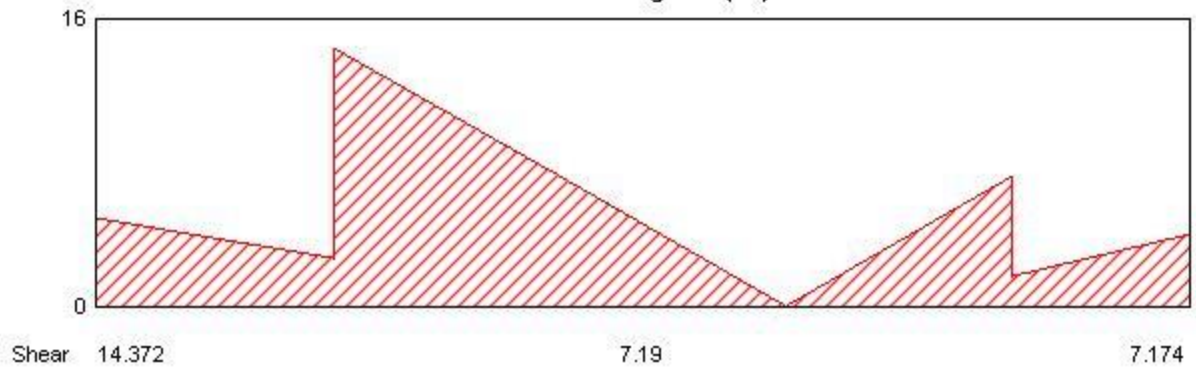
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



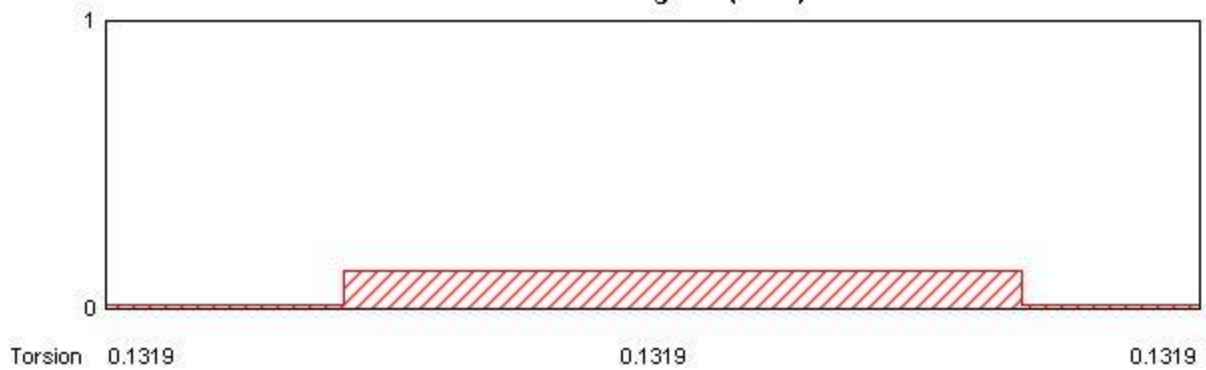
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



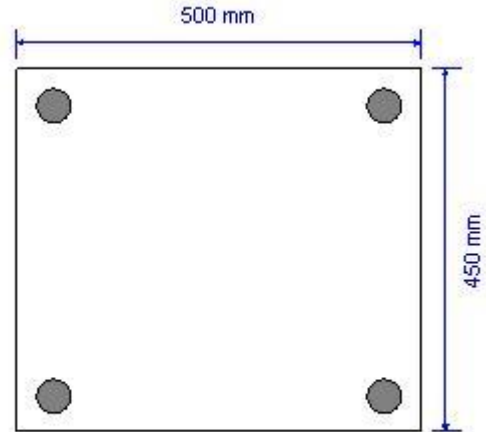
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

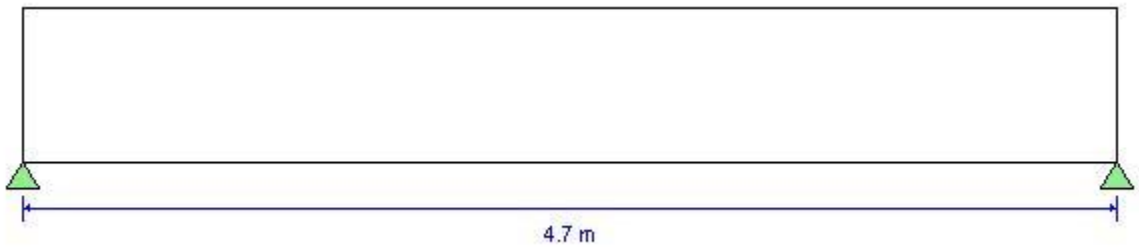
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B35  
Section Property = Viga45\*50  
Length = 4.7 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

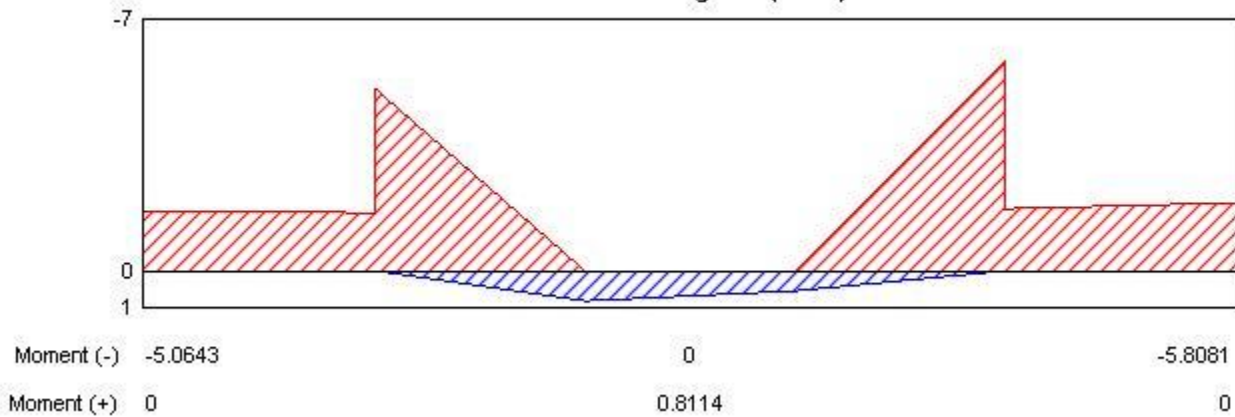


### Material Properties

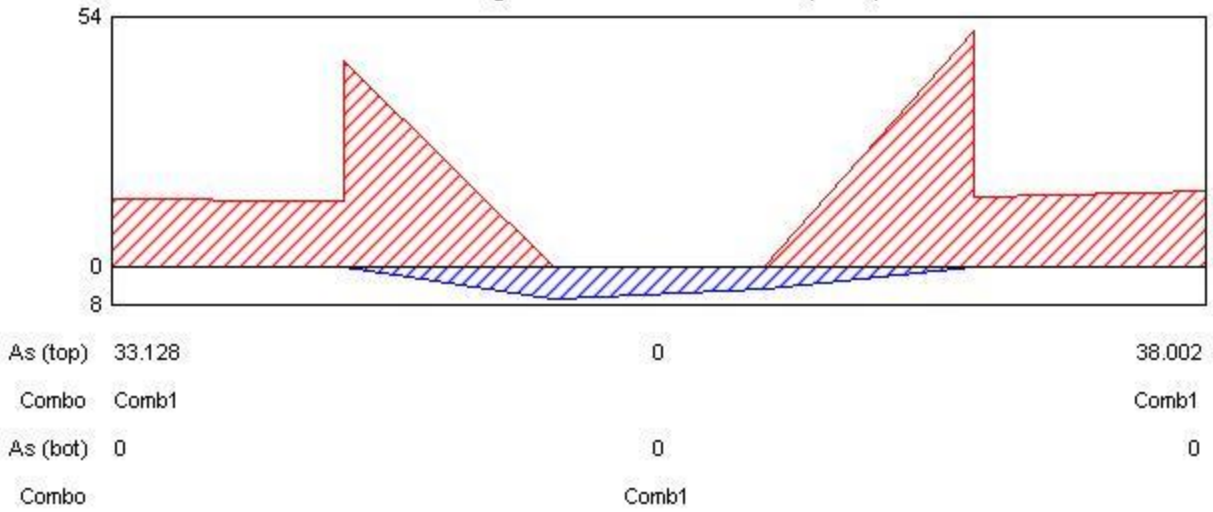
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



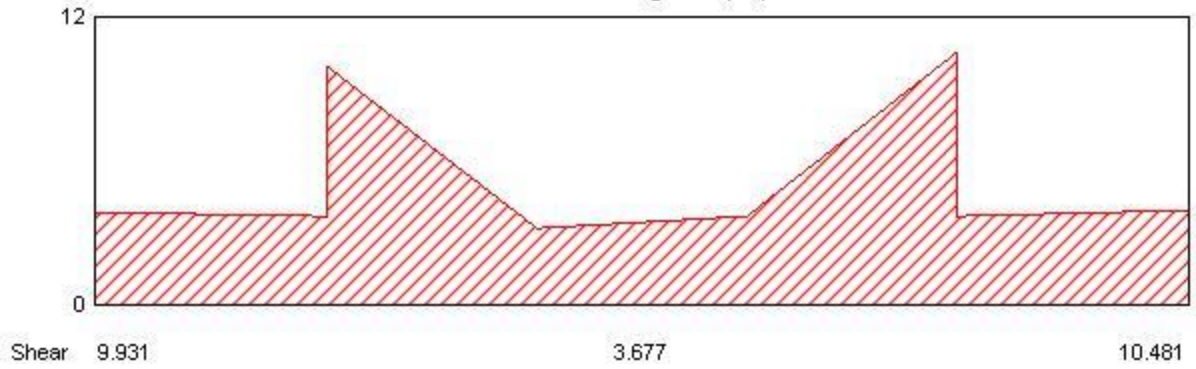
**Moment Diagram (kN-m)**



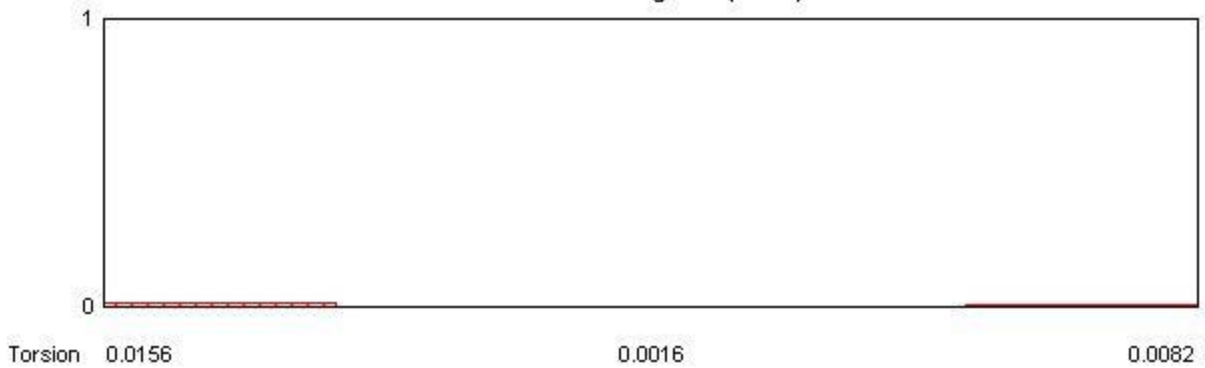
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



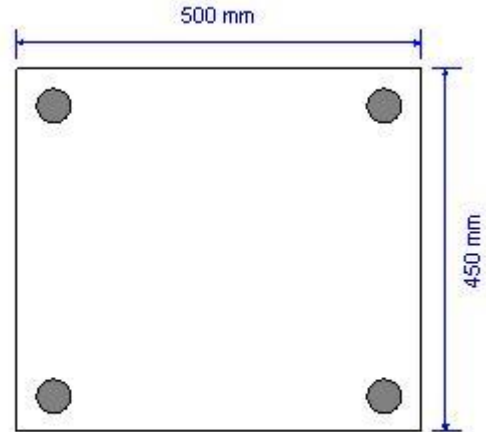
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B36  
Section Property = Viga45\*50  
Length = 6.05 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

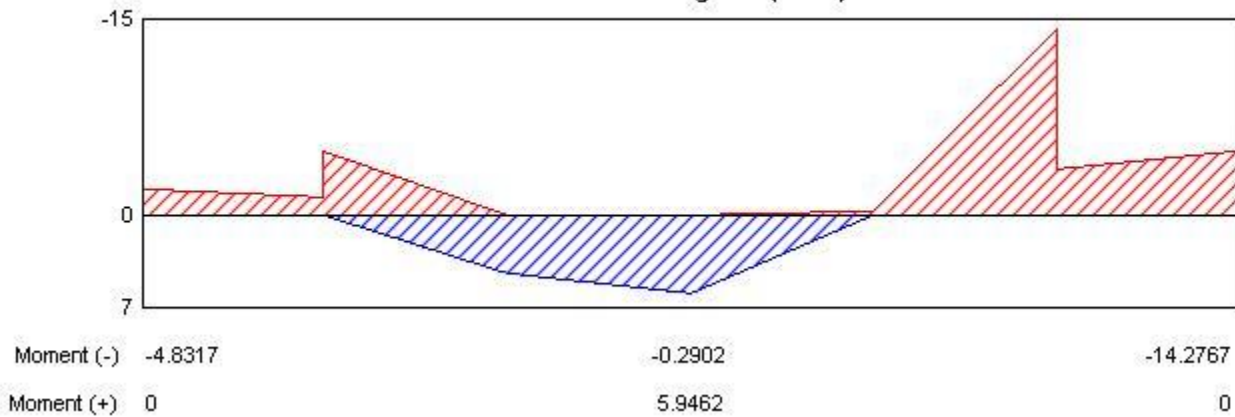


### Material Properties

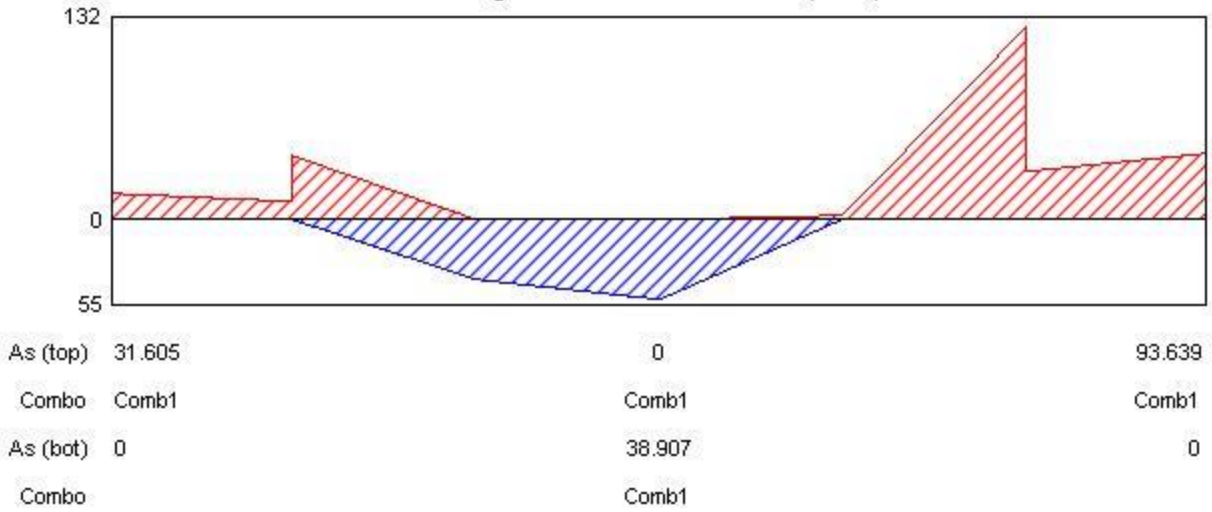
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



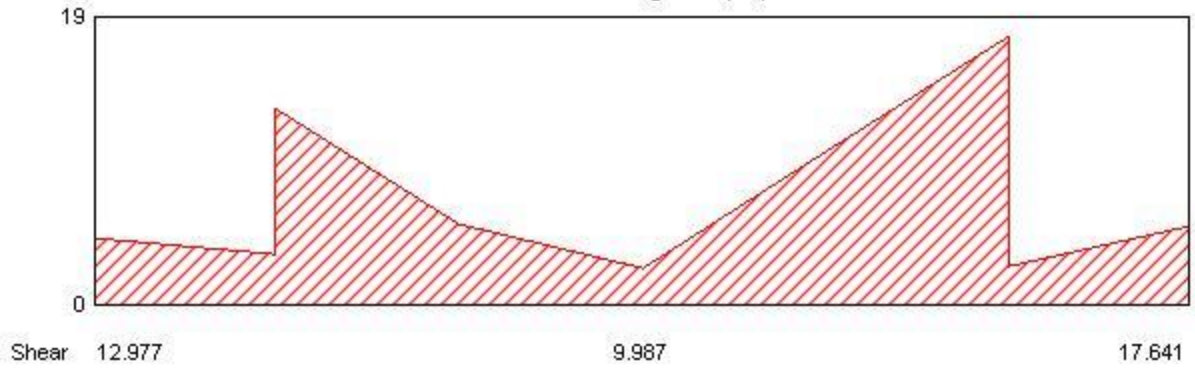
**Moment Diagram (kN-m)**



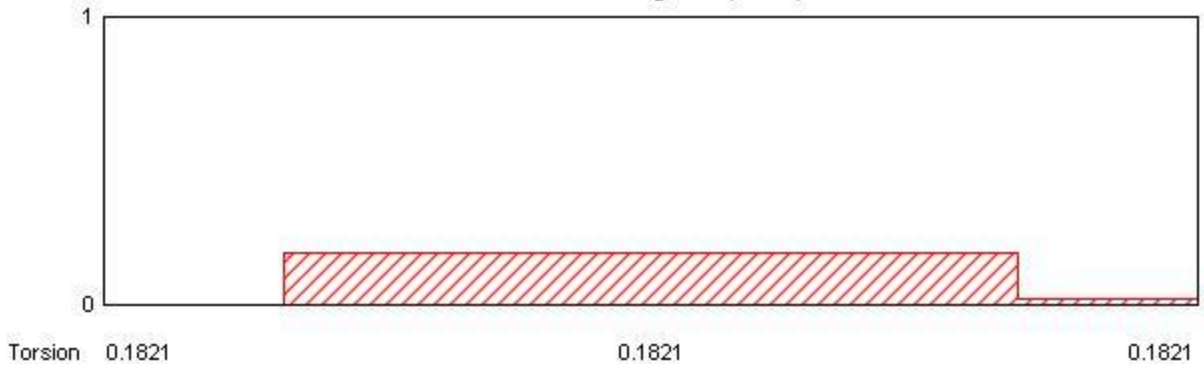
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



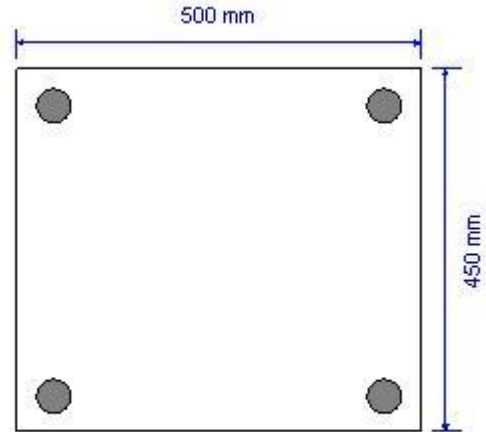
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B37  
Section Property = Viga45\*50  
Length = 7.08 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

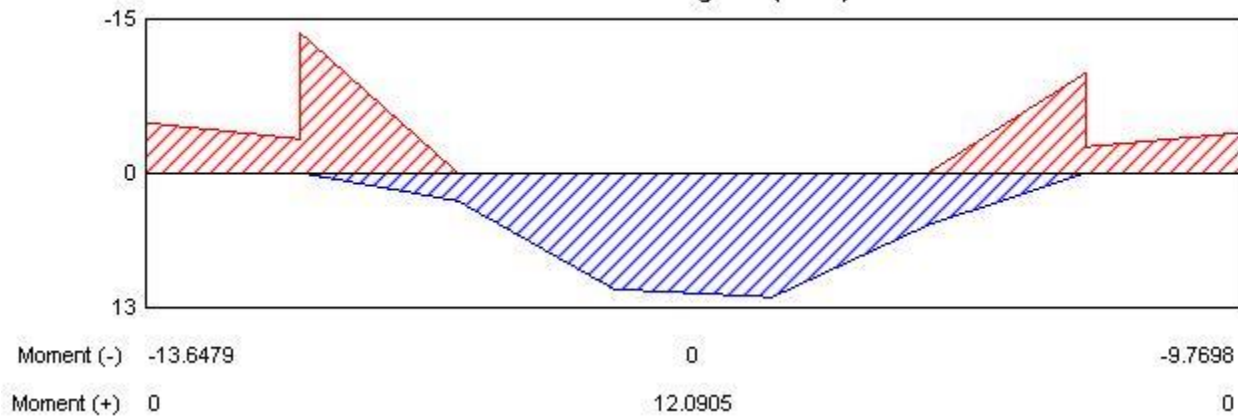


### Material Properties

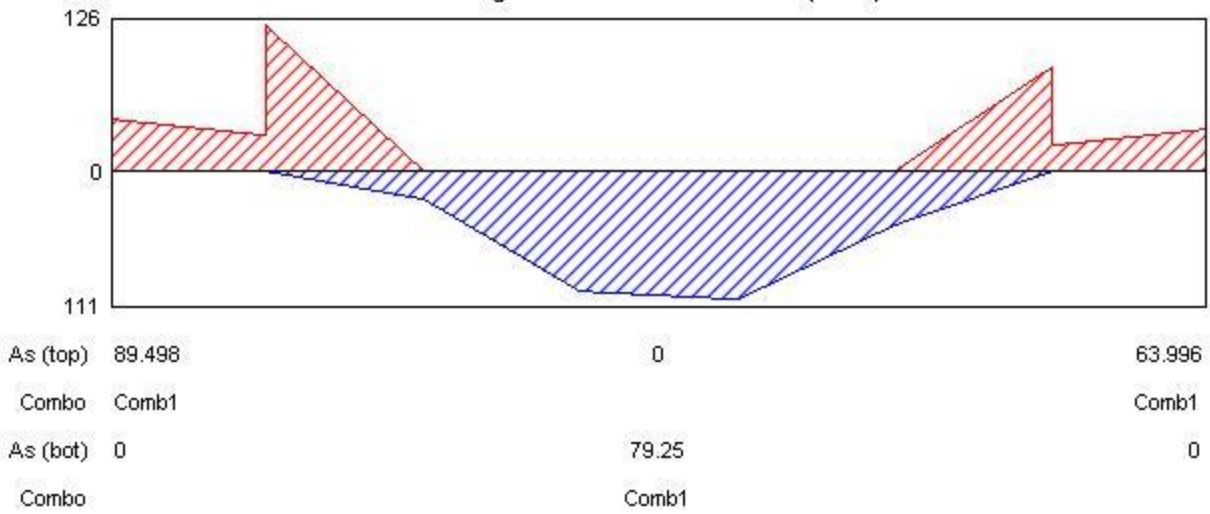
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



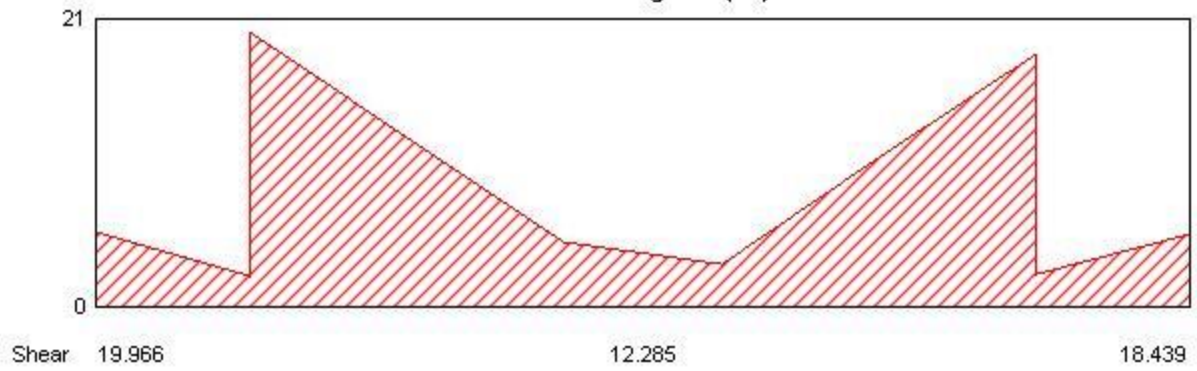
**Moment Diagram (kN-m)**



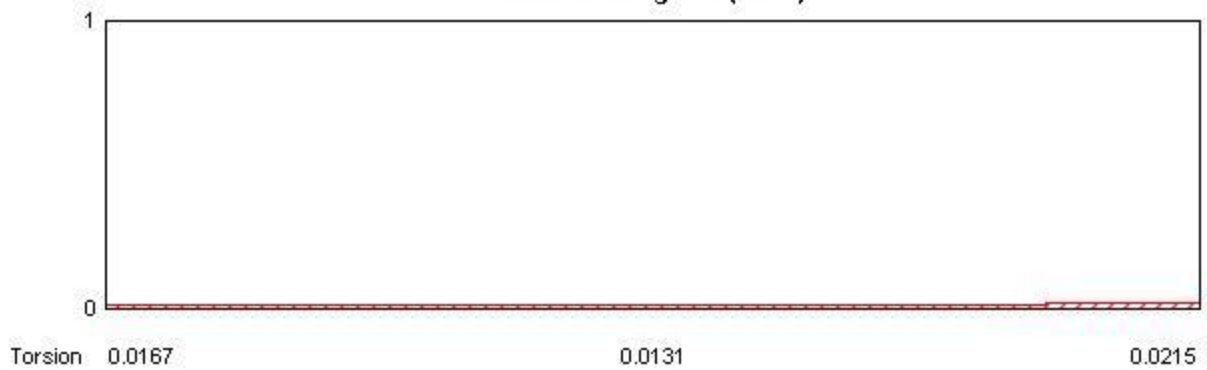
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



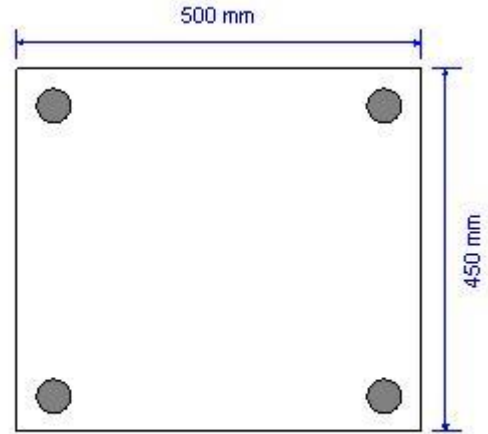
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

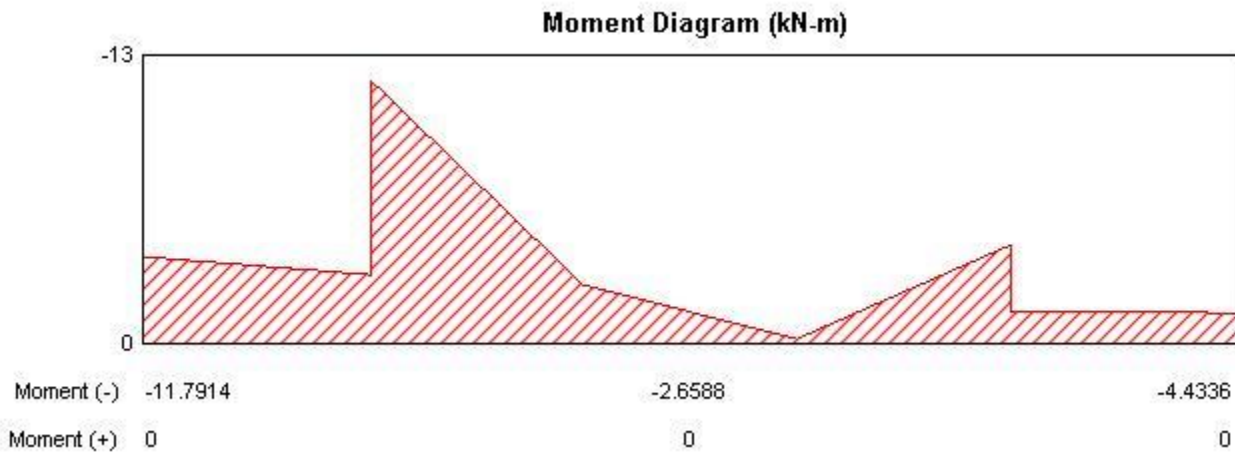
### Geometric Properties

Combination = Overall Envelope  
 Beam Label = B38  
 Section Property = Viga45\*50  
 Length = 4.82 m  
 Section Width = 500 mm  
 Section Depth = 450 mm  
 Distance to Top Rebar Center = 45 mm  
 Distance to Bot Rebar Center = 45 mm

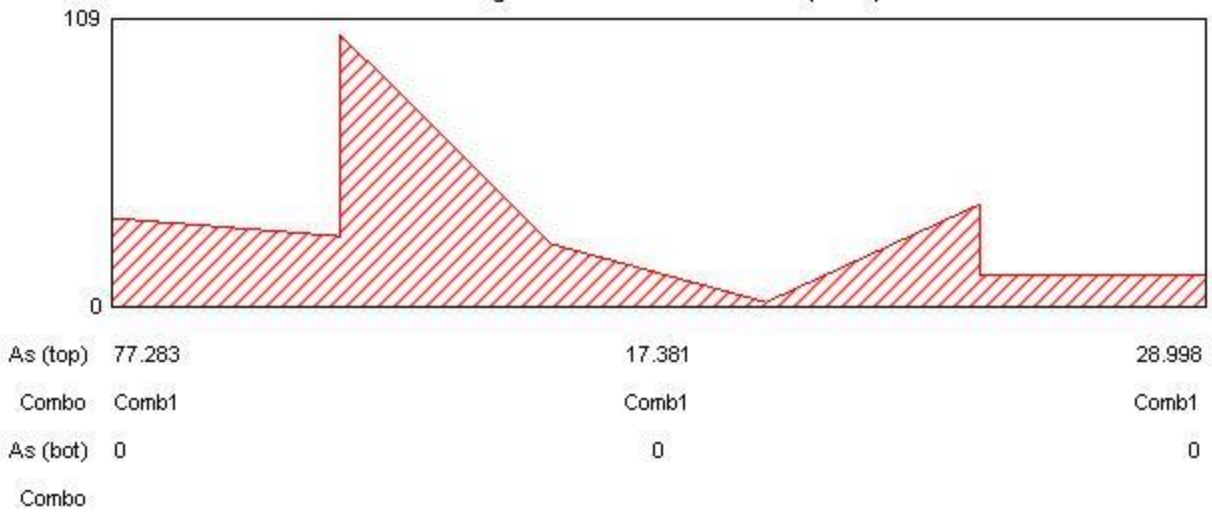


### Material Properties

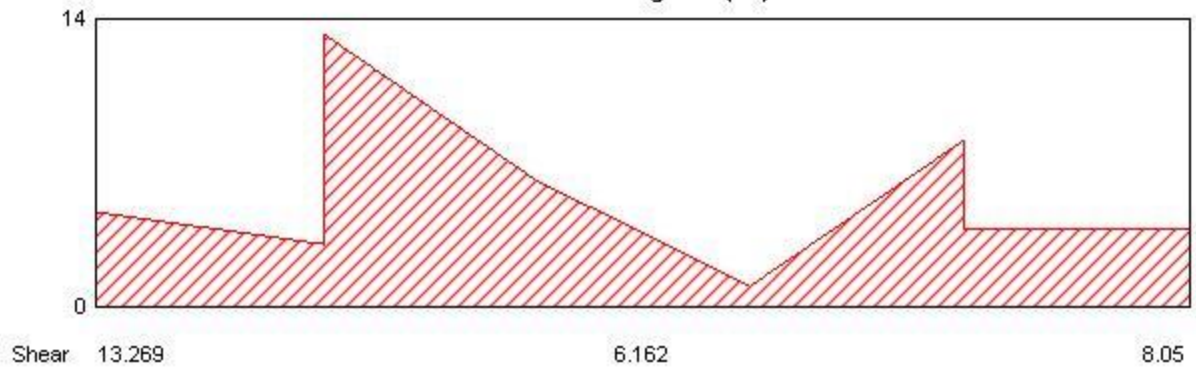
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
 Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
 Shear Rebar Yield = 420 N/mm<sup>2</sup>



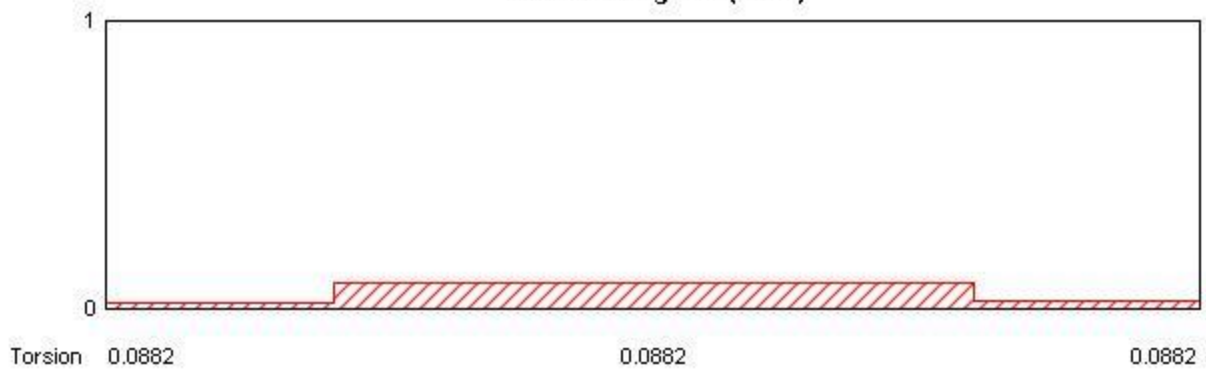
### Longitudinal Reinforcement (mm<sup>2</sup>)



### Shear Diagram (kN)



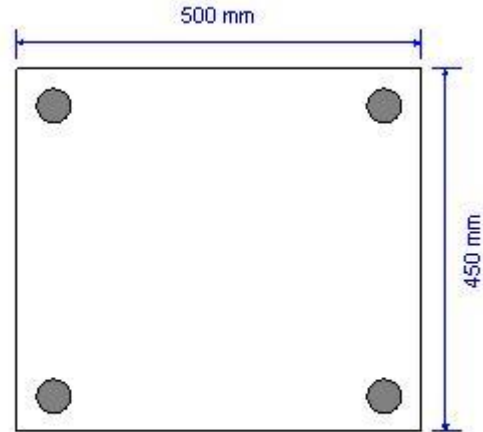
### Torsion Diagram (kN-m)



## ACI 318-14 Concrete Beam Design

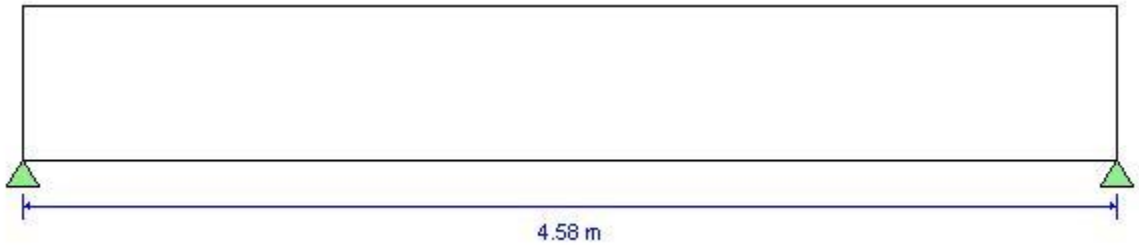
### Geometric Properties

Combination = Overall Envelope  
 Beam Label = B39  
 Section Property = Viga45\*50  
 Length = 4.58 m  
 Section Width = 500 mm  
 Section Depth = 450 mm  
 Distance to Top Rebar Center = 45 mm  
 Distance to Bot Rebar Center = 45 mm

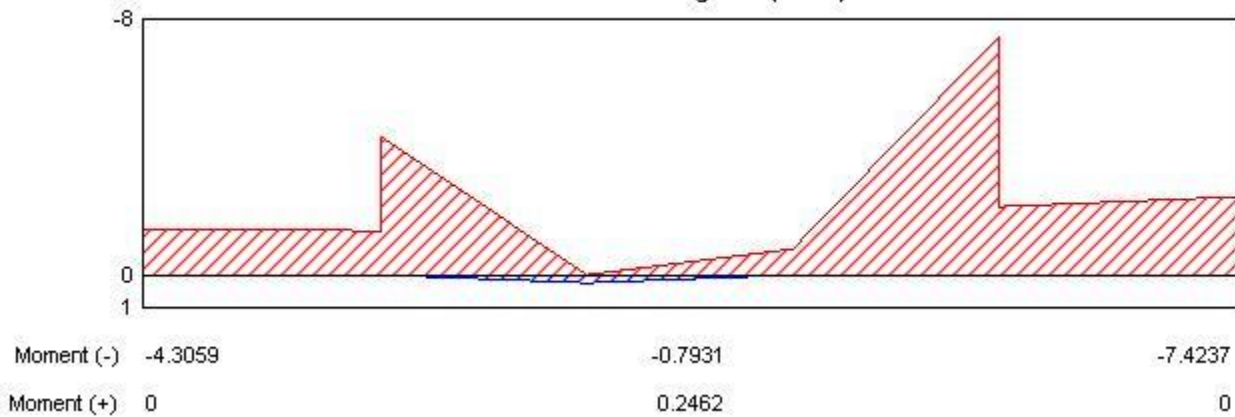


### Material Properties

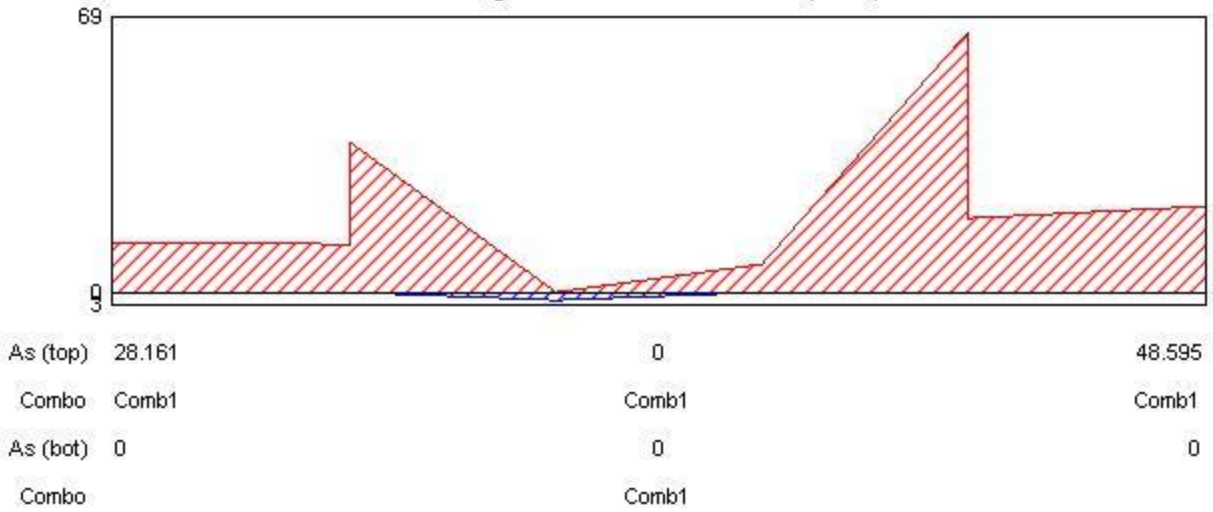
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
 Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
 Shear Rebar Yield = 420 N/mm<sup>2</sup>



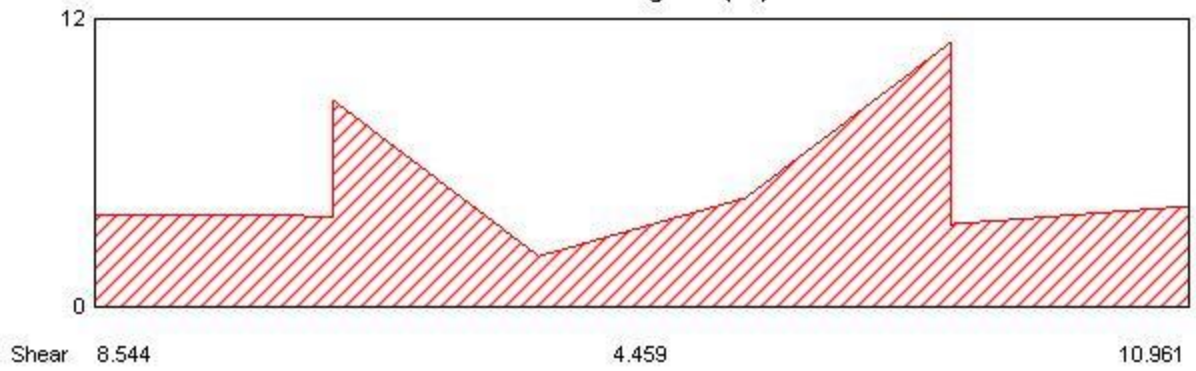
**Moment Diagram (kN-m)**



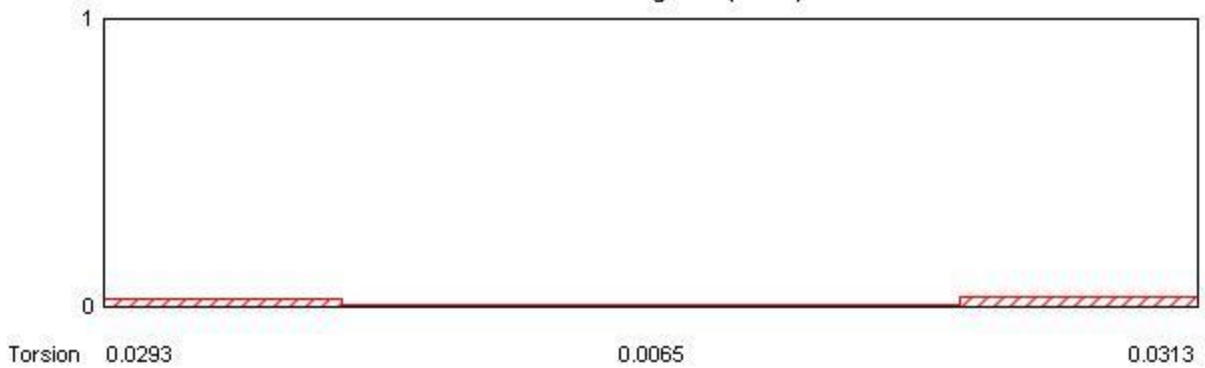
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



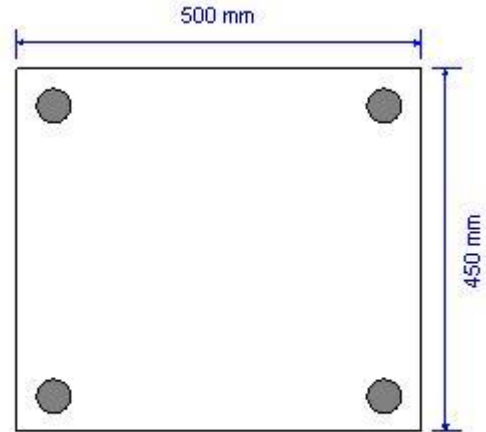
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

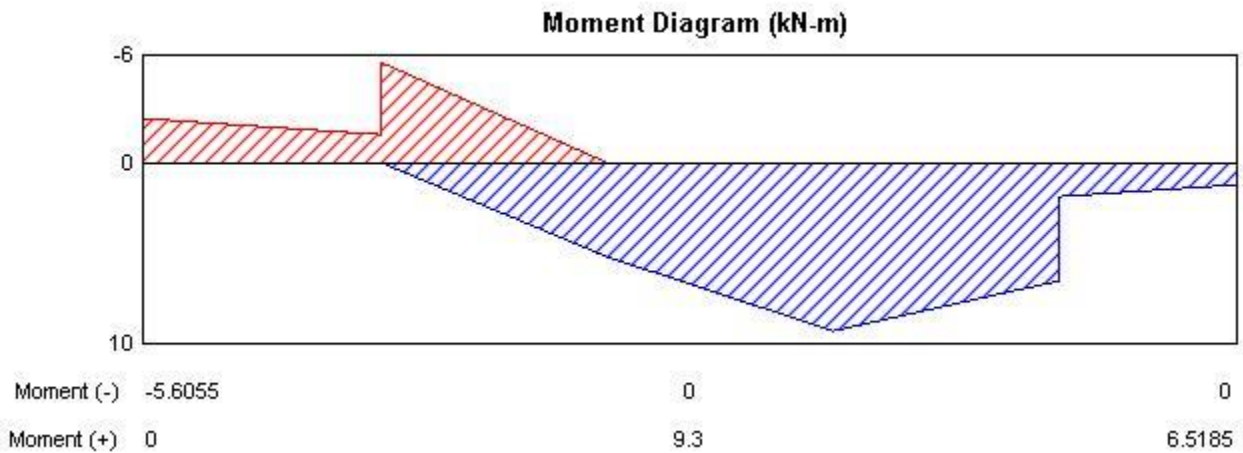
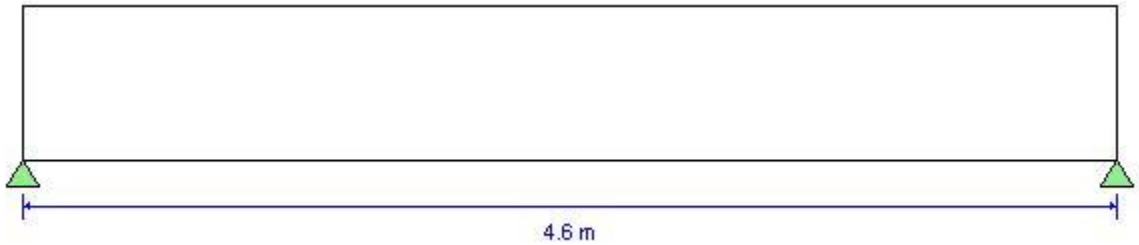
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B40  
Section Property = Viga45\*50  
Length = 4.6 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

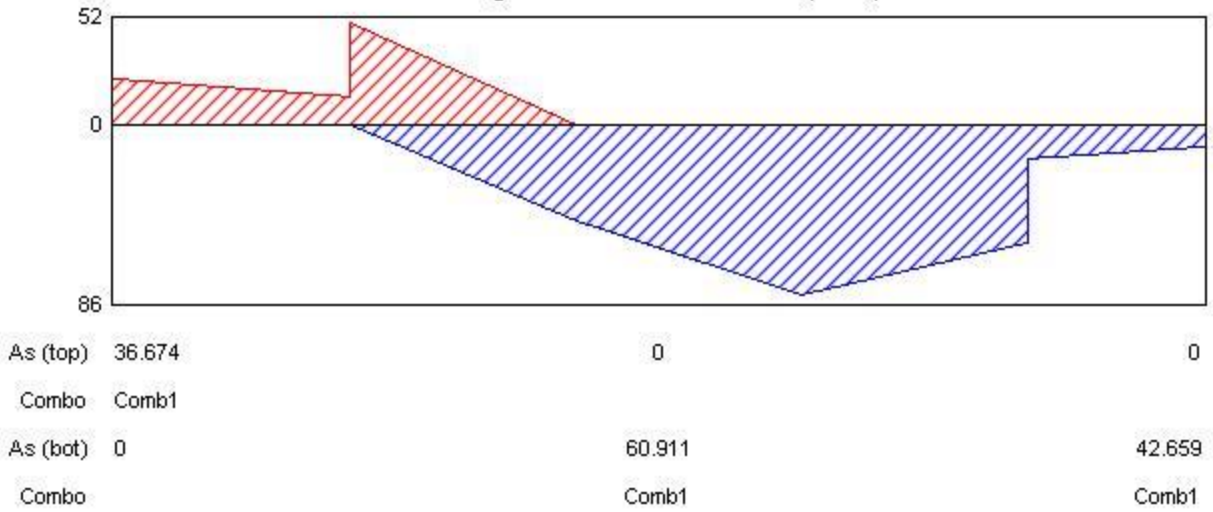


### Material Properties

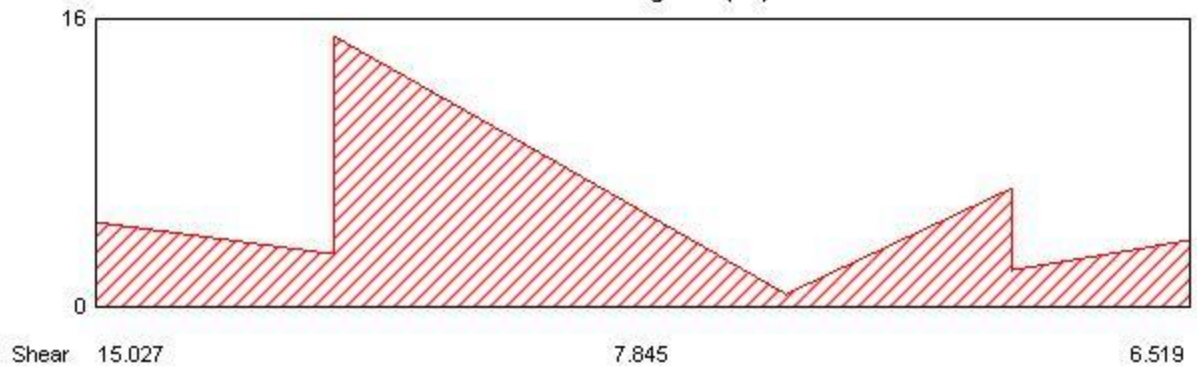
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



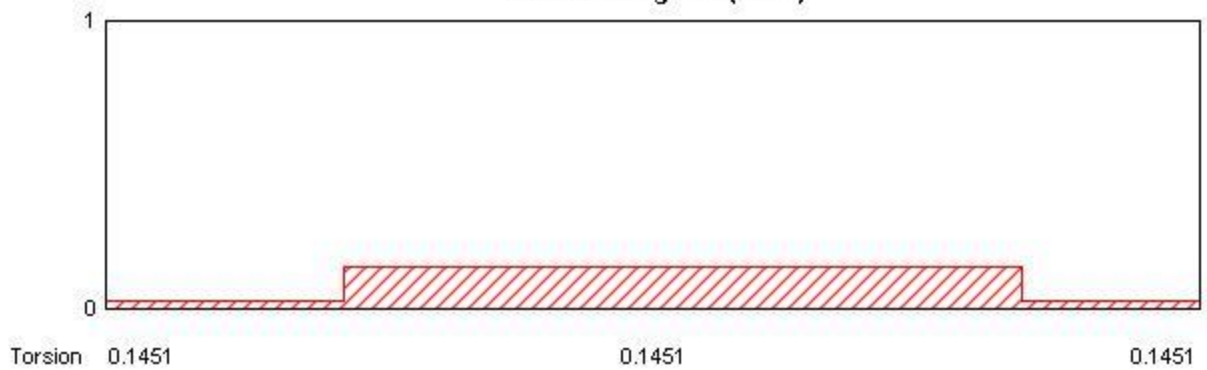
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



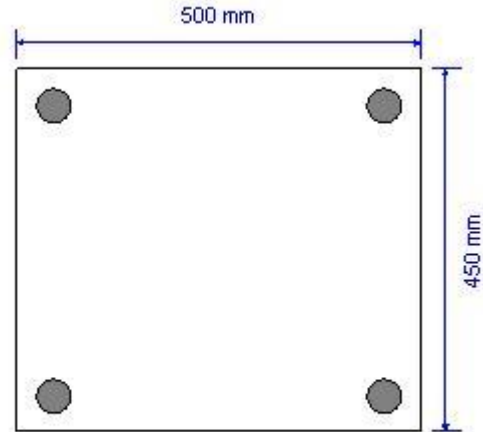
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

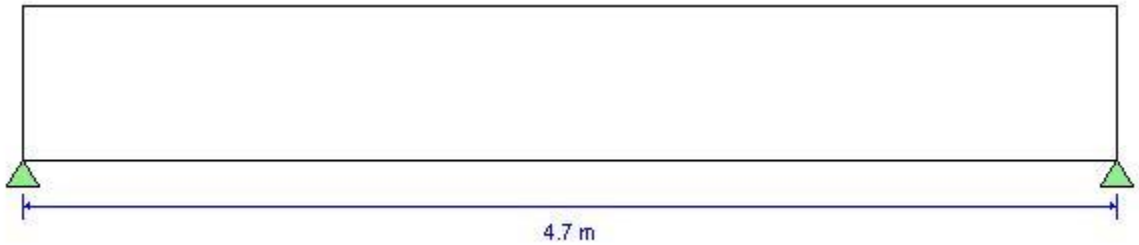
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B41  
Section Property = Viga45\*50  
Length = 4.7 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

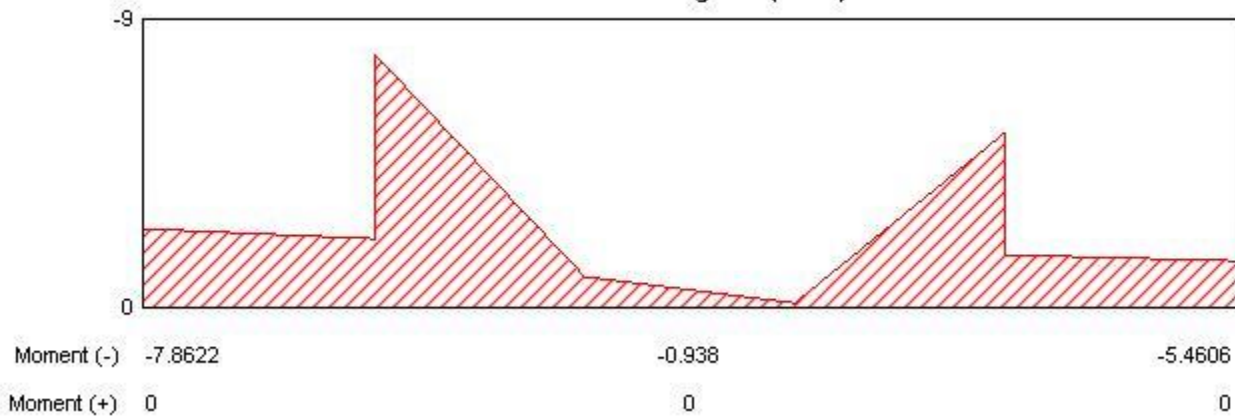


### Material Properties

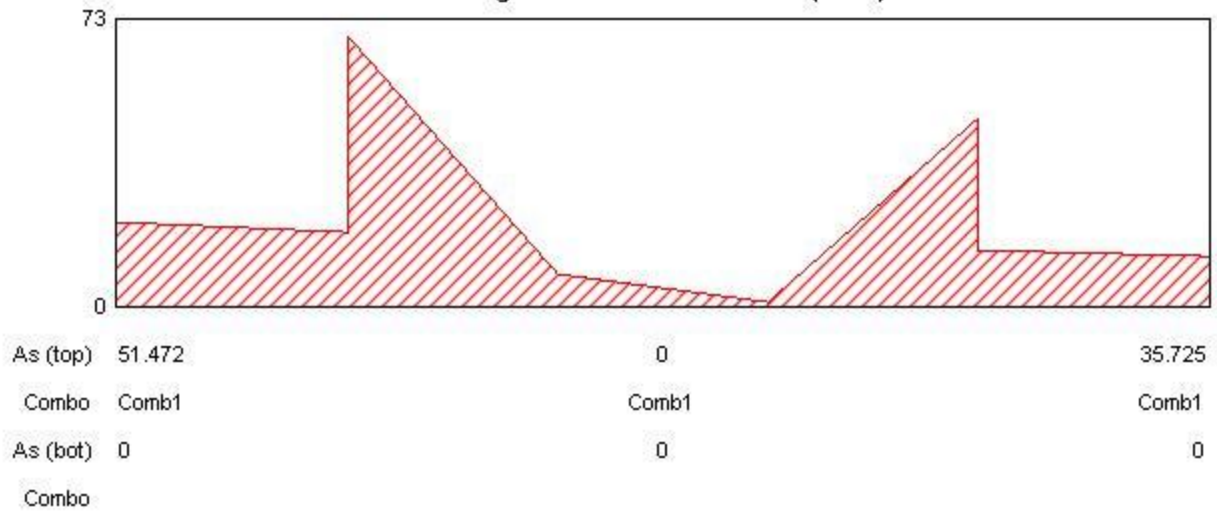
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



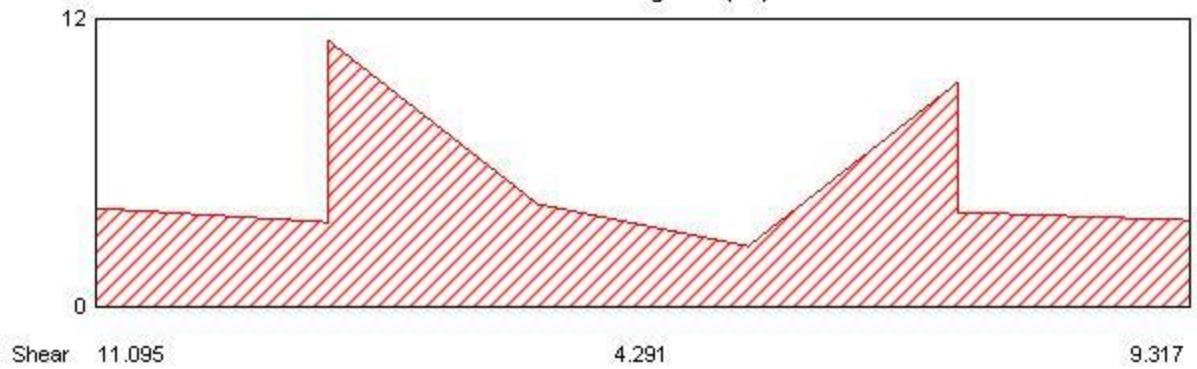
**Moment Diagram (kN-m)**



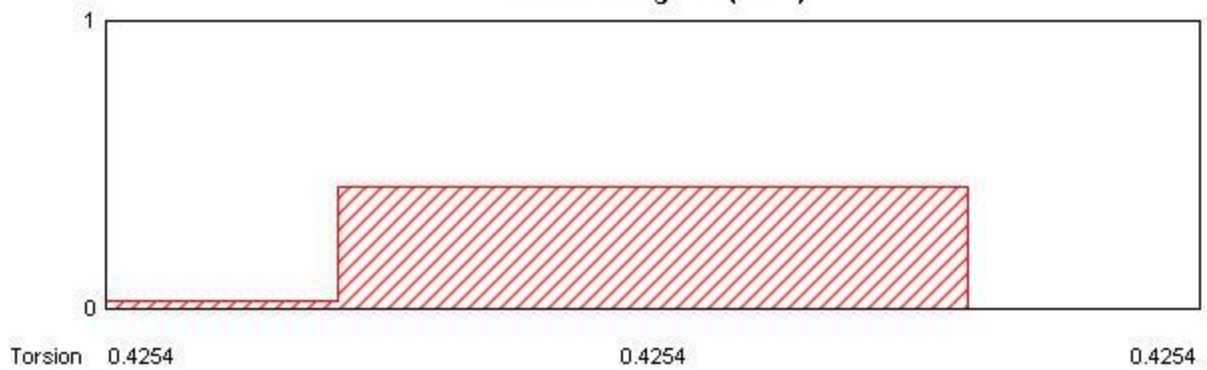
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



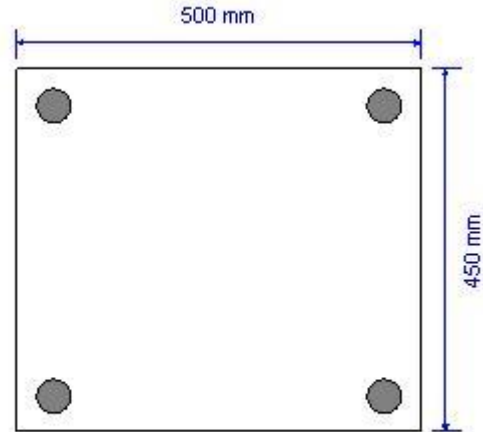
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
 Beam Label = B42  
 Section Property = Viga45\*50  
 Length = 6.05 m  
 Section Width = 500 mm  
 Section Depth = 450 mm  
 Distance to Top Rebar Center = 45 mm  
 Distance to Bot Rebar Center = 45 mm

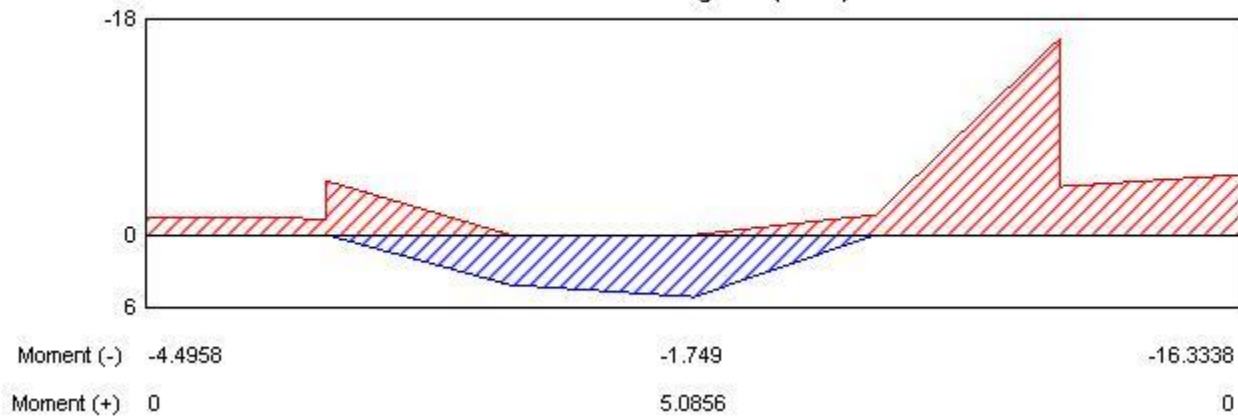


### Material Properties

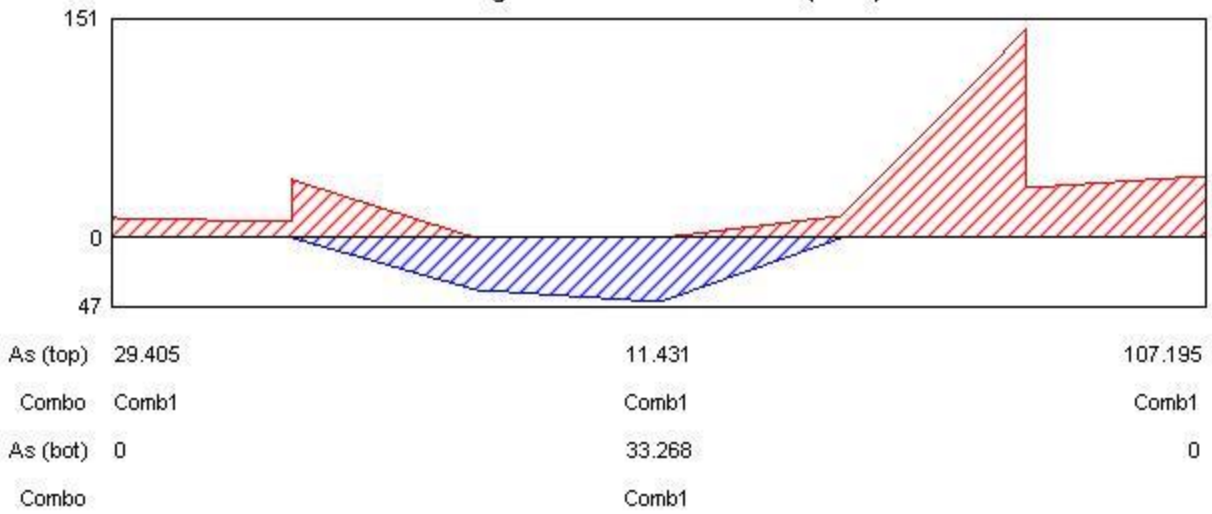
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
 Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
 Shear Rebar Yield = 420 N/mm<sup>2</sup>



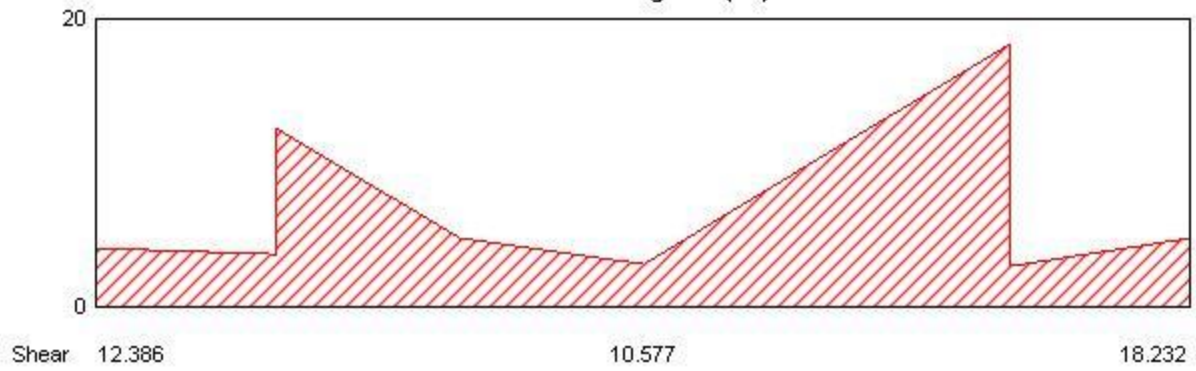
**Moment Diagram (kN-m)**



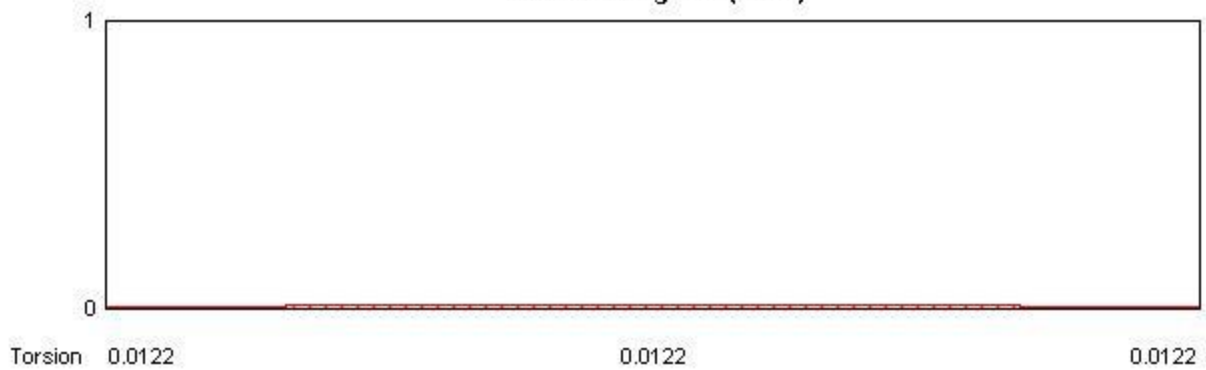
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



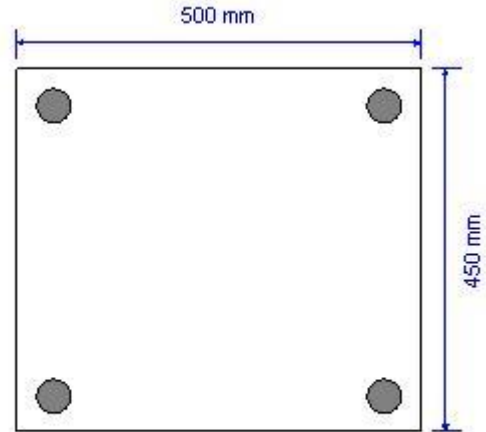
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

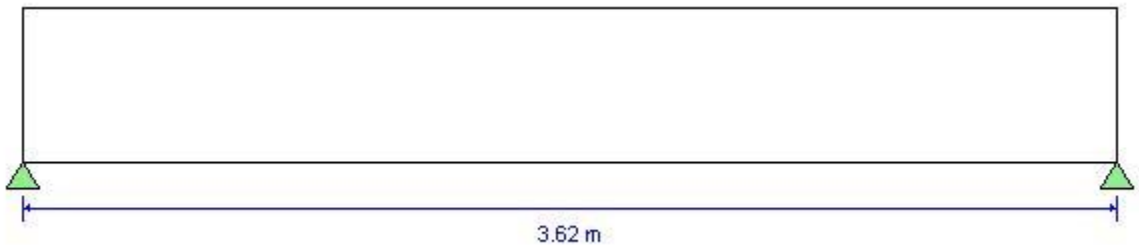
### Geometric Properties

Combination = Overall Envelope  
 Beam Label = B43  
 Section Property = Viga45\*50  
 Length = 3.62 m  
 Section Width = 500 mm  
 Section Depth = 450 mm  
 Distance to Top Rebar Center = 45 mm  
 Distance to Bot Rebar Center = 45 mm

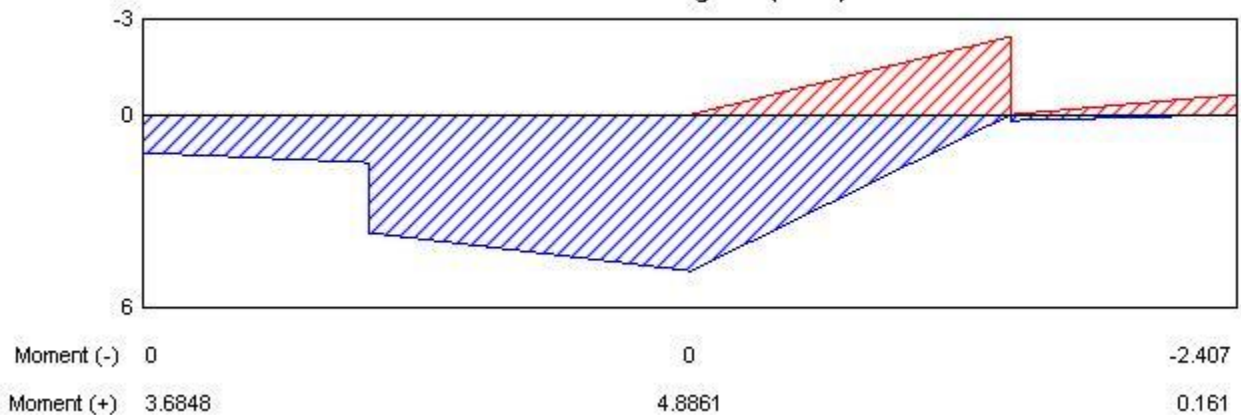


### Material Properties

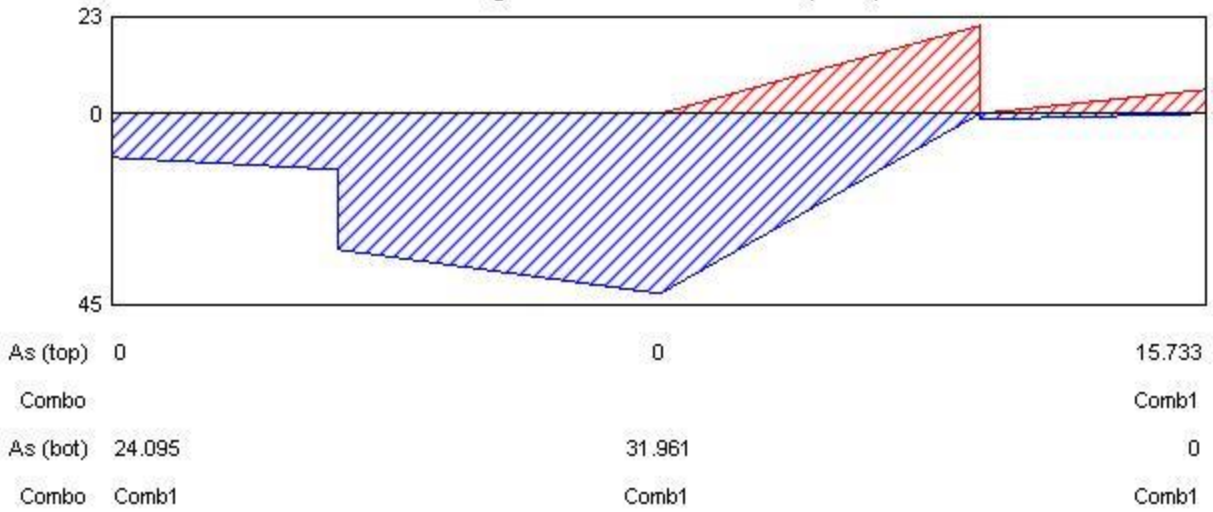
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
 Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
 Shear Rebar Yield = 420 N/mm<sup>2</sup>



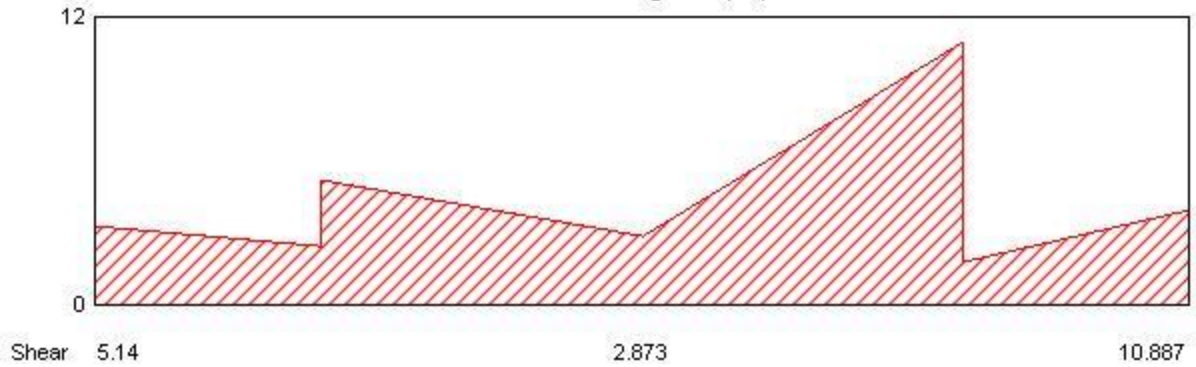
**Moment Diagram (kN-m)**



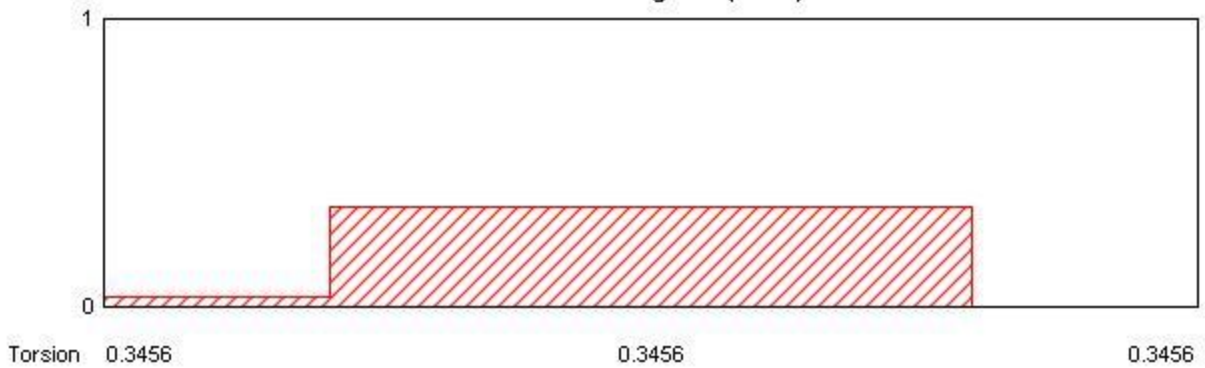
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



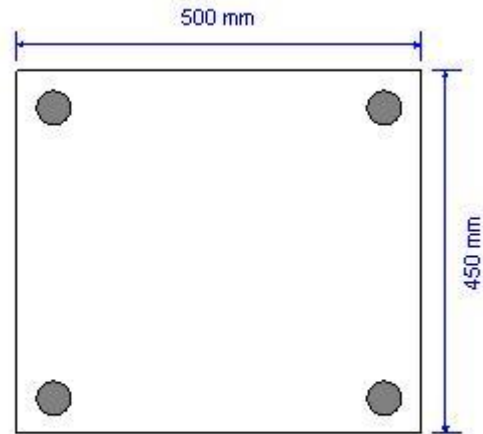
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

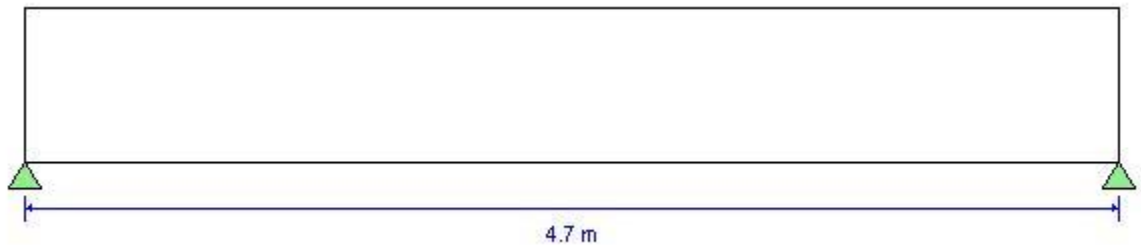
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B44  
Section Property = Viga45\*50  
Length = 4.7 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

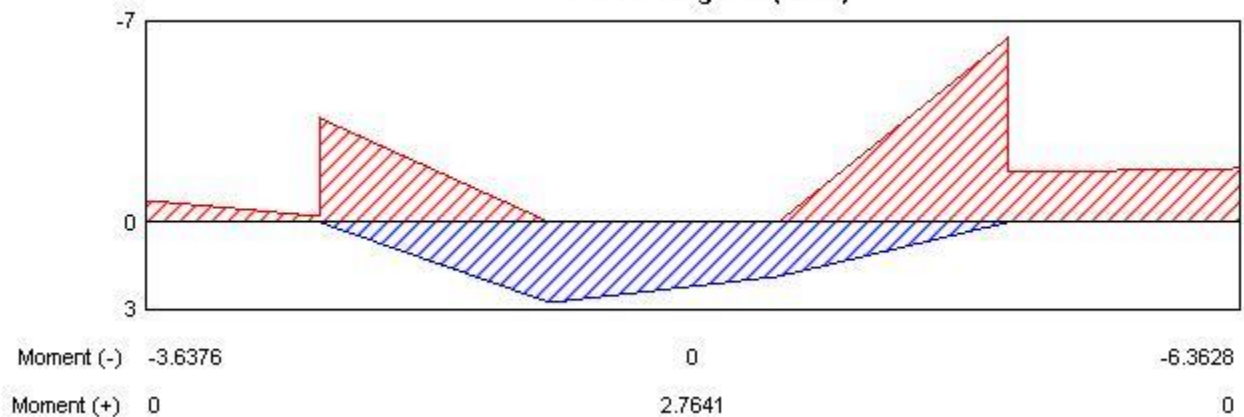


### Material Properties

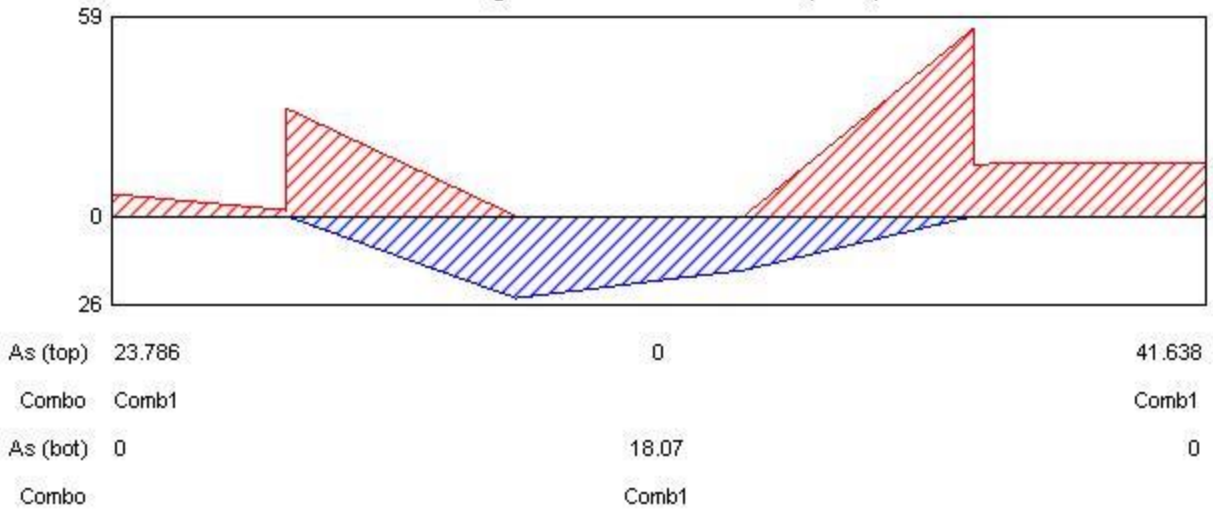
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



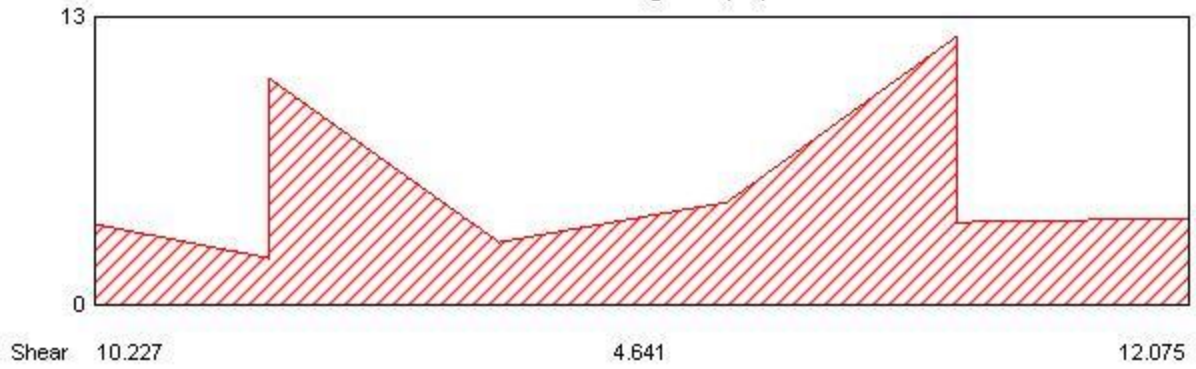
**Moment Diagram (kN-m)**



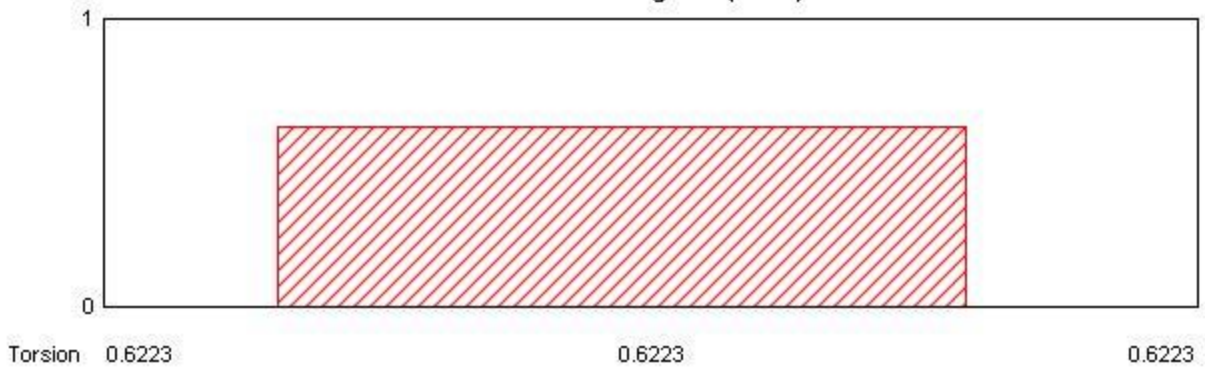
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



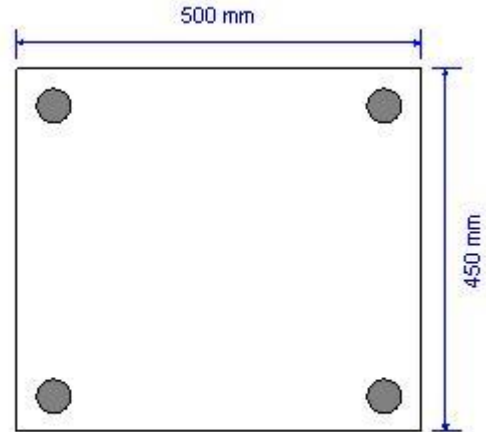
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B45  
Section Property = Viga45\*50  
Length = 6.05 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

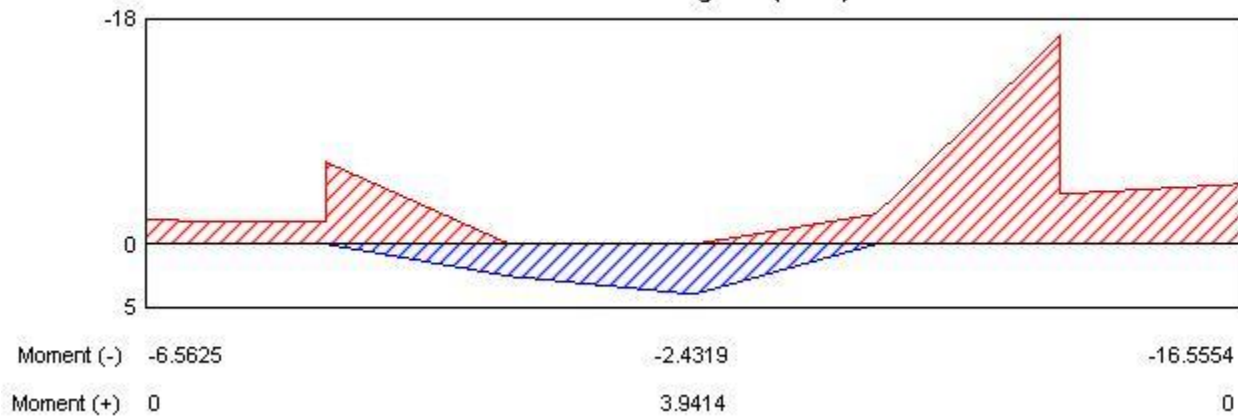


### Material Properties

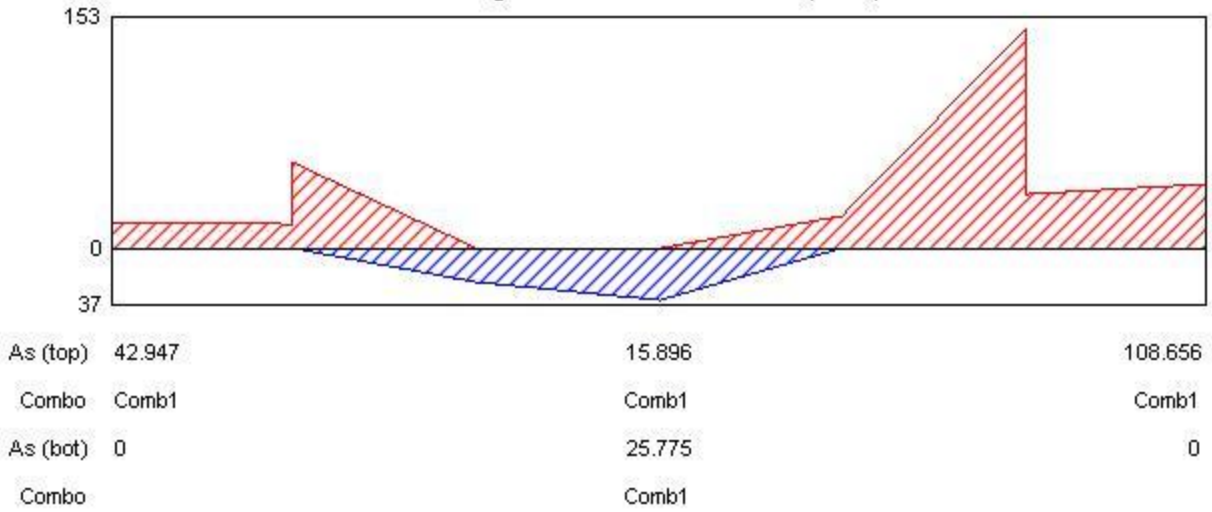
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



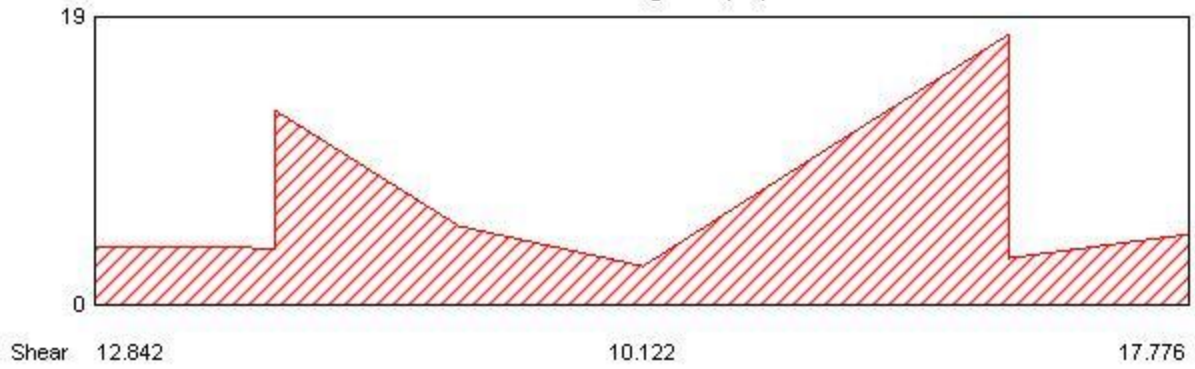
**Moment Diagram (kN-m)**



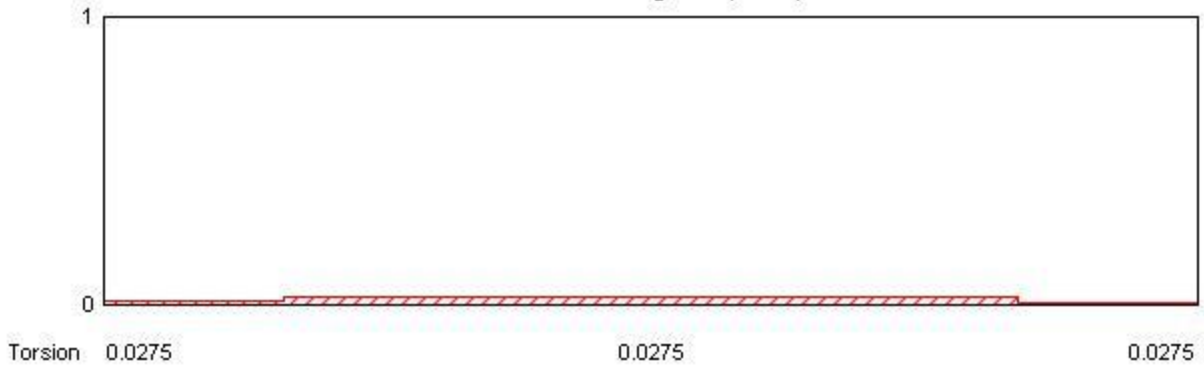
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



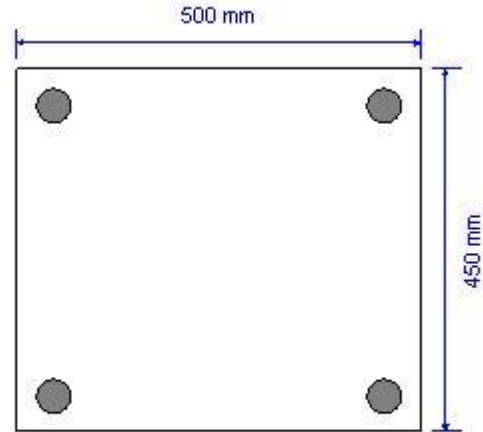
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

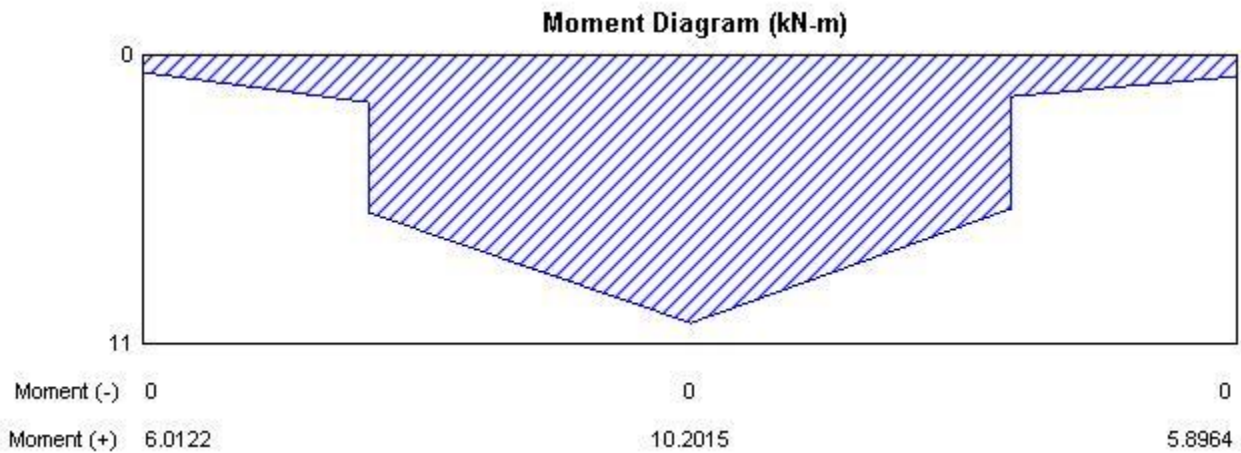
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B46  
Section Property = Viga45\*50  
Length = 3.62 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

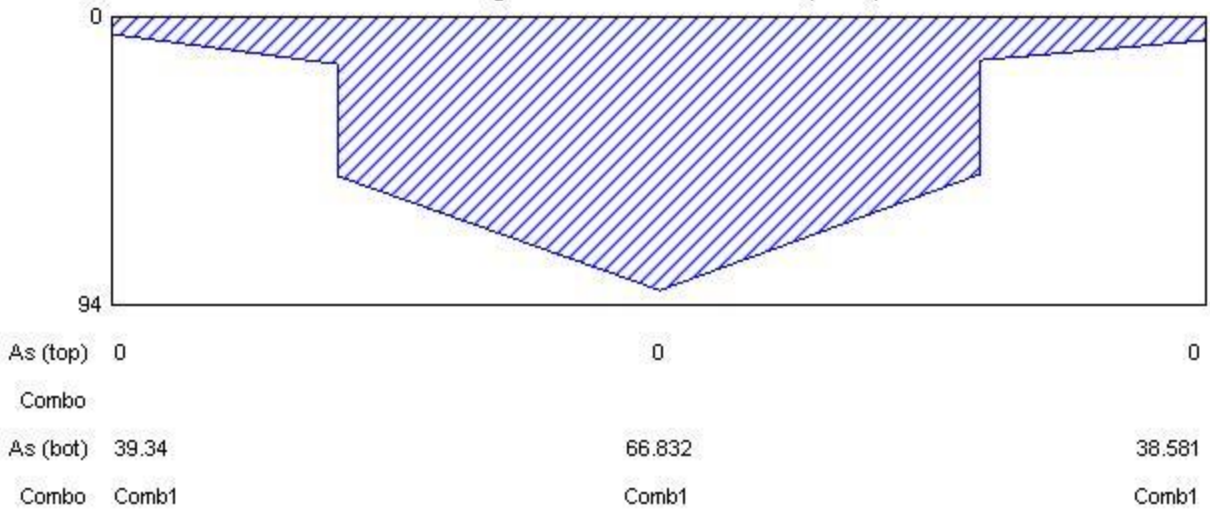


### Material Properties

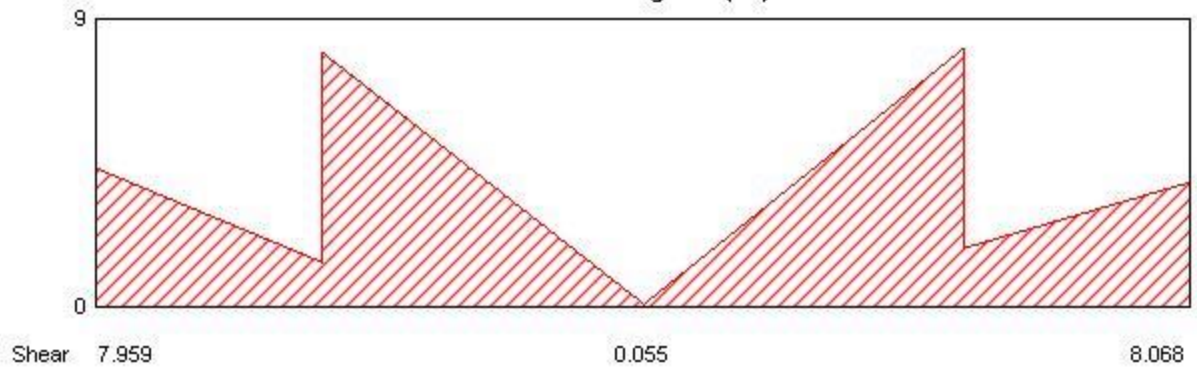
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



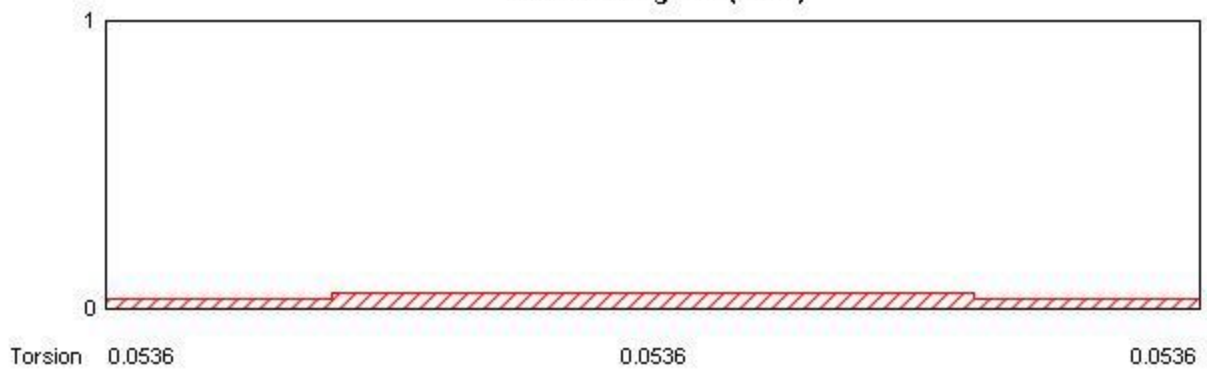
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



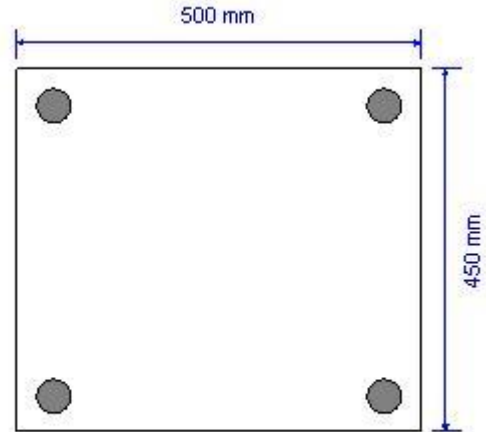
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

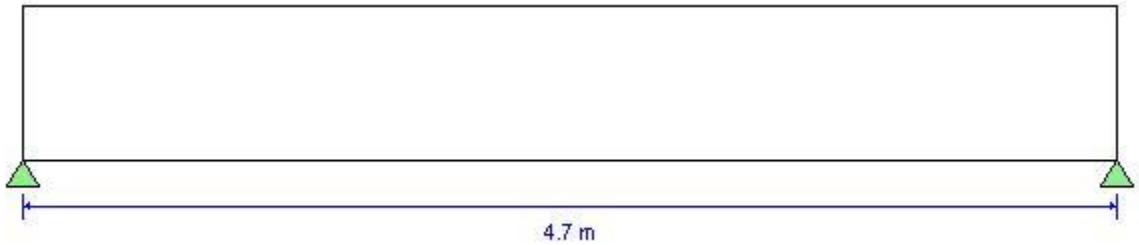
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B47  
Section Property = Viga45\*50  
Length = 4.7 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

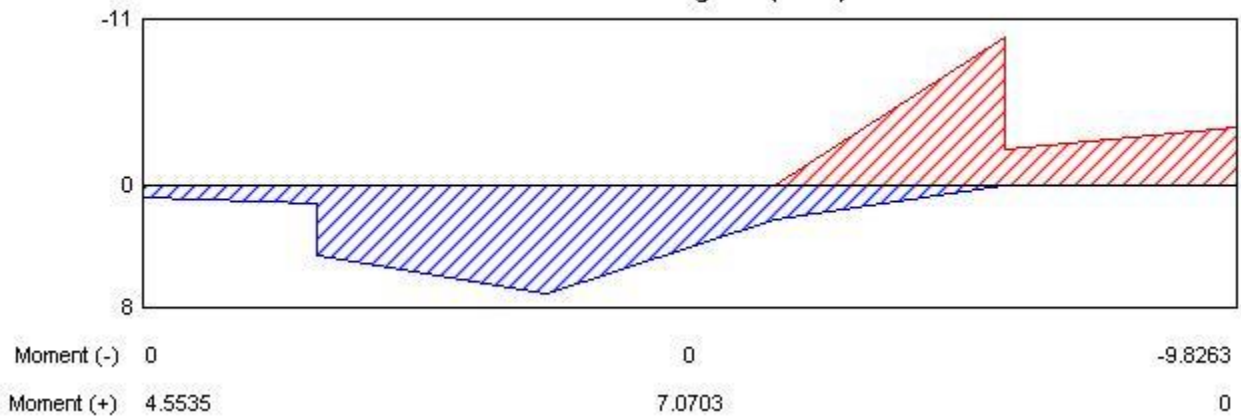


### Material Properties

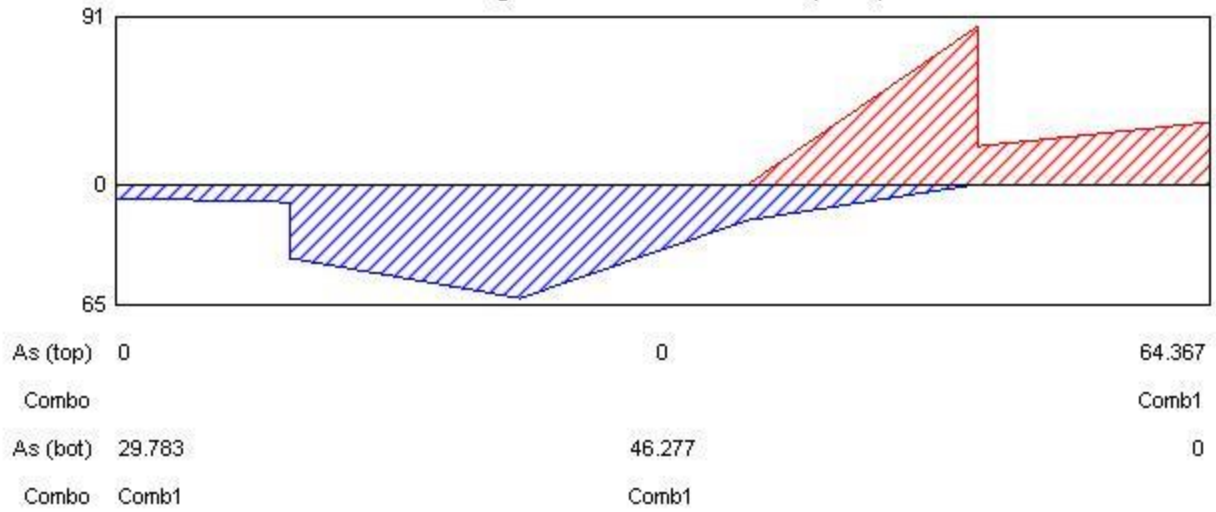
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



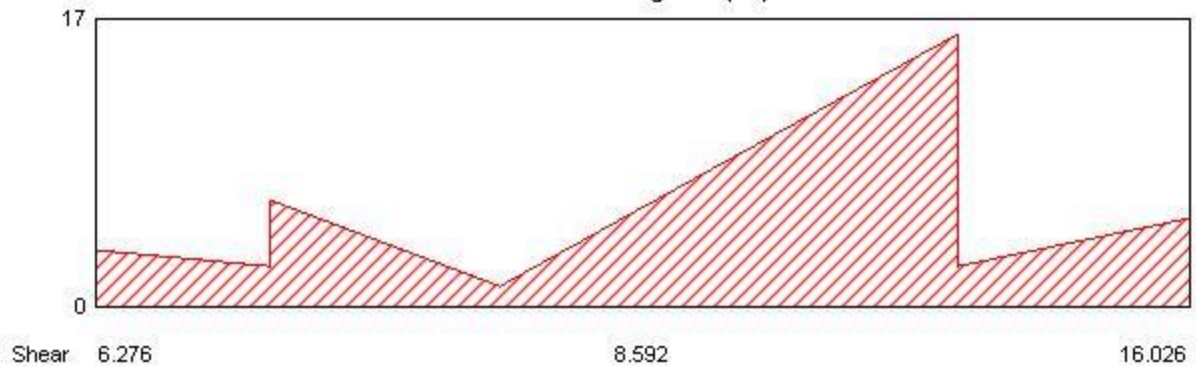
**Moment Diagram (kN-m)**



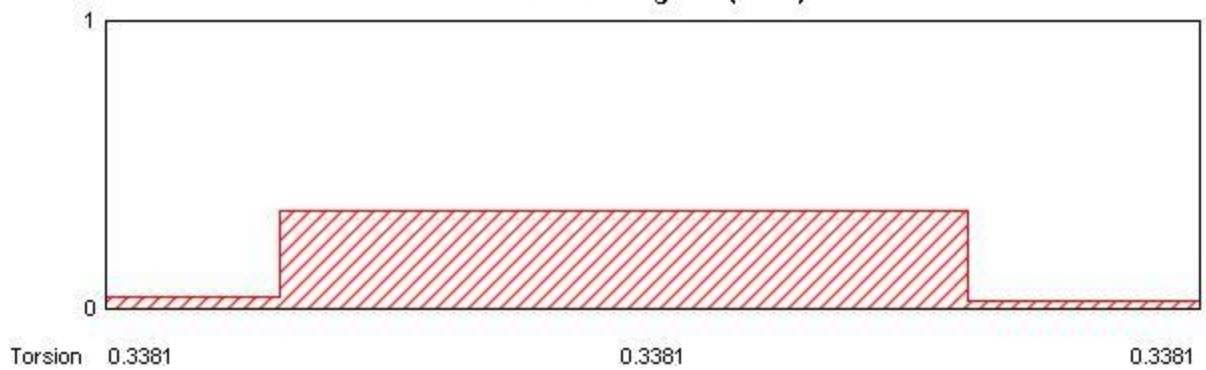
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



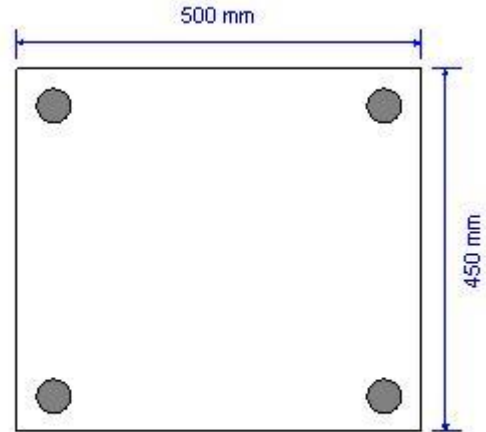
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B48  
Section Property = Viga45\*50  
Length = 6.05 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

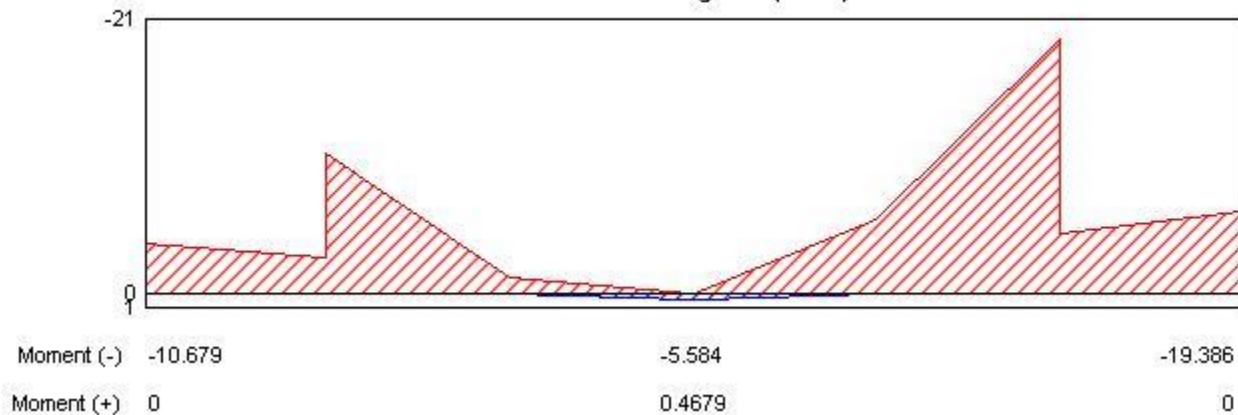


### Material Properties

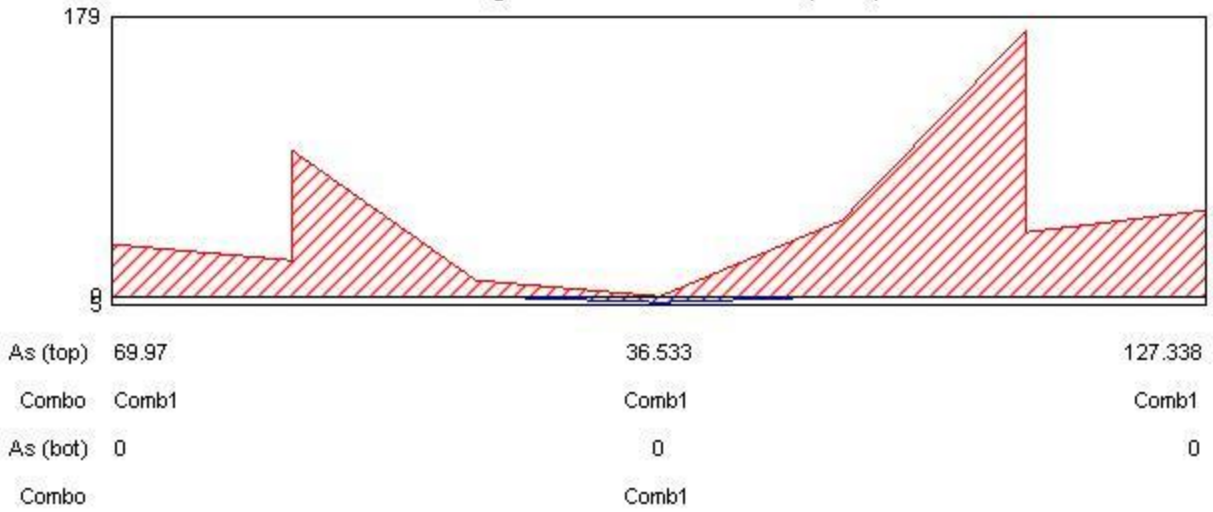
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



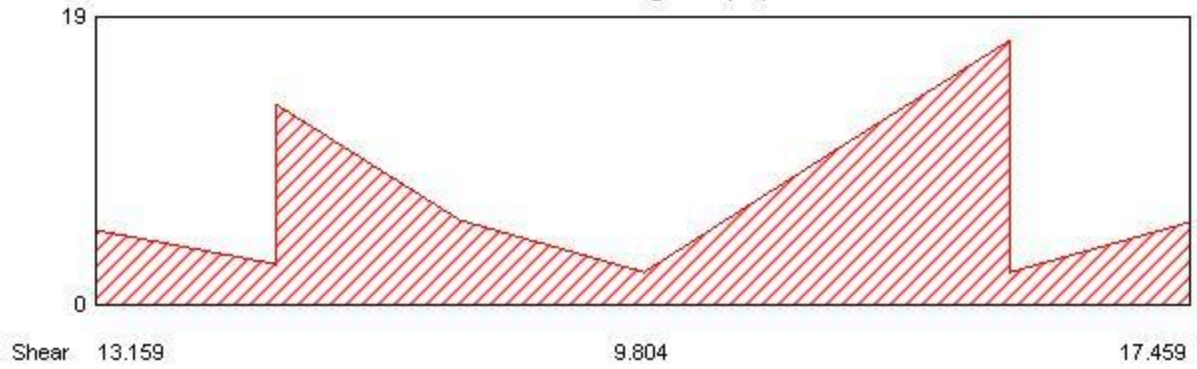
**Moment Diagram (kN-m)**



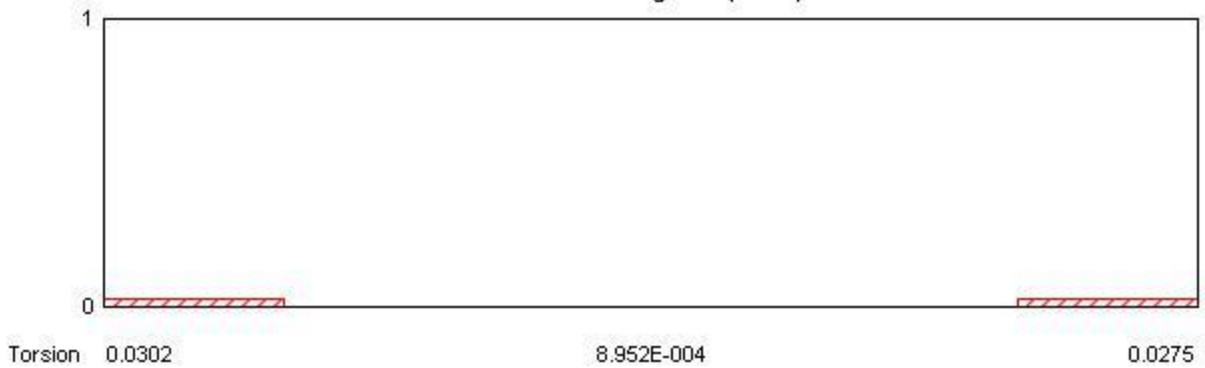
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



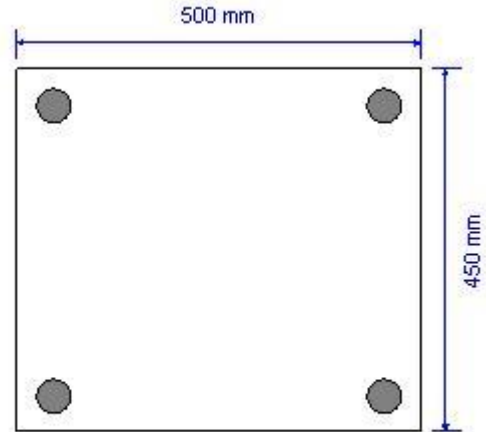
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

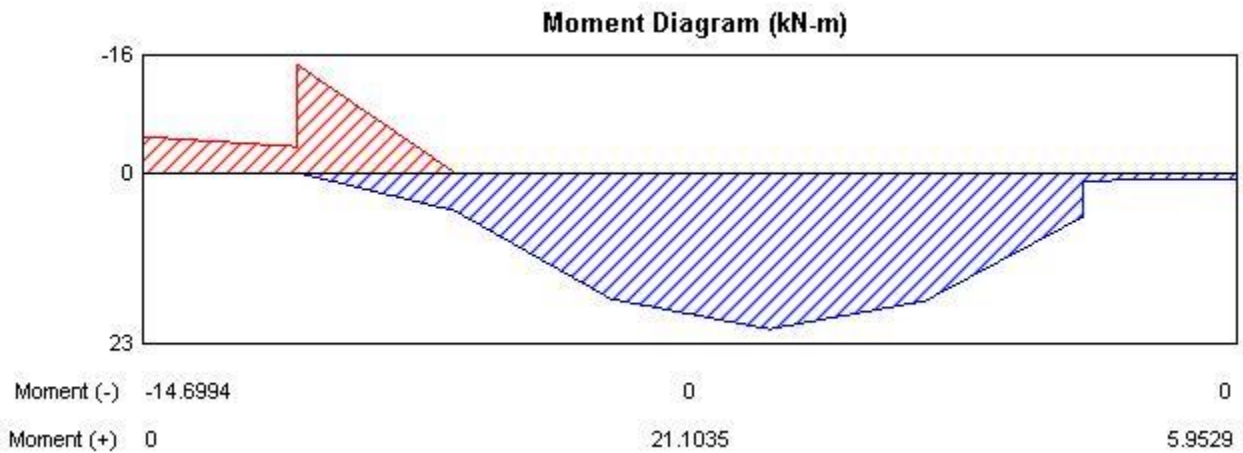
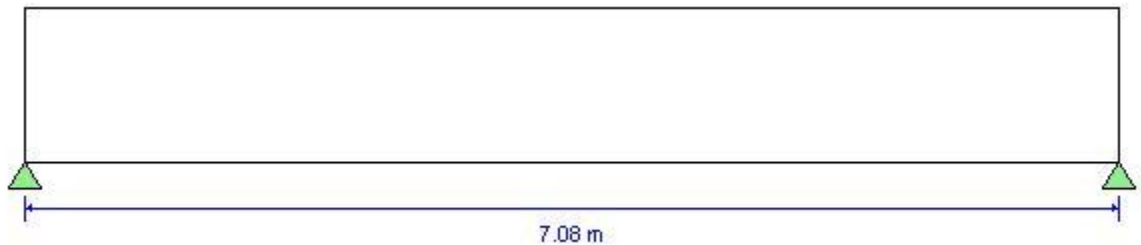
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B49  
Section Property = Viga45\*50  
Length = 7.08 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

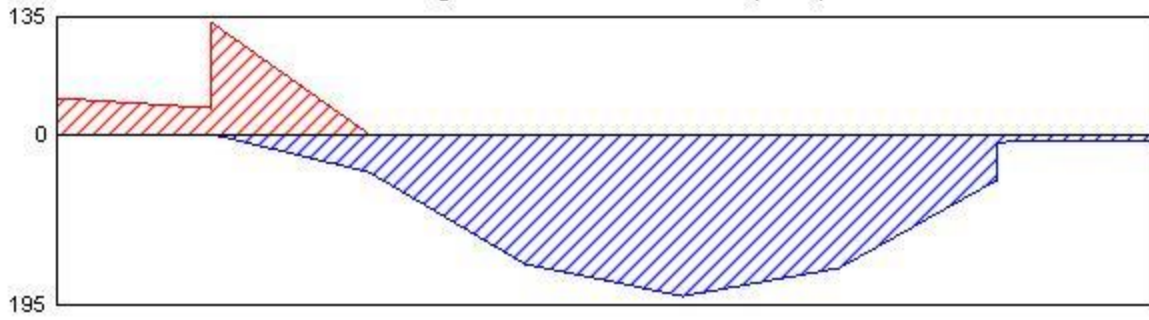


### Material Properties

Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>

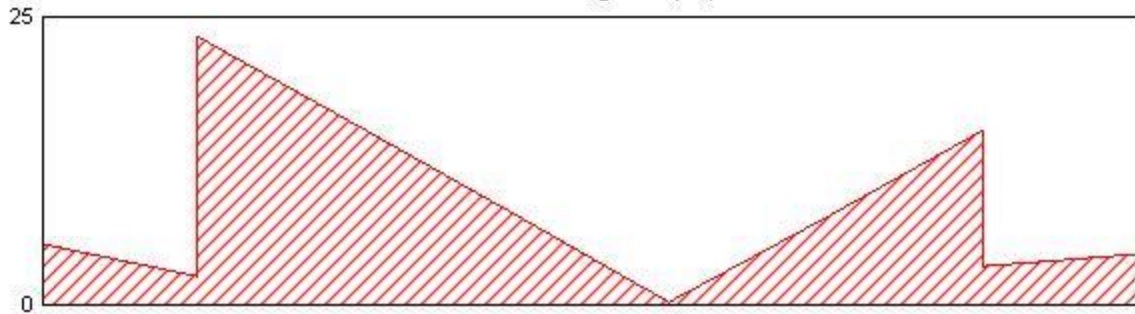


**Longitudinal Reinforcement (mm<sup>2</sup>)**



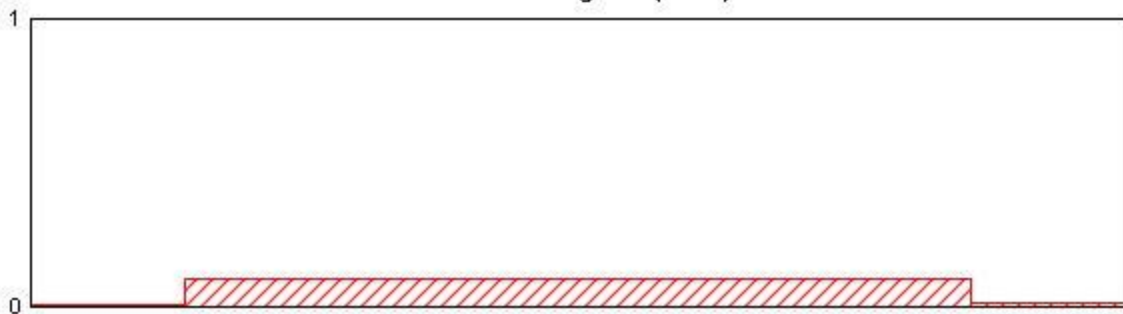
As (top)	96.423	0	0
Combo	Comb1		
As (bot)	0	138.688	38.951
Combo		Comb1	Comb1

**Shear Diagram (kN)**



Shear	23.268	15.587	15.137
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**Torsion Diagram (kN-m)**

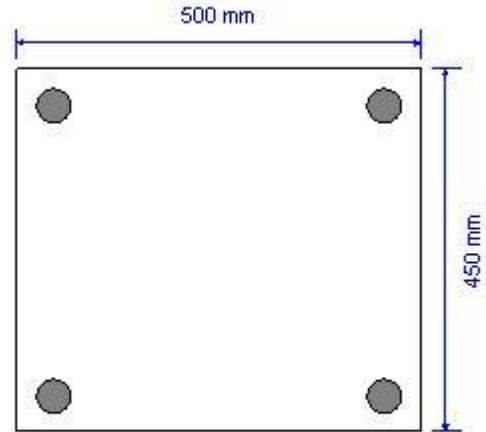


Torsion	0.0944	0.0944	0.0944
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## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B50  
Section Property = Viga45\*50  
Length = 7.08 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

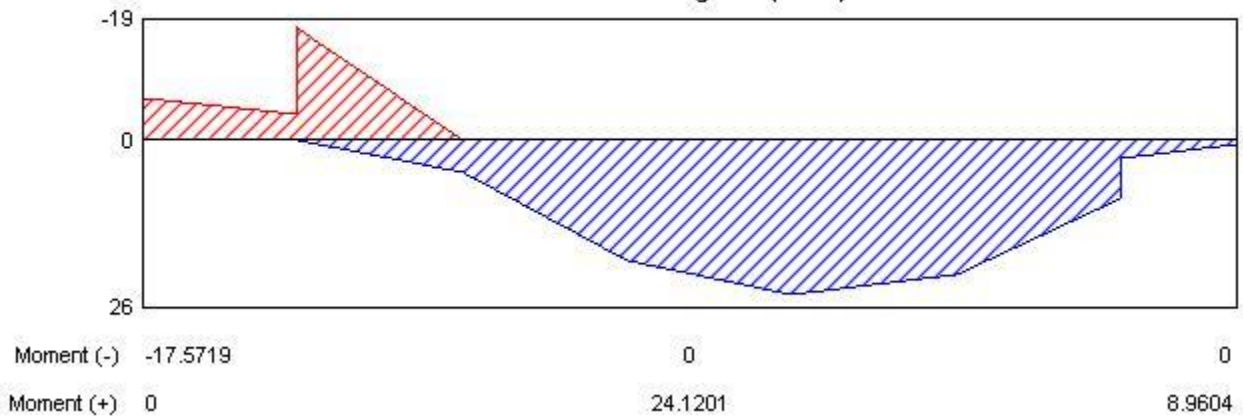


### Material Properties

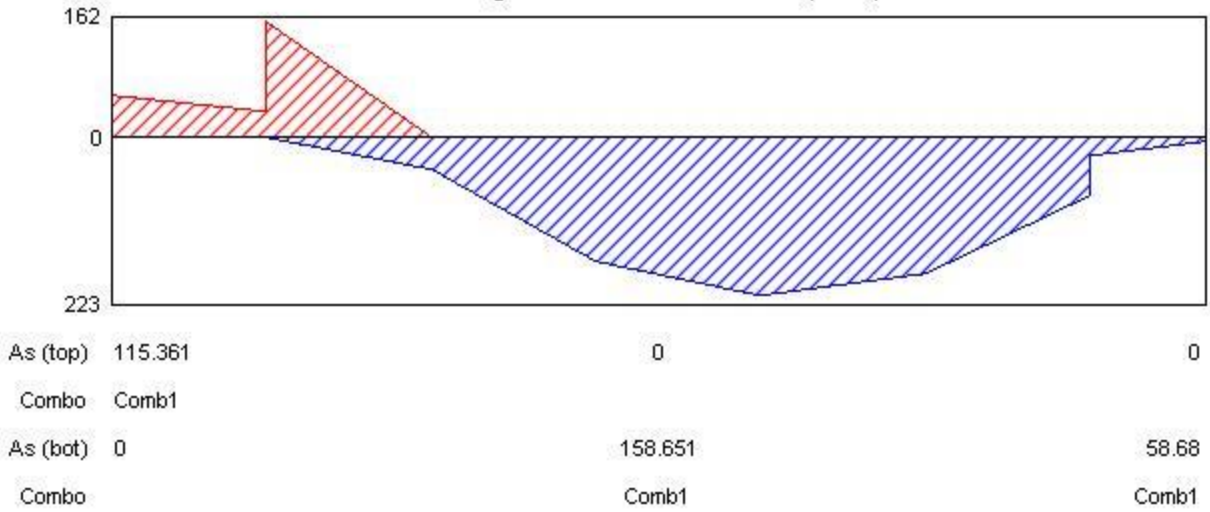
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



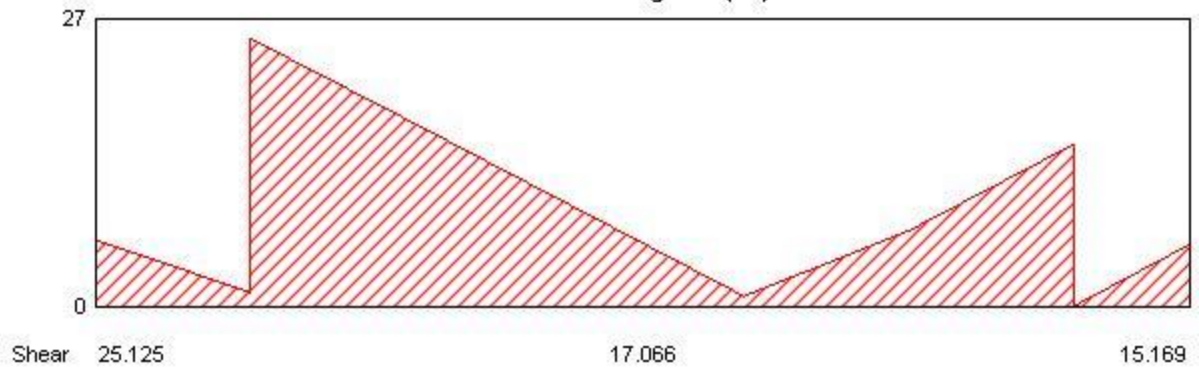
**Moment Diagram (kN-m)**



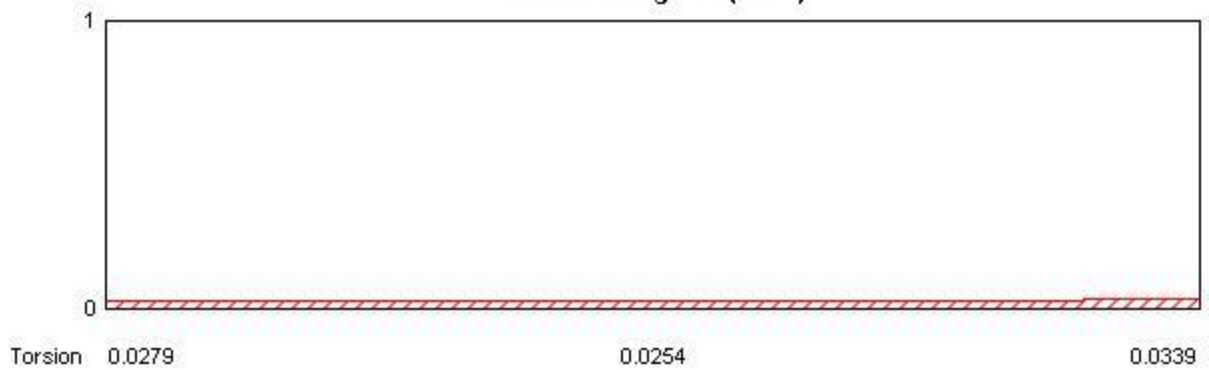
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



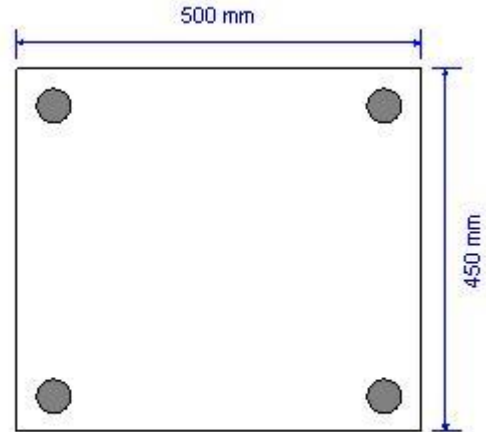
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B51  
Section Property = Viga45\*50  
Length = 4.32 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

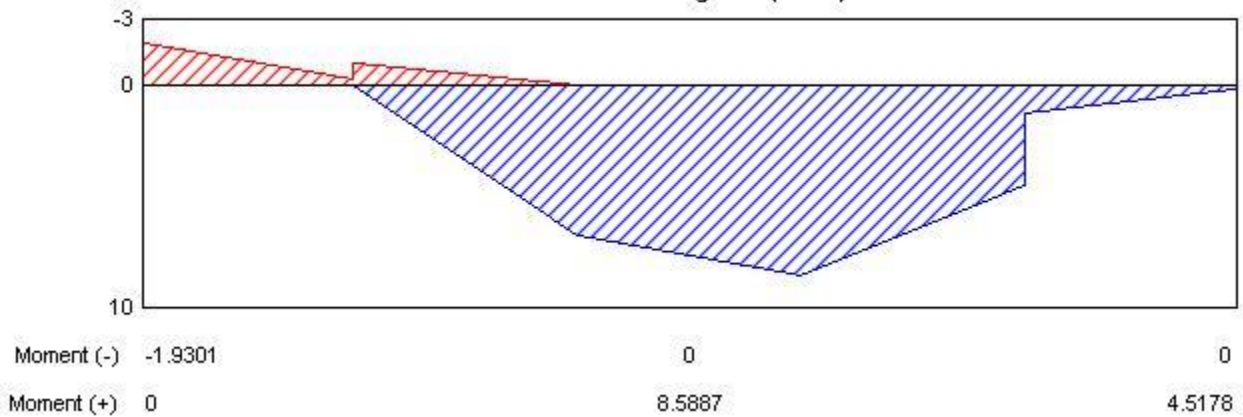


### Material Properties

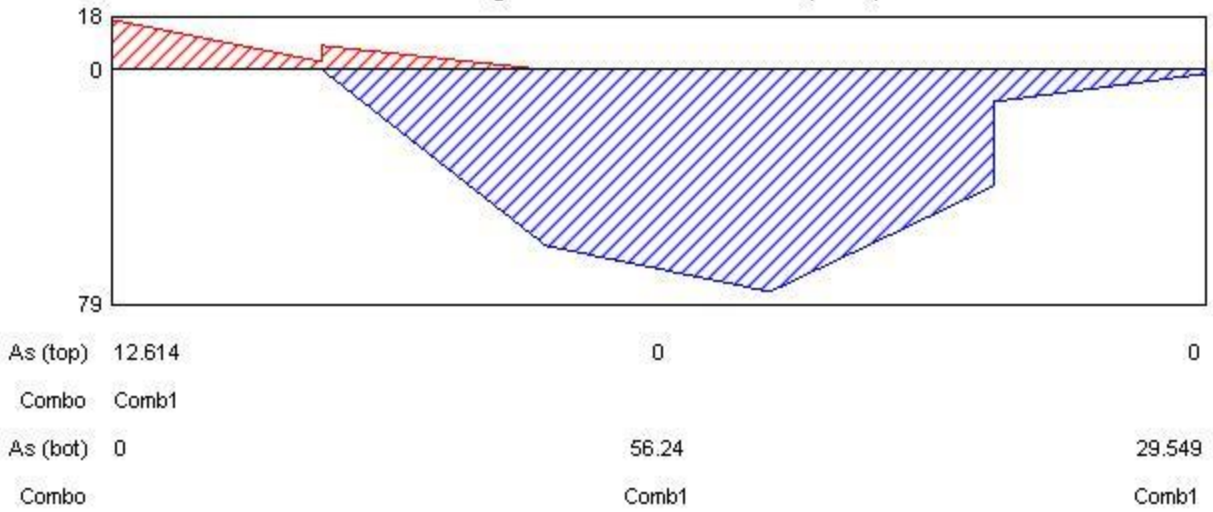
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



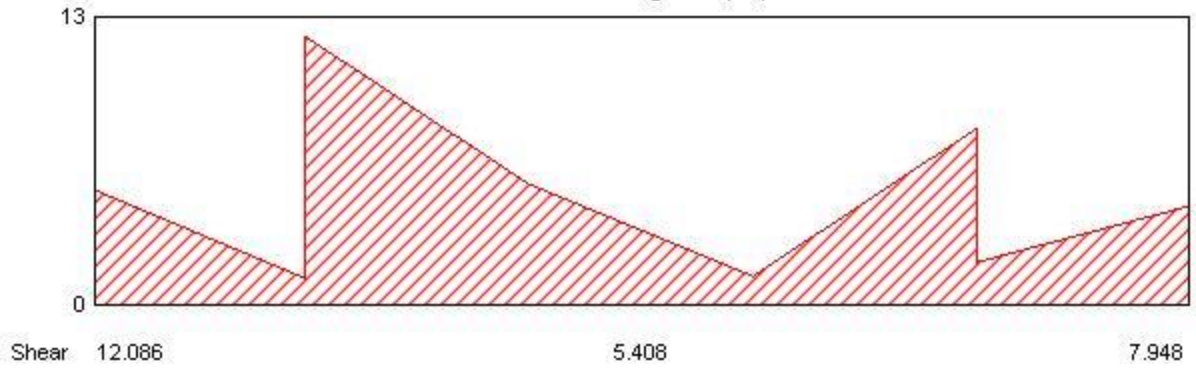
**Moment Diagram (kN-m)**



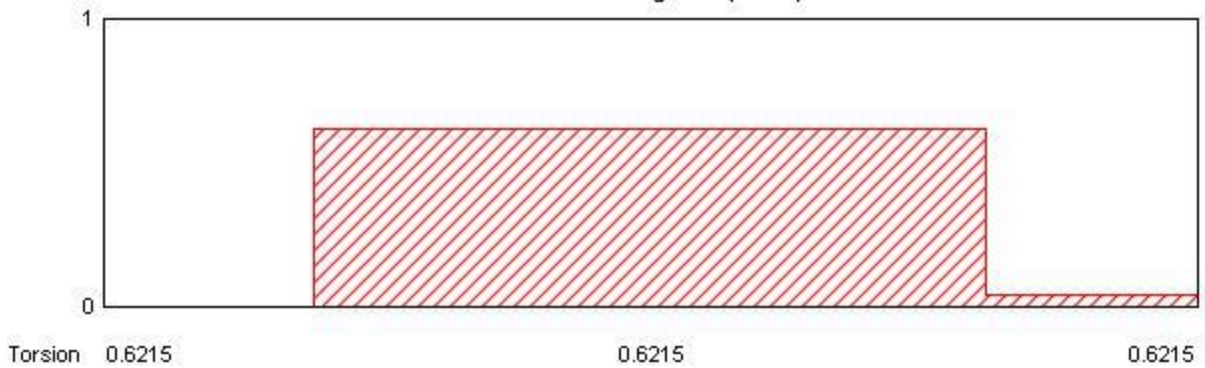
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



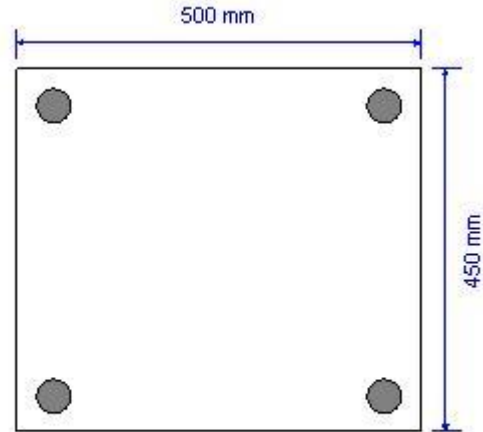
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

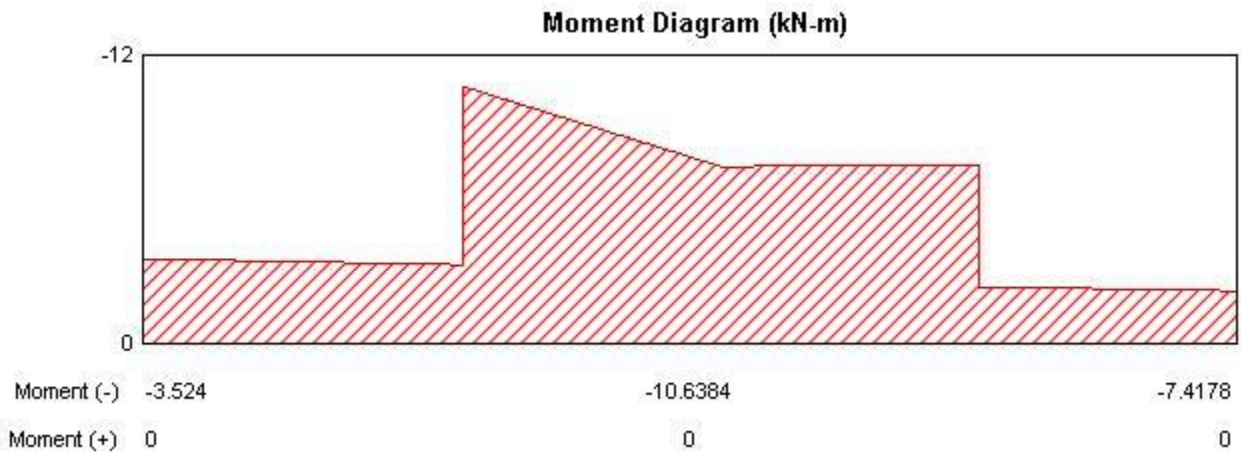
### Geometric Properties

Combination = Overall Envelope  
 Beam Label = B52  
 Section Property = Viga45\*50  
 Length = 2.83 m  
 Section Width = 500 mm  
 Section Depth = 450 mm  
 Distance to Top Rebar Center = 45 mm  
 Distance to Bot Rebar Center = 45 mm

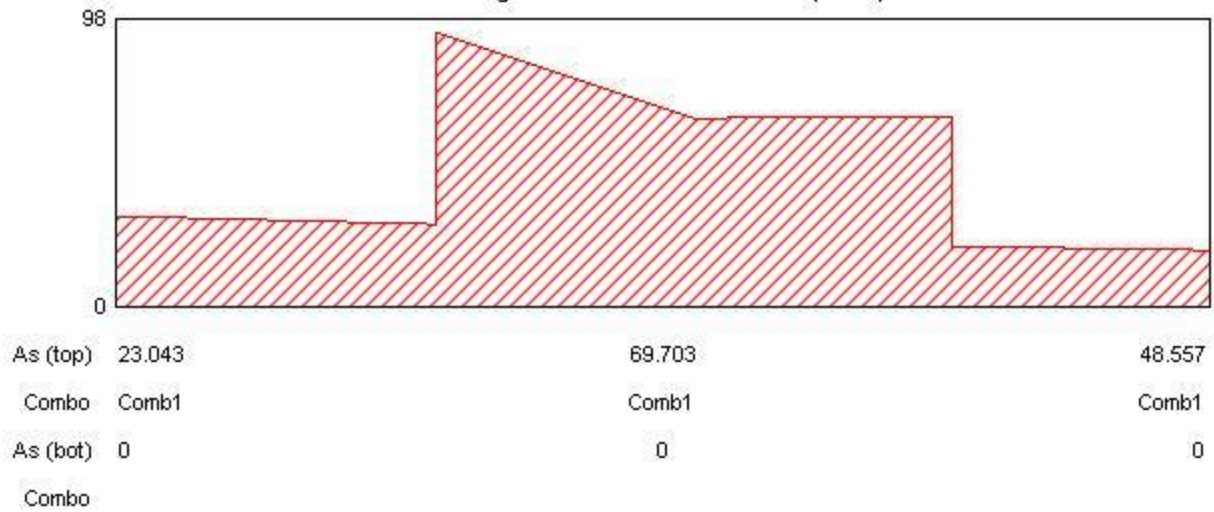


### Material Properties

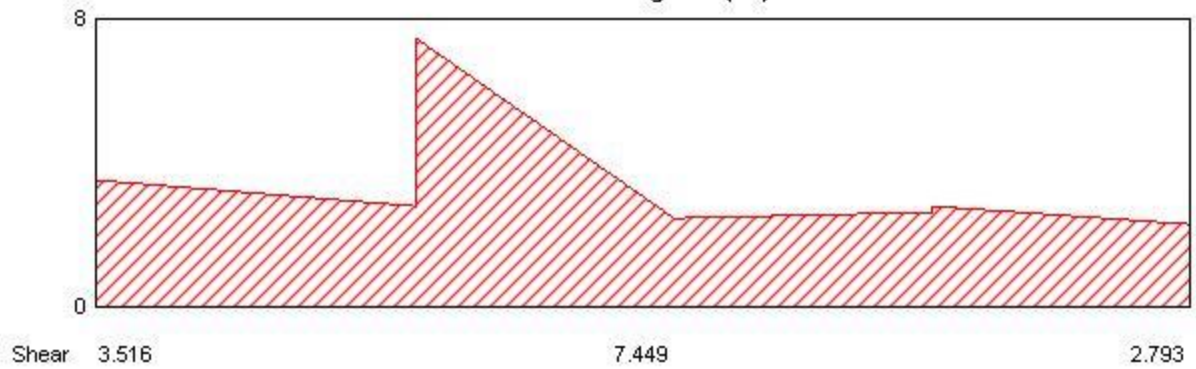
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
 Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
 Shear Rebar Yield = 420 N/mm<sup>2</sup>



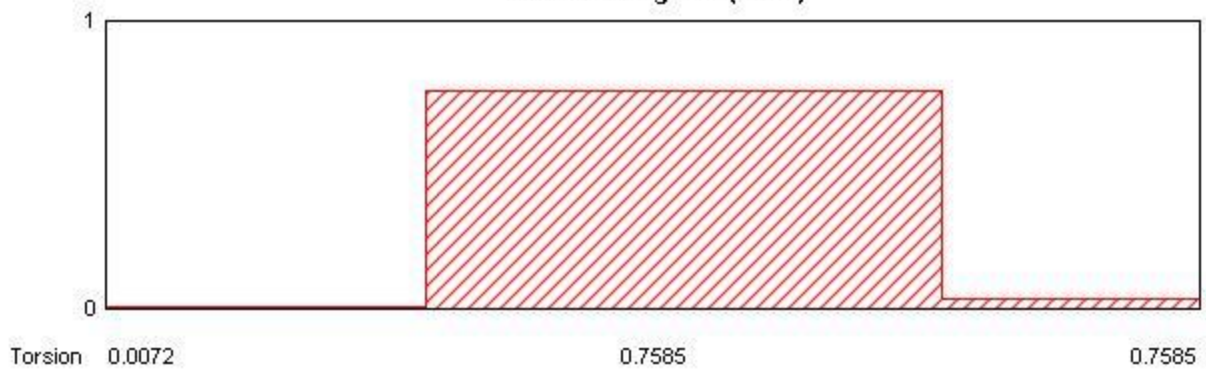
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



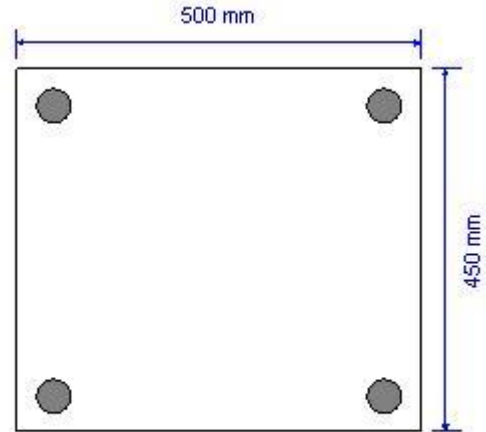
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

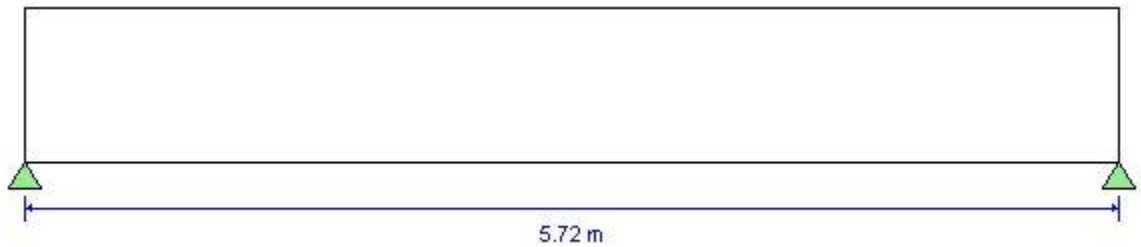
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B53  
Section Property = Viga45\*50  
Length = 5.72 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

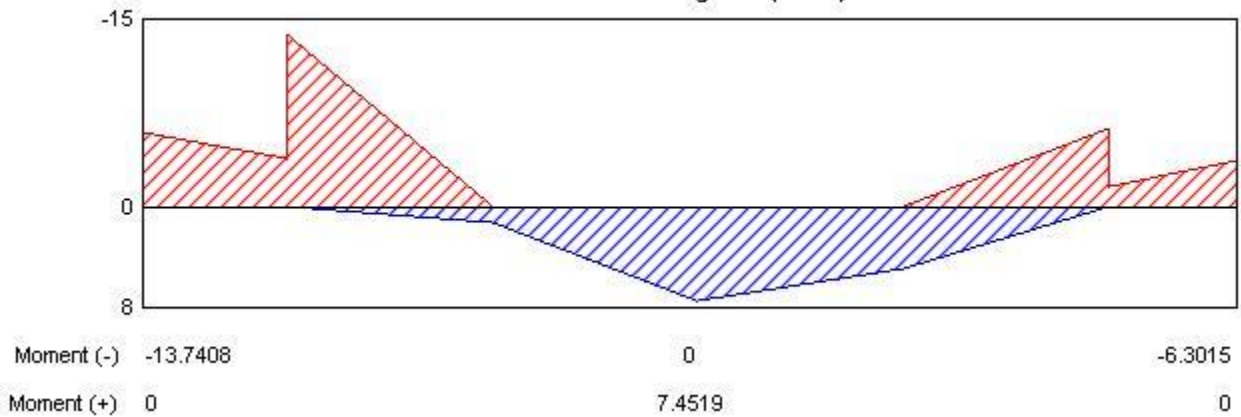


### Material Properties

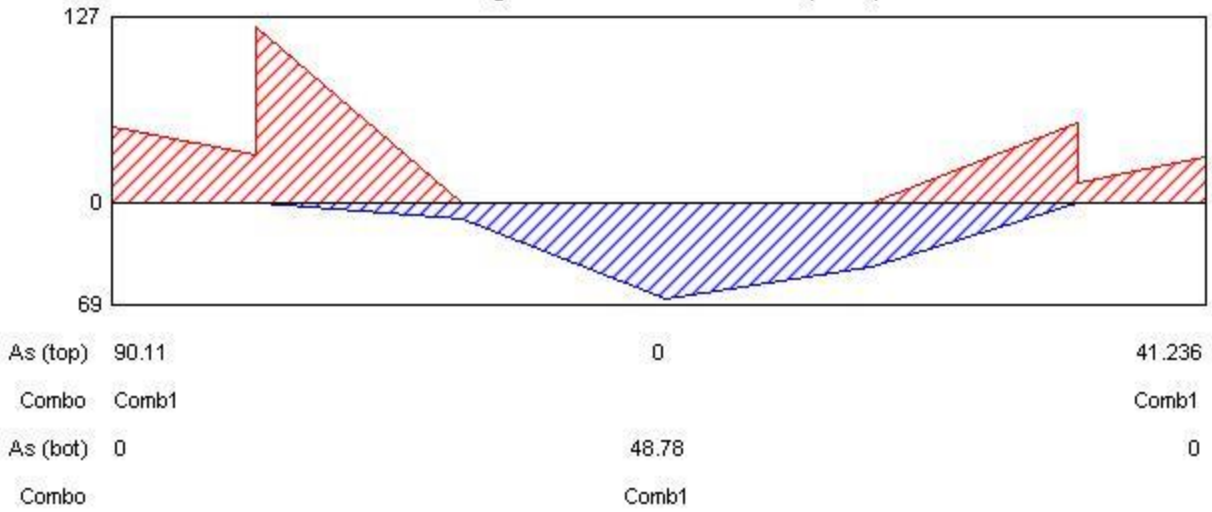
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



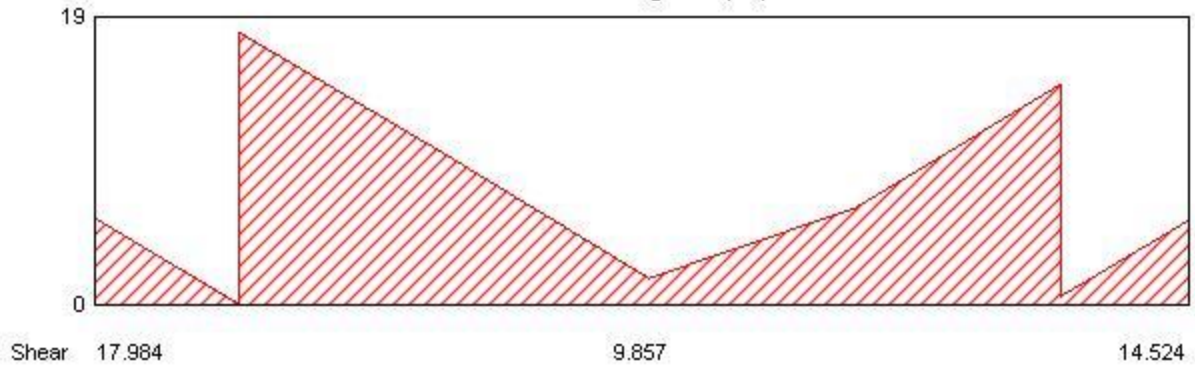
**Moment Diagram (kN-m)**



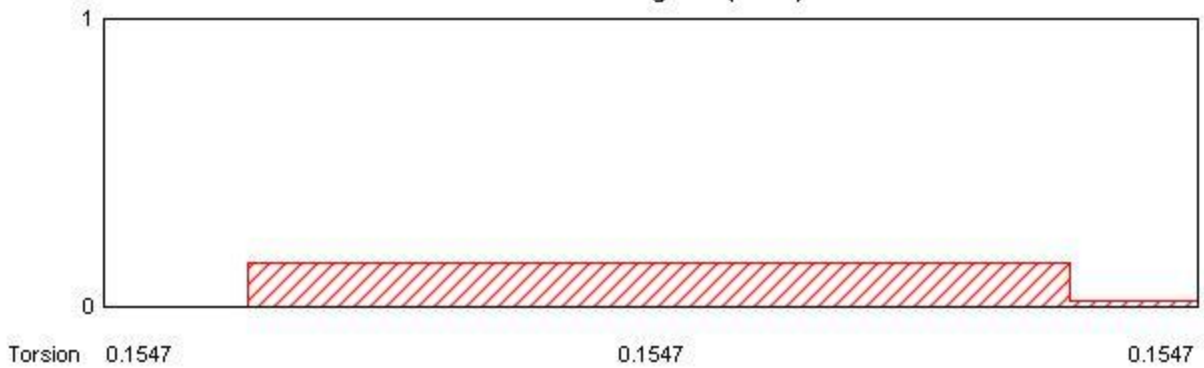
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



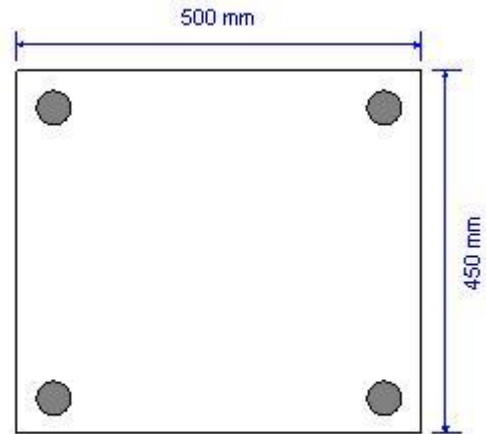
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B54  
Section Property = Viga45\*50  
Length = 6.73 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

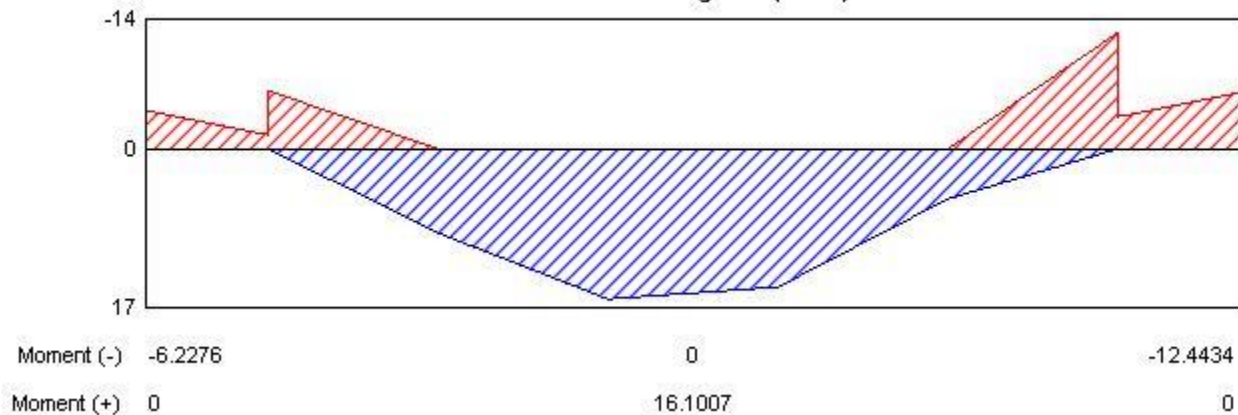


### Material Properties

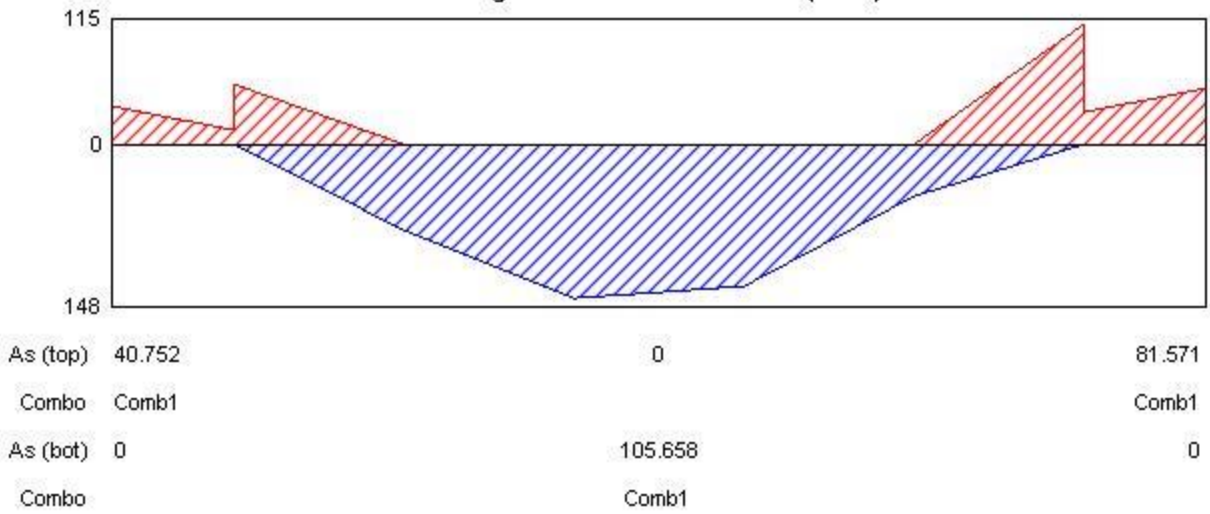
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



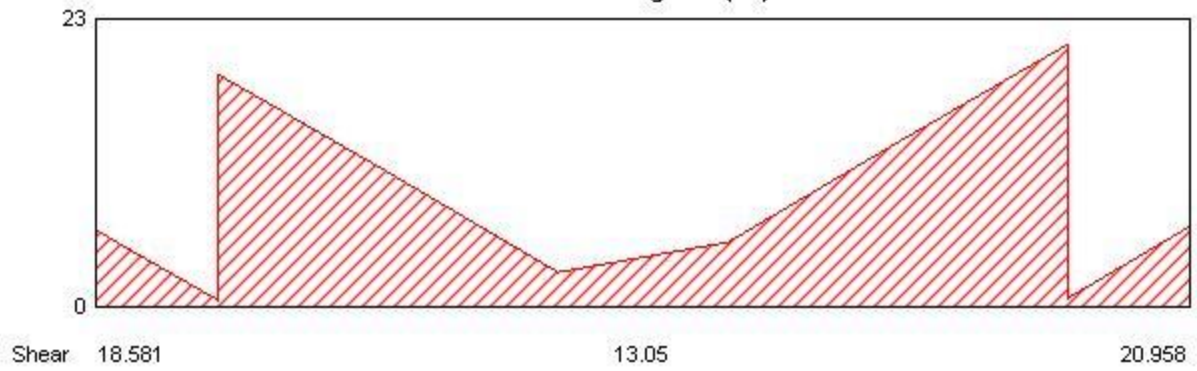
**Moment Diagram (kN-m)**



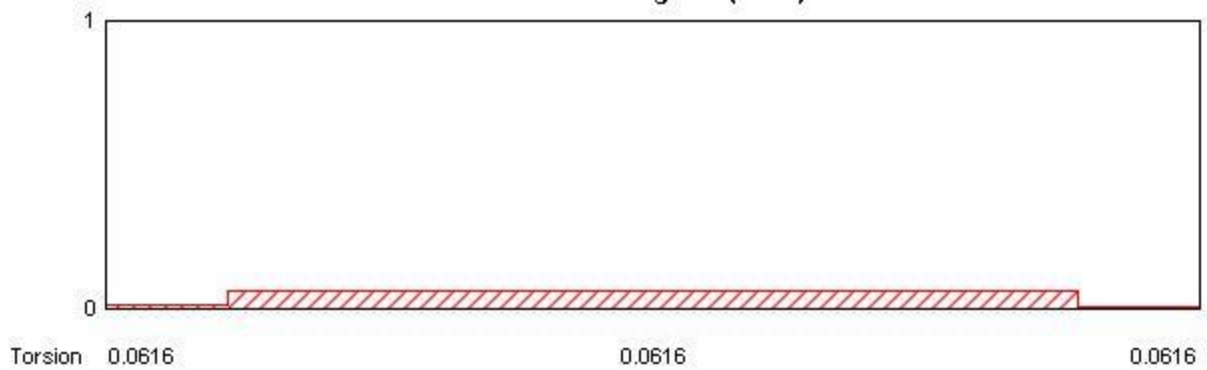
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



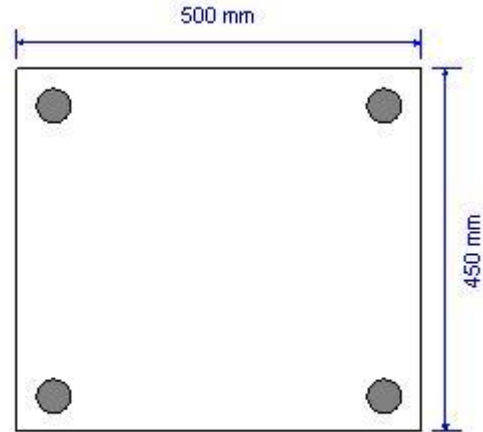
**Torsion Diagram (kN-m)**



# ACI 318-14 Concrete Beam Design

## Geometric Properties

Combination = Overall Envelope  
Beam Label = B56  
Section Property = Viga45\*50  
Length = 6.75 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

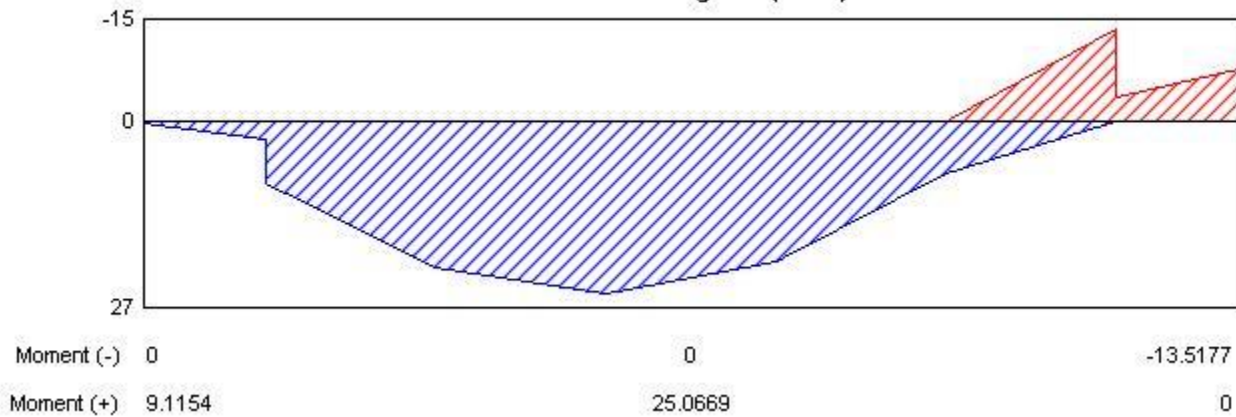


## Material Properties

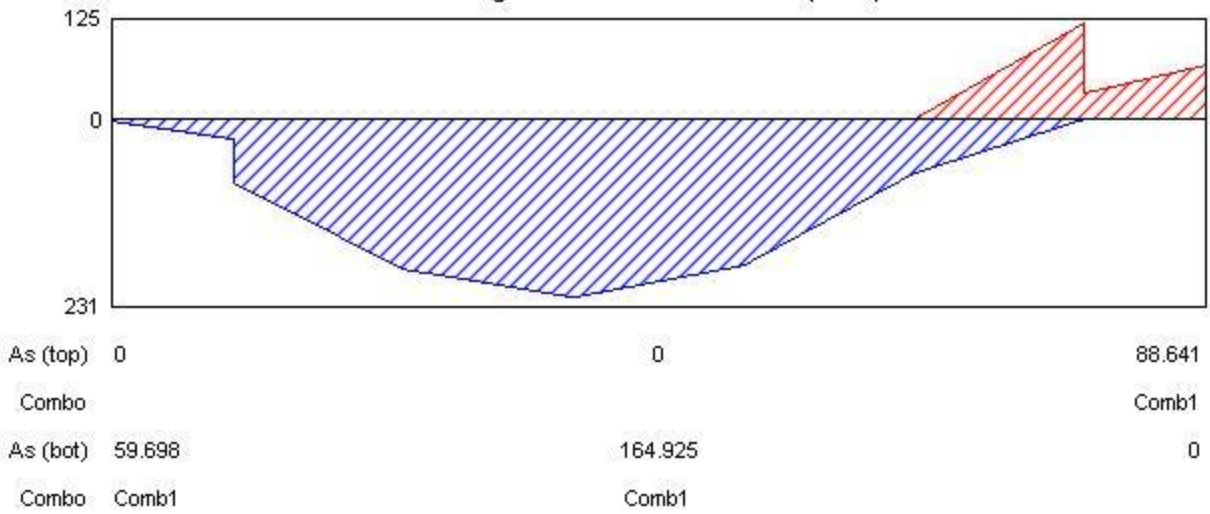
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



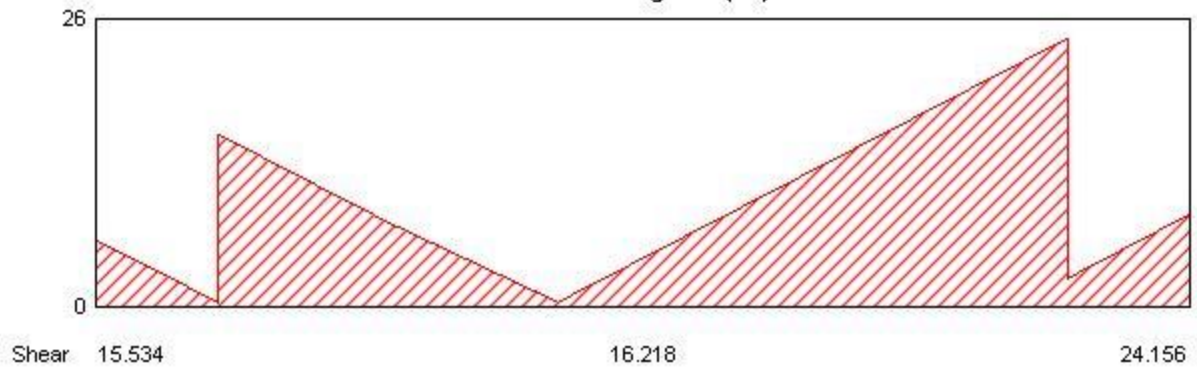
**Moment Diagram (kN-m)**



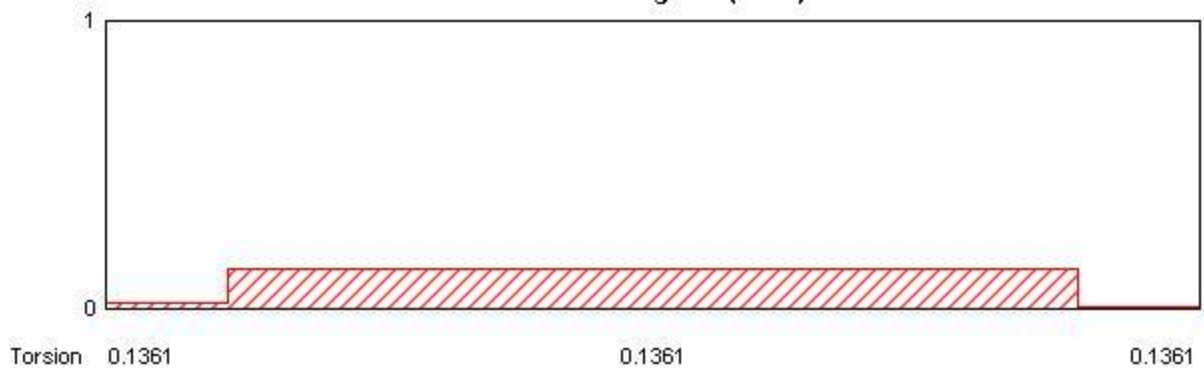
### Longitudinal Reinforcement (mm<sup>2</sup>)



### Shear Diagram (kN)



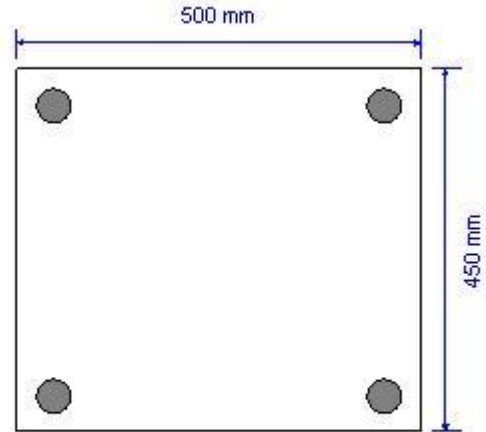
### Torsion Diagram (kN-m)



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B57  
Section Property = Viga45\*50  
Length = 5.35 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

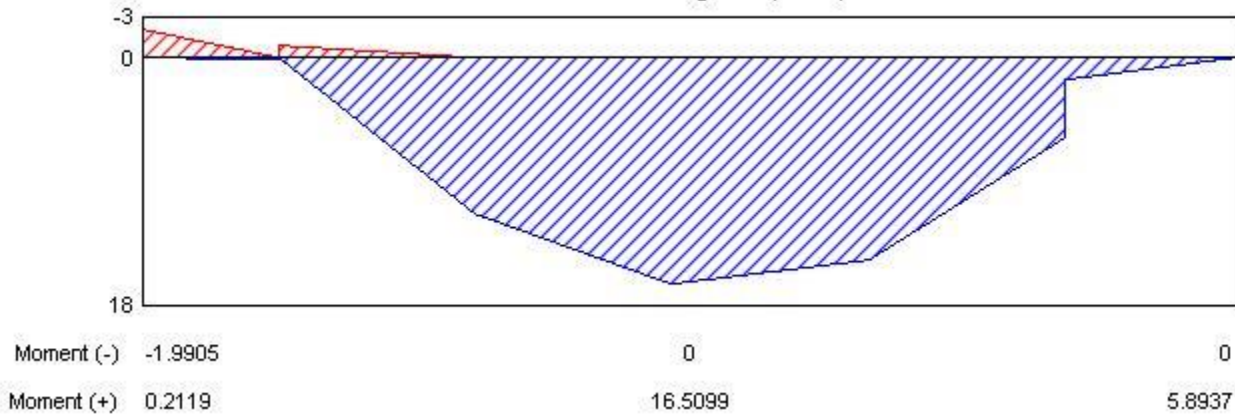


### Material Properties

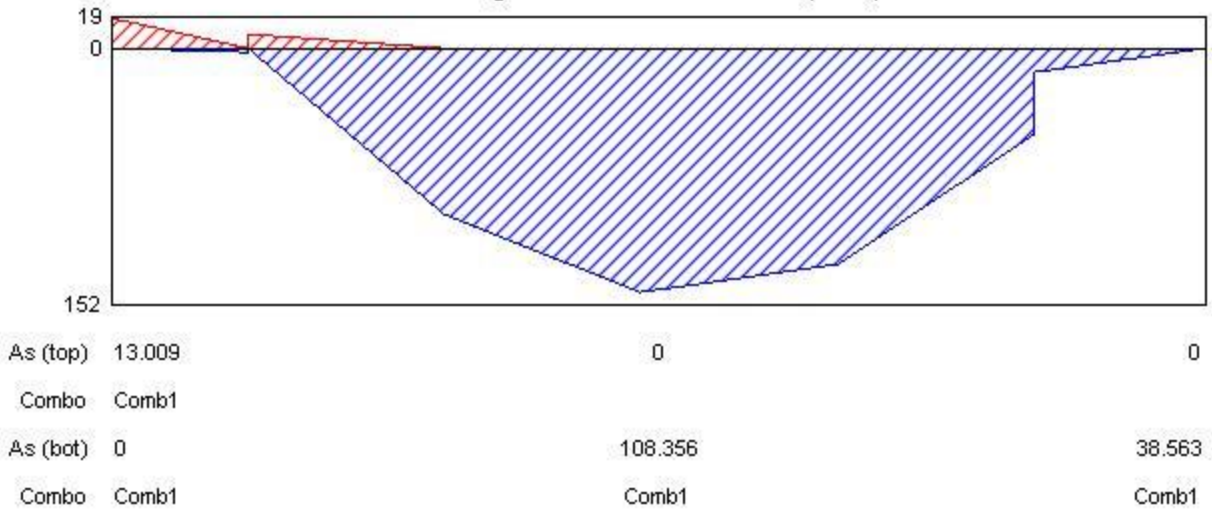
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



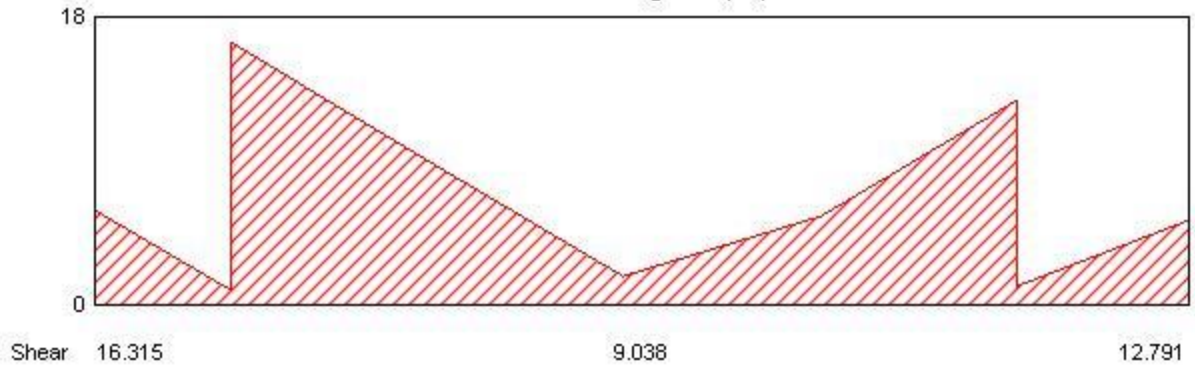
**Moment Diagram (kN-m)**



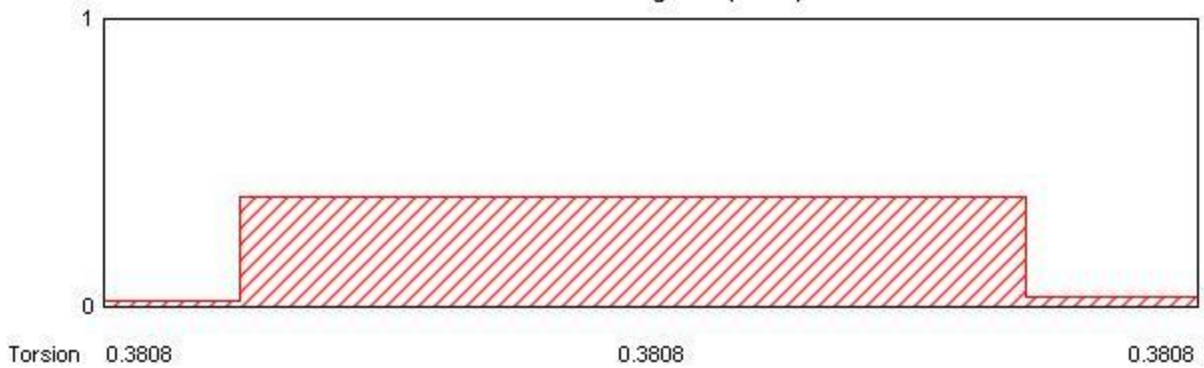
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



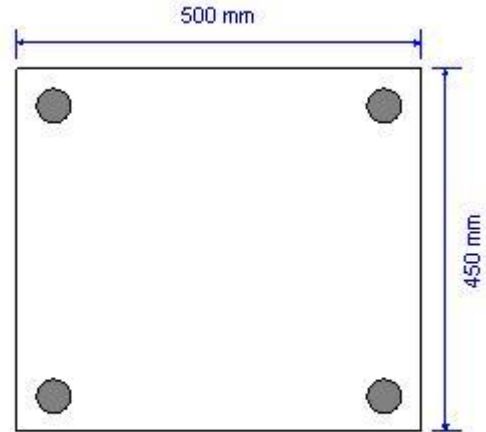
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
 Beam Label = B58  
 Section Property = Viga45\*50  
 Length = 4.32 m  
 Section Width = 500 mm  
 Section Depth = 450 mm  
 Distance to Top Rebar Center = 45 mm  
 Distance to Bot Rebar Center = 45 mm

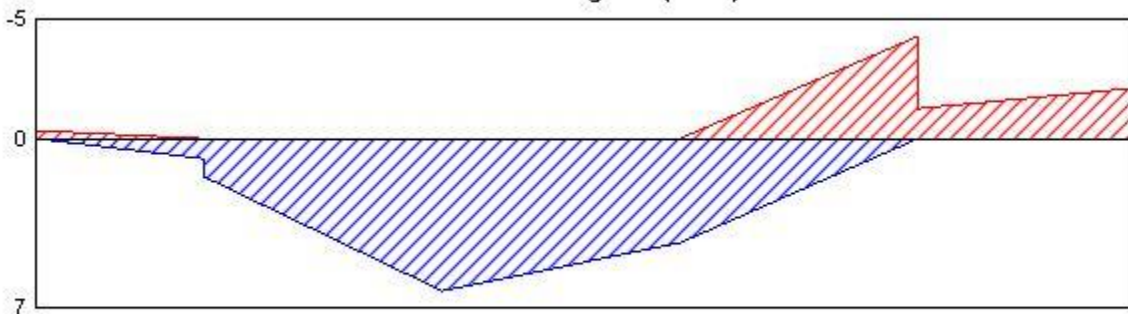


### Material Properties

Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
 Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
 Shear Rebar Yield = 420 N/mm<sup>2</sup>

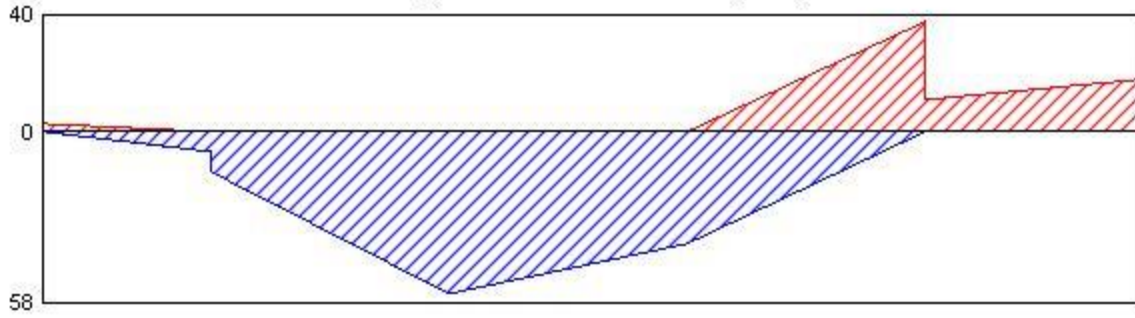


**Moment Diagram (kN-m)**



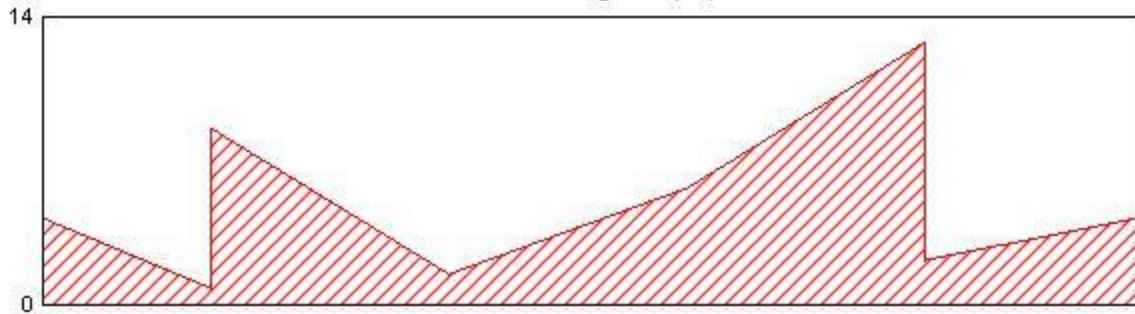
Moment (-)	-0.3004	0	-4.2803
Moment (+)	1.5702	6.3	0

**Longitudinal Reinforcement (mm<sup>2</sup>)**



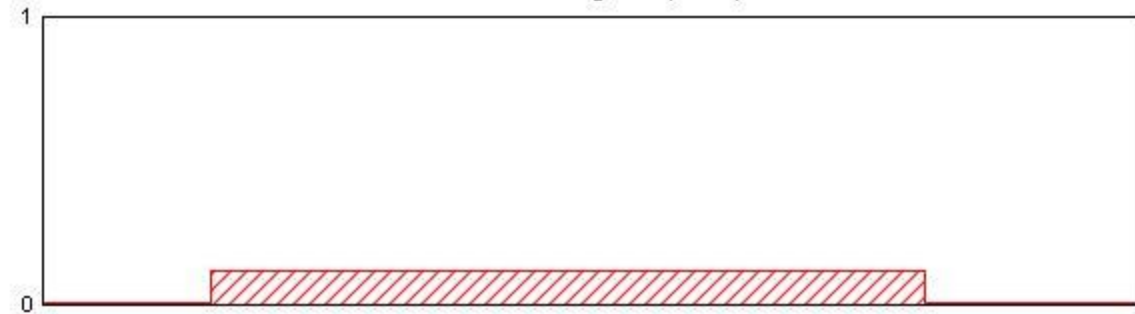
As (top)	0	0	27.993
Combo	Comb1		Comb1
As (bot)	10.261	41.227	0
Combo	Comb1	Comb1	

**Shear Diagram (kN)**



Shear	8.585	5.628	12.734
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**Torsion Diagram (kN-m)**

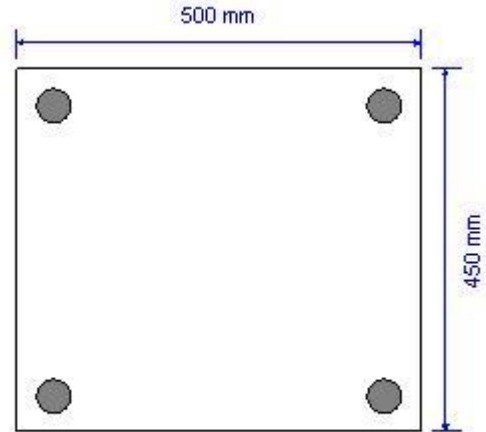


Torsion	0.1198	0.1198	0.1198
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## ACI 318-14 Concrete Beam Design

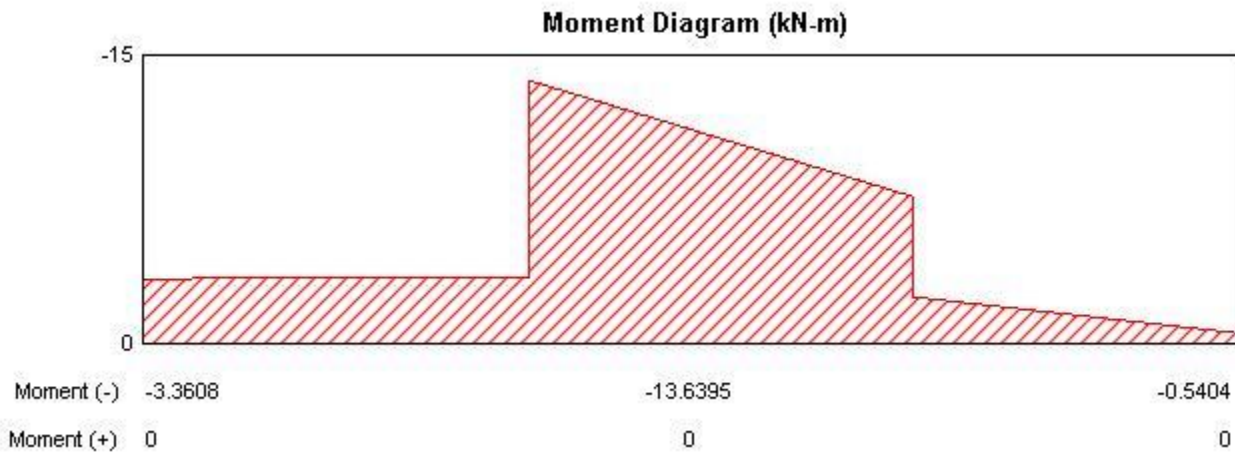
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B59  
Section Property = Viga45\*50  
Length = 2.83 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

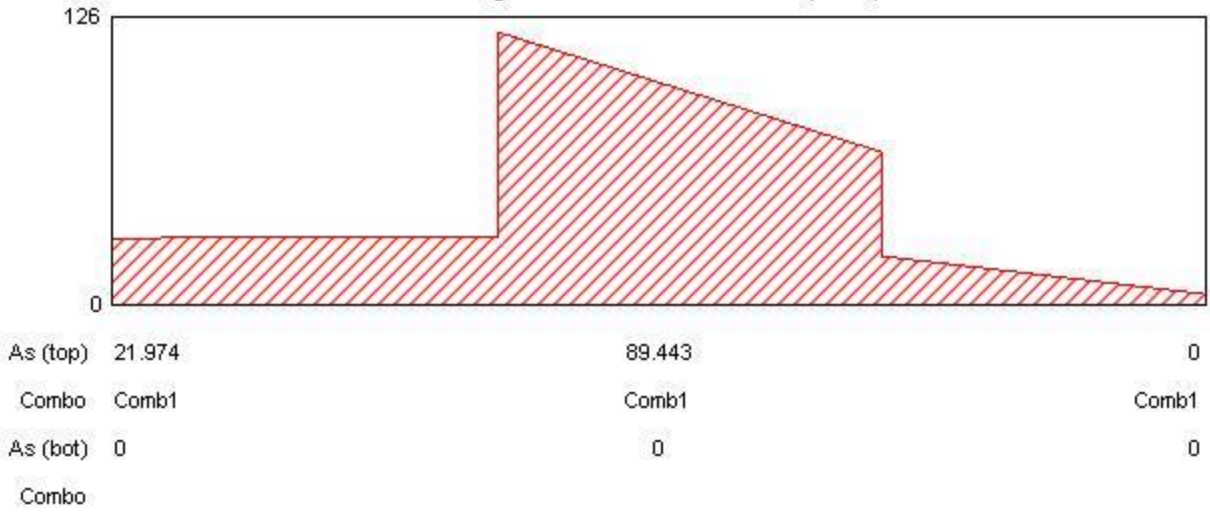


### Material Properties

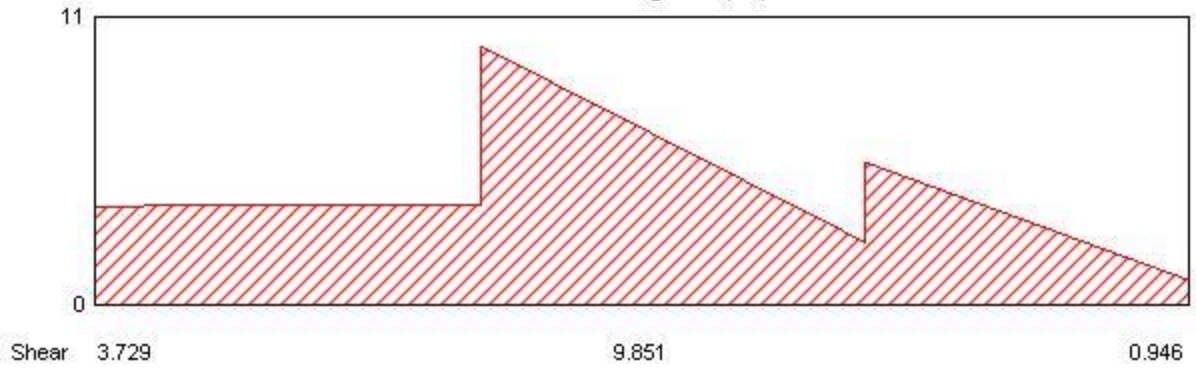
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



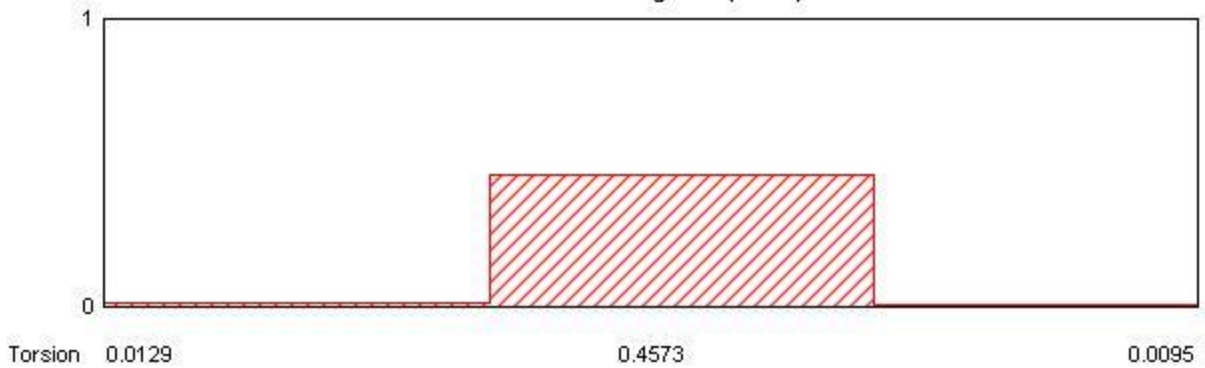
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



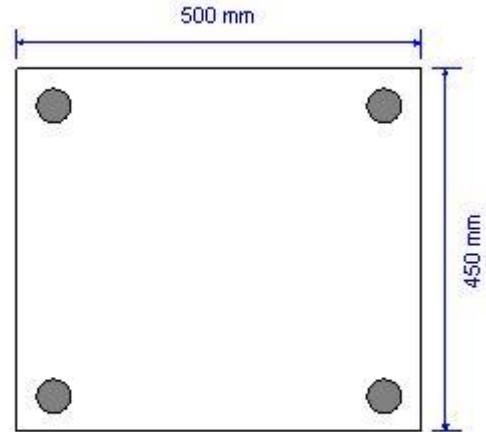
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

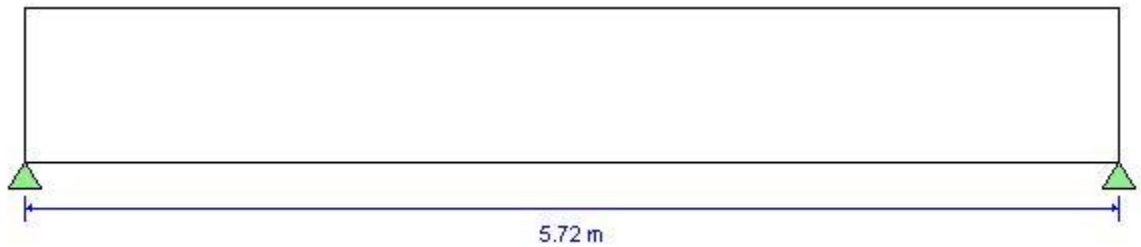
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B60  
Section Property = Viga45\*50  
Length = 5.72 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

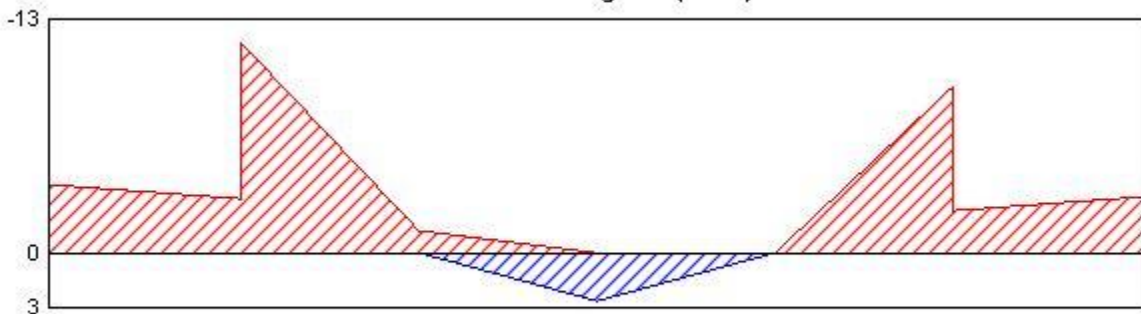


### Material Properties

Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>

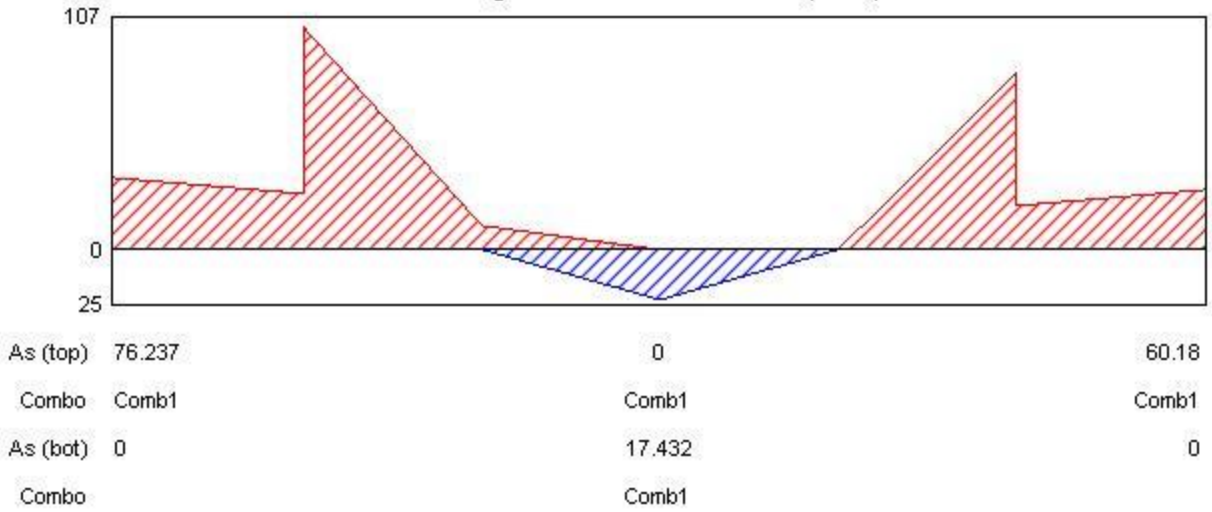


**Moment Diagram (kN-m)**

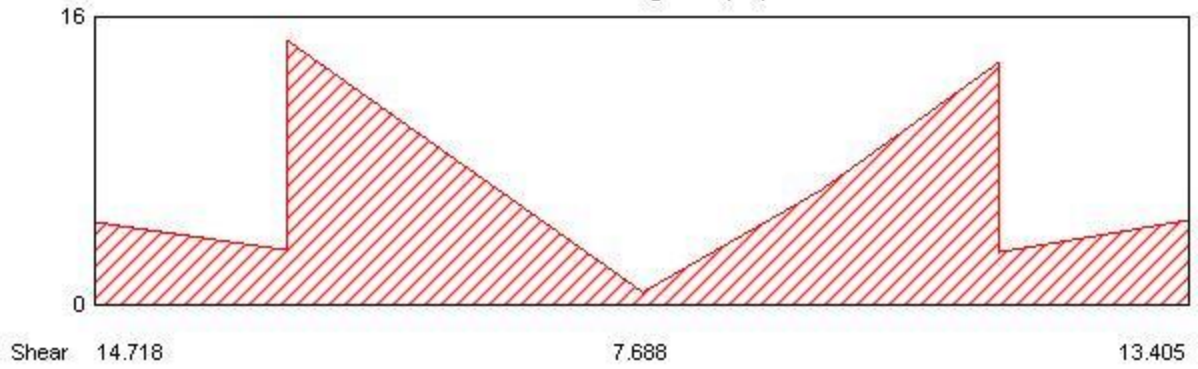


Moment (-)	-11.6324	-1.2135	-9.1889
Moment (+)	0	2.6667	0

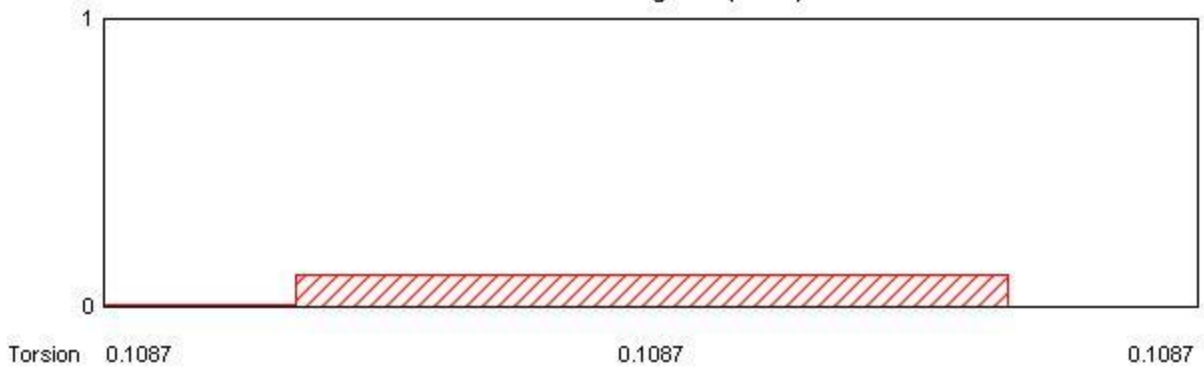
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



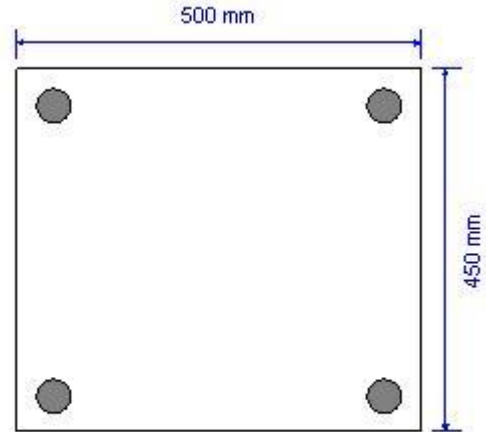
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B61  
Section Property = Viga45\*50  
Length = 6.73 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

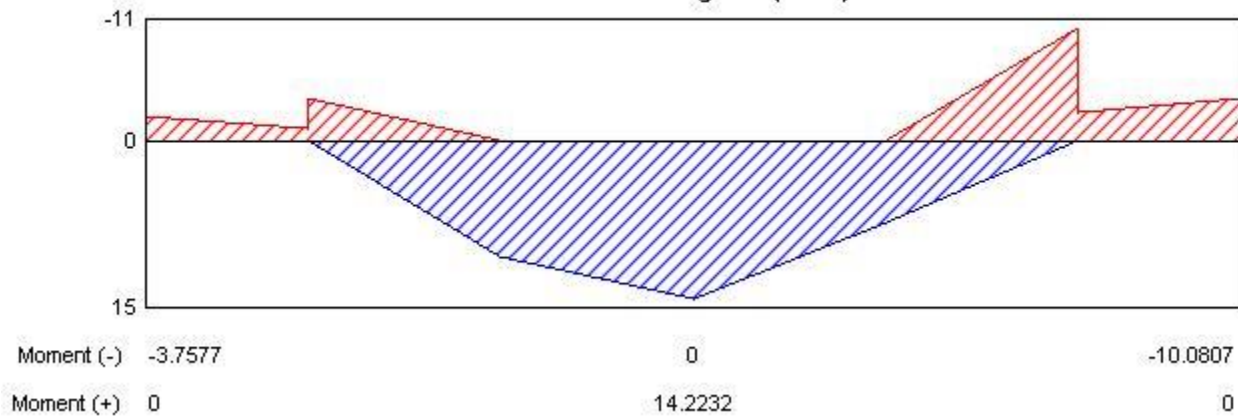


### Material Properties

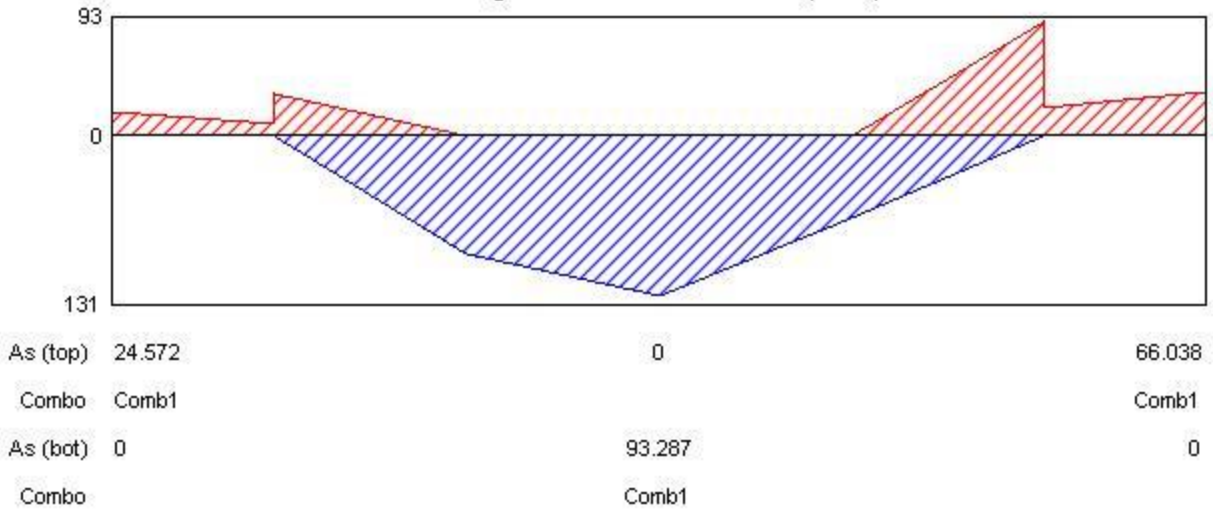
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



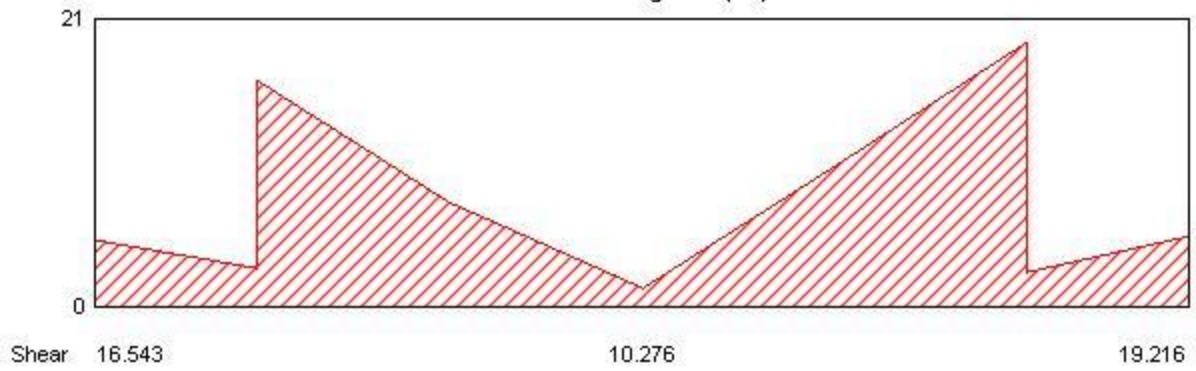
**Moment Diagram (kN-m)**



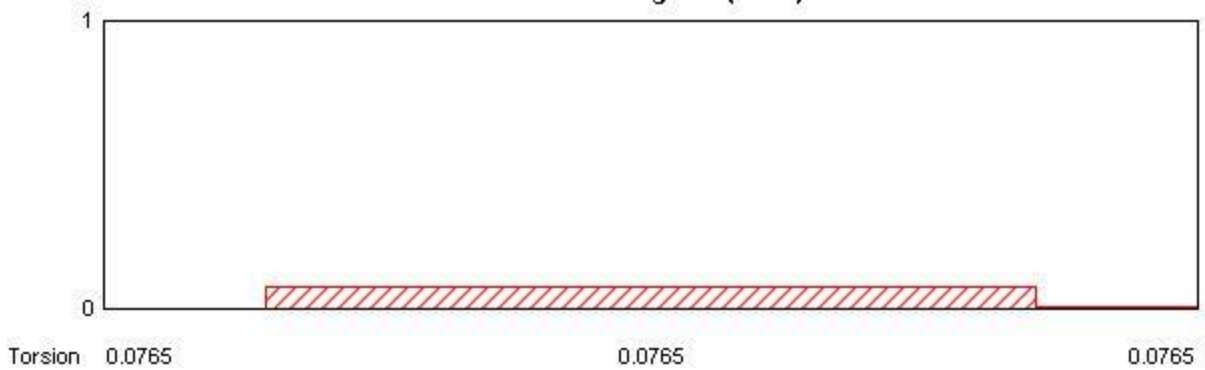
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



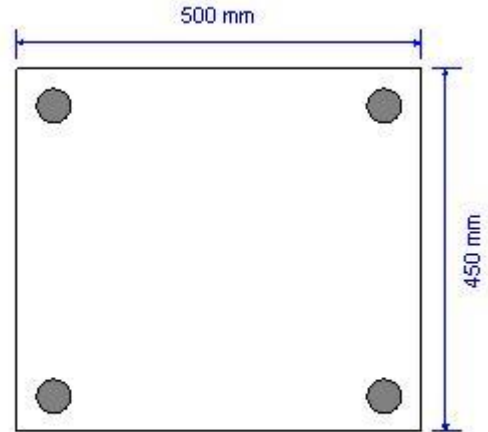
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

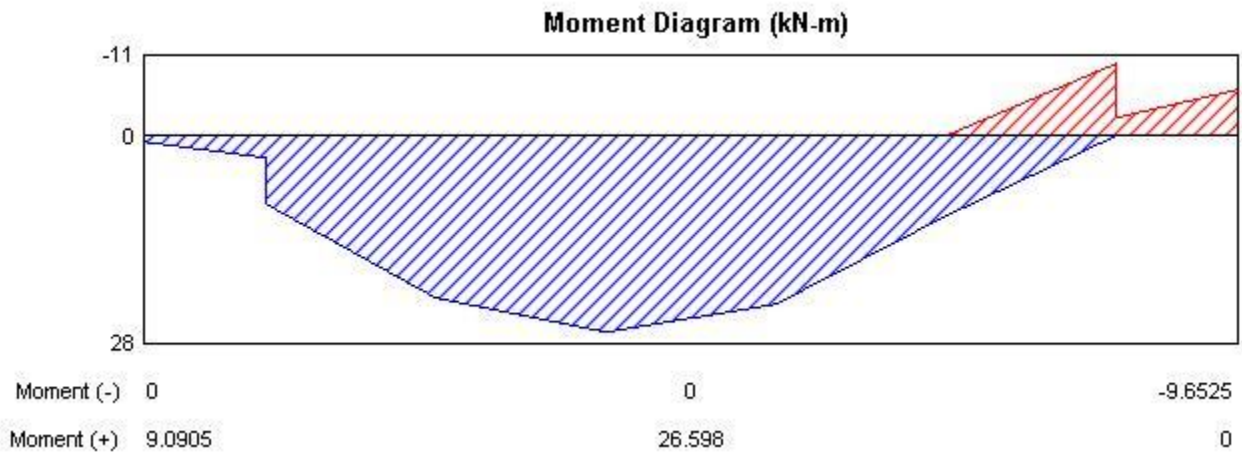
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B63  
Section Property = Viga45\*50  
Length = 6.75 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

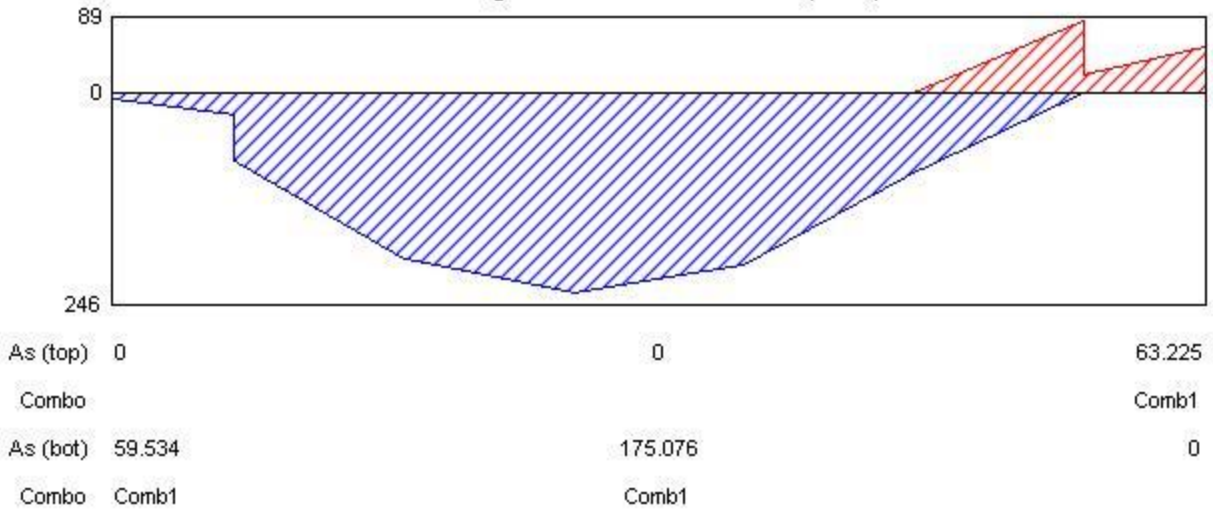


### Material Properties

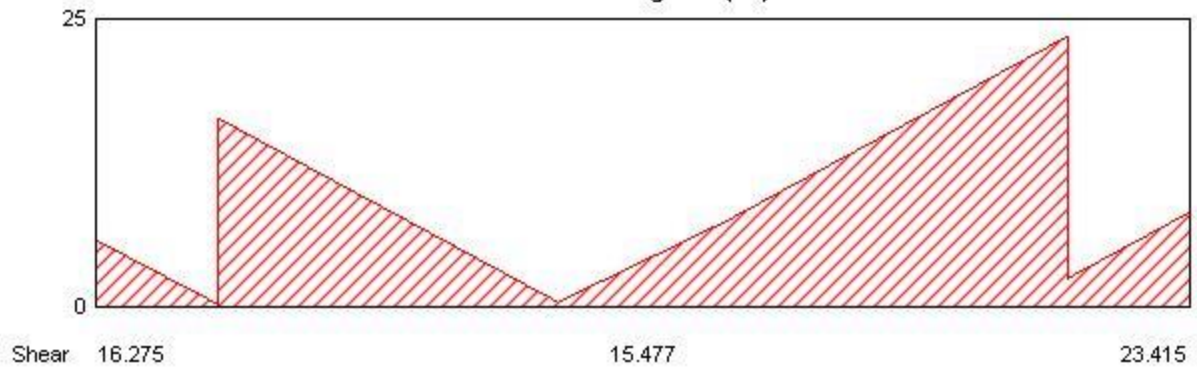
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



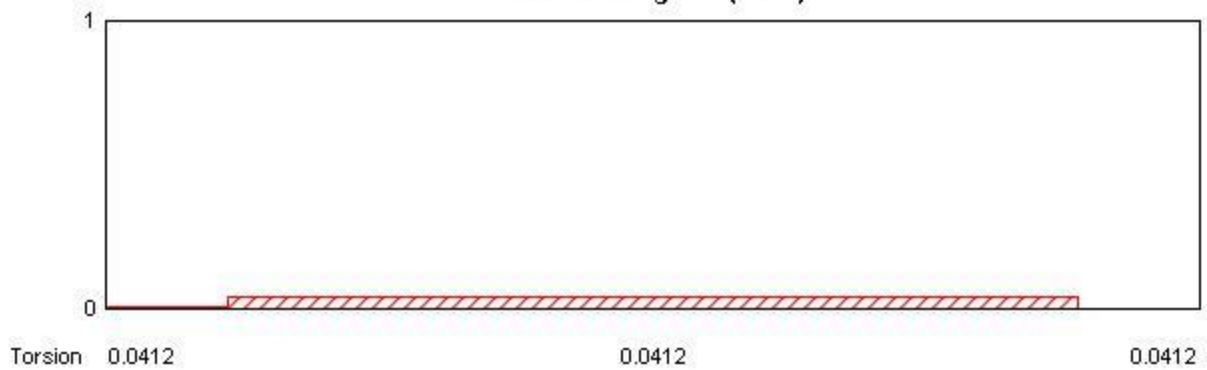
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



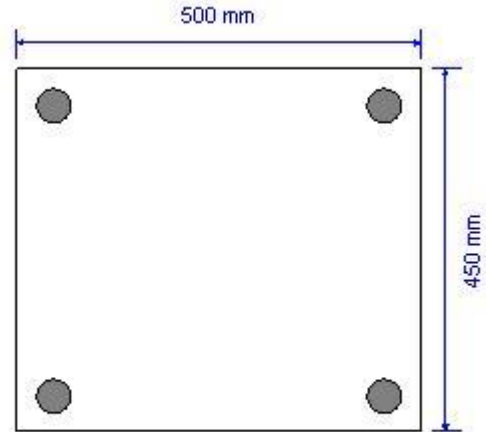
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

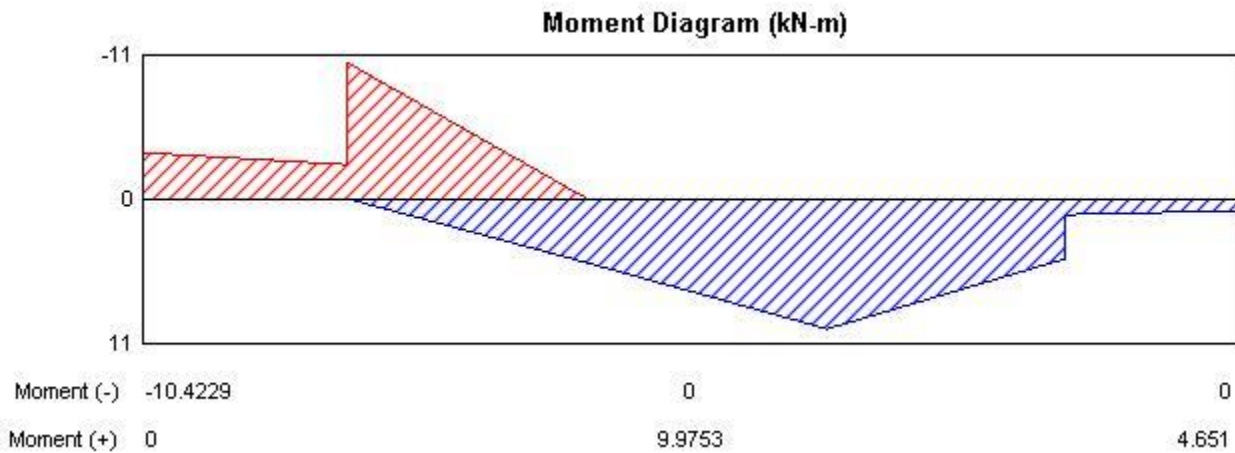
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B64  
Section Property = Viga45\*50  
Length = 5.35 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

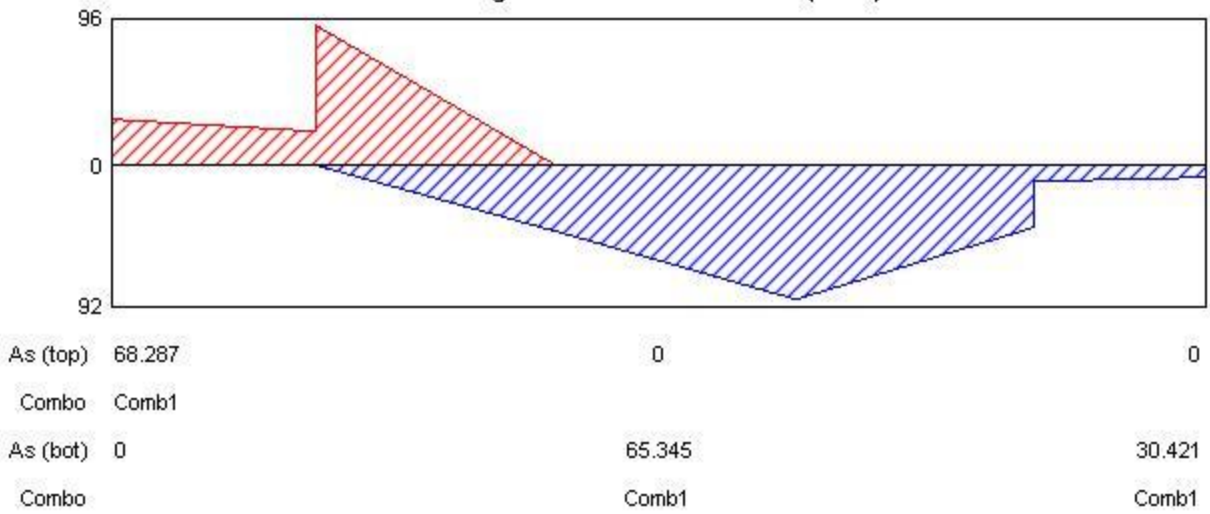


### Material Properties

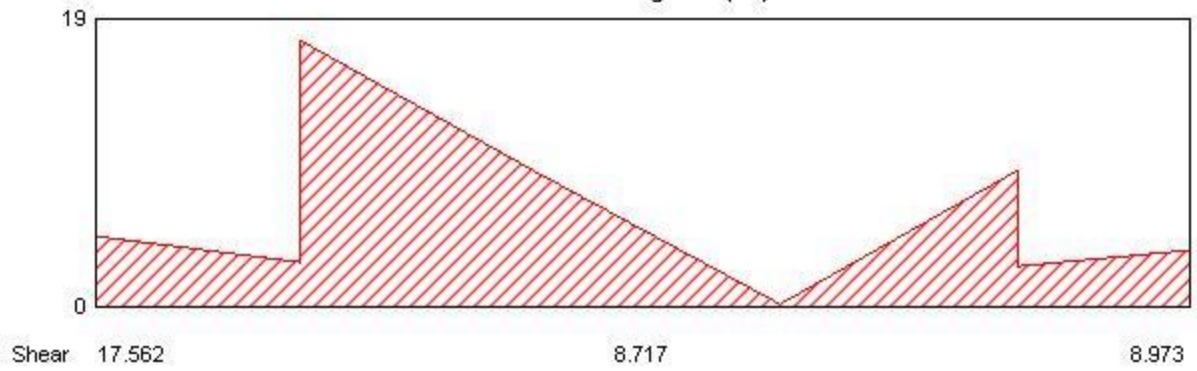
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



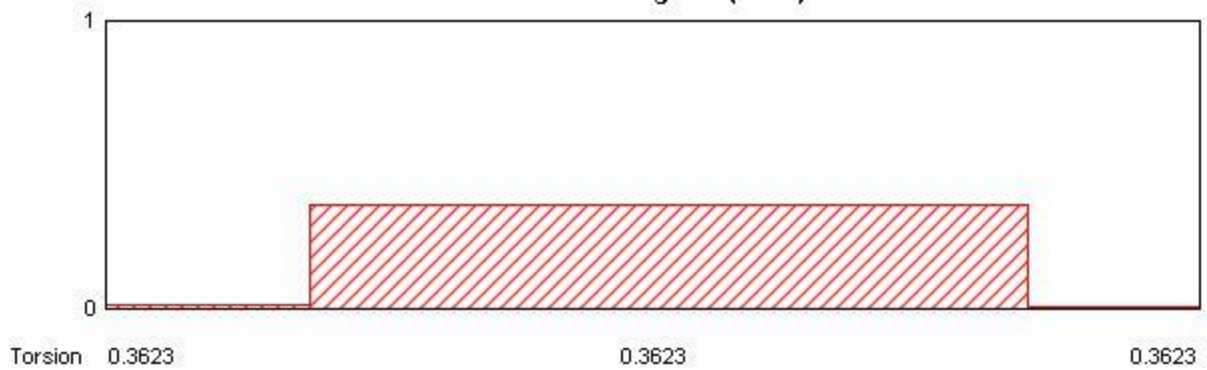
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



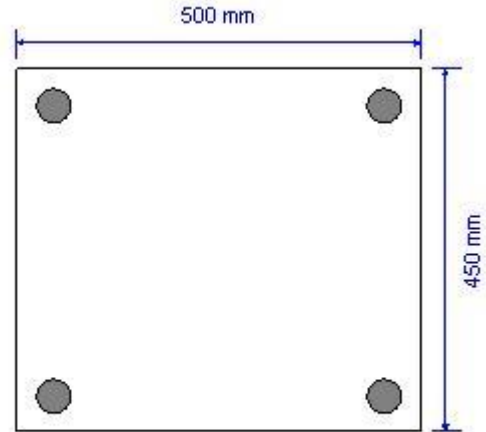
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B65  
Section Property = Viga45\*50  
Length = 4.32 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

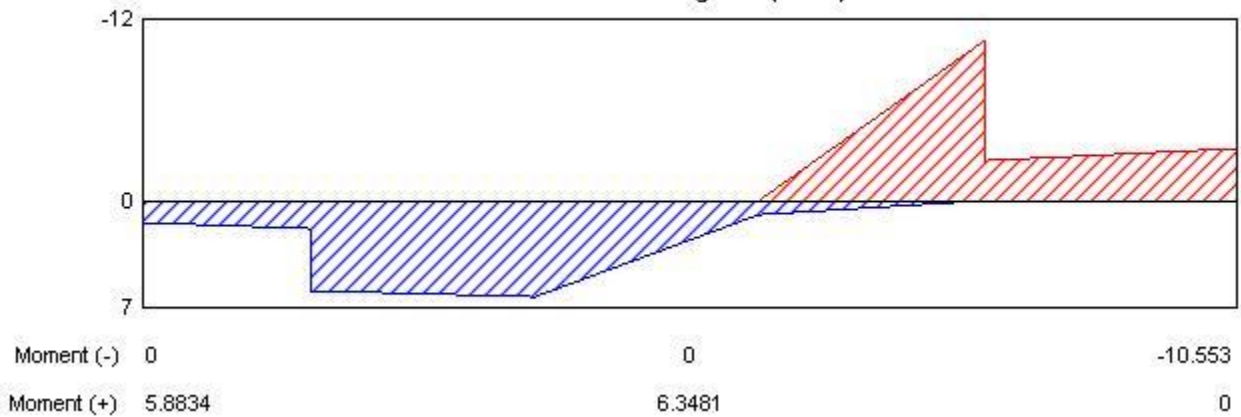


### Material Properties

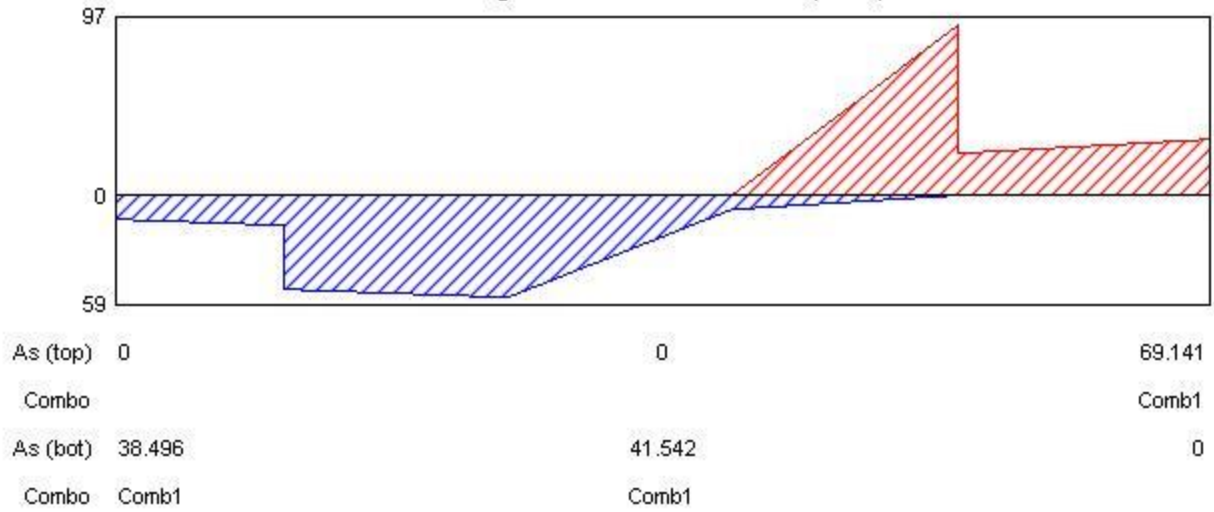
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



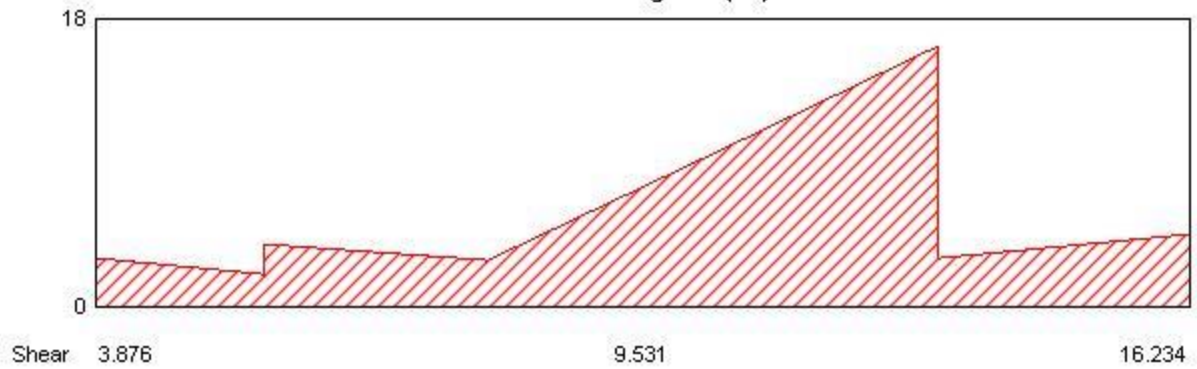
**Moment Diagram (kN-m)**



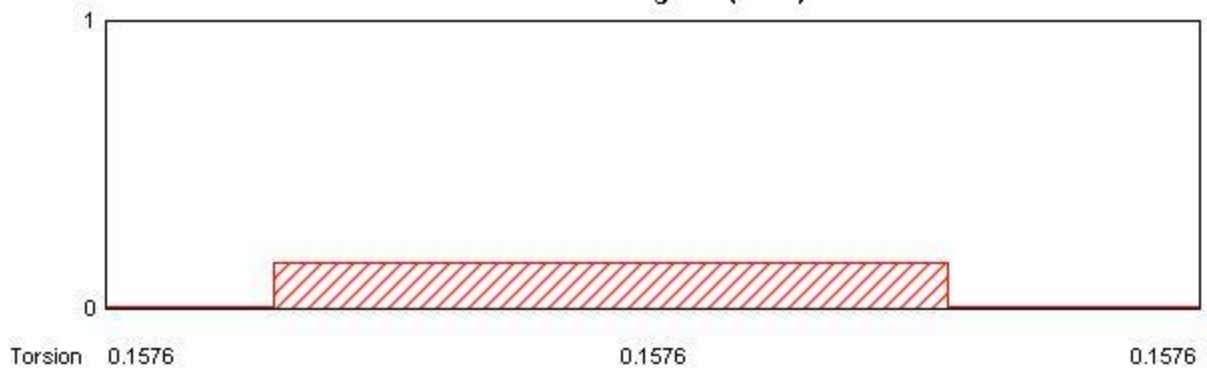
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



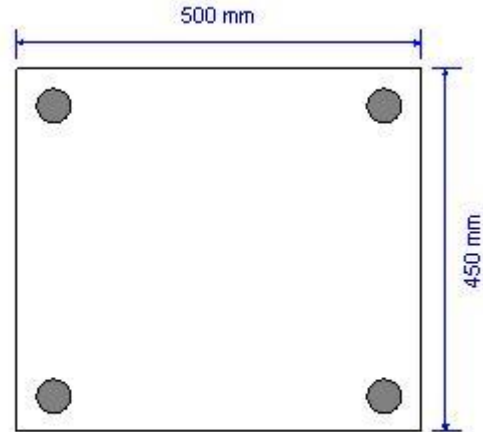
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

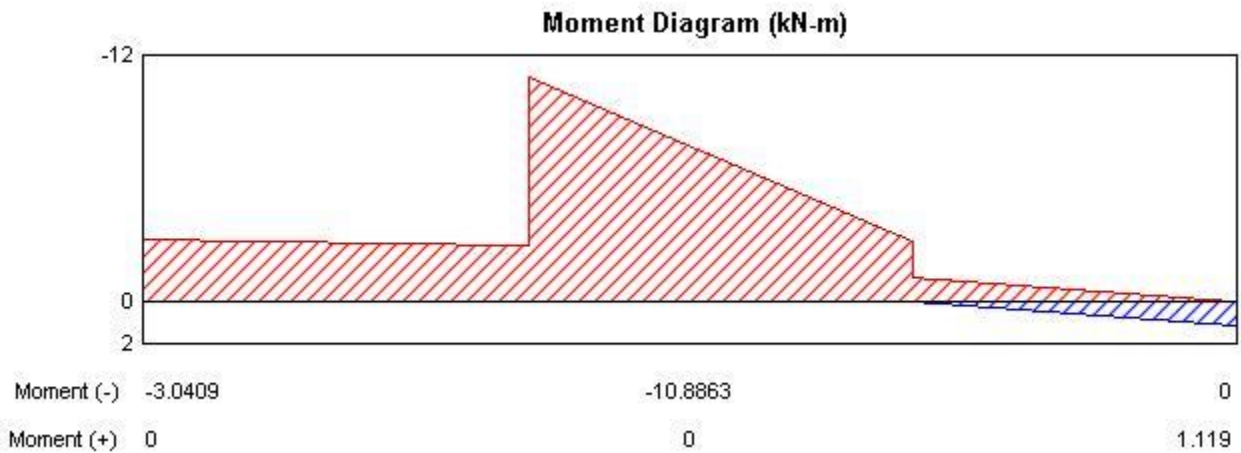
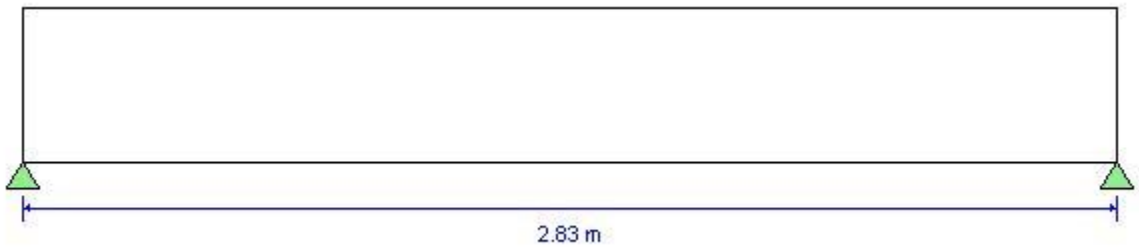
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B66  
Section Property = Viga45\*50  
Length = 2.83 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

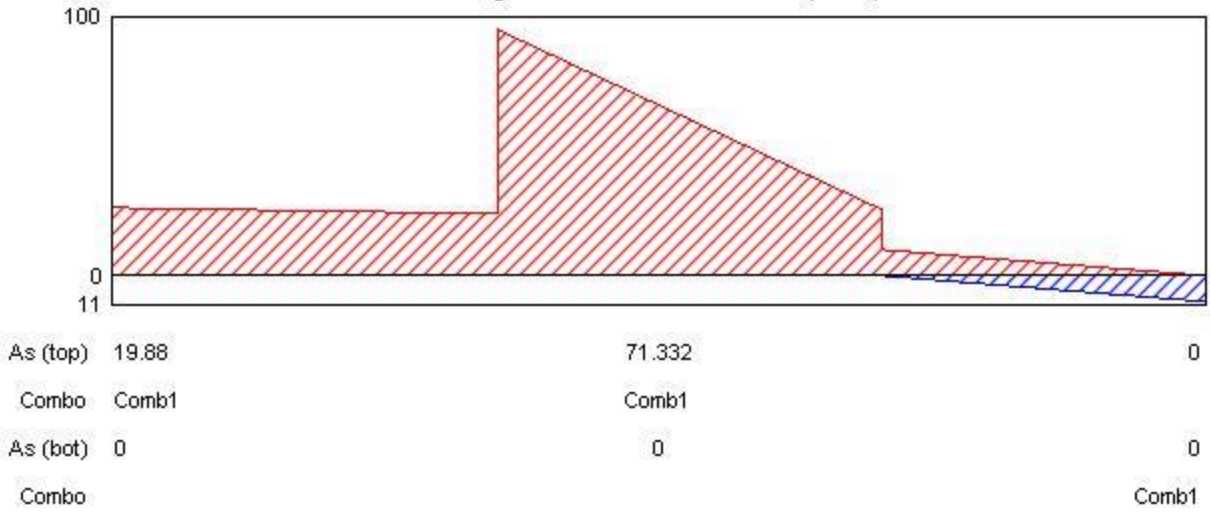


### Material Properties

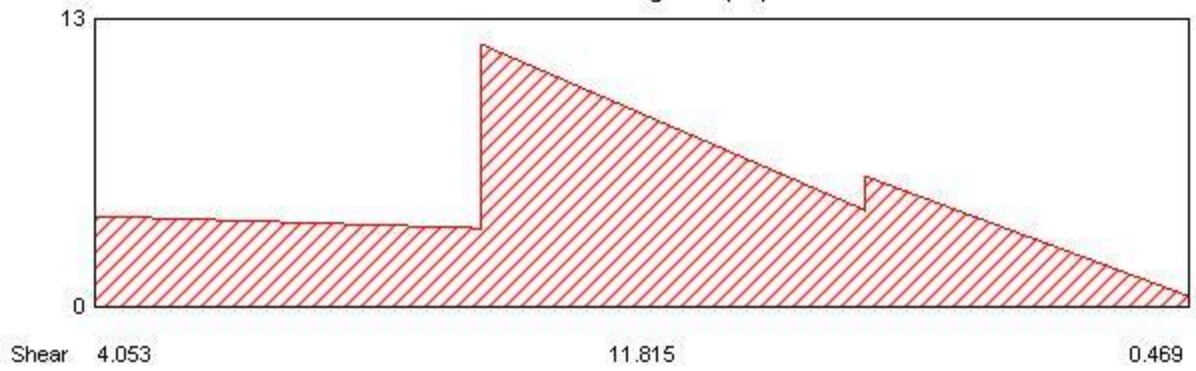
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



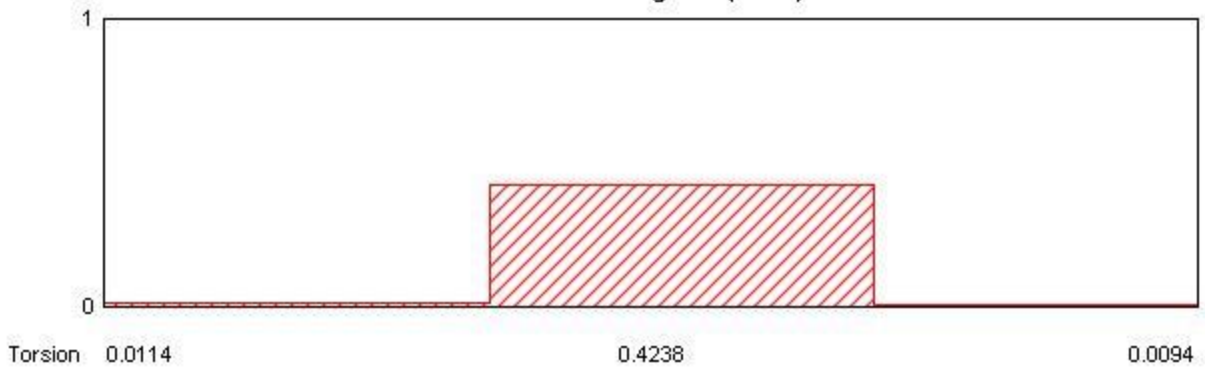
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



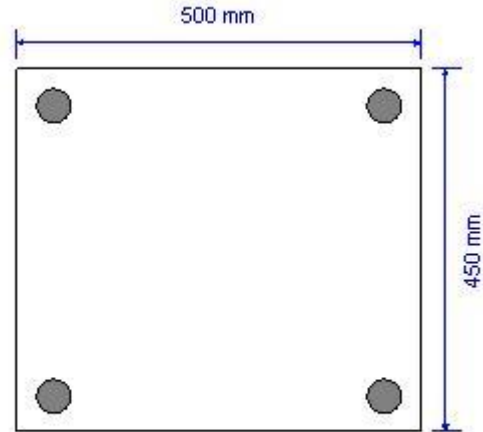
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

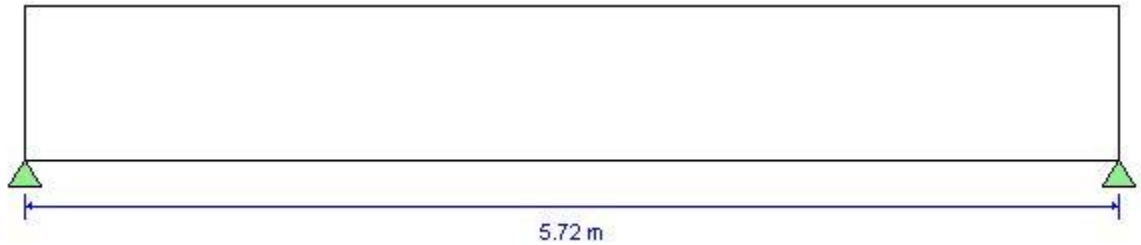
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B67  
Section Property = Viga45\*50  
Length = 5.72 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

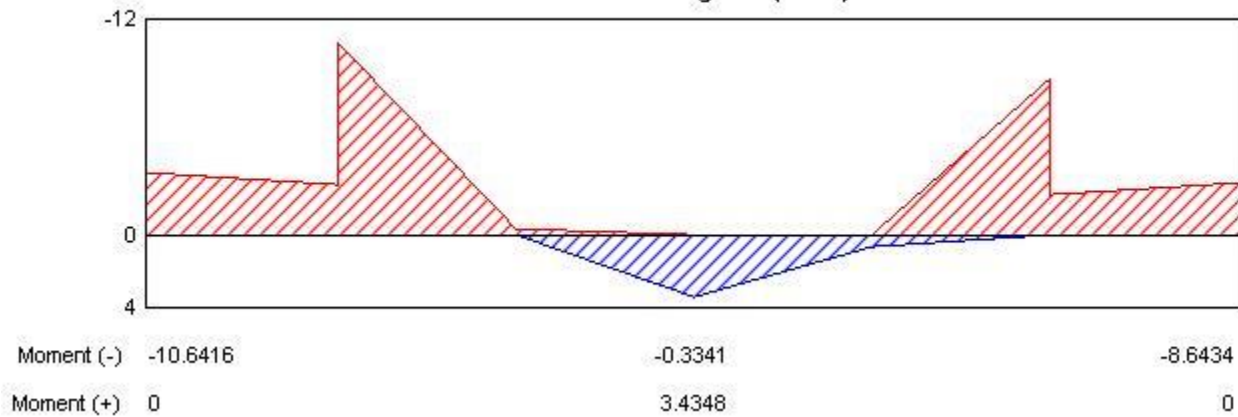


### Material Properties

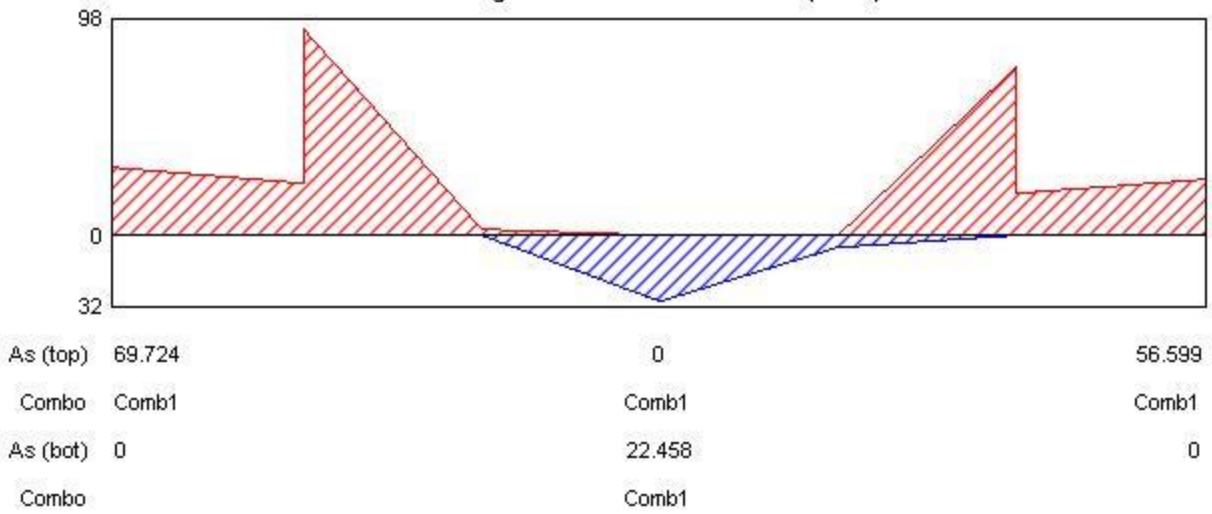
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



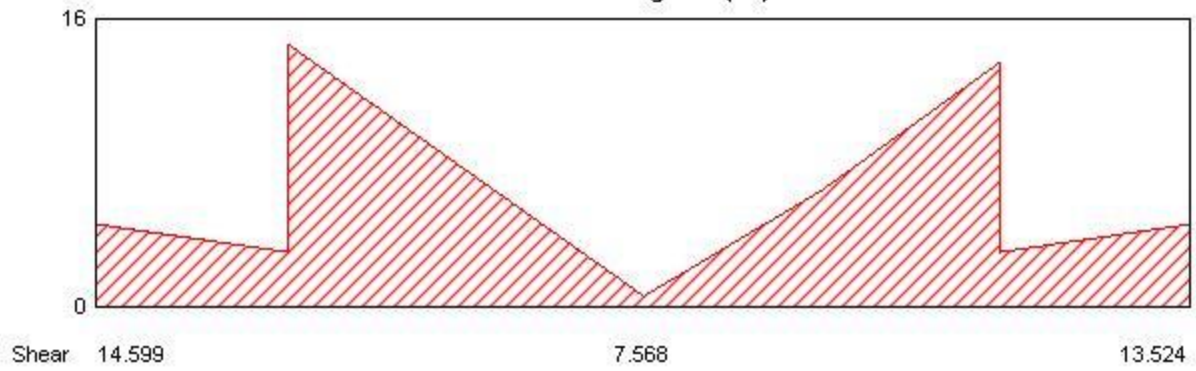
**Moment Diagram (kN-m)**



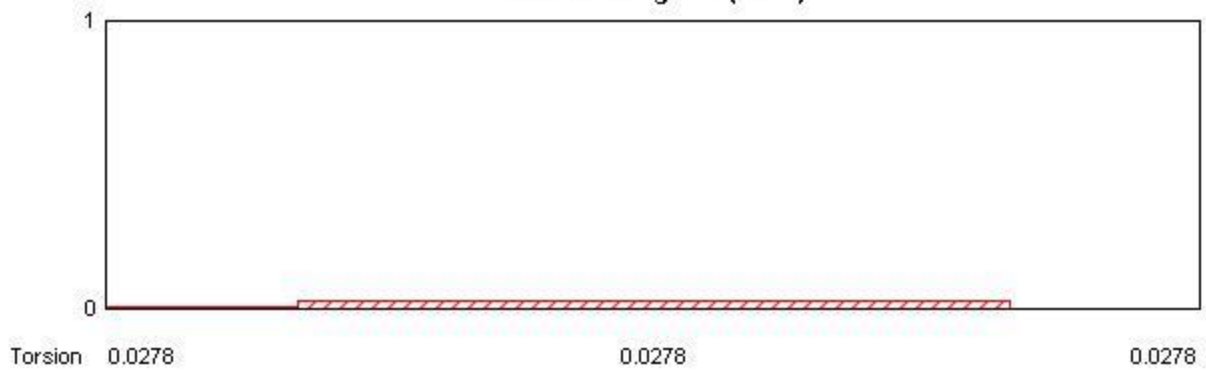
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



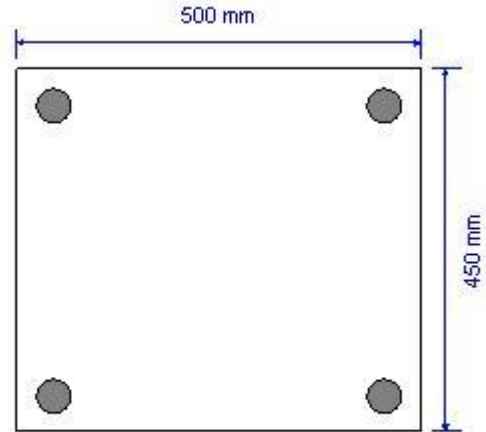
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

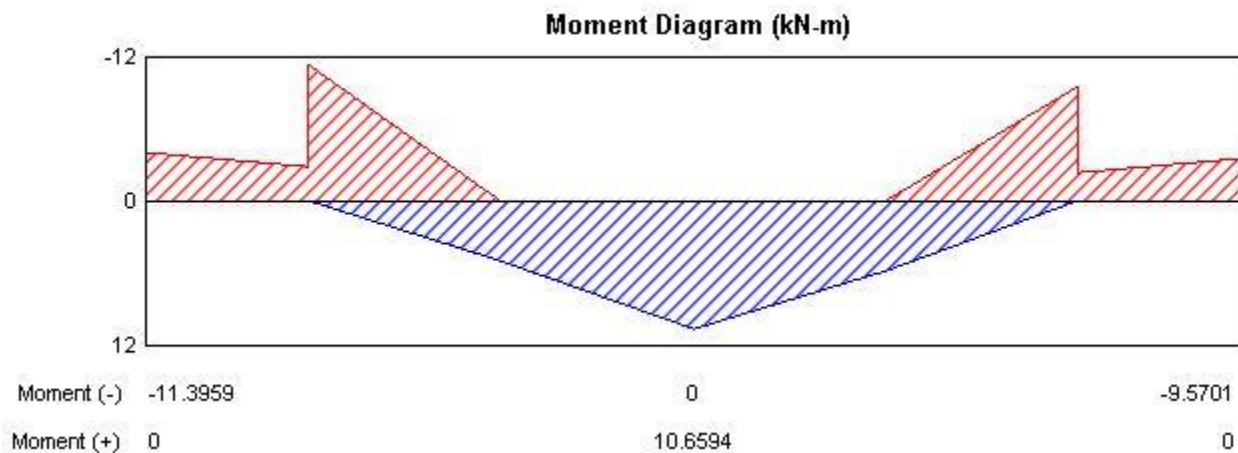
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B68  
Section Property = Viga45\*50  
Length = 6.73 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

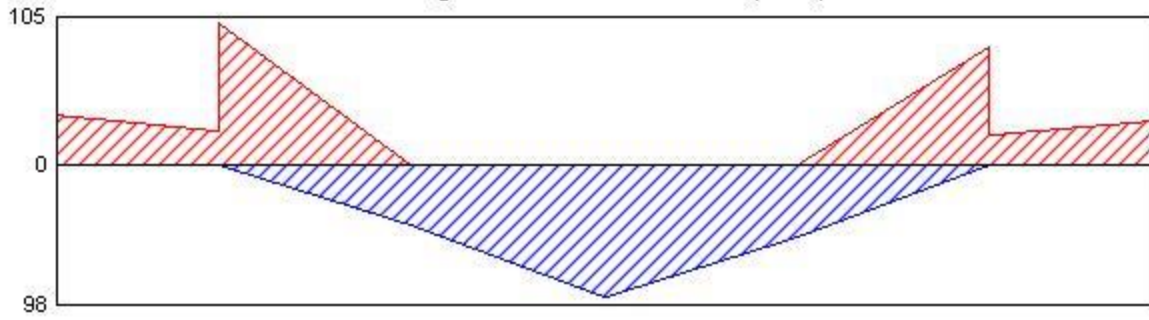


### Material Properties

Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>

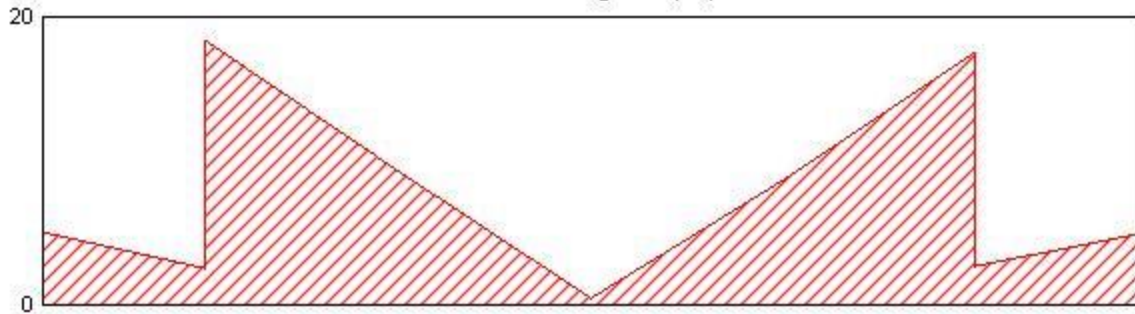


**Longitudinal Reinforcement (mm<sup>2</sup>)**



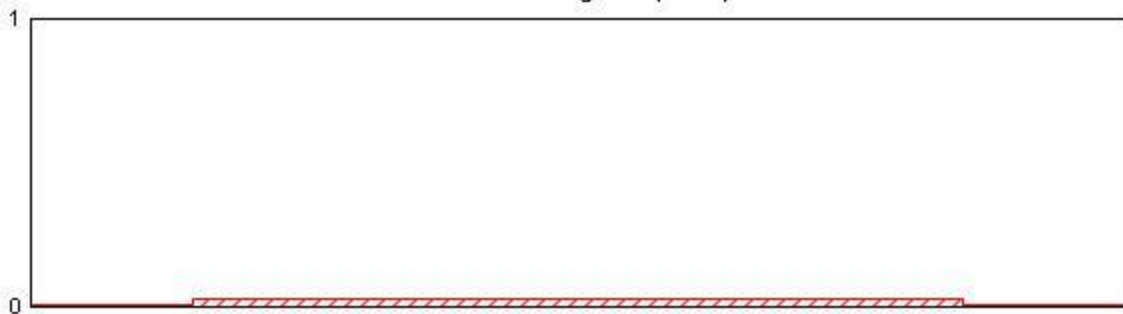
As (top)	74.682	0	62.684
Combo	Comb1		Comb1
As (bot)	0	69.841	0
Combo		Comb1	

**Shear Diagram (kN)**



Shear	18.265	9.326	17.493
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**Torsion Diagram (kN-m)**

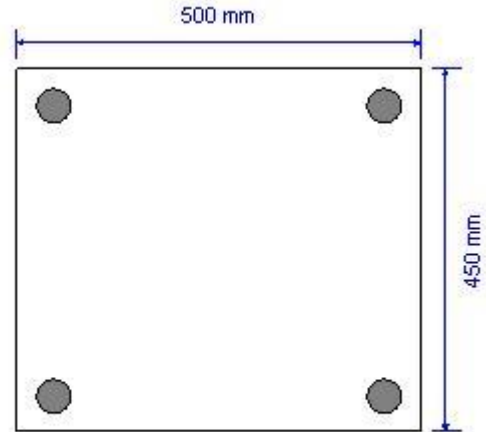


Torsion	0.0273	0.0273	0.0273
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## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B69  
Section Property = Viga45\*50  
Length = 6.3 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

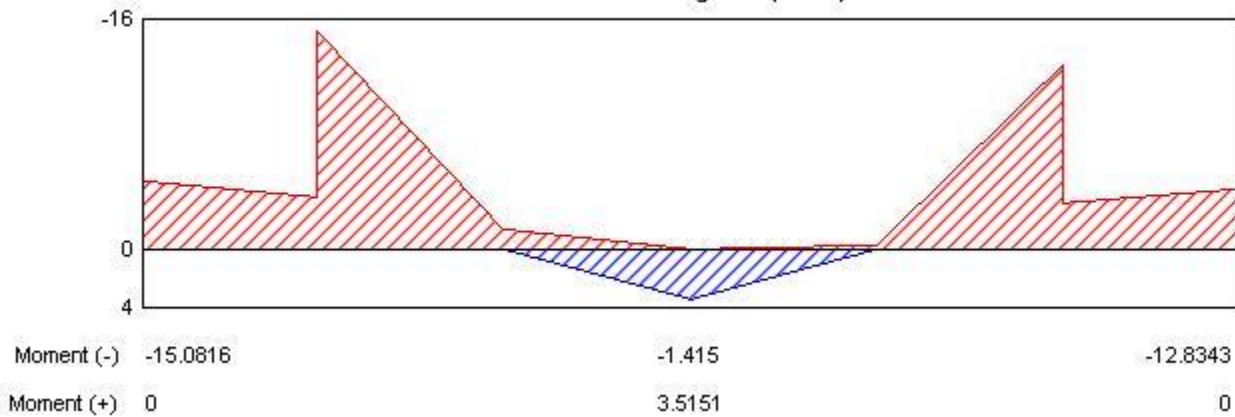


### Material Properties

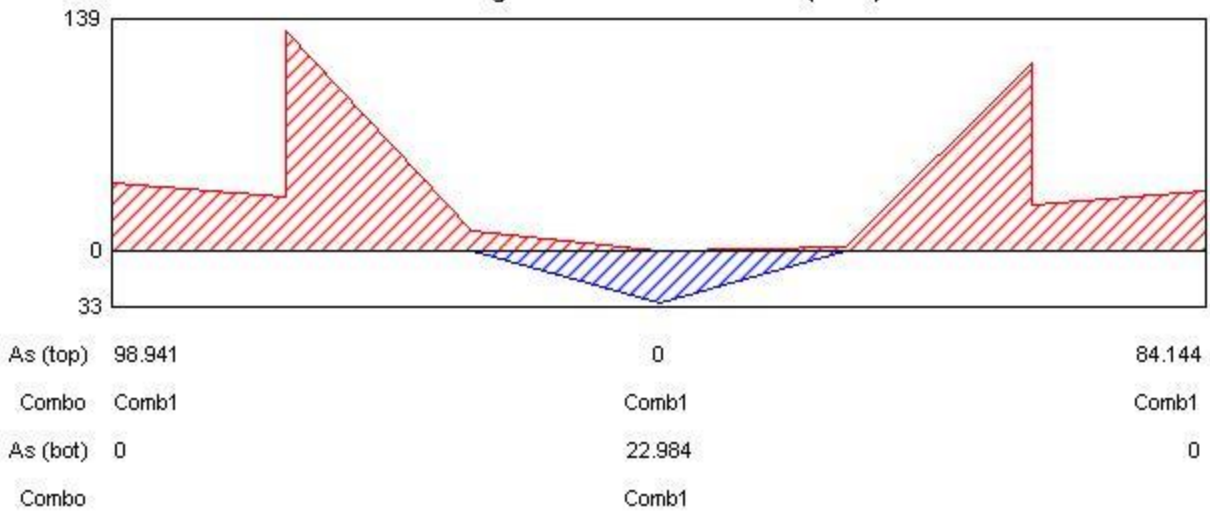
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



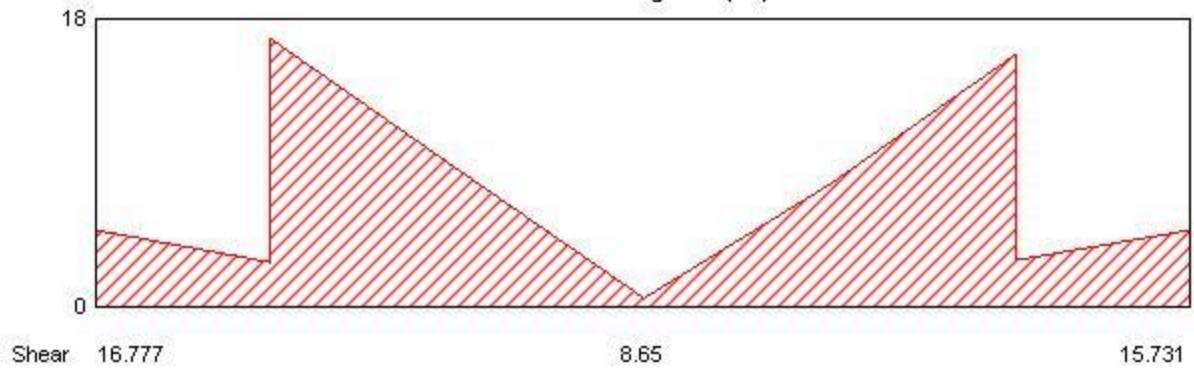
**Moment Diagram (kN-m)**



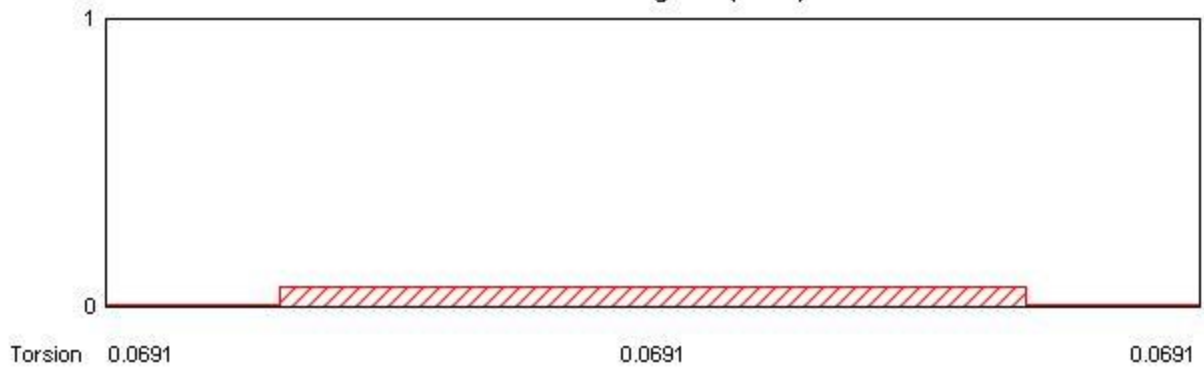
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



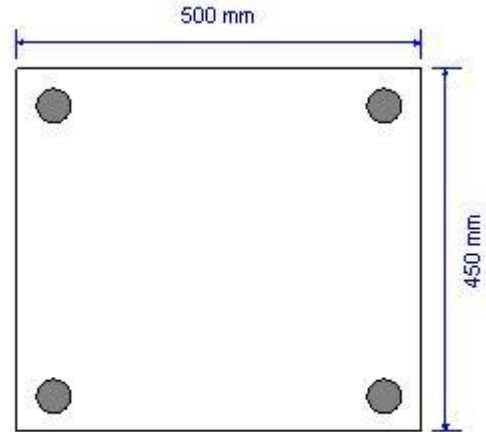
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

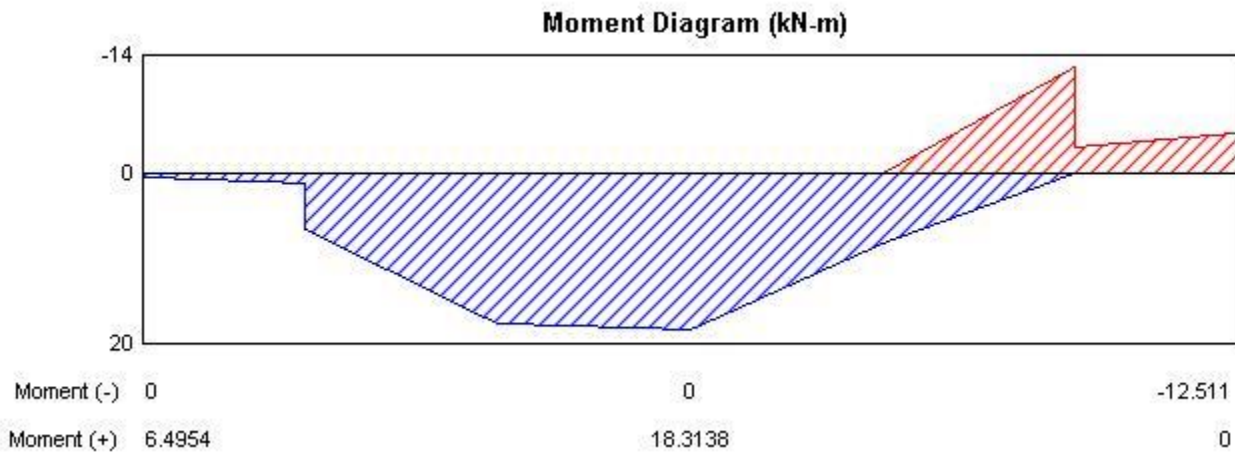
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B70  
Section Property = Viga45\*50  
Length = 6.75 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

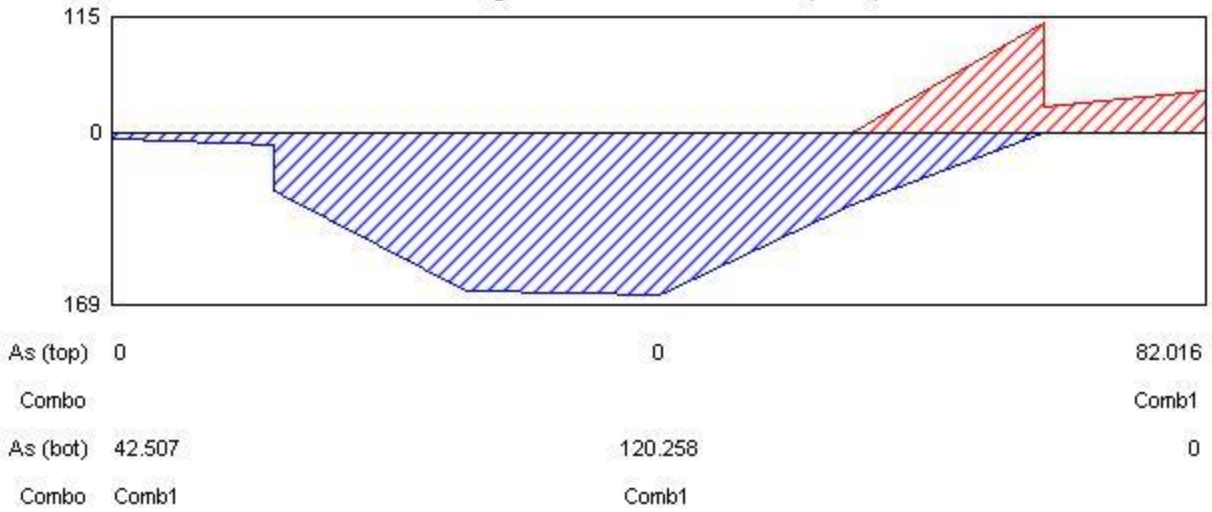


### Material Properties

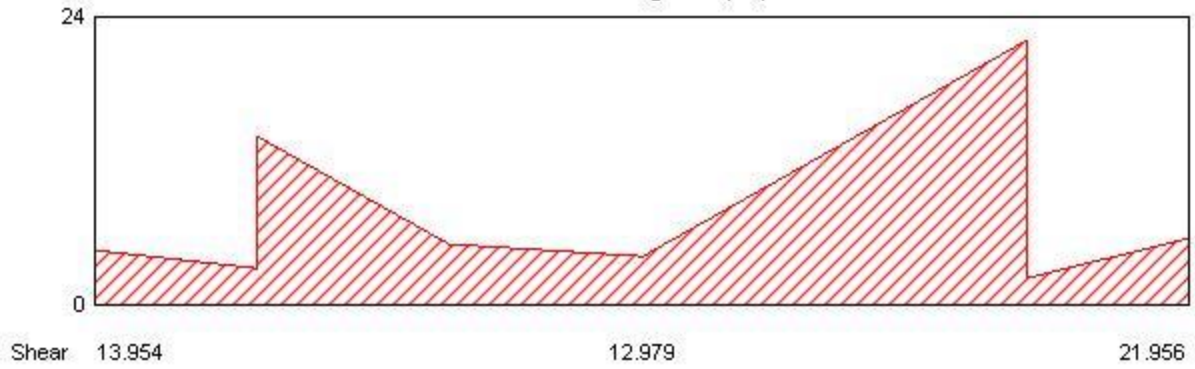
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



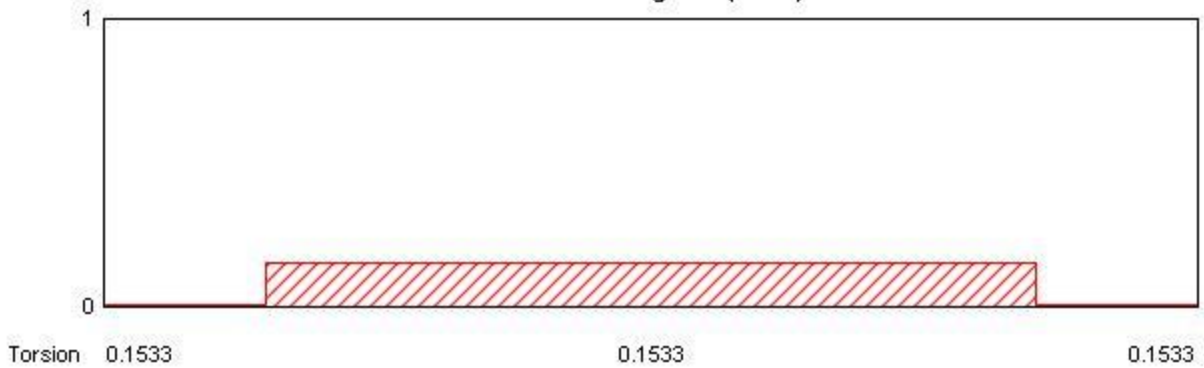
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



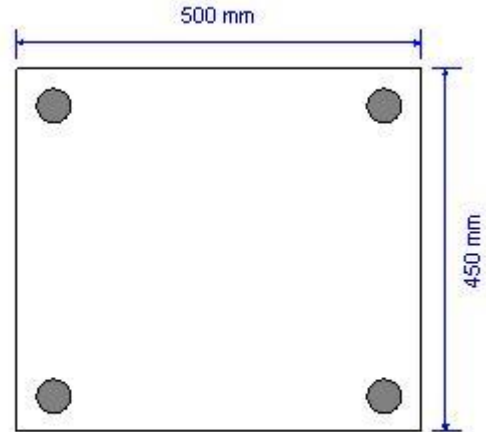
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

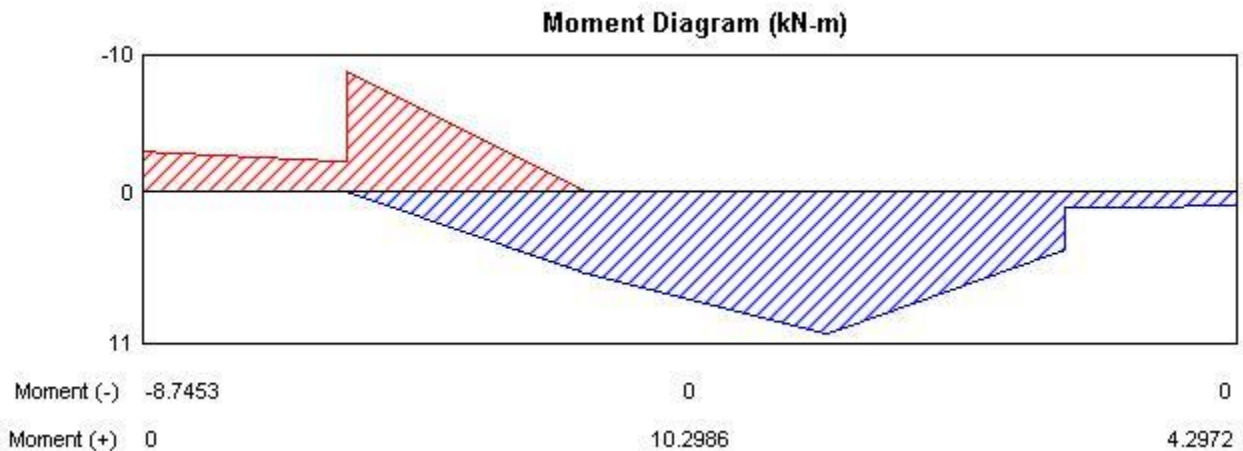
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B71  
Section Property = Viga45\*50  
Length = 5.35 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

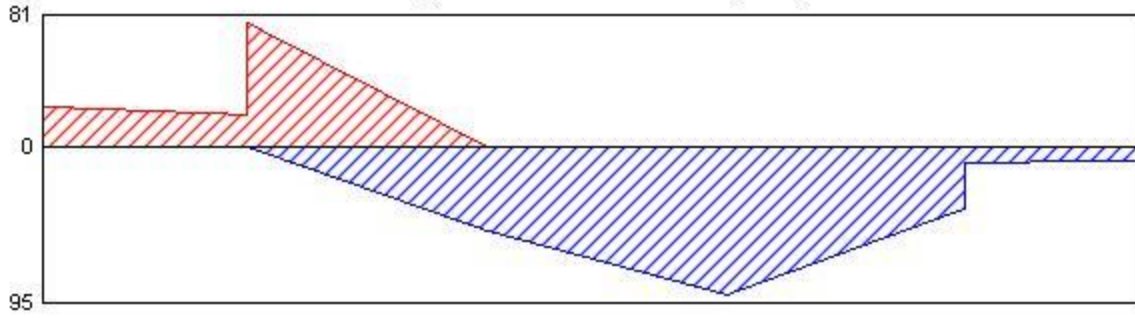


### Material Properties

Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>

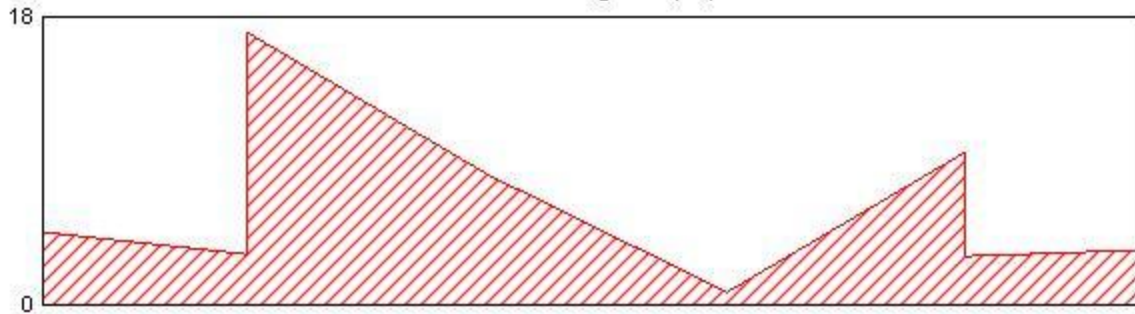


**Longitudinal Reinforcement (mm<sup>2</sup>)**



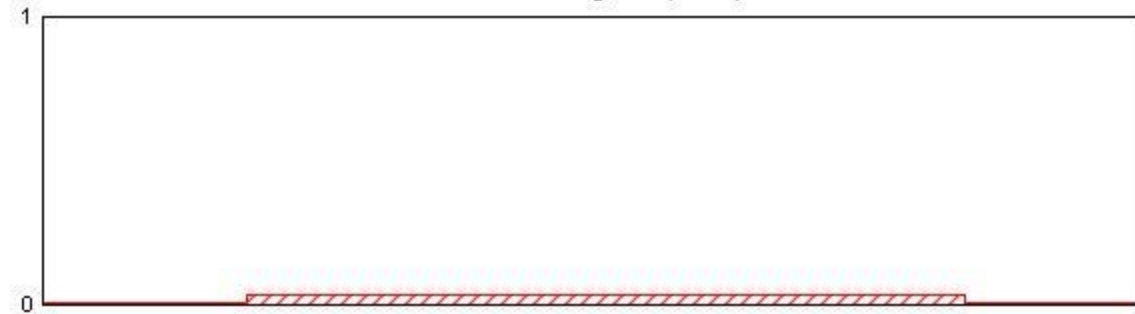
As (top)	57.268	0	0
Combo	Comb1		
As (bot)	0	67.47	28.104
Combo		Comb1	Comb1

**Shear Diagram (kN)**



Shear	16.984	8.138	9.552
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**Torsion Diagram (kN-m)**

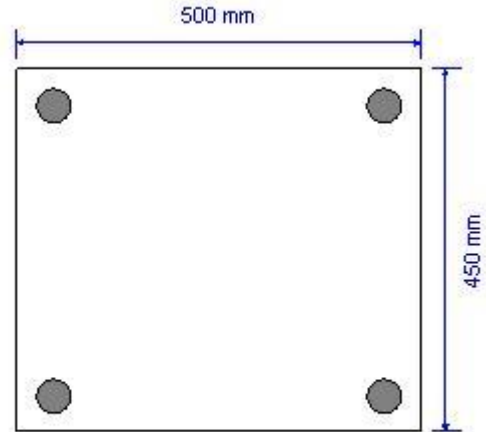


Torsion	0.0324	0.0324	0.0324
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## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B72  
Section Property = Viga45\*50  
Length = 4.32 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

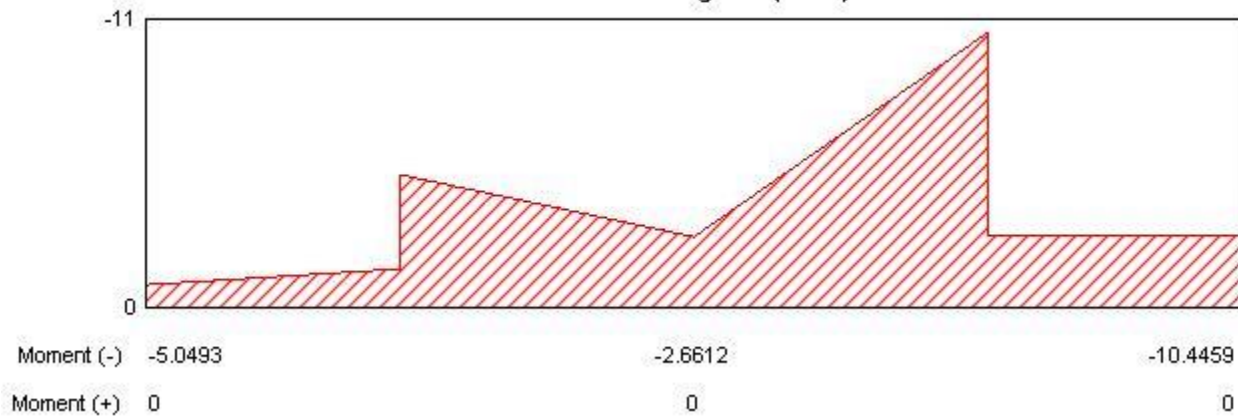


### Material Properties

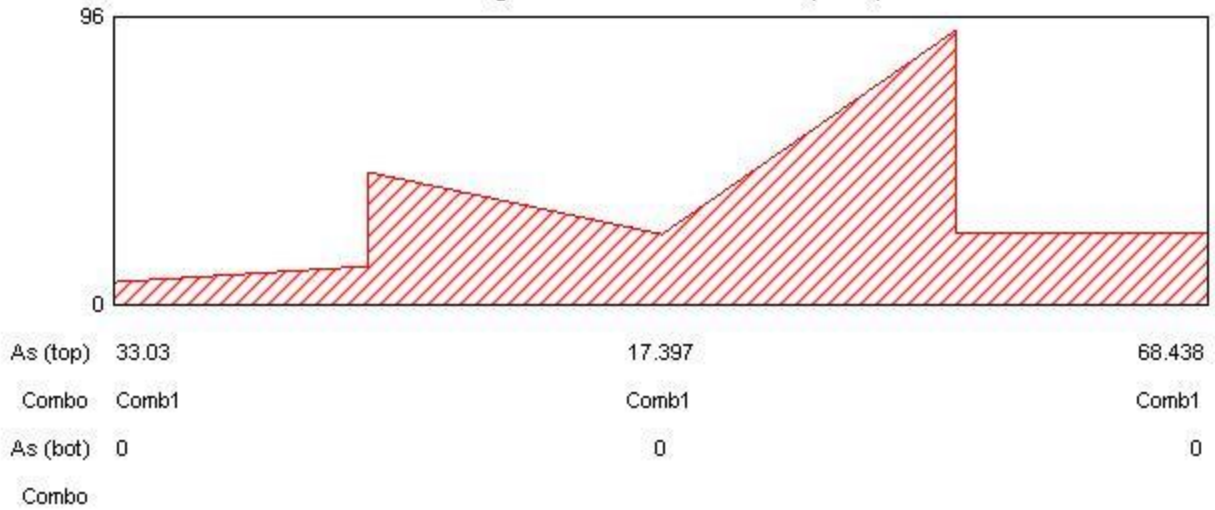
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



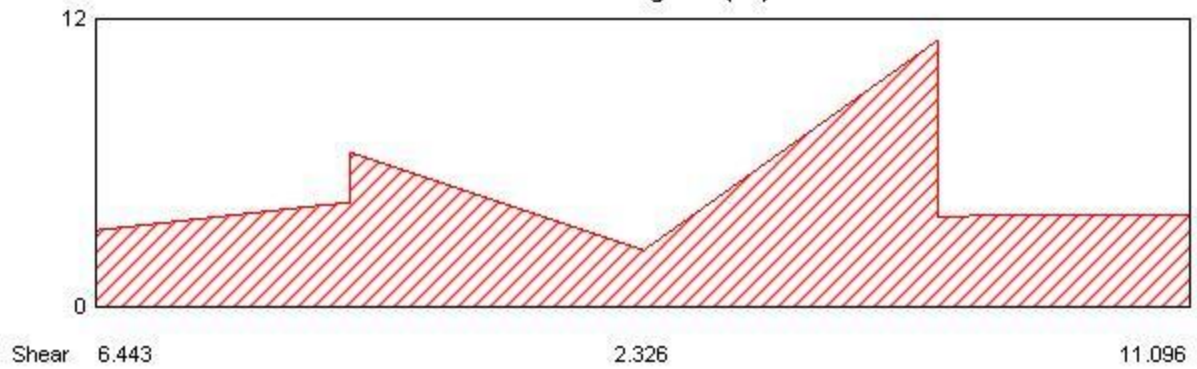
**Moment Diagram (kN-m)**



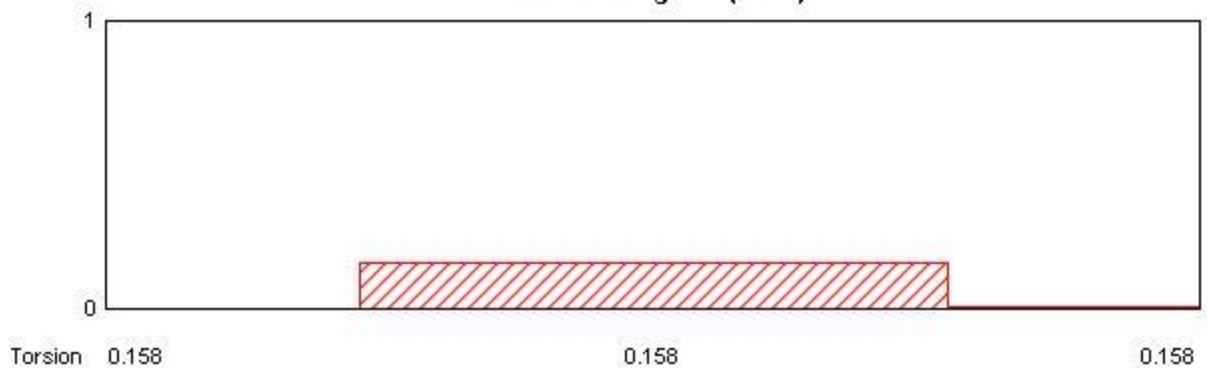
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



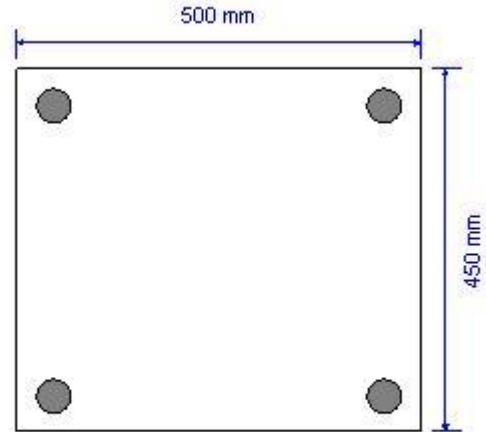
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

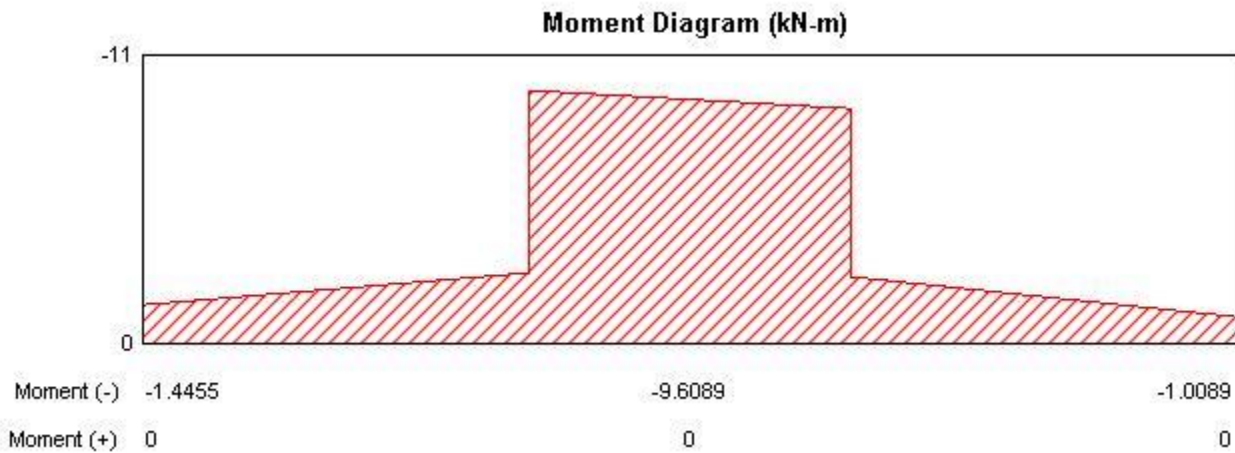
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B73  
Section Property = Viga45\*50  
Length = 2.83 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

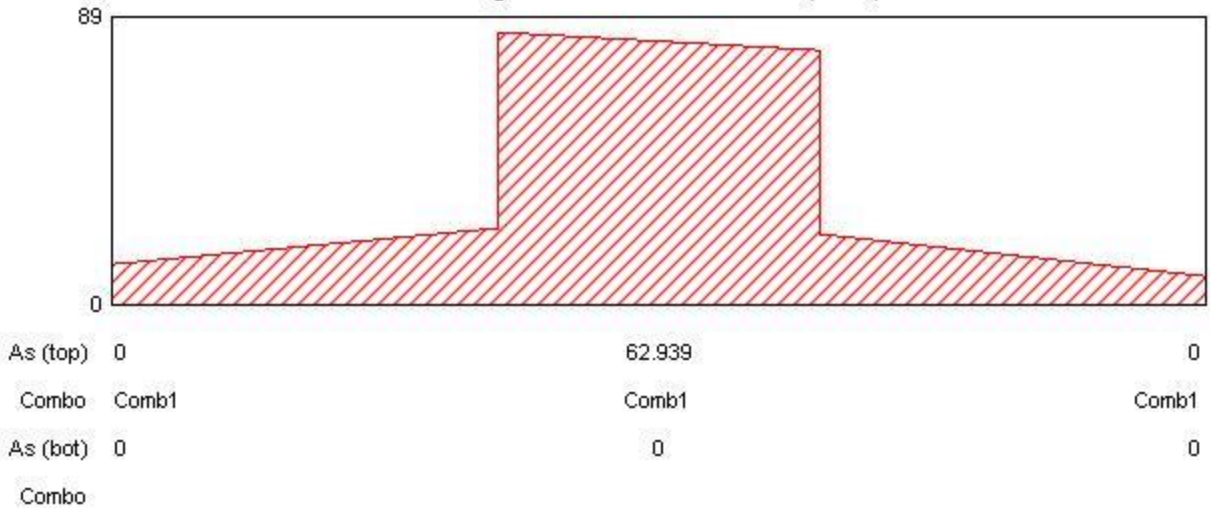


### Material Properties

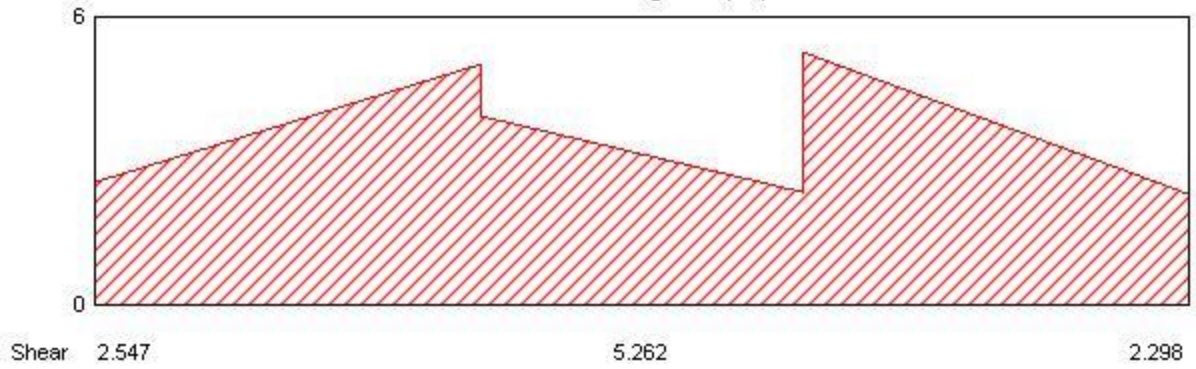
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



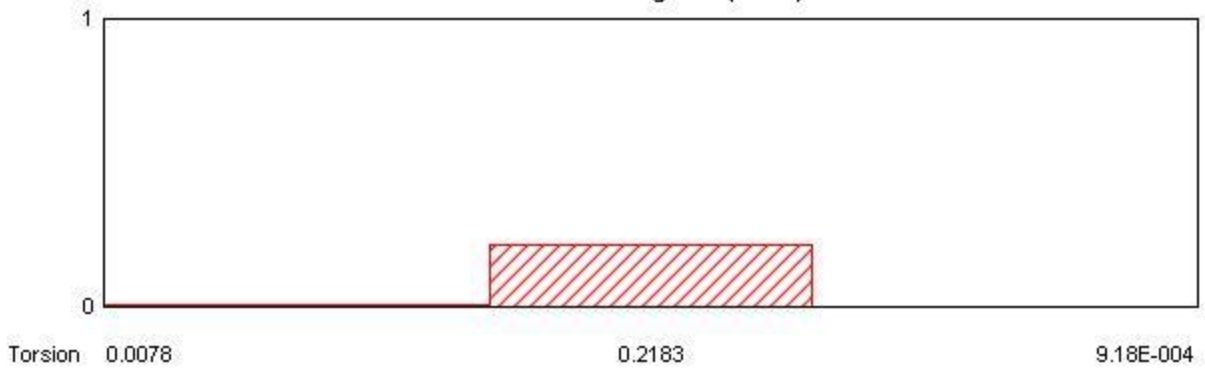
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



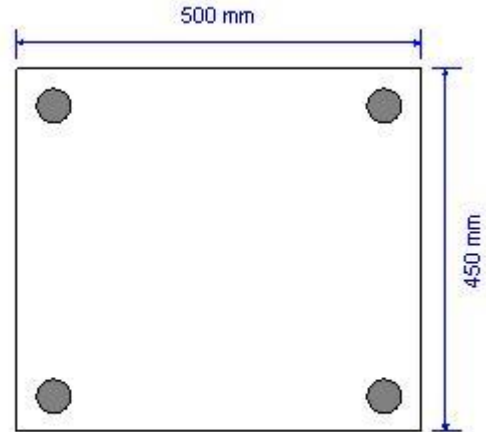
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

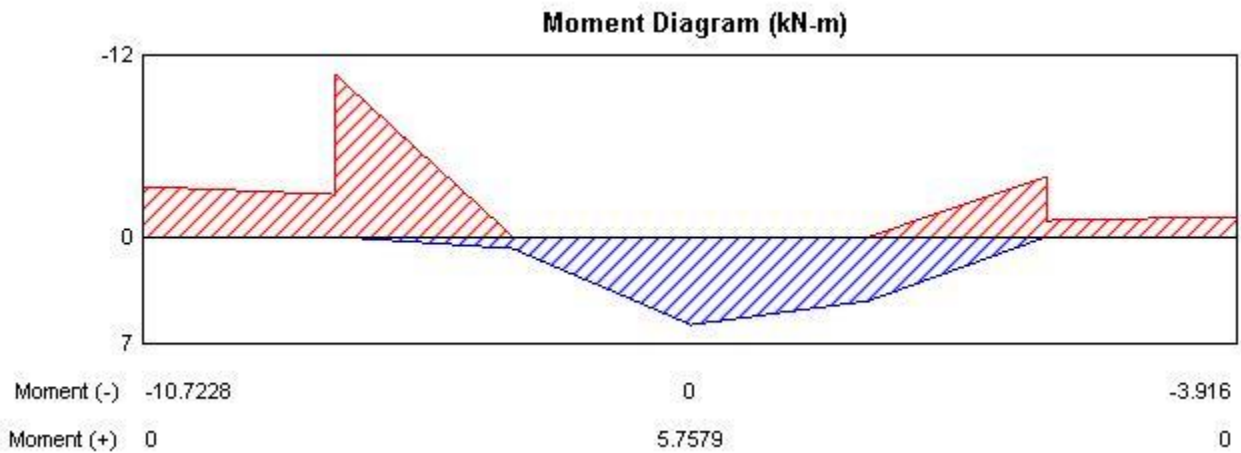
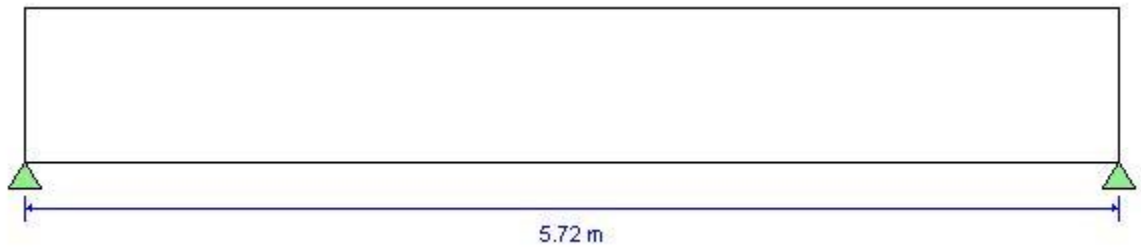
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B74  
Section Property = Viga45\*50  
Length = 5.72 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

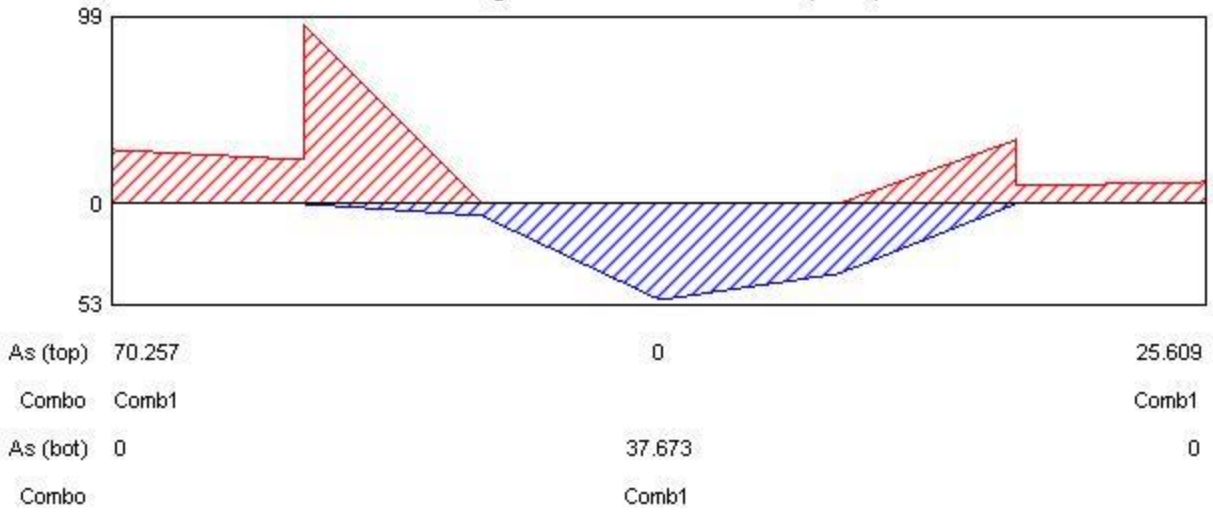


### Material Properties

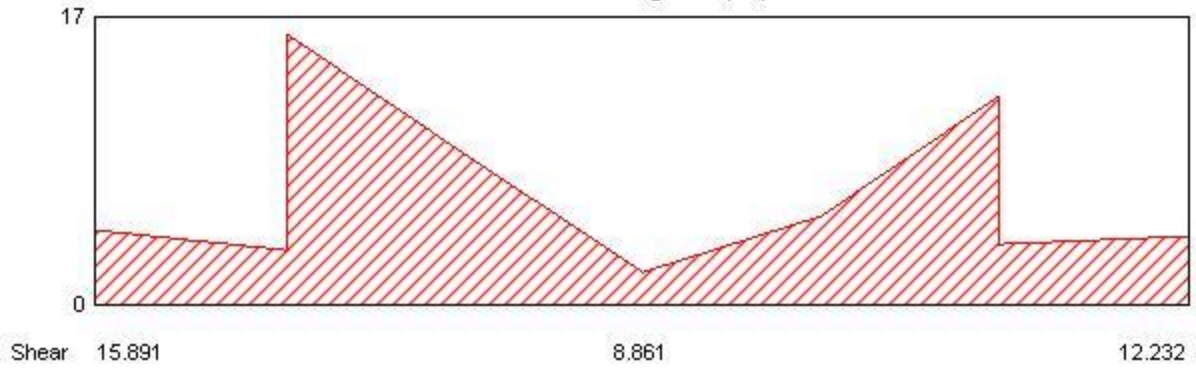
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



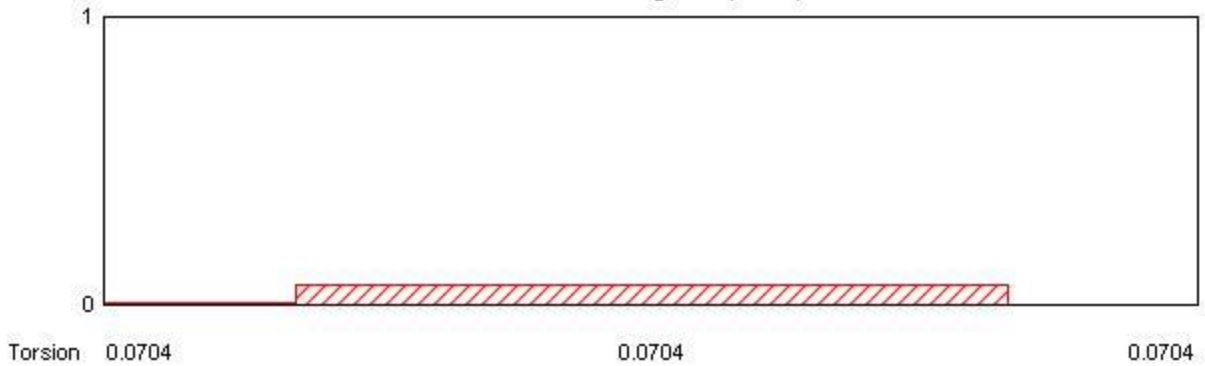
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



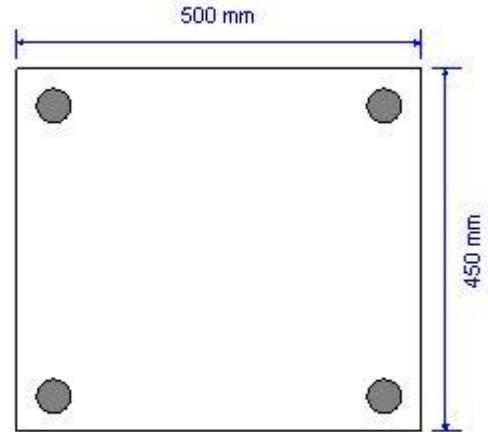
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

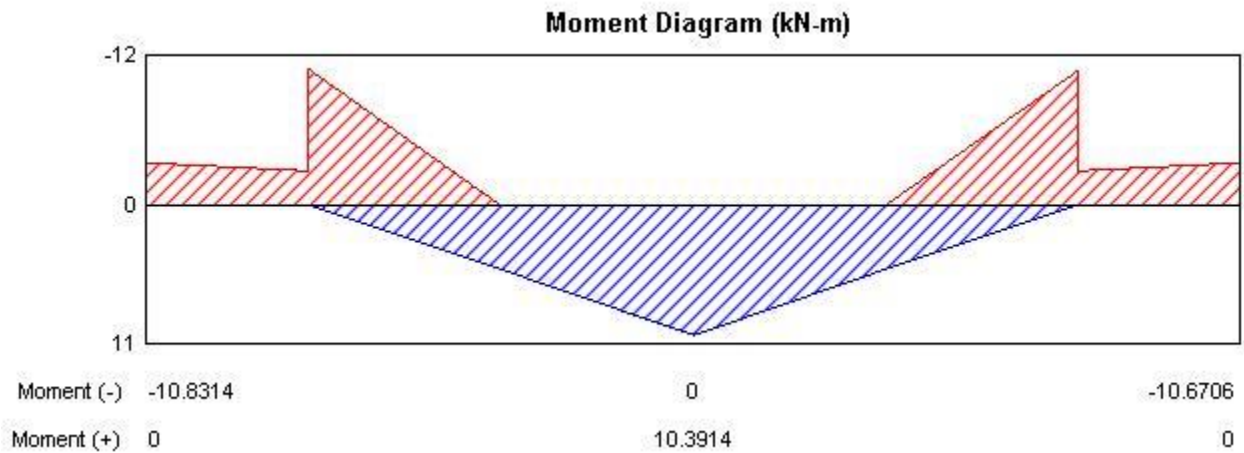
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B75  
Section Property = Viga45\*50  
Length = 6.73 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

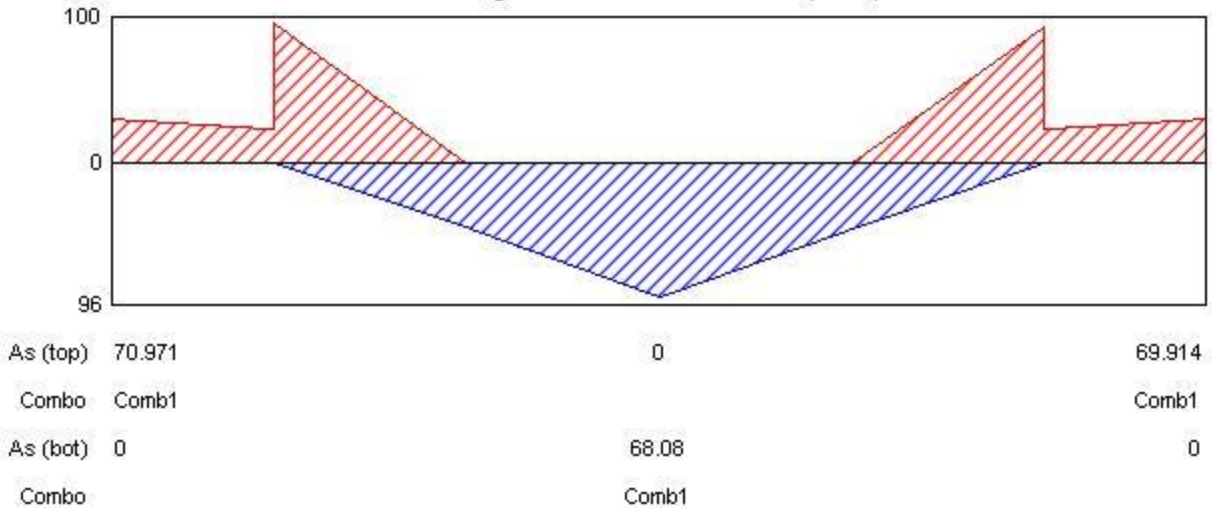


### Material Properties

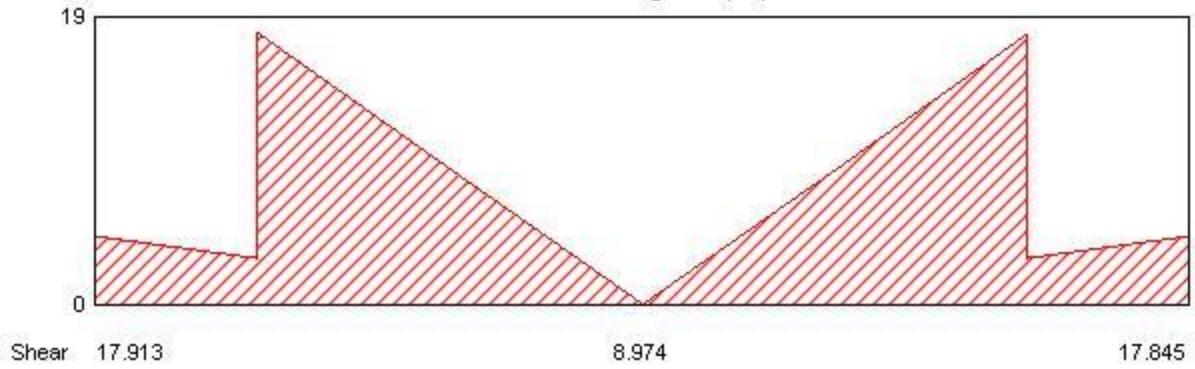
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



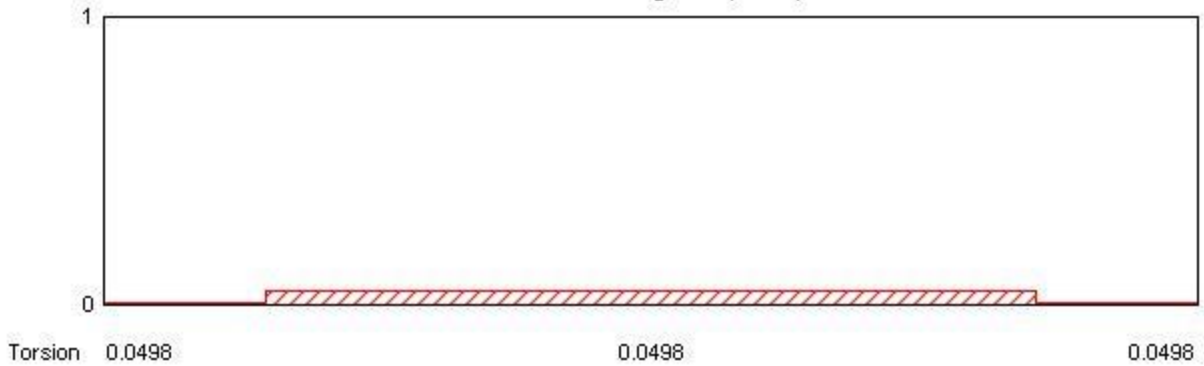
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



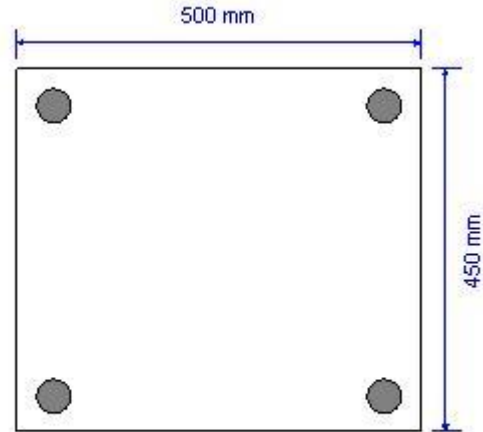
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

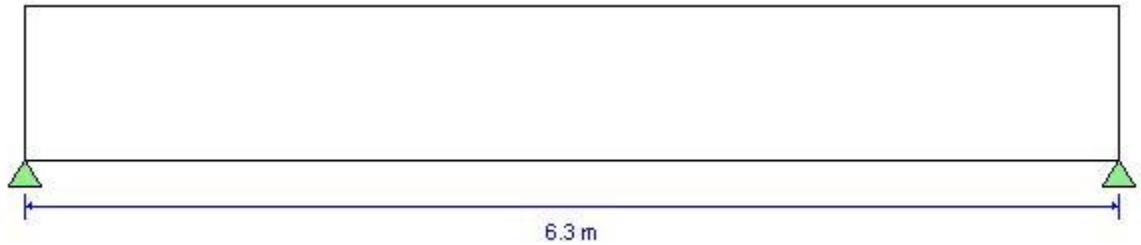
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B76  
Section Property = Viga45\*50  
Length = 6.3 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

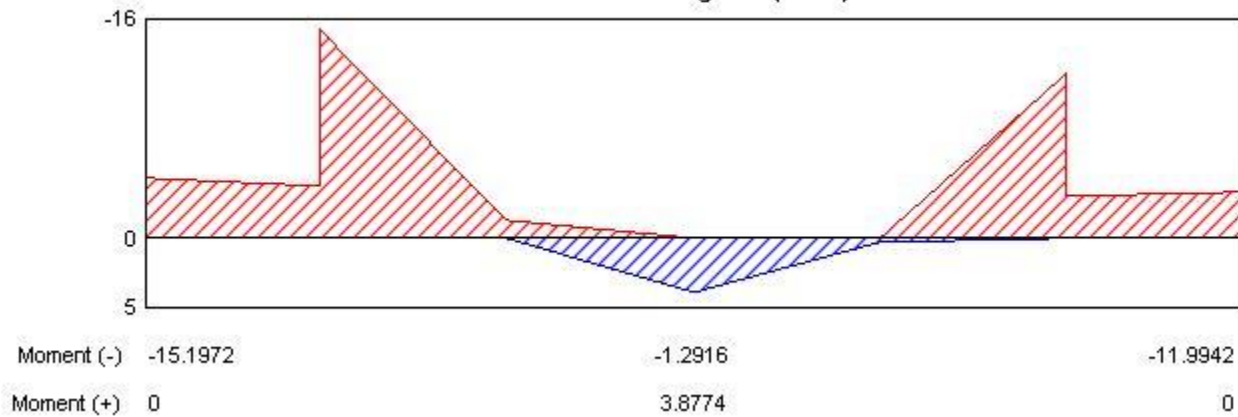


### Material Properties

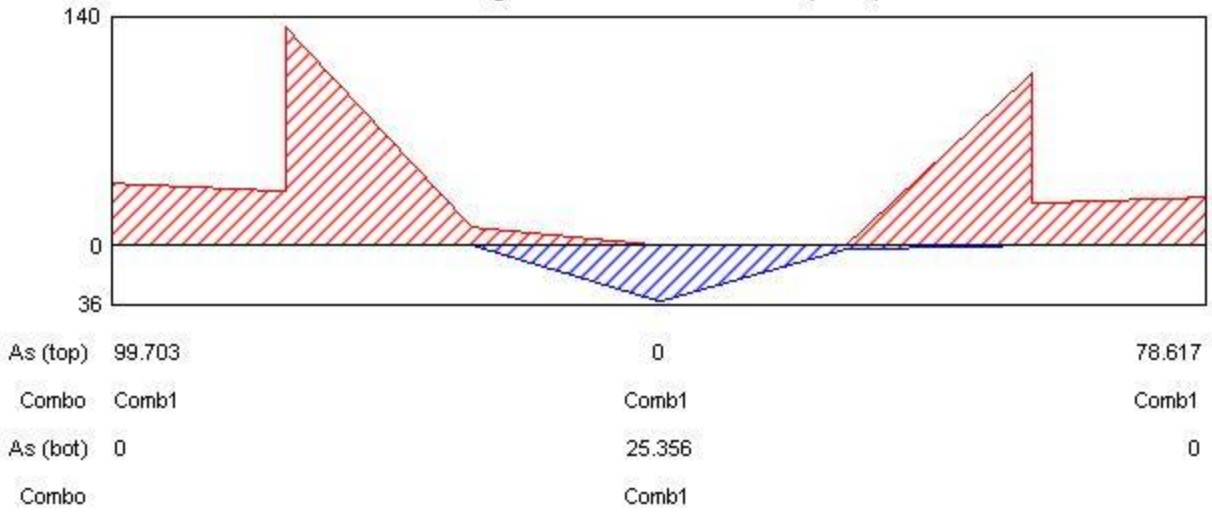
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



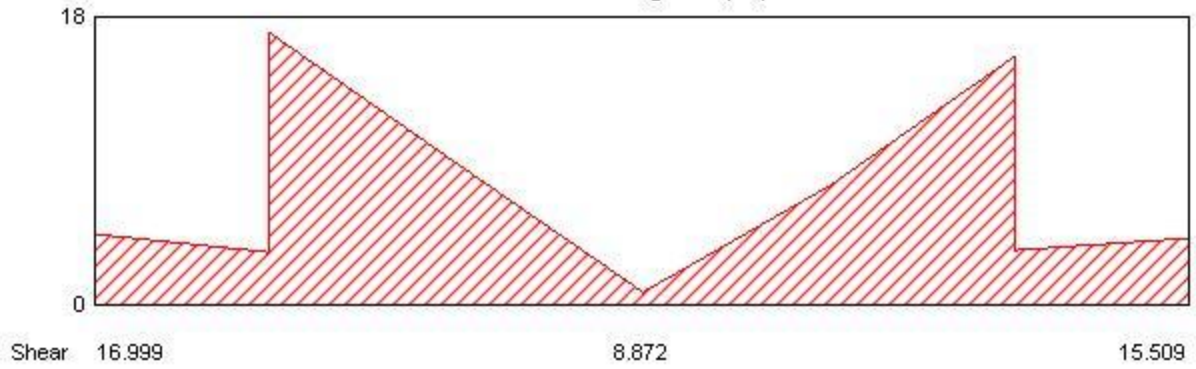
**Moment Diagram (kN-m)**



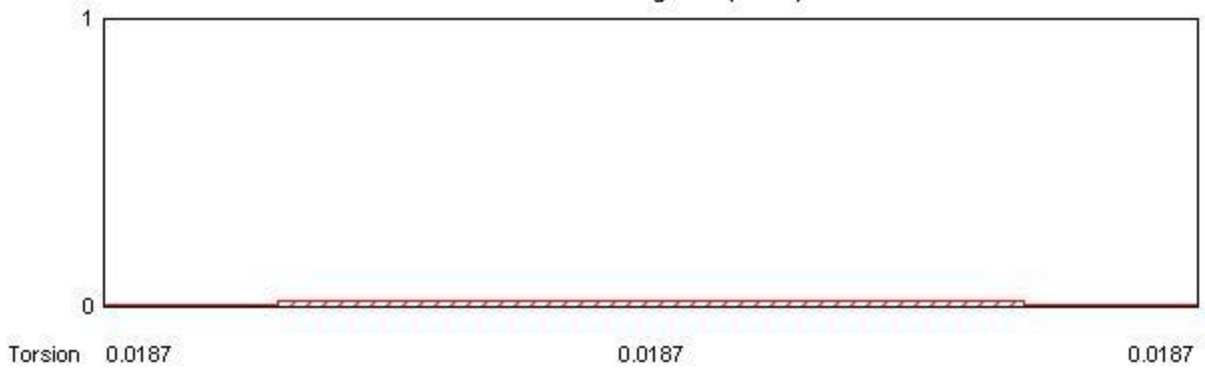
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



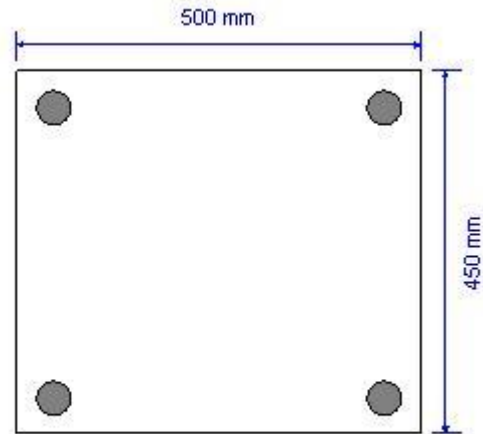
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
 Beam Label = B77  
 Section Property = Viga45\*50  
 Length = 6.75 m  
 Section Width = 500 mm  
 Section Depth = 450 mm  
 Distance to Top Rebar Center = 45 mm  
 Distance to Bot Rebar Center = 45 mm

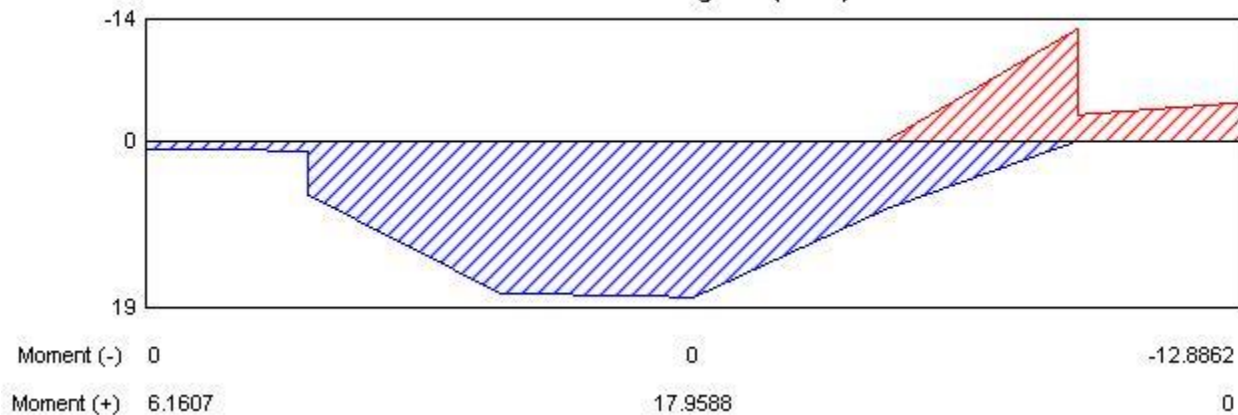


### Material Properties

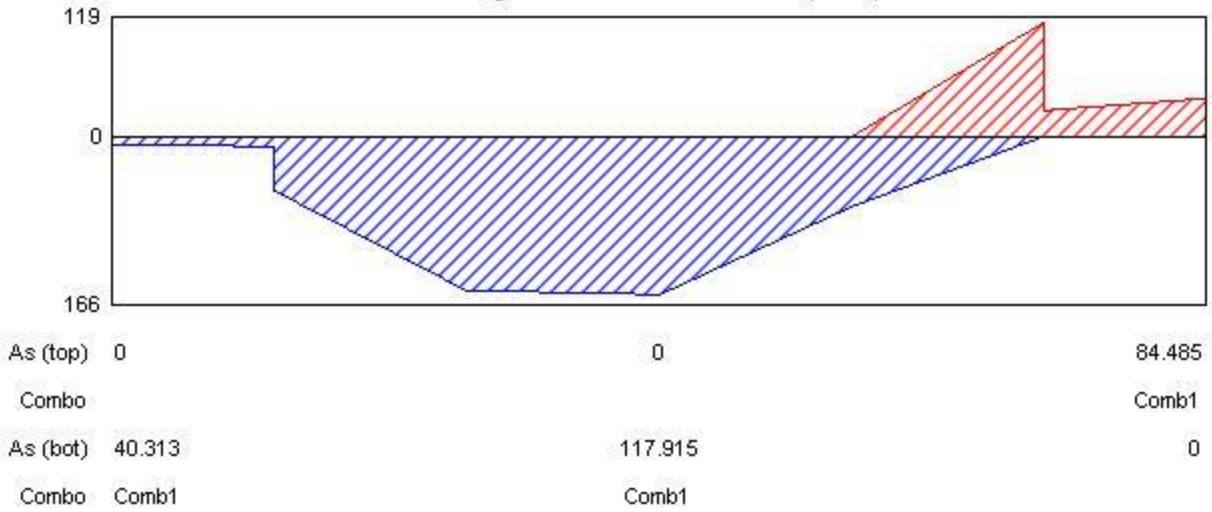
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
 Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
 Shear Rebar Yield = 420 N/mm<sup>2</sup>



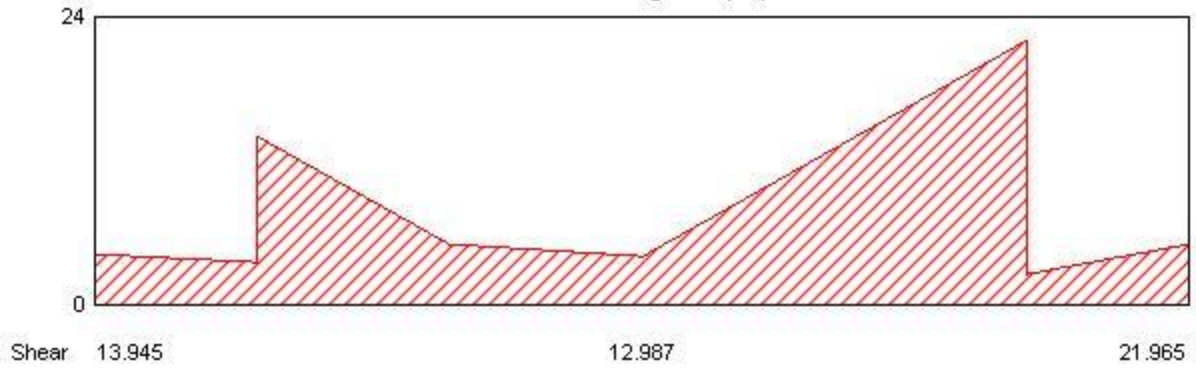
**Moment Diagram (kN-m)**



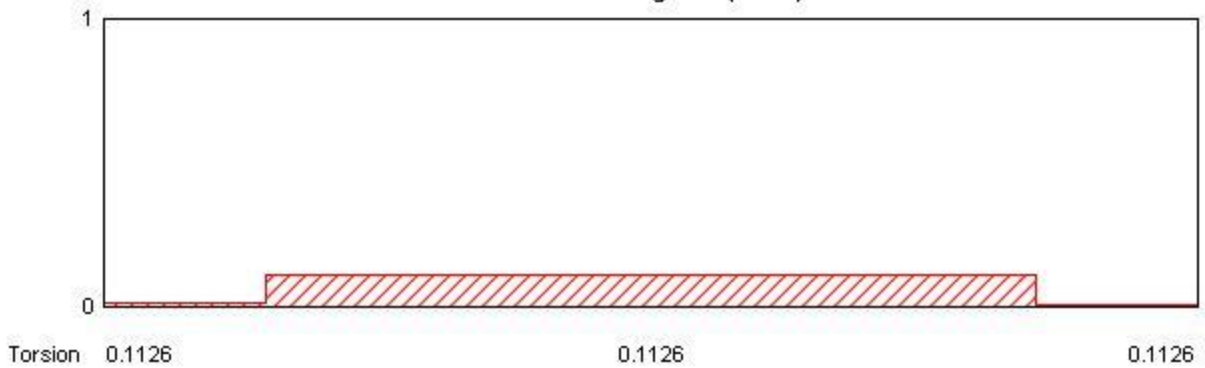
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



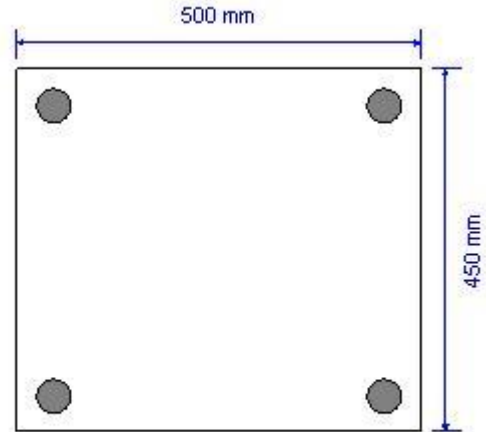
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

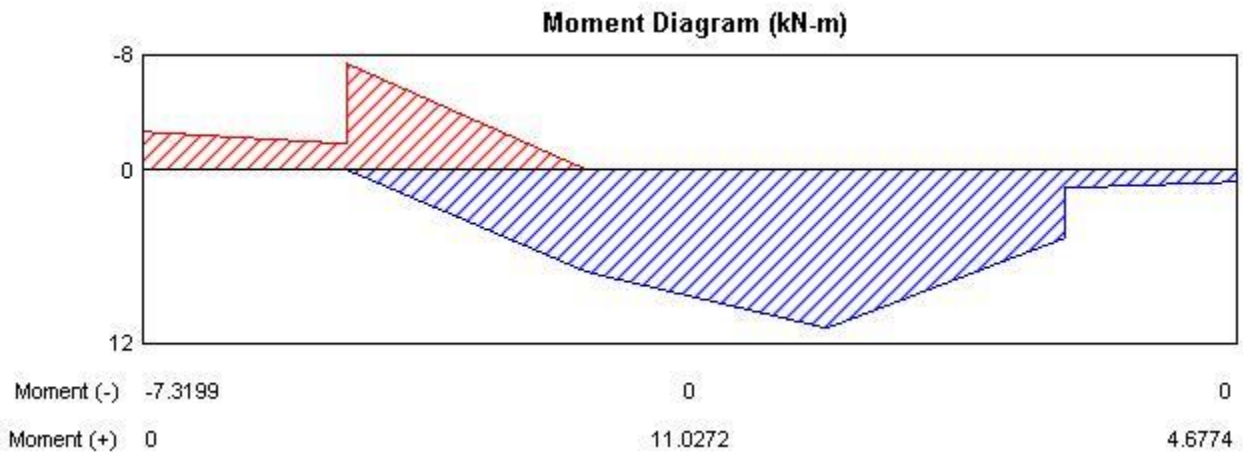
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B78  
Section Property = Viga45\*50  
Length = 5.35 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

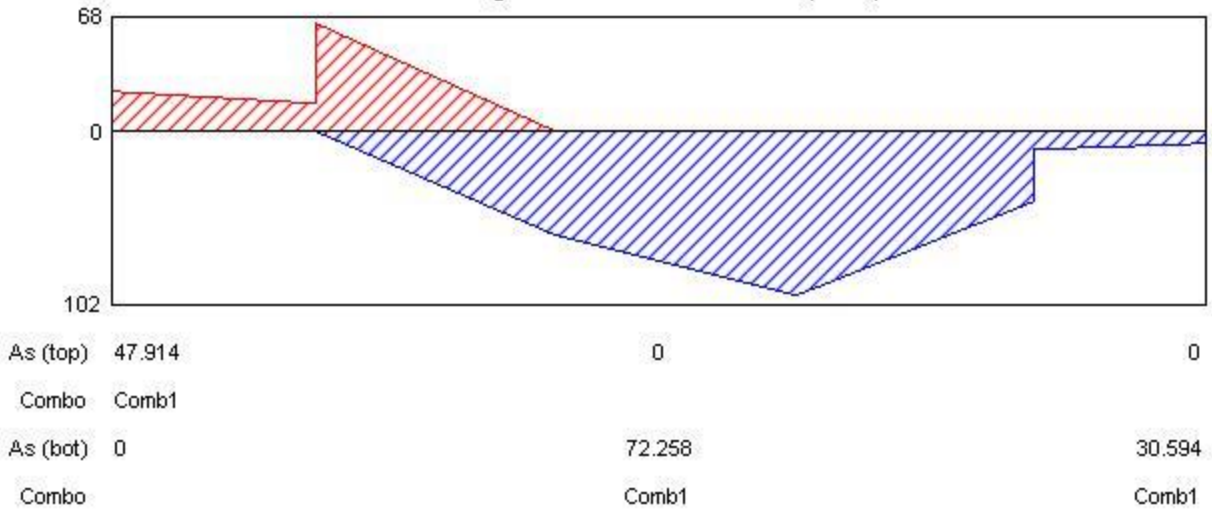


### Material Properties

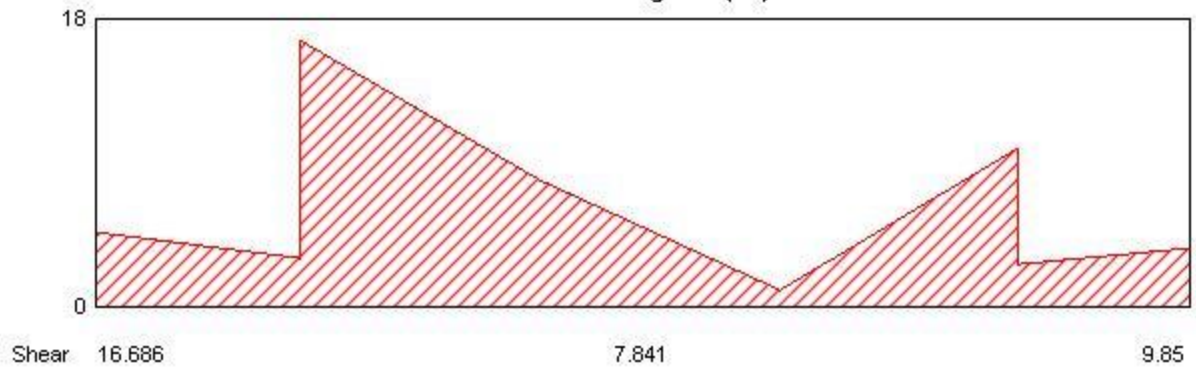
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



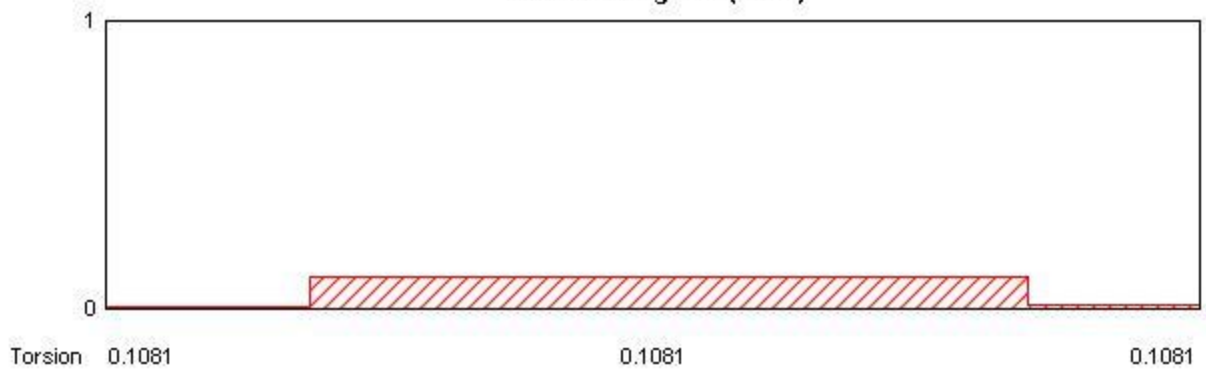
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



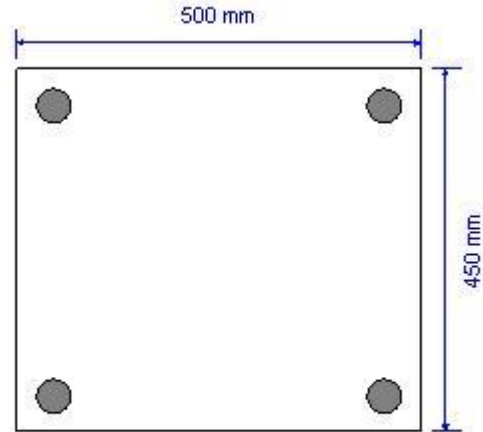
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B79  
Section Property = Viga45\*50  
Length = 4.32 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

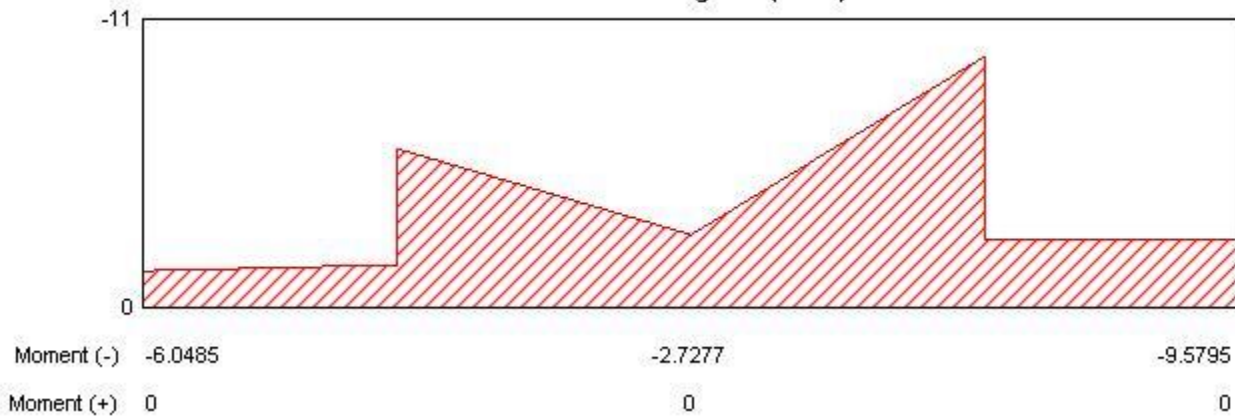


### Material Properties

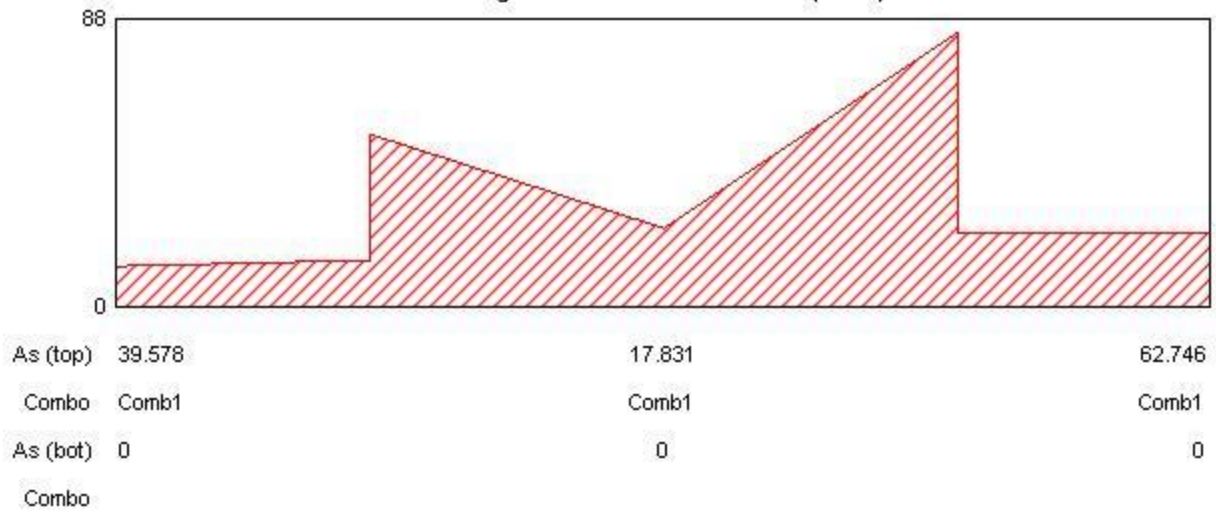
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



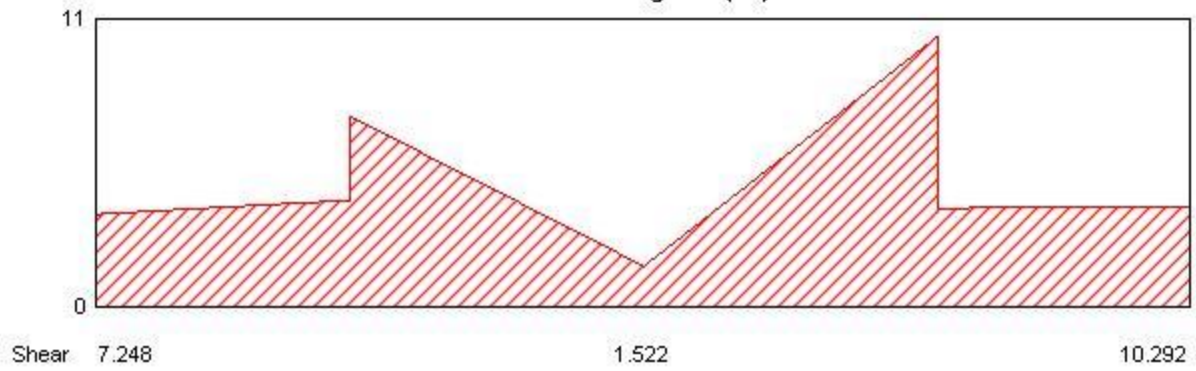
**Moment Diagram (kN-m)**



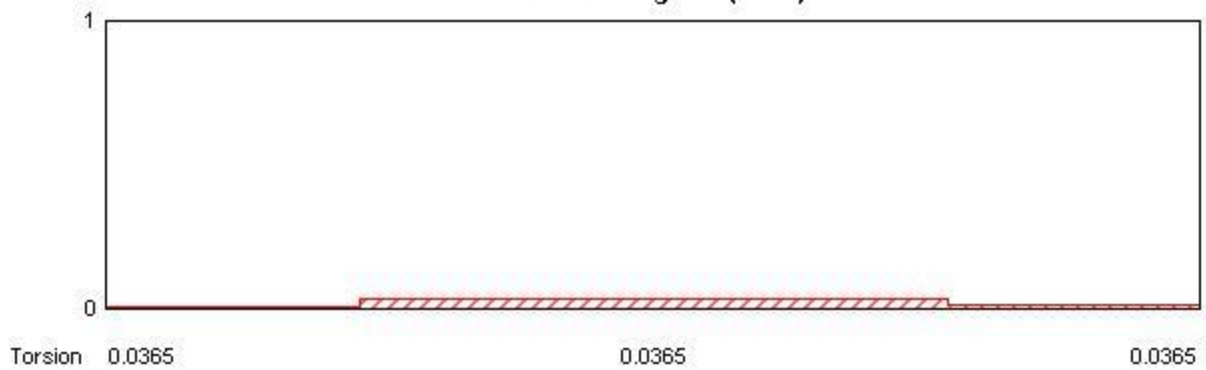
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



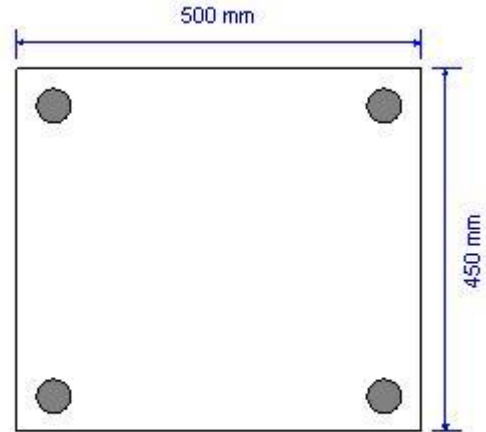
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

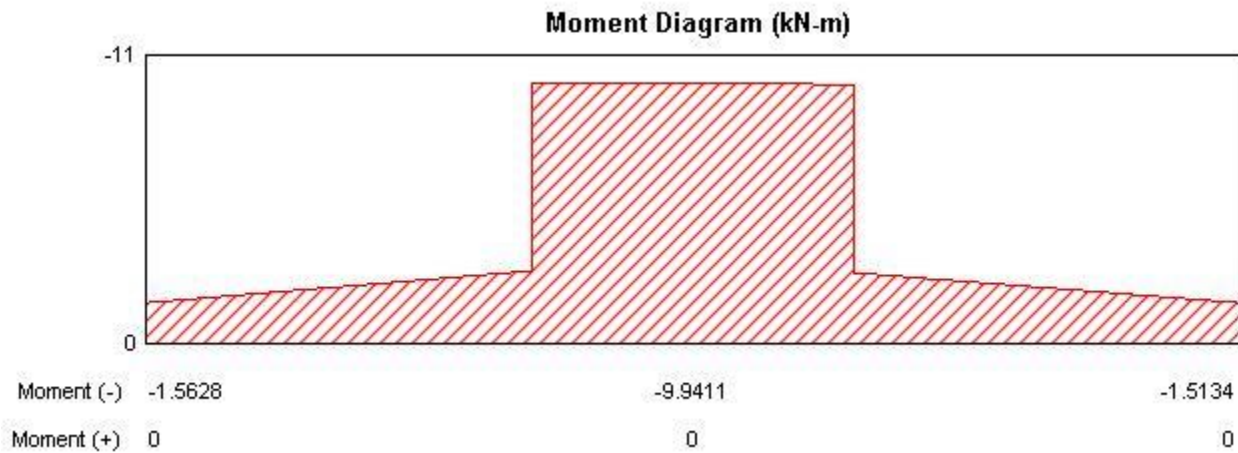
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B80  
Section Property = Viga45\*50  
Length = 2.83 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

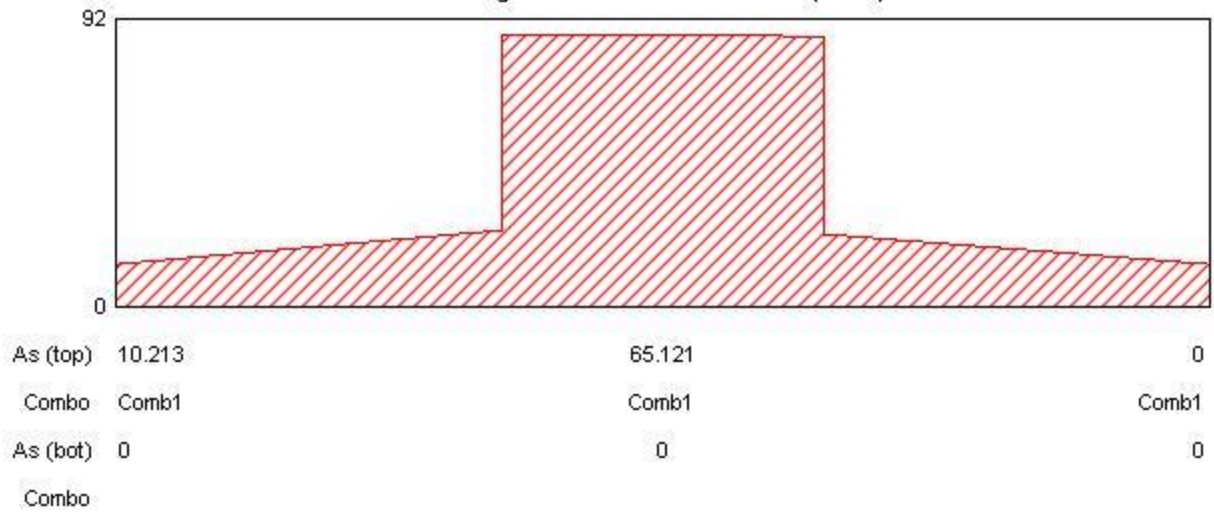


### Material Properties

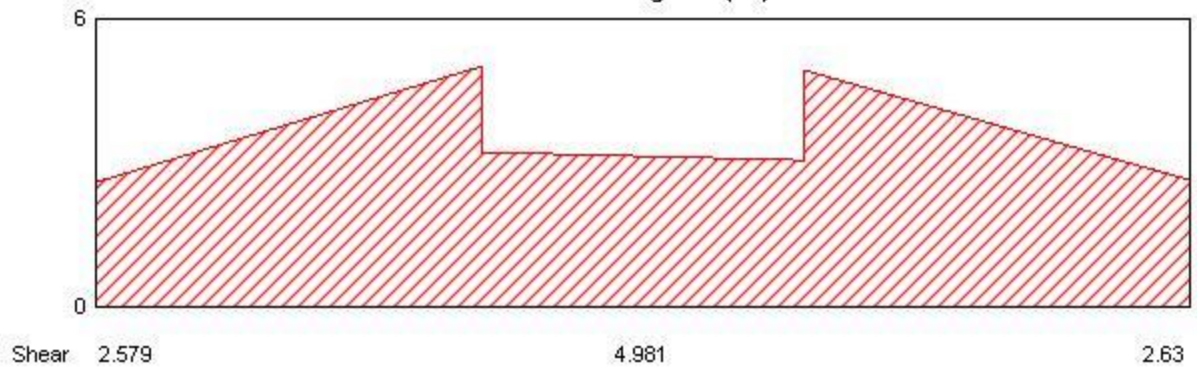
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



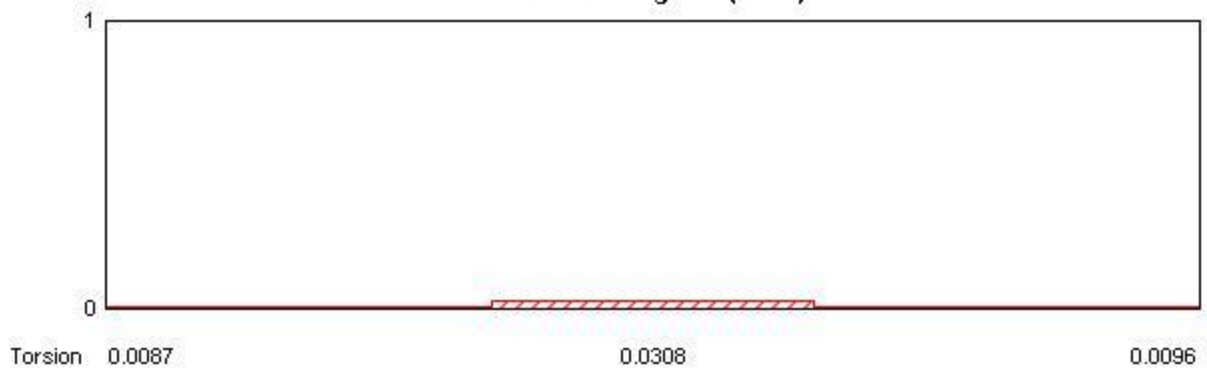
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



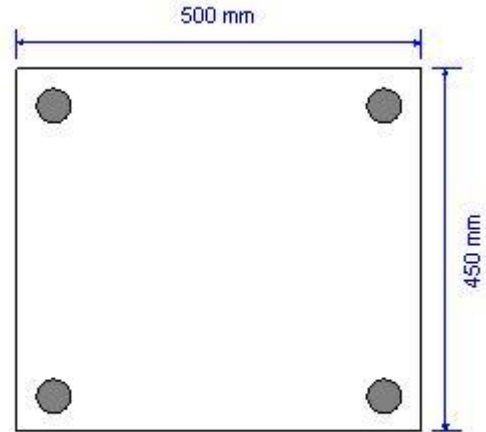
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

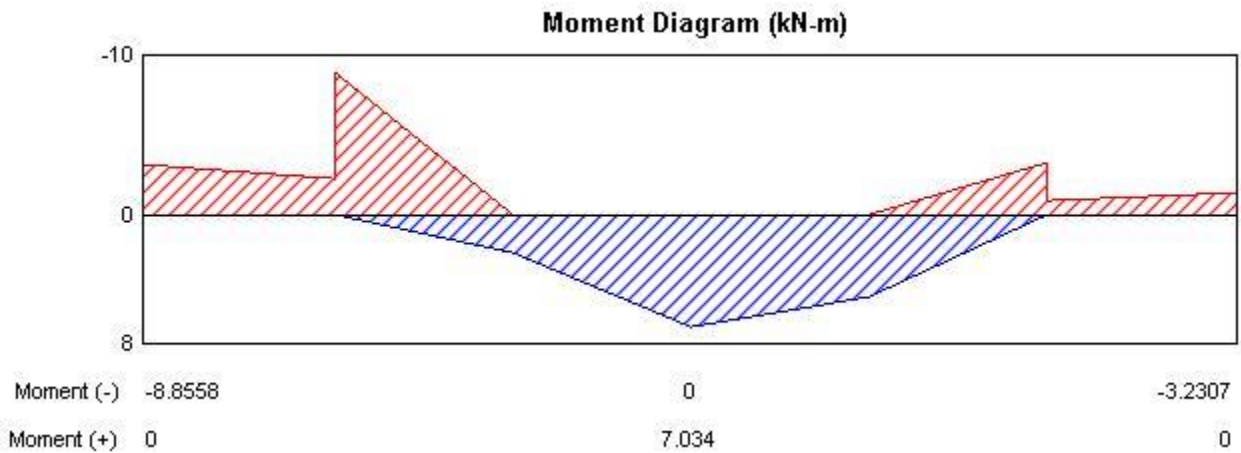
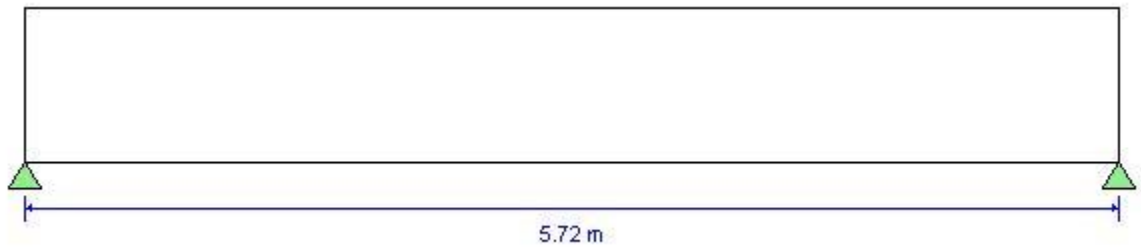
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B81  
Section Property = Viga45\*50  
Length = 5.72 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

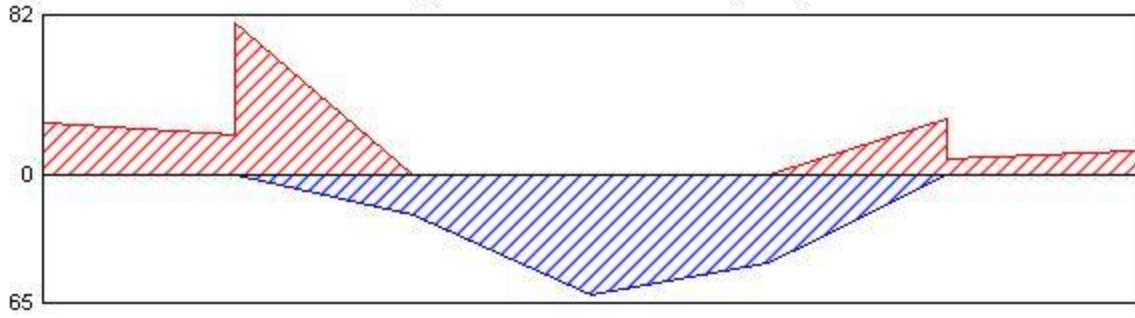


### Material Properties

Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>

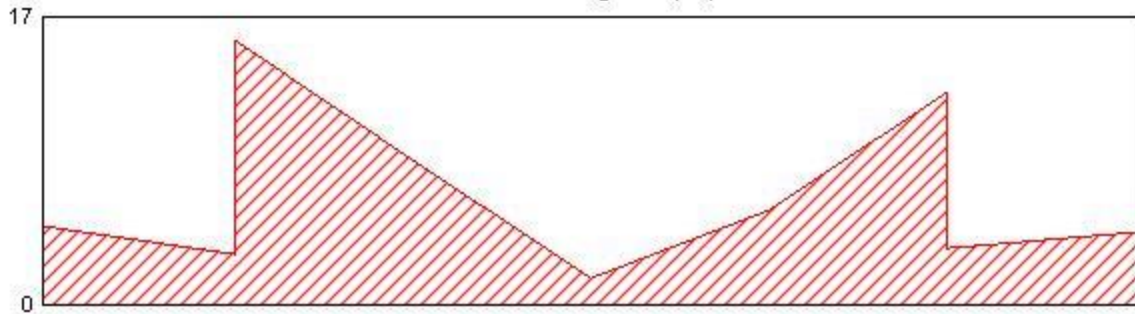


**Longitudinal Reinforcement (mm<sup>2</sup>)**



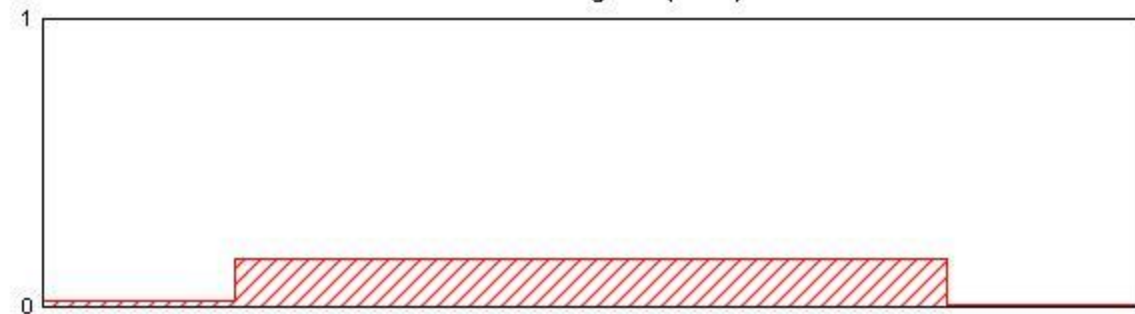
As (top)	57.994	0	21.123
Combo	Comb1		Comb1
As (bot)	0	46.039	0
Combo		Comb1	

**Shear Diagram (kN)**



Shear	15.574	8.543	12.549
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**Torsion Diagram (kN-m)**

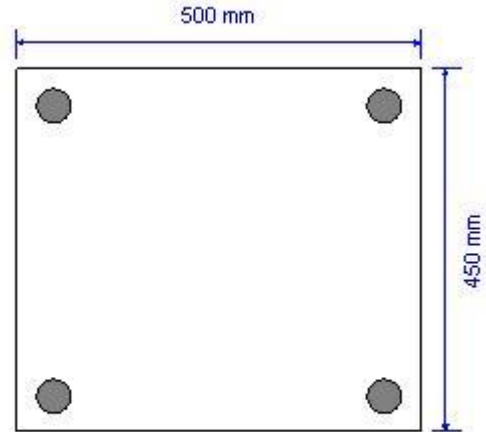


Torsion	0.1637	0.1637	0.1637
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## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B82  
Section Property = Viga45\*50  
Length = 6.73 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

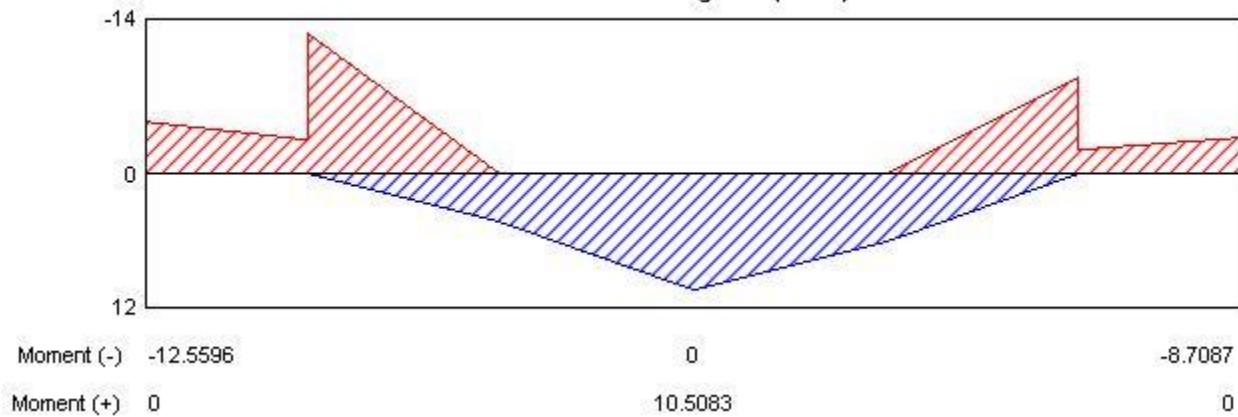


### Material Properties

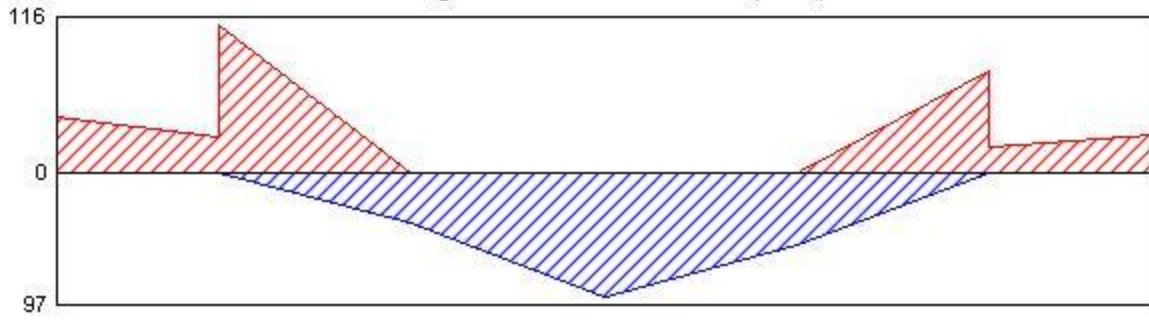
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



**Moment Diagram (kN-m)**

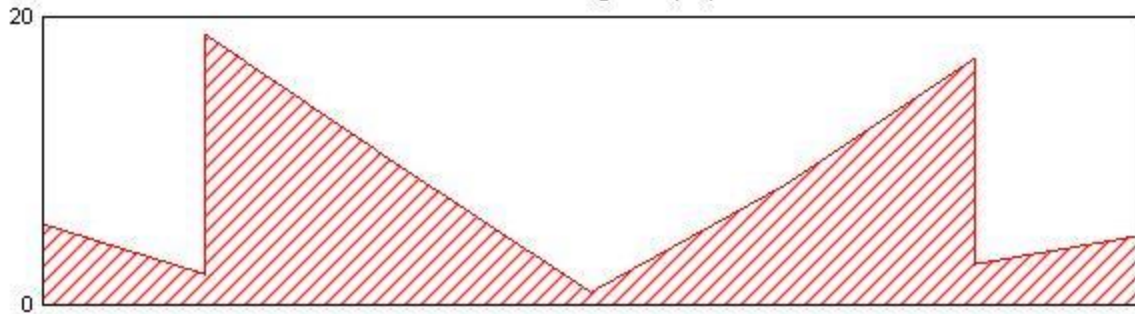


**Longitudinal Reinforcement (mm<sup>2</sup>)**



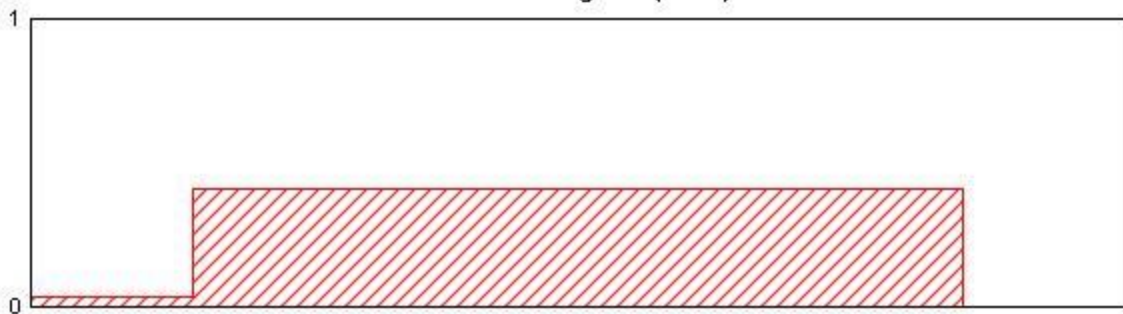
As (top)	82.336	0	57.028
Combo	Comb1		Comb1
As (bot)	0	68.848	0
Combo		Comb1	

**Shear Diagram (kN)**



Shear	18.694	9.754	17.065
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**Torsion Diagram (kN-m)**

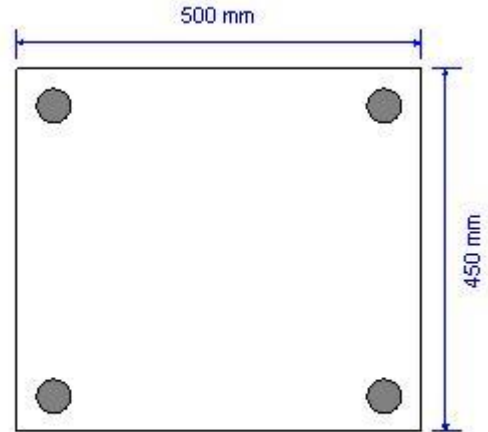


Torsion	0.4083	0.4083	0.4083
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## ACI 318-14 Concrete Beam Design

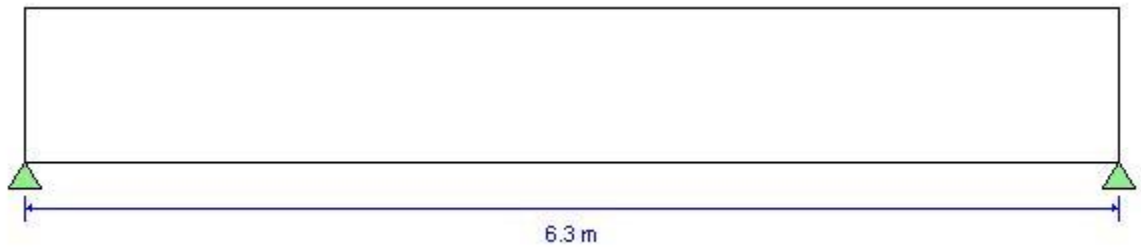
### Geometric Properties

Combination = Overall Envelope  
 Beam Label = B83  
 Section Property = Viga45\*50  
 Length = 6.3 m  
 Section Width = 500 mm  
 Section Depth = 450 mm  
 Distance to Top Rebar Center = 45 mm  
 Distance to Bot Rebar Center = 45 mm

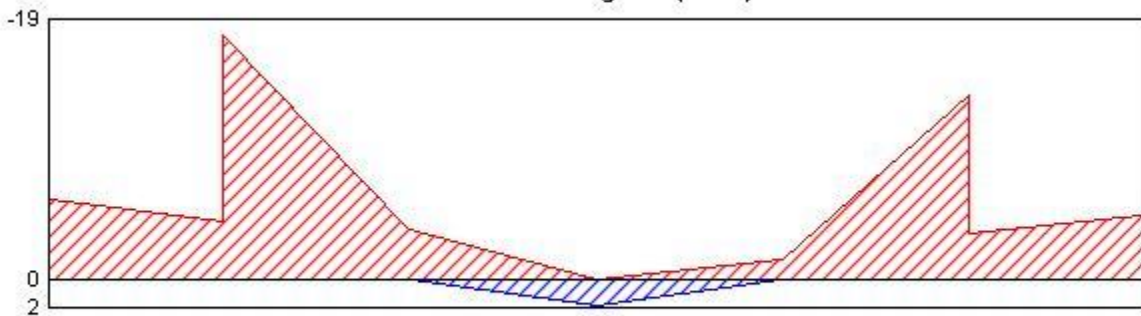


### Material Properties

Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
 Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
 Shear Rebar Yield = 420 N/mm<sup>2</sup>

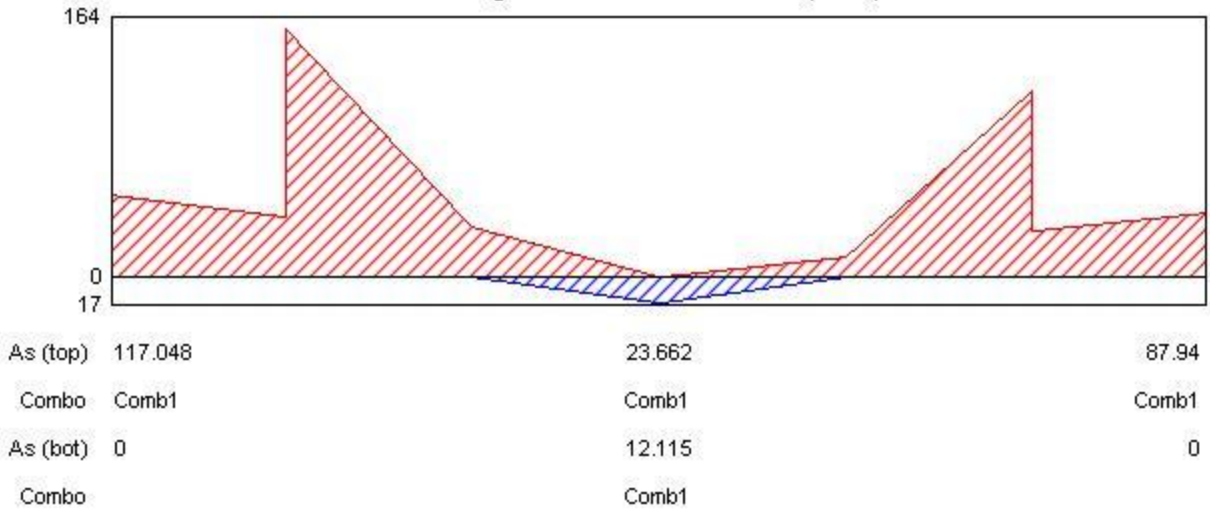


**Moment Diagram (kN-m)**

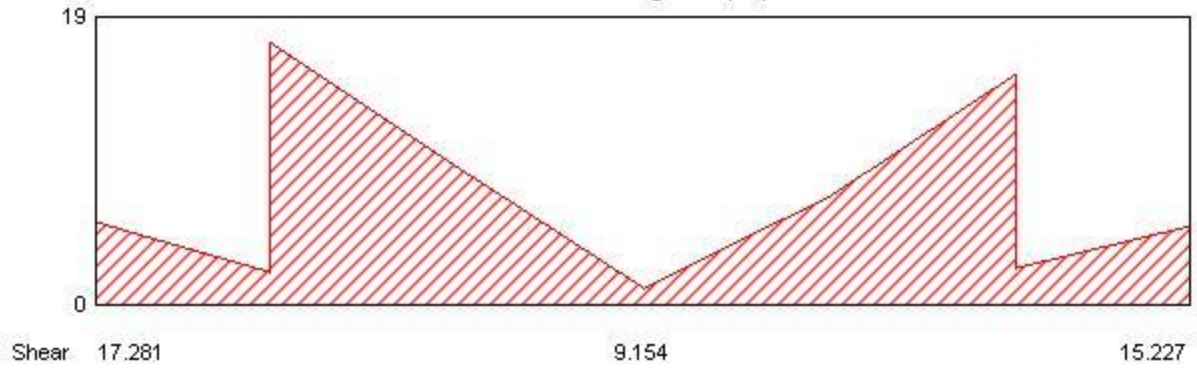


Moment (-)	-17.8275	-3.6187	-13.4111
Moment (+)	0	1.8537	0

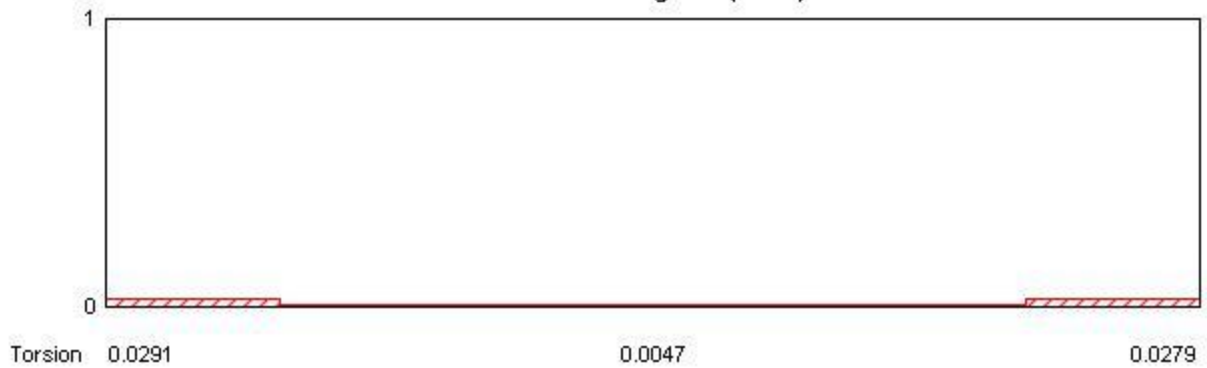
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



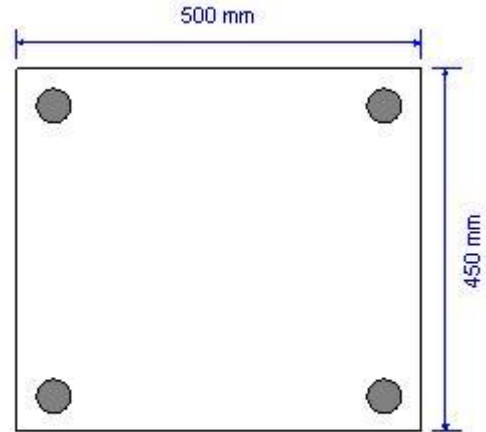
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

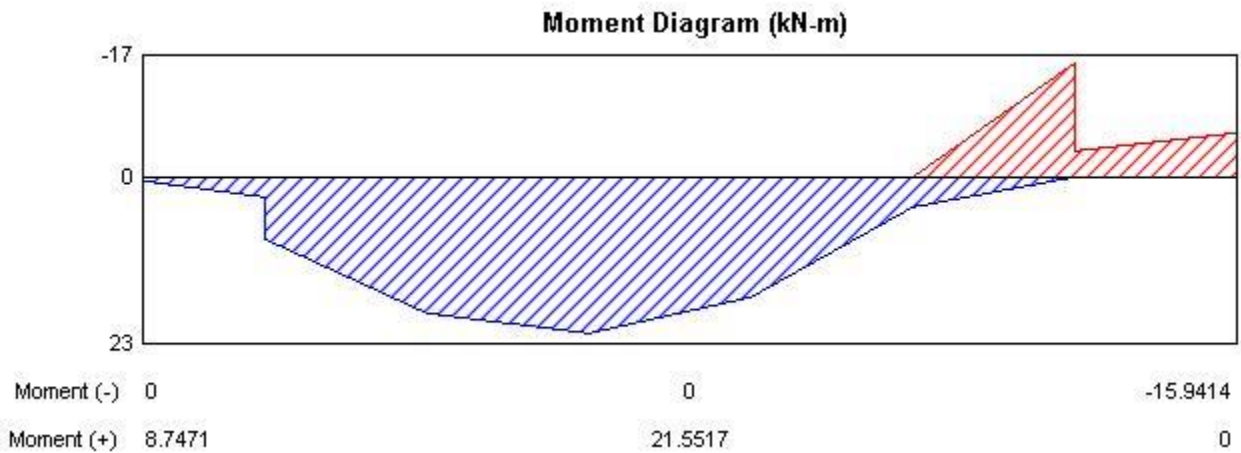
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B84  
Section Property = Viga45\*50  
Length = 6.75 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

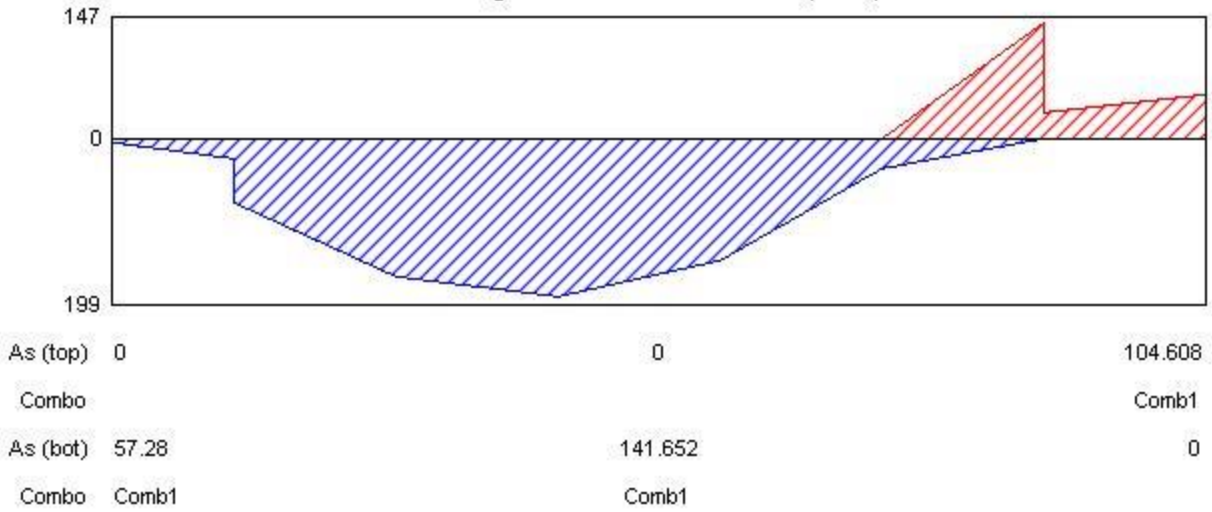


### Material Properties

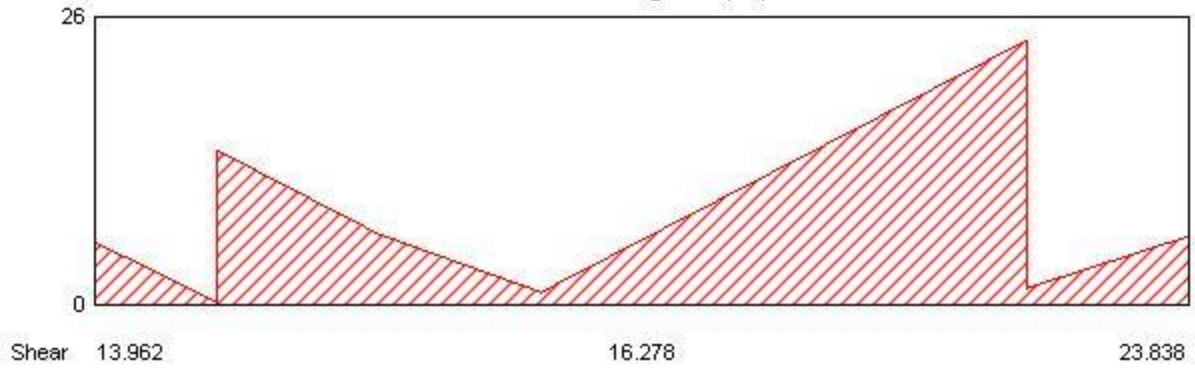
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



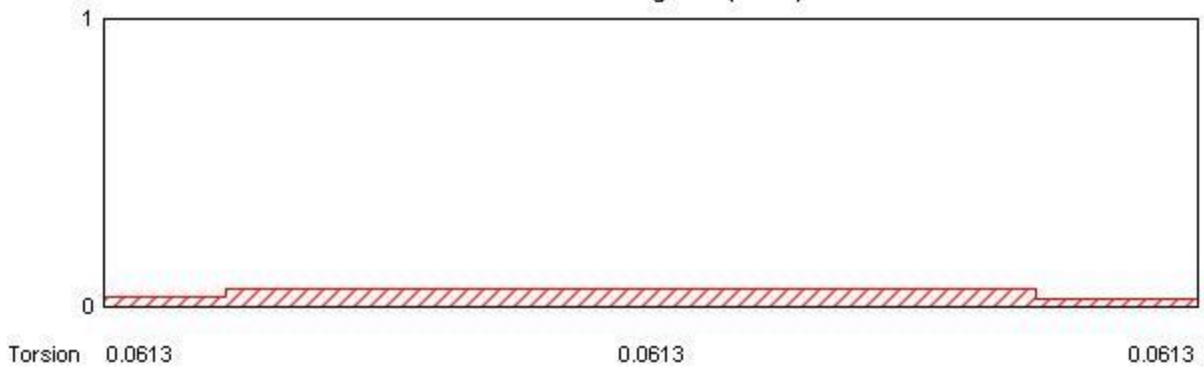
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



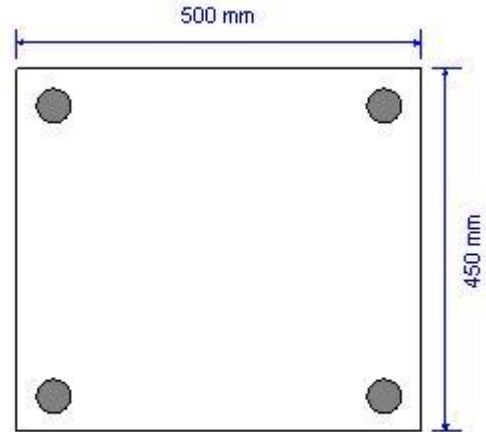
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

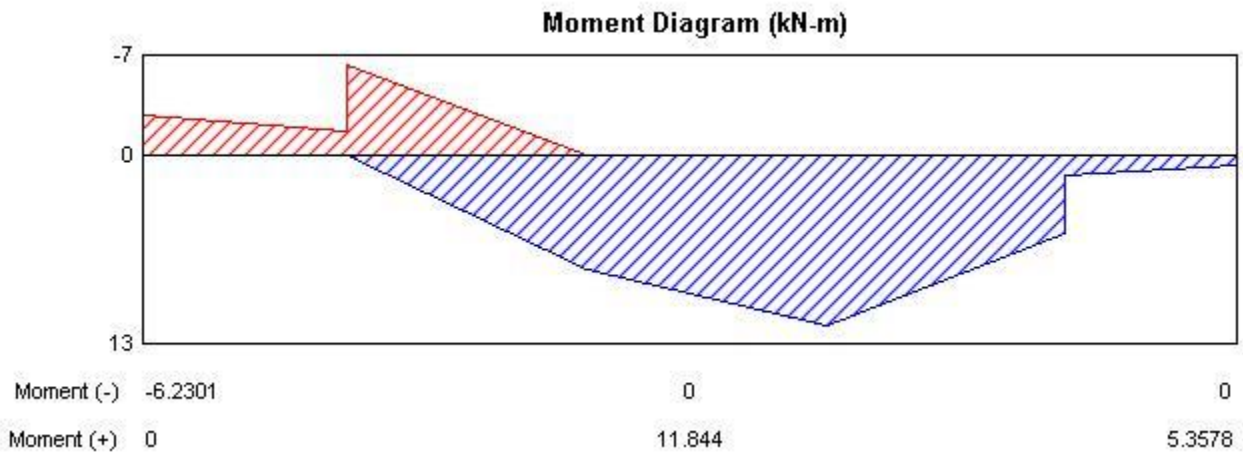
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B85  
Section Property = Viga45\*50  
Length = 5.35 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

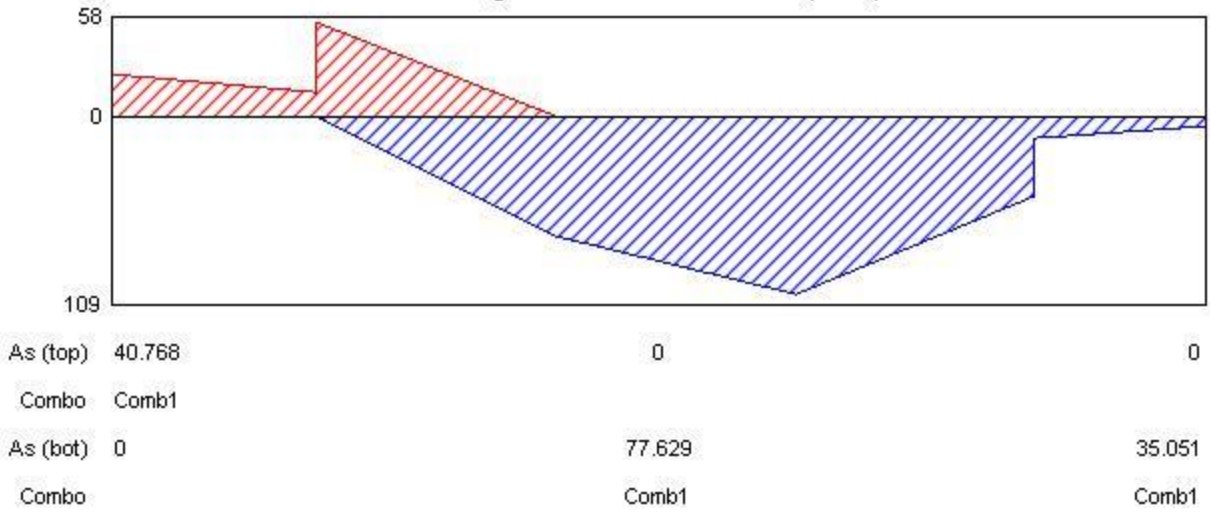


### Material Properties

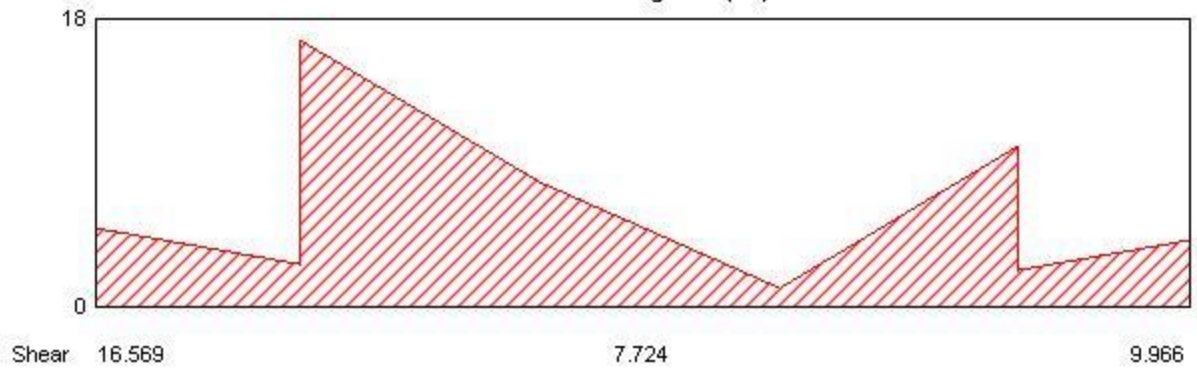
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



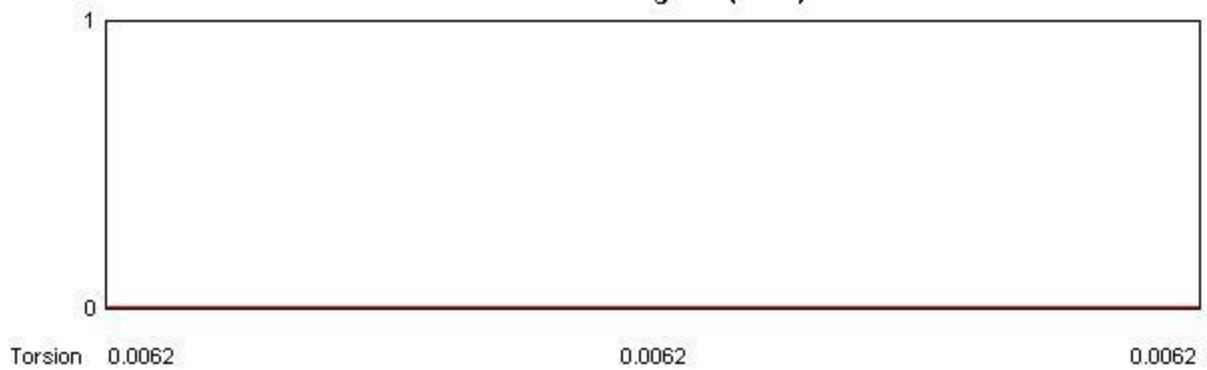
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



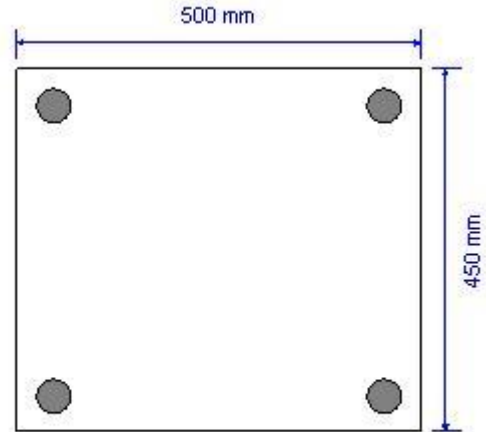
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

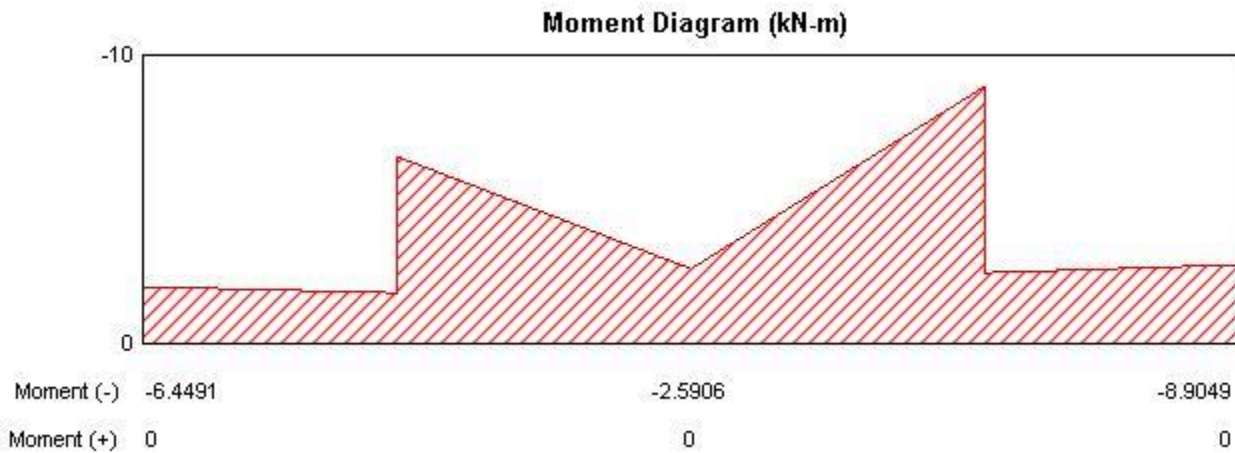
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B86  
Section Property = Viga45\*50  
Length = 4.32 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

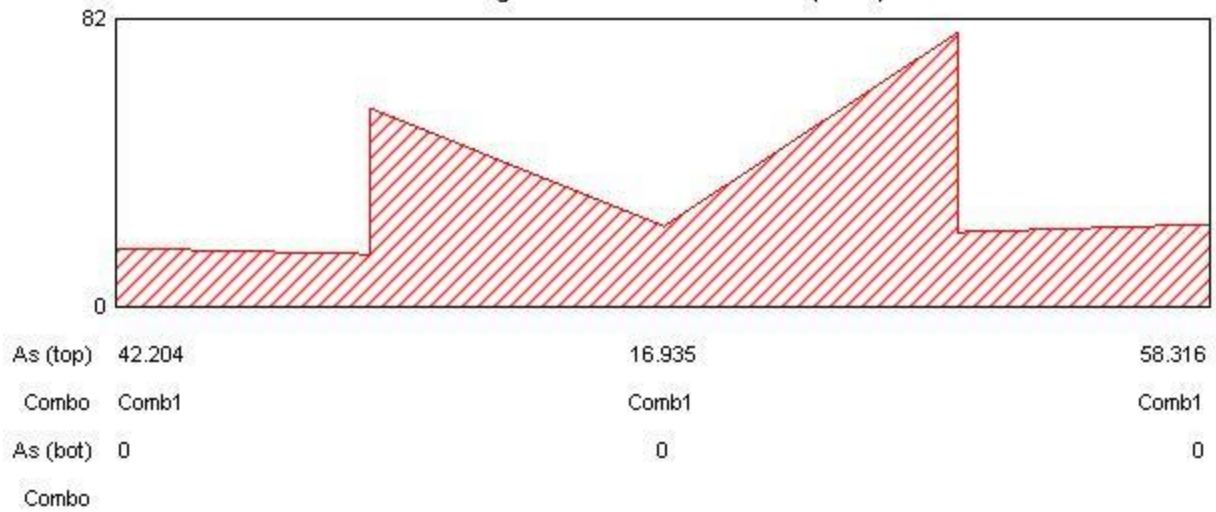


### Material Properties

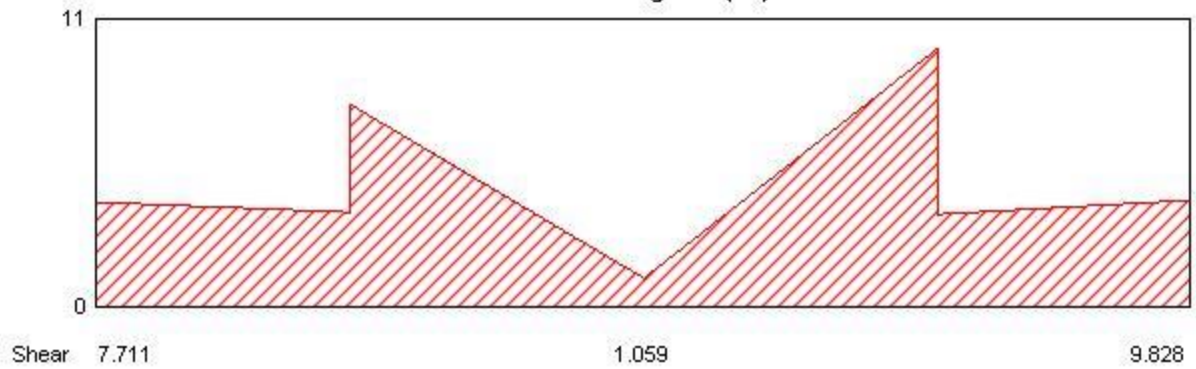
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



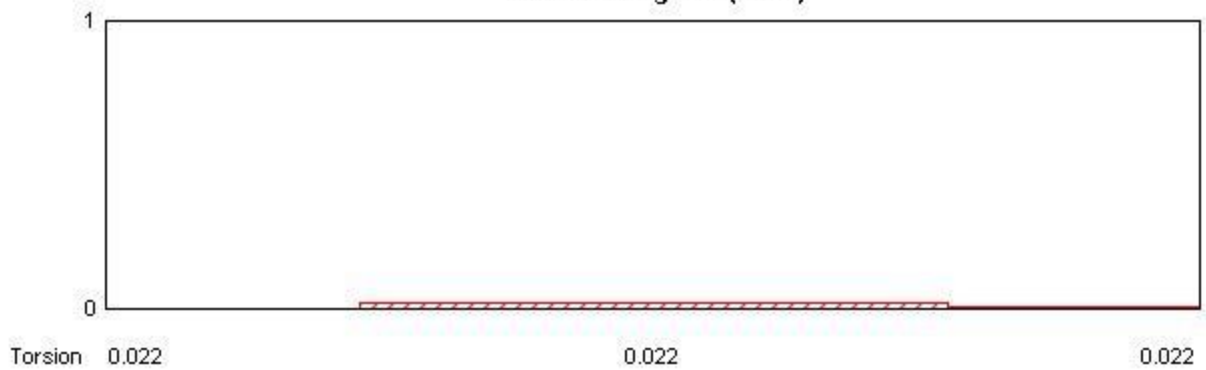
### Longitudinal Reinforcement (mm<sup>2</sup>)



### Shear Diagram (kN)

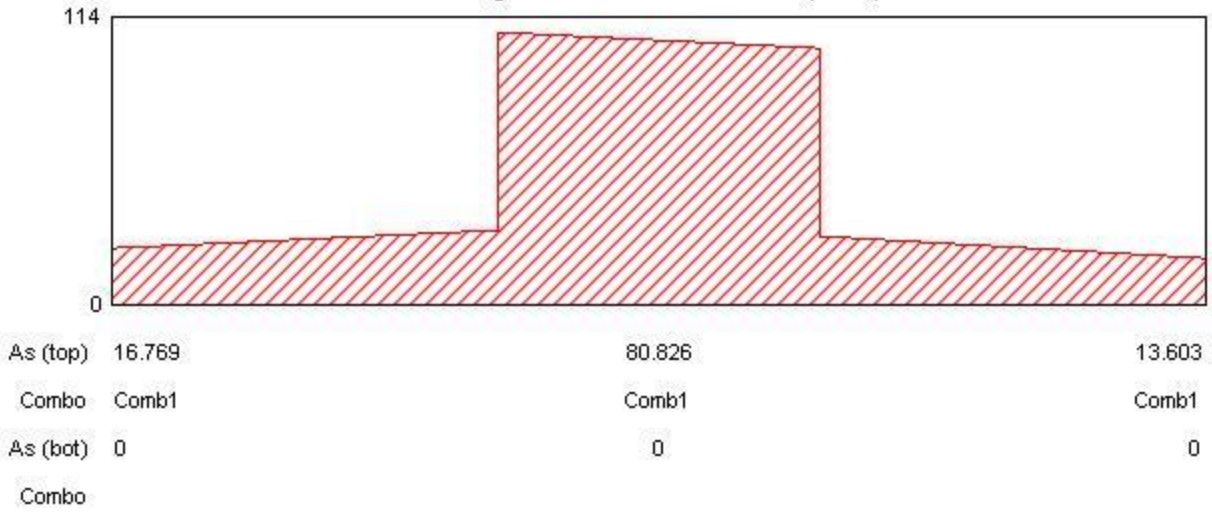


### Torsion Diagram (kN-m)

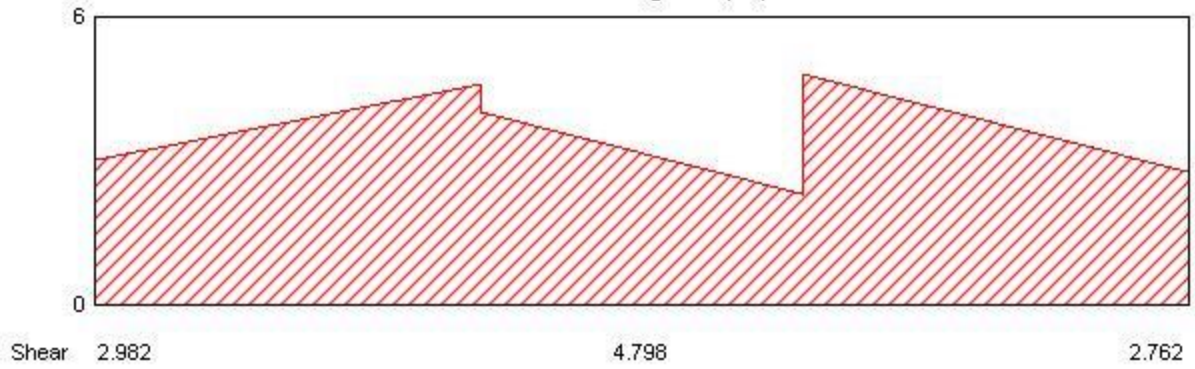




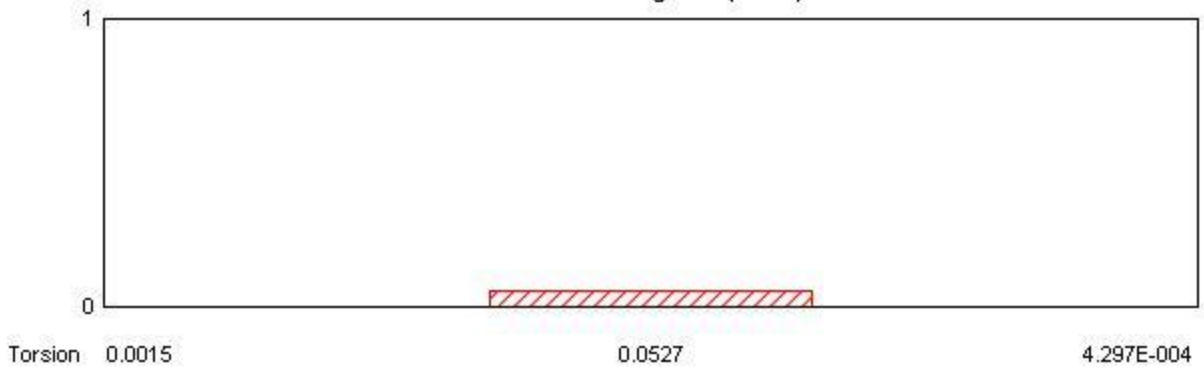
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



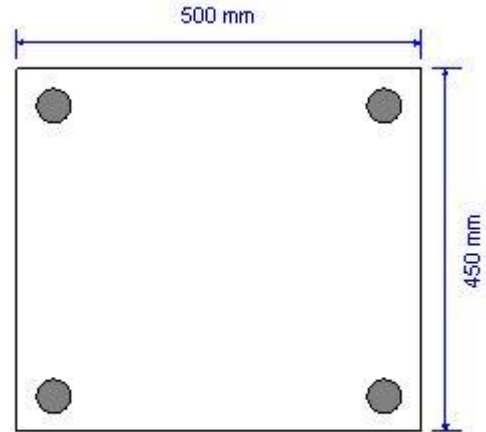
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

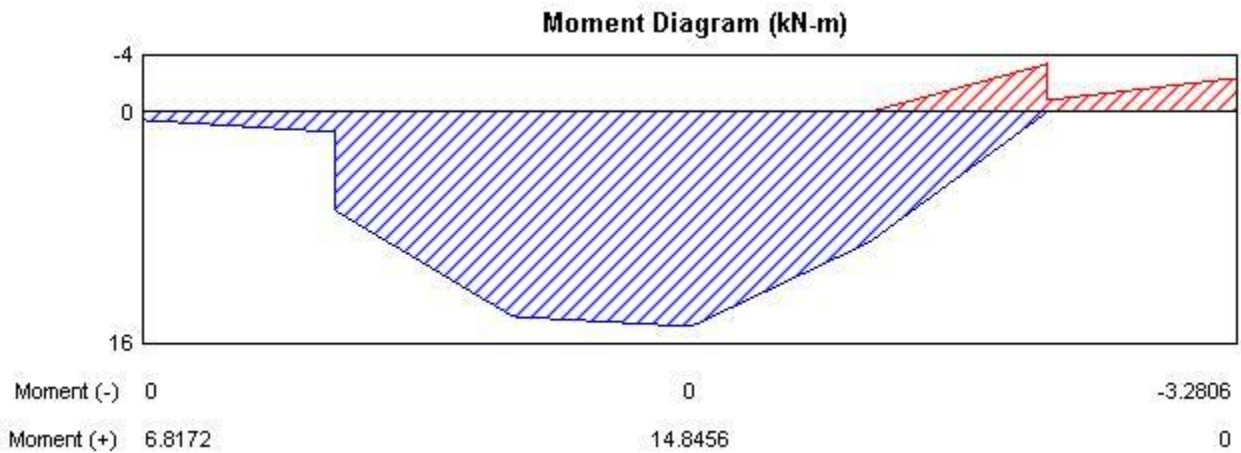
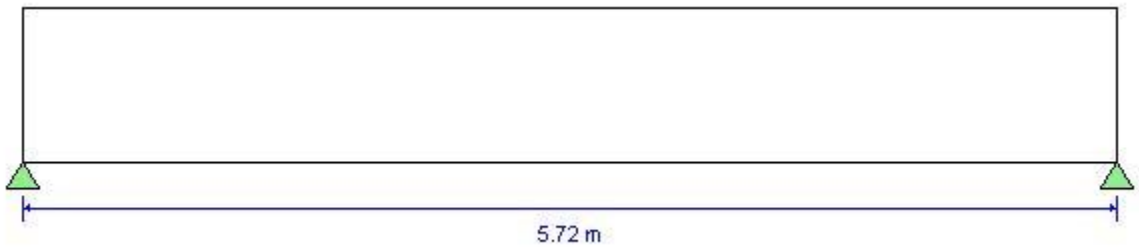
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B88  
Section Property = Viga45\*50  
Length = 5.72 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

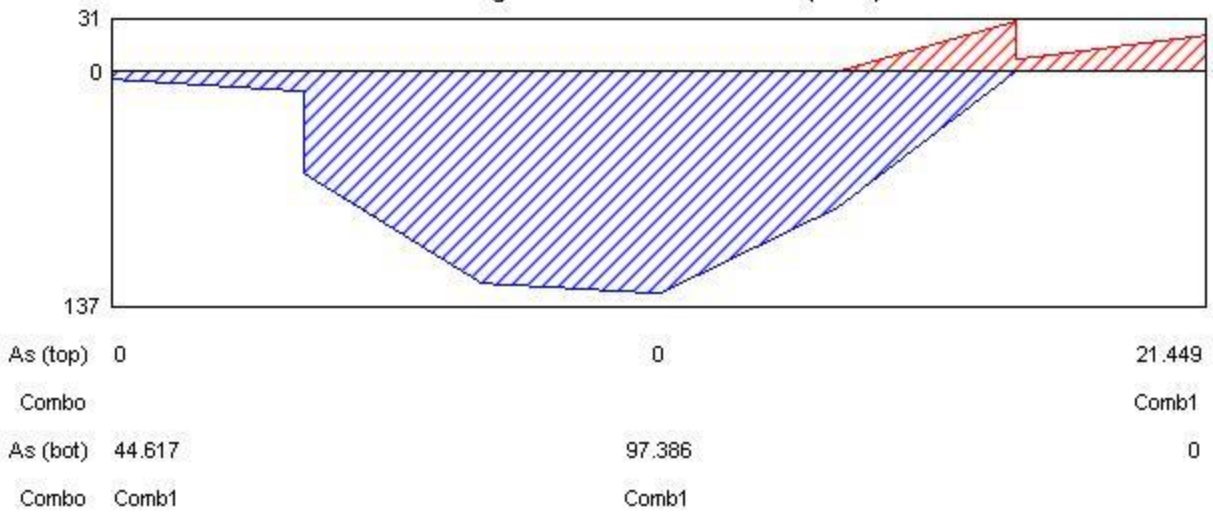


### Material Properties

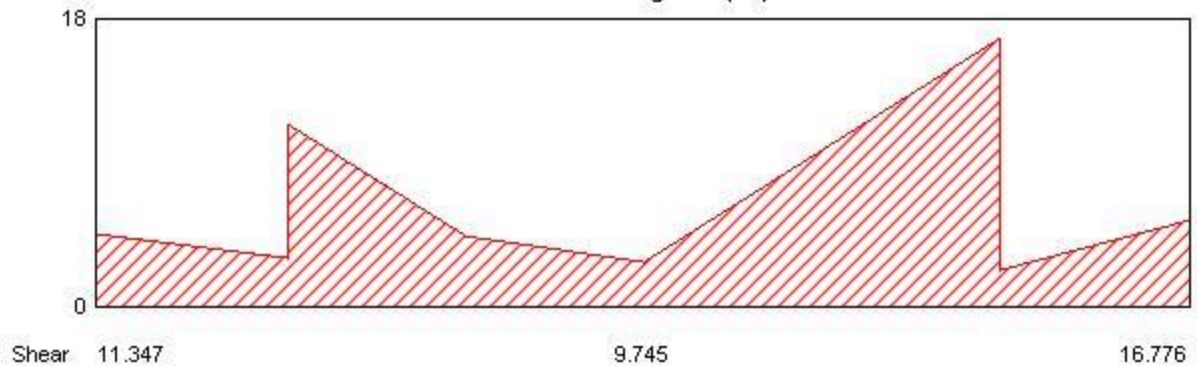
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



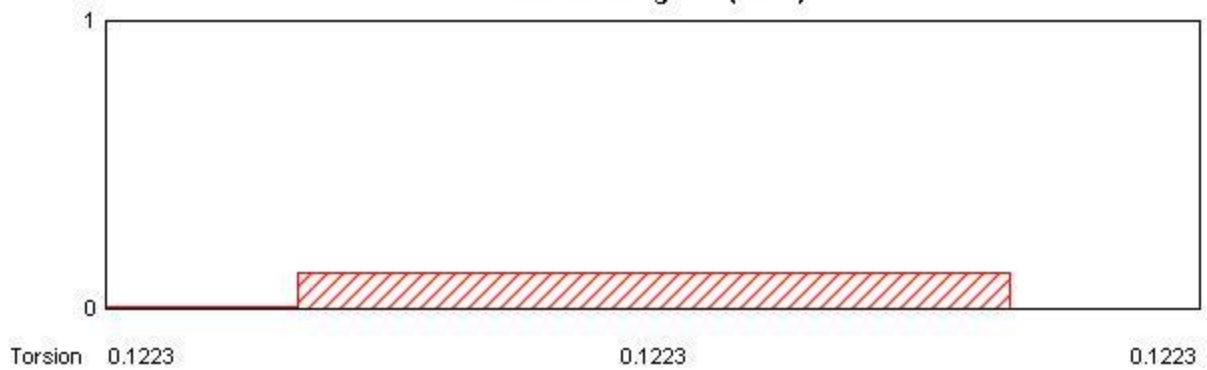
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



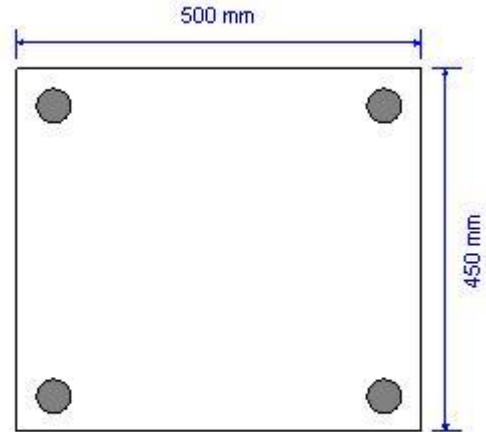
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

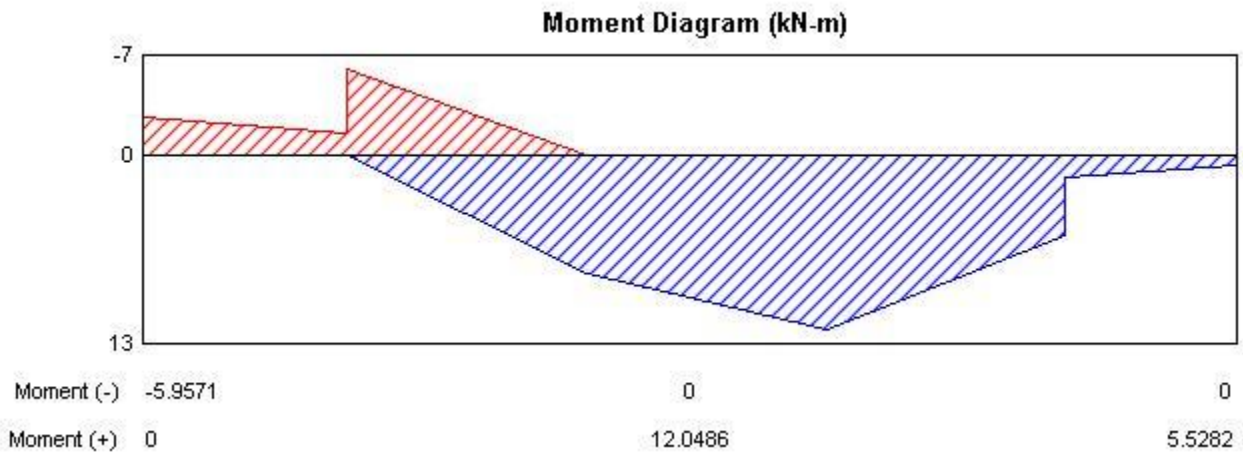
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B89  
Section Property = Viga45\*50  
Length = 5.35 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

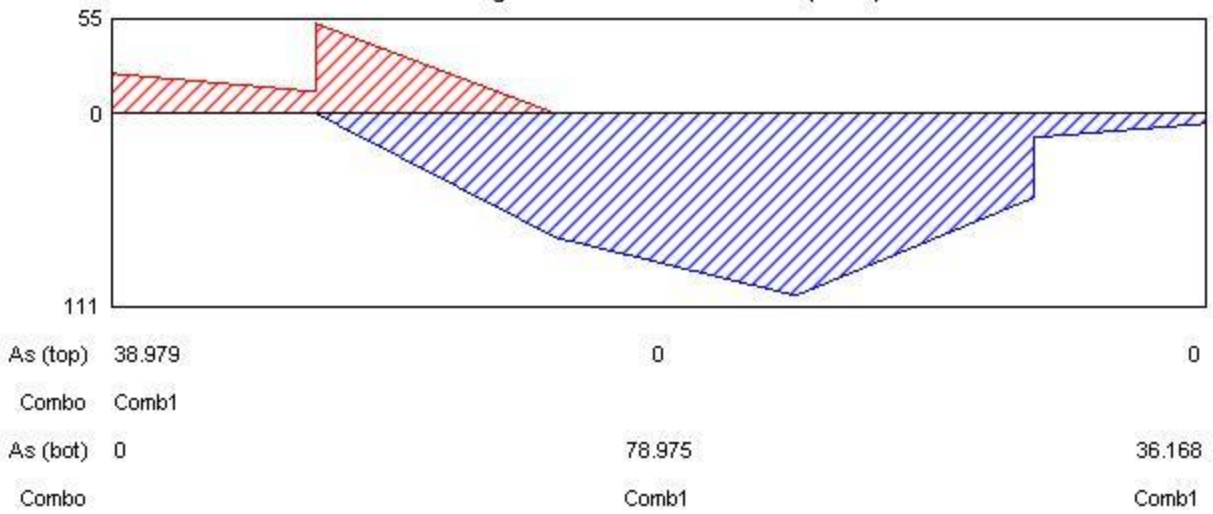


### Material Properties

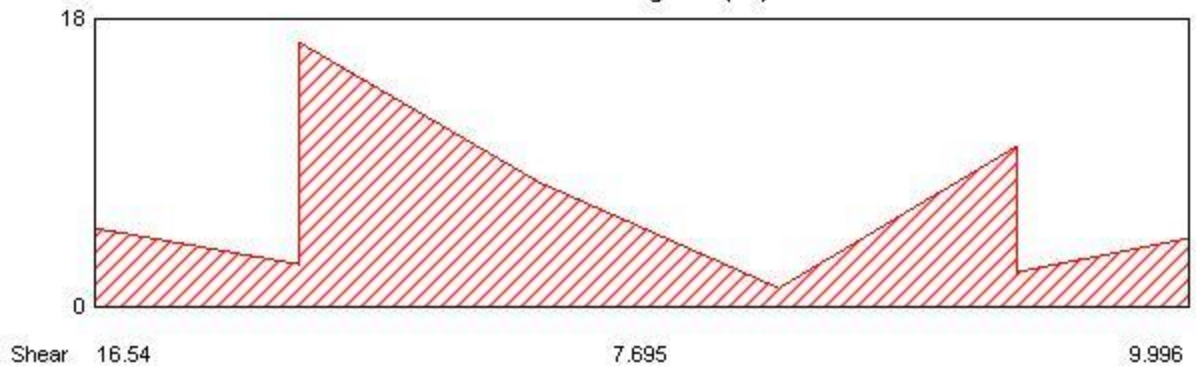
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



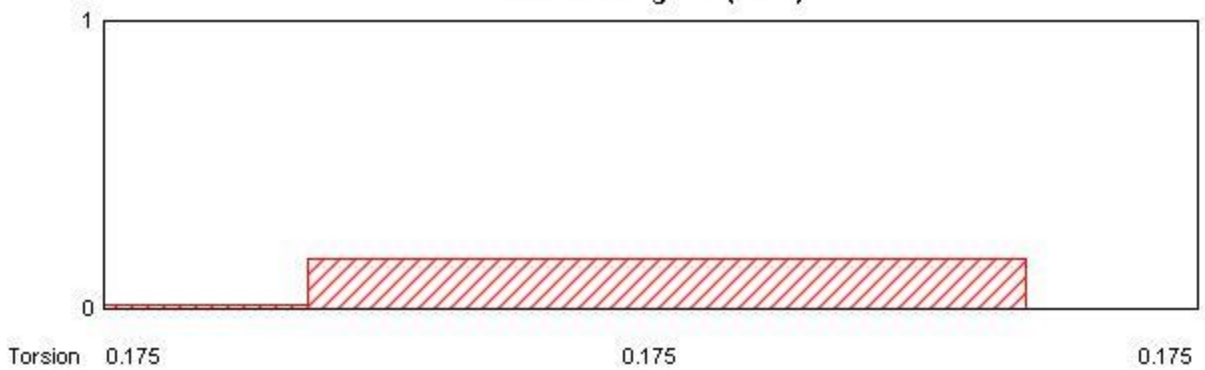
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



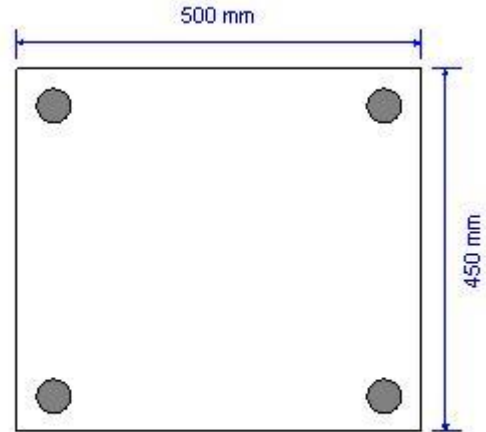
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

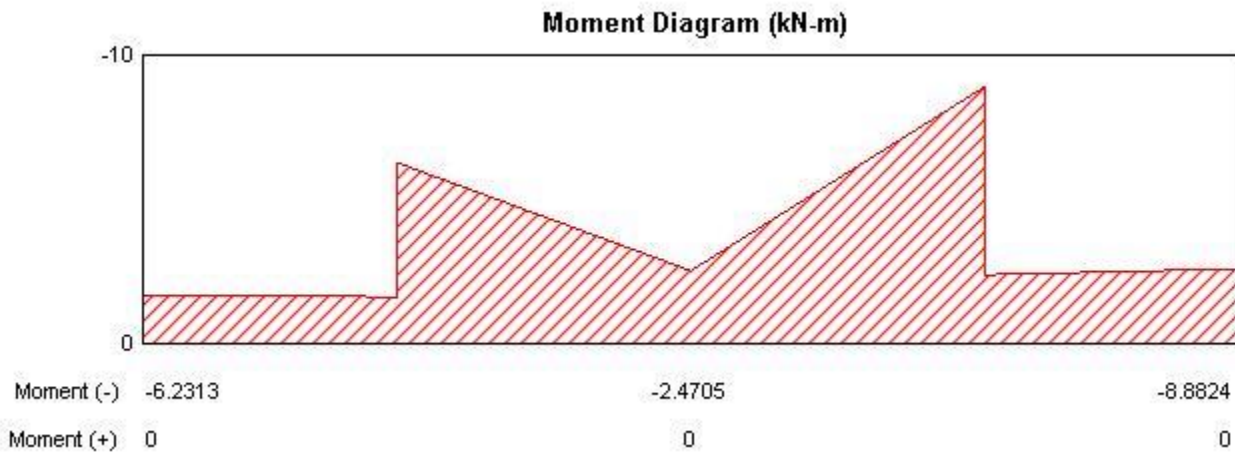
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B90  
Section Property = Viga45\*50  
Length = 4.32 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

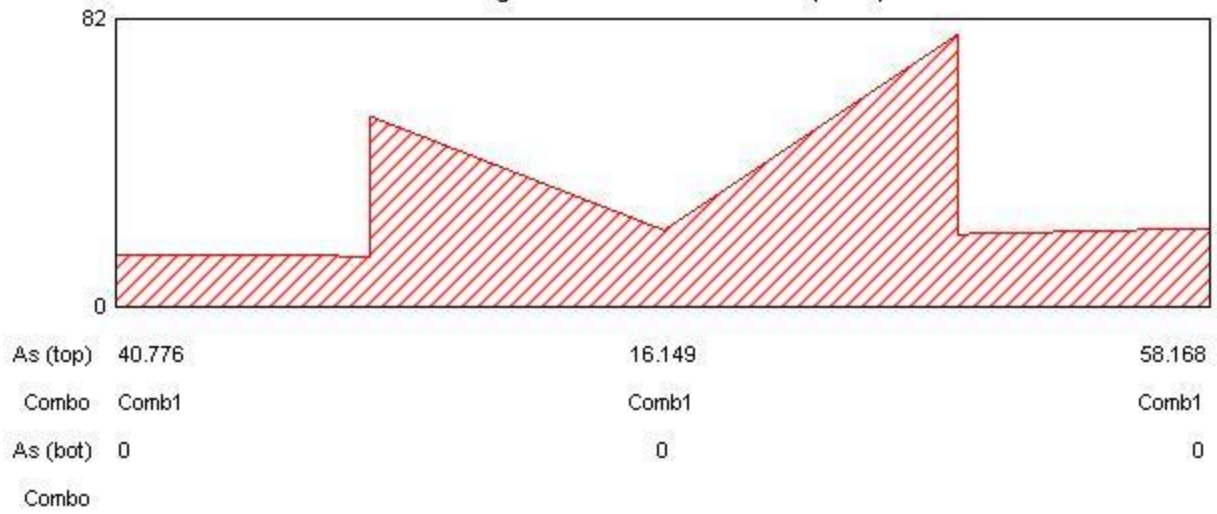


### Material Properties

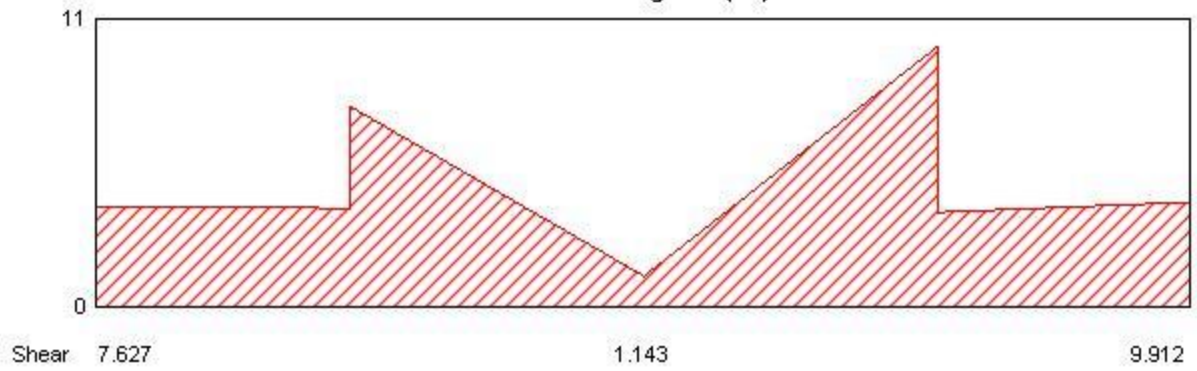
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



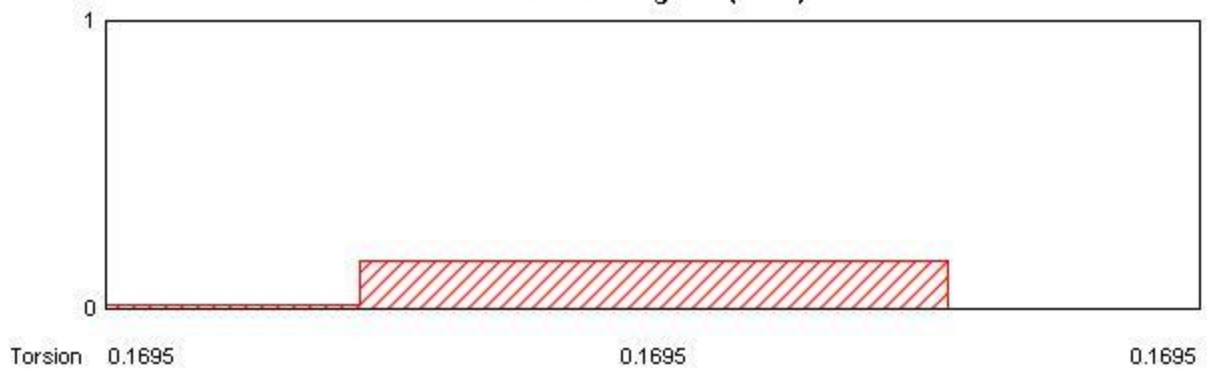
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**

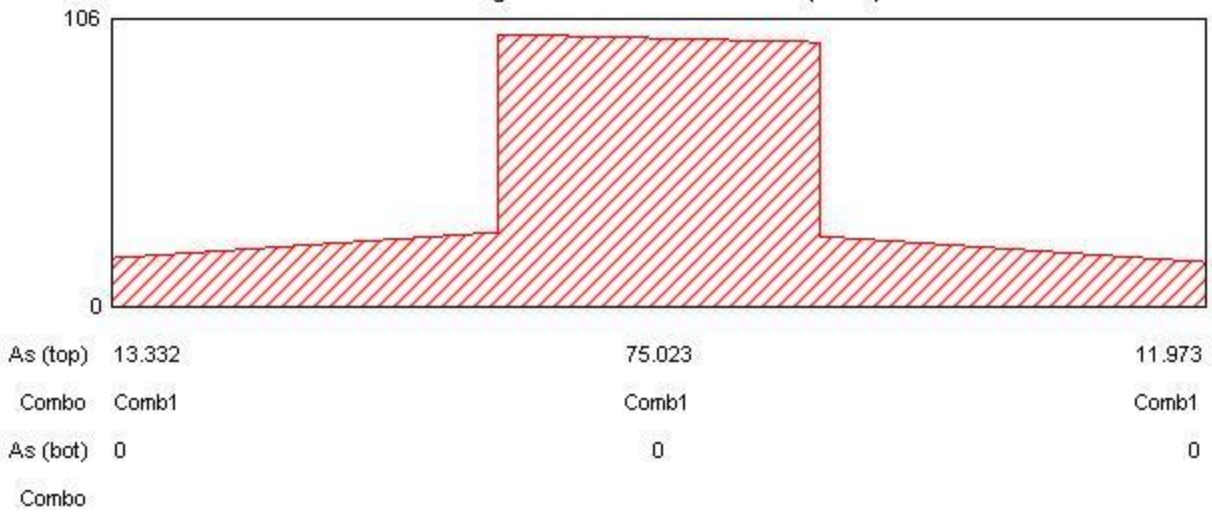


**Torsion Diagram (kN-m)**

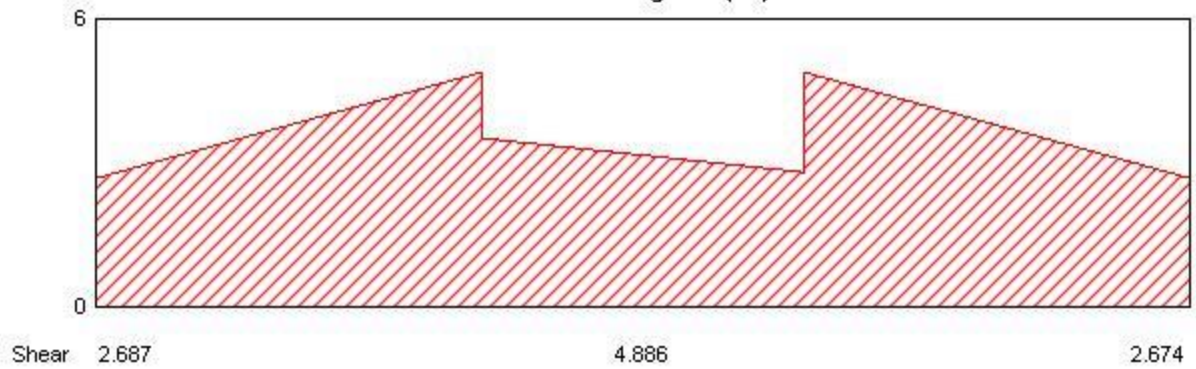




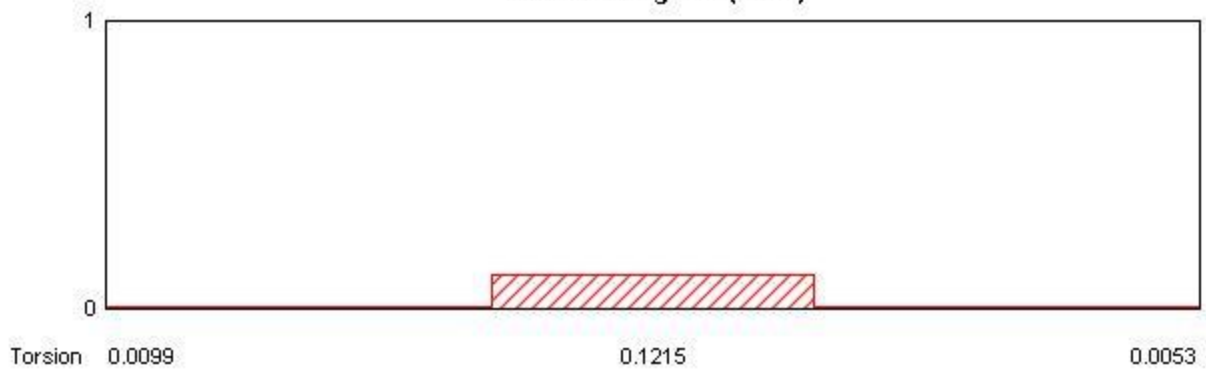
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



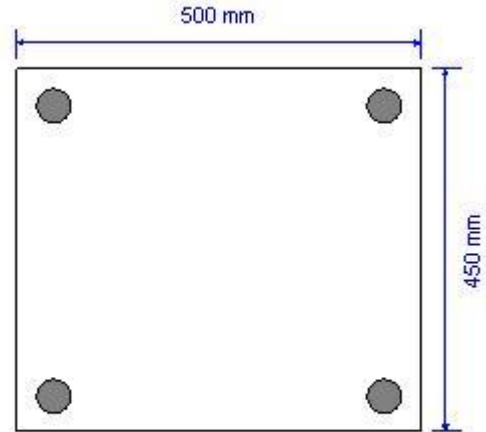
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

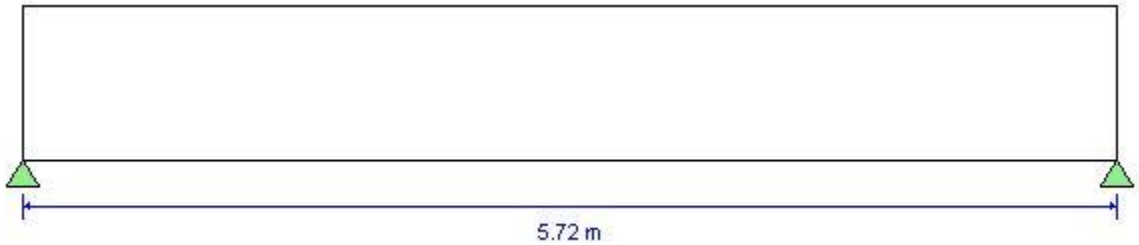
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B92  
Section Property = Viga45\*50  
Length = 5.72 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

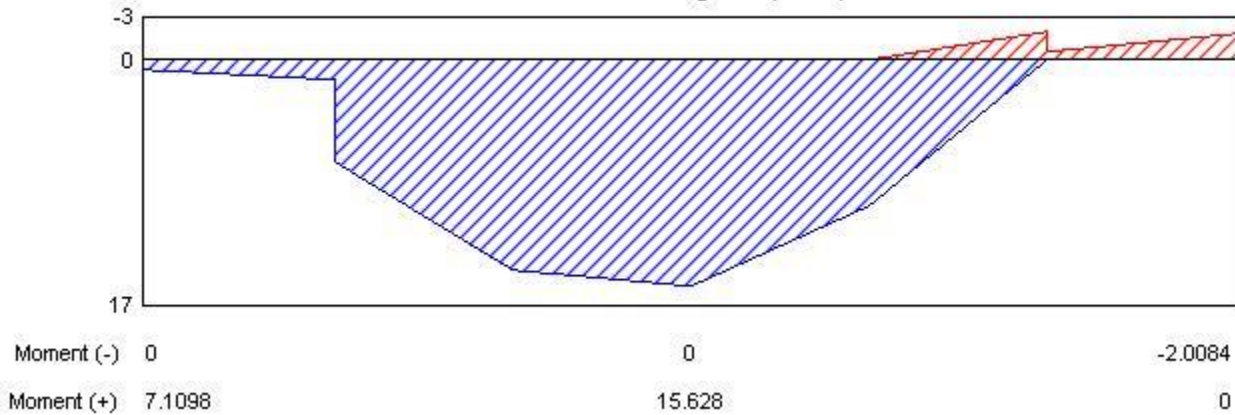


### Material Properties

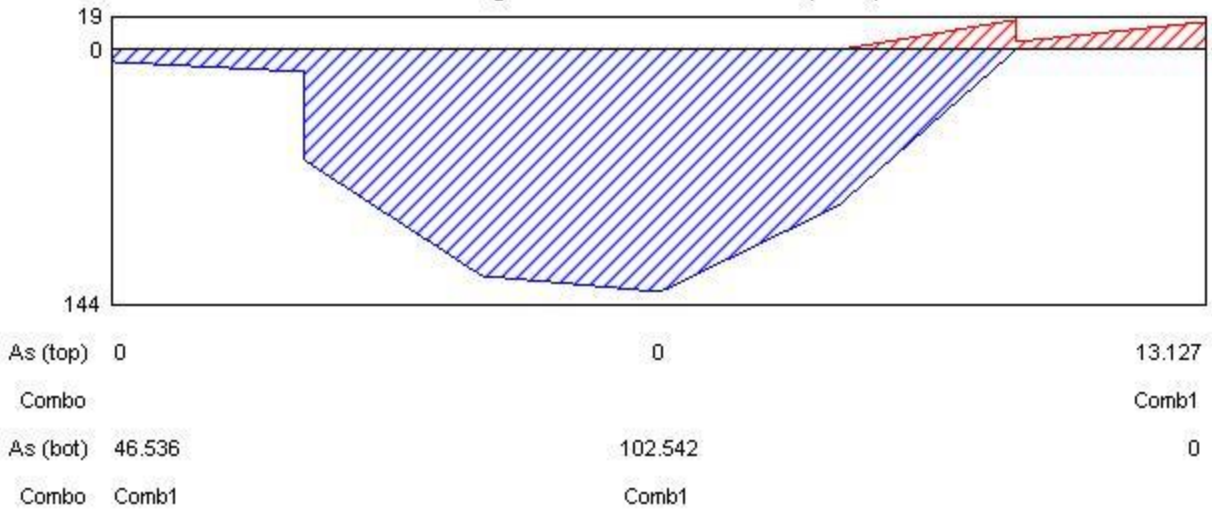
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



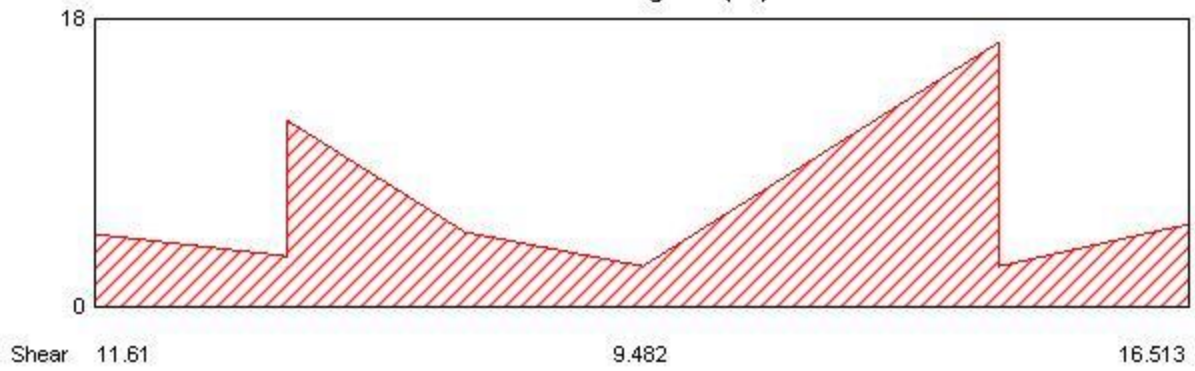
**Moment Diagram (kN-m)**



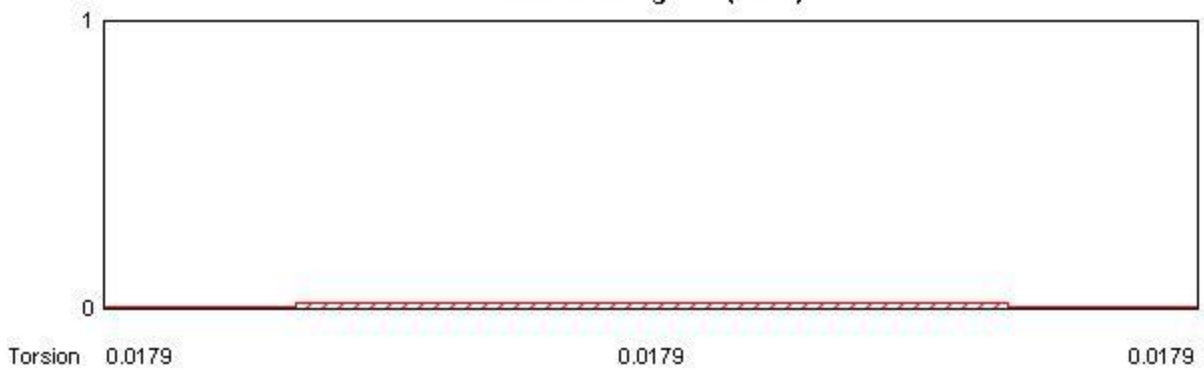
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



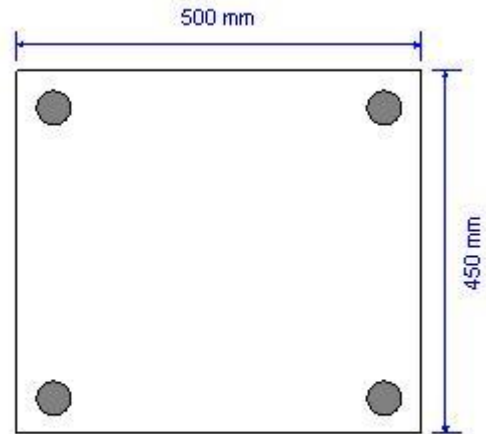
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B93  
Section Property = Viga45\*50  
Length = 5.35 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

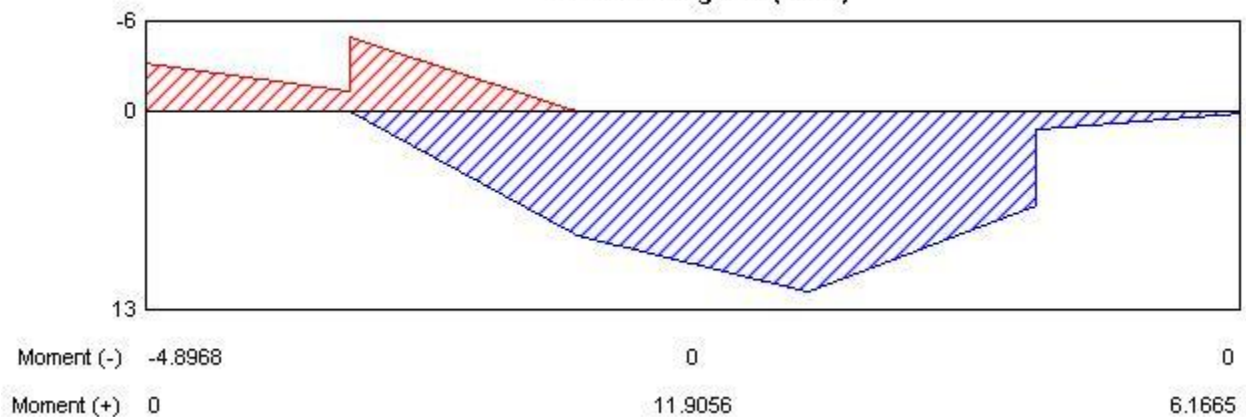


### Material Properties

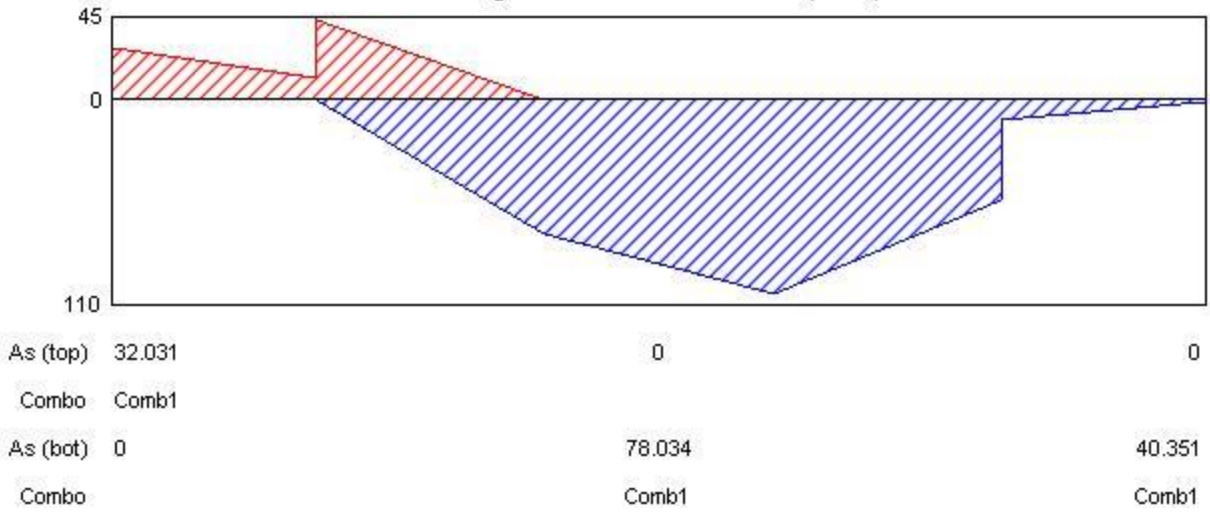
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



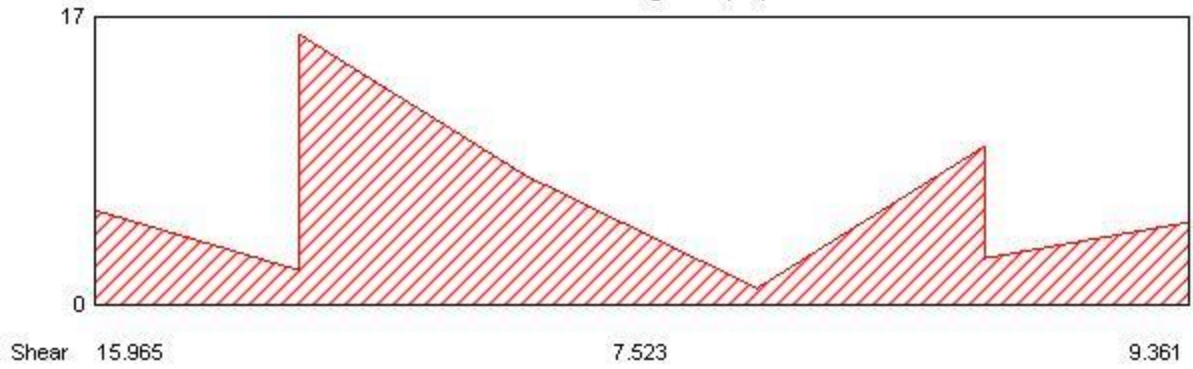
**Moment Diagram (kN-m)**



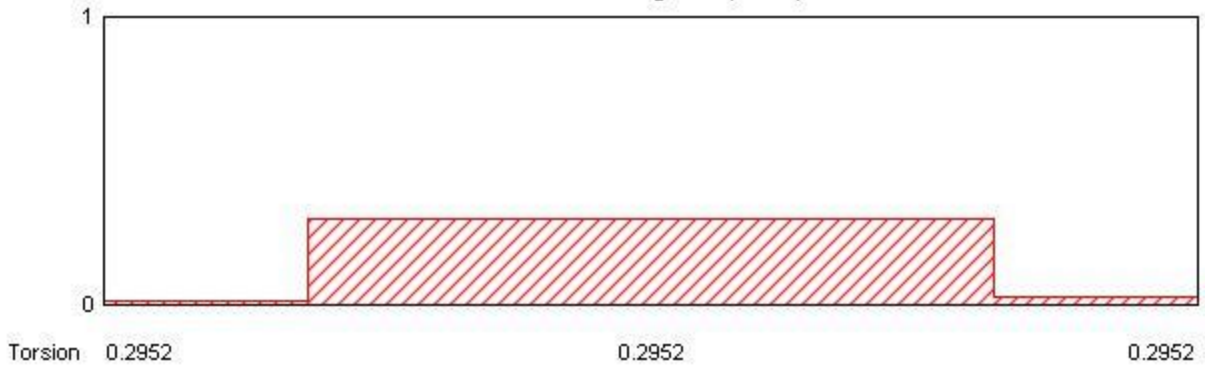
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



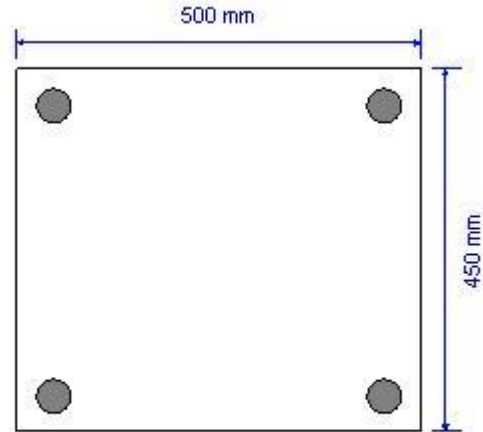
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
 Beam Label = B94  
 Section Property = Viga45\*50  
 Length = 4.32 m  
 Section Width = 500 mm  
 Section Depth = 450 mm  
 Distance to Top Rebar Center = 45 mm  
 Distance to Bot Rebar Center = 45 mm

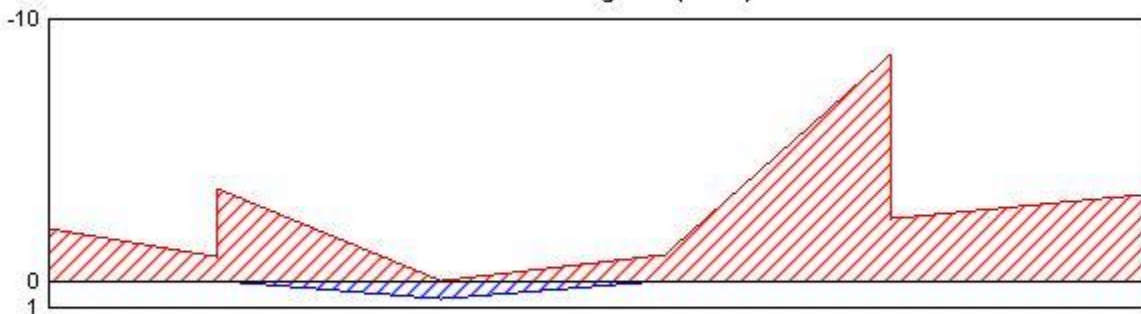


### Material Properties

Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
 Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
 Shear Rebar Yield = 420 N/mm<sup>2</sup>

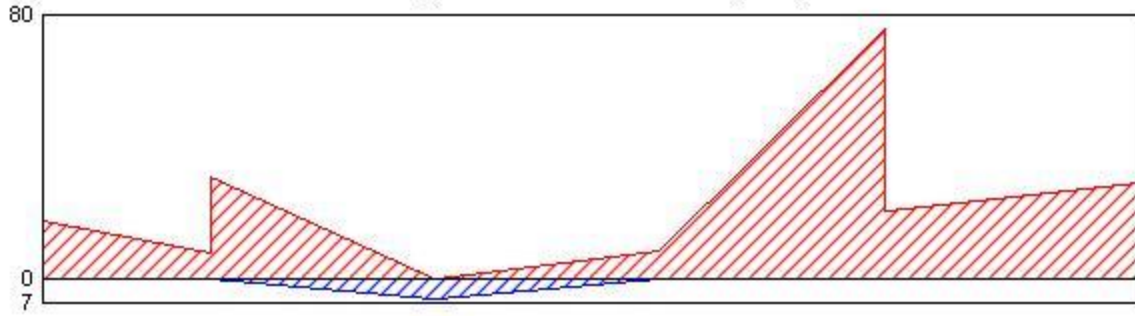


**Moment Diagram (kN-m)**



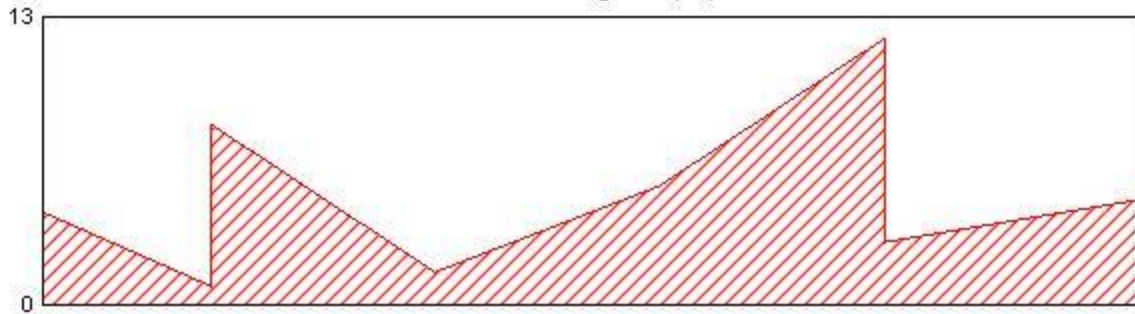
Moment (-)	-3.5187	-0.9976	-8.6523
Moment (+)	0	0.7136	0

**Longitudinal Reinforcement (mm<sup>2</sup>)**



As (top)	23.007	0	56.658
Combo	Comb1	Comb1	Comb1
As (bot)	0	0	0
Combo		Comb1	

**Shear Diagram (kN)**



Shear	8.125	5.282	11.985
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**Torsion Diagram (kN-m)**

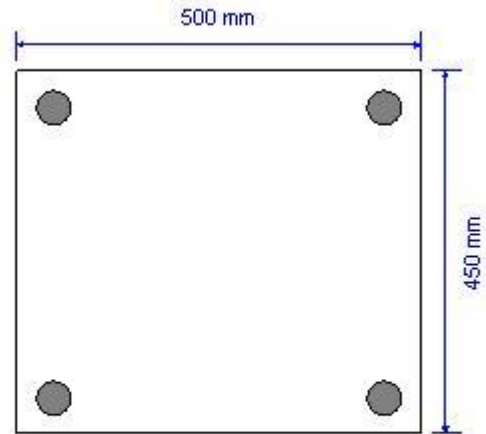


Torsion	0.1915	0.1915	0.1915
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## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B95  
Section Property = Viga45\*50  
Length = 2.83 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

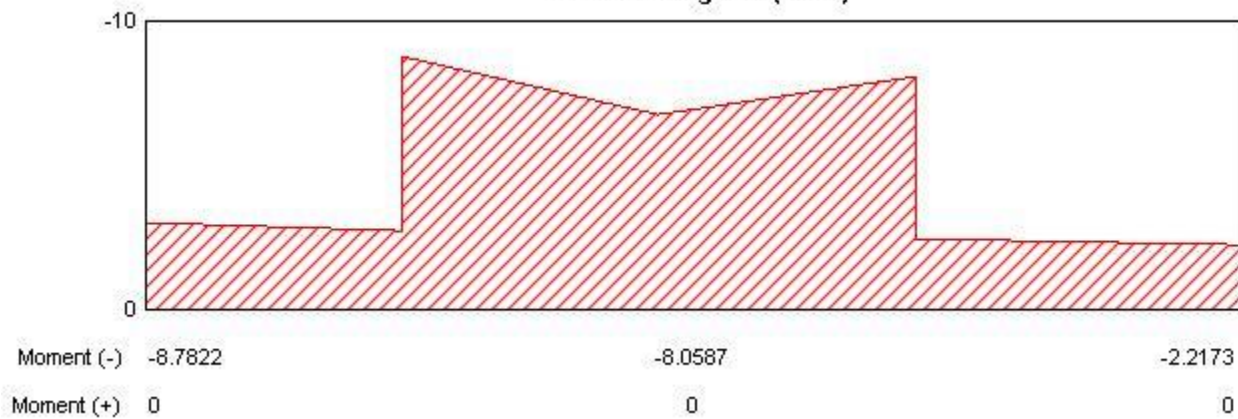


### Material Properties

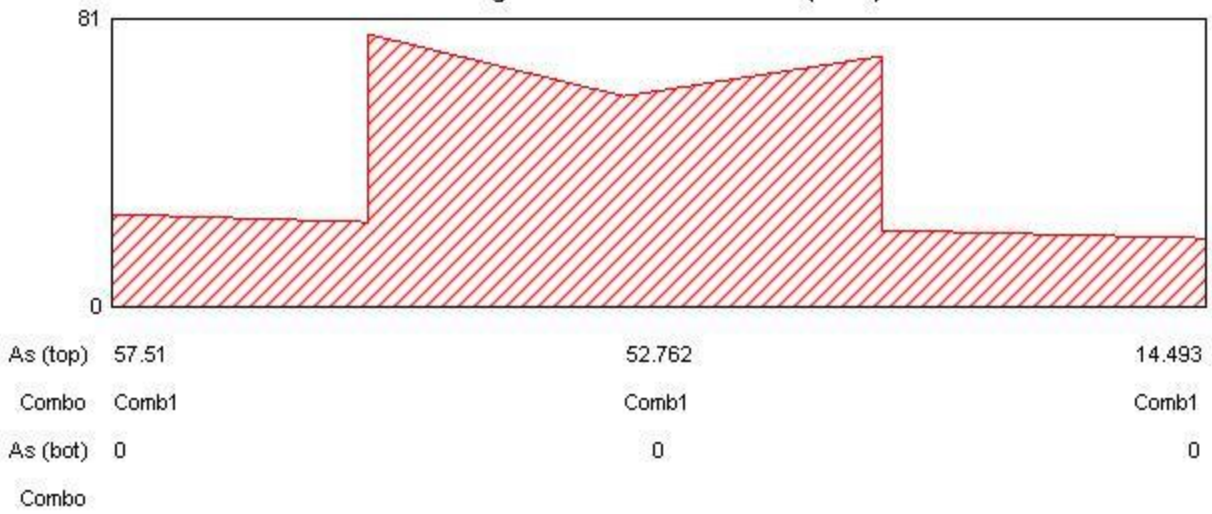
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



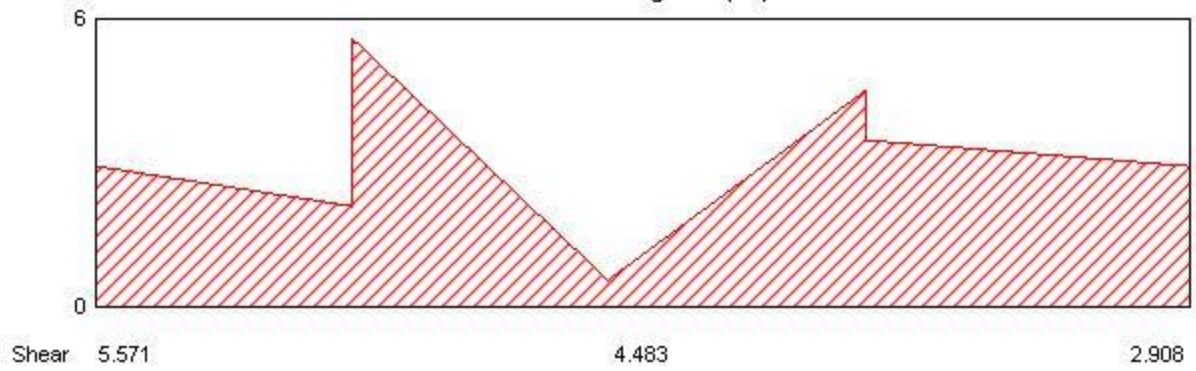
**Moment Diagram (kN-m)**



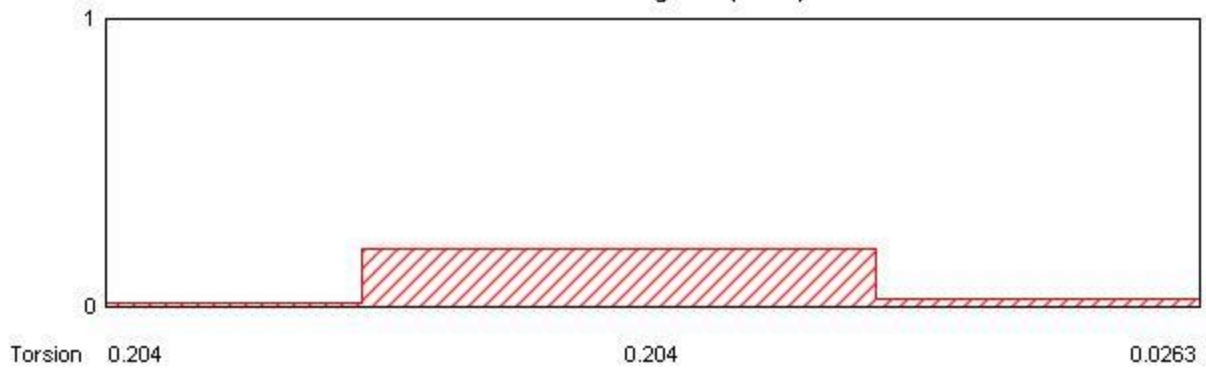
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



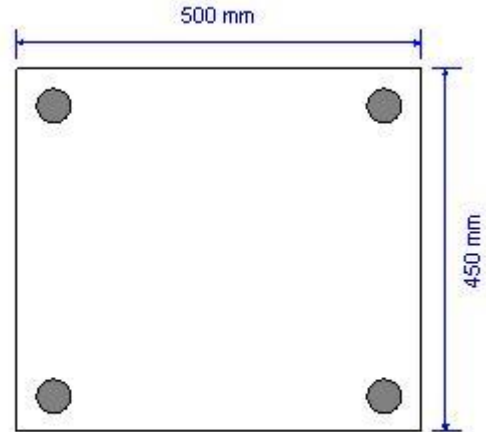
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

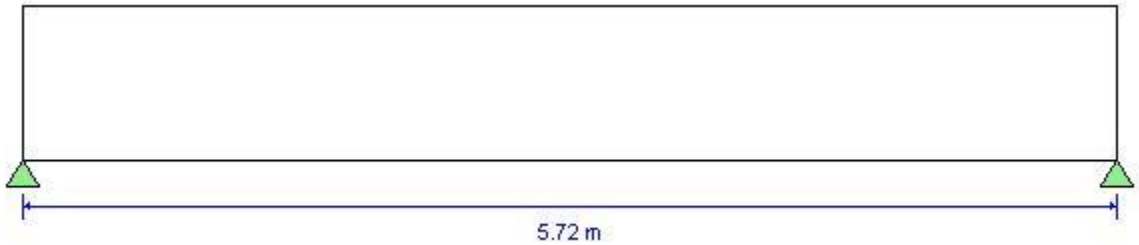
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B96  
Section Property = Viga45\*50  
Length = 5.72 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

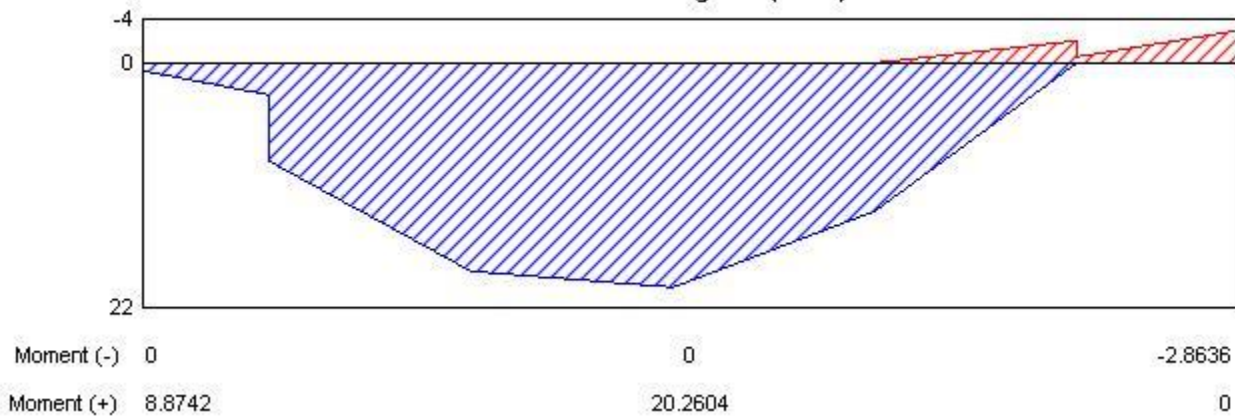


### Material Properties

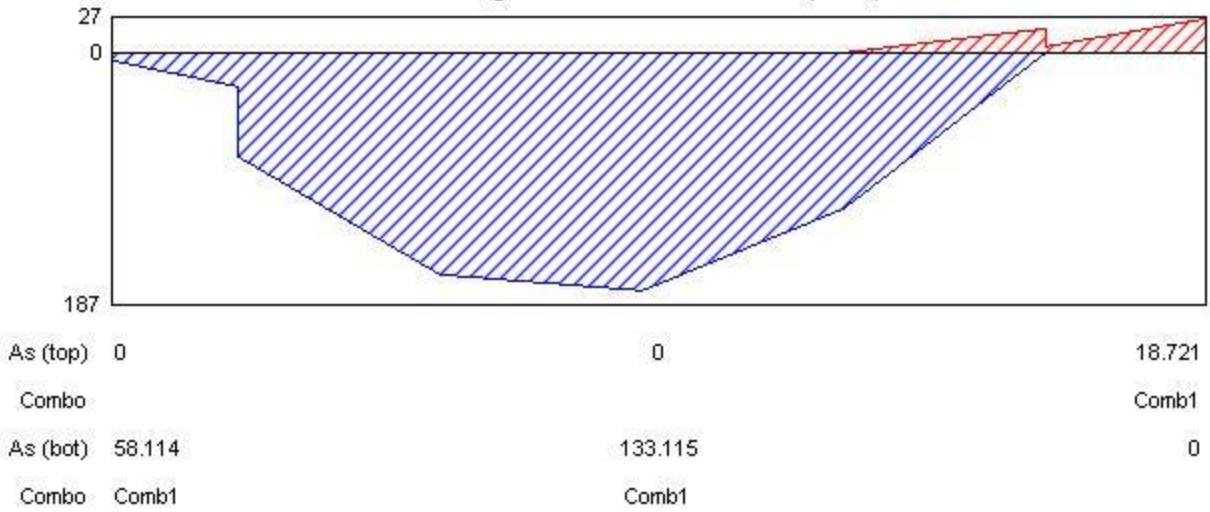
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



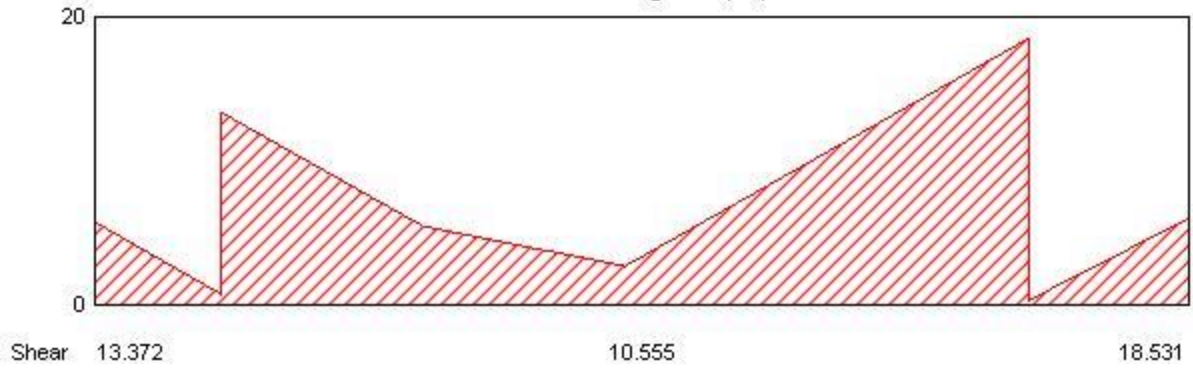
**Moment Diagram (kN-m)**



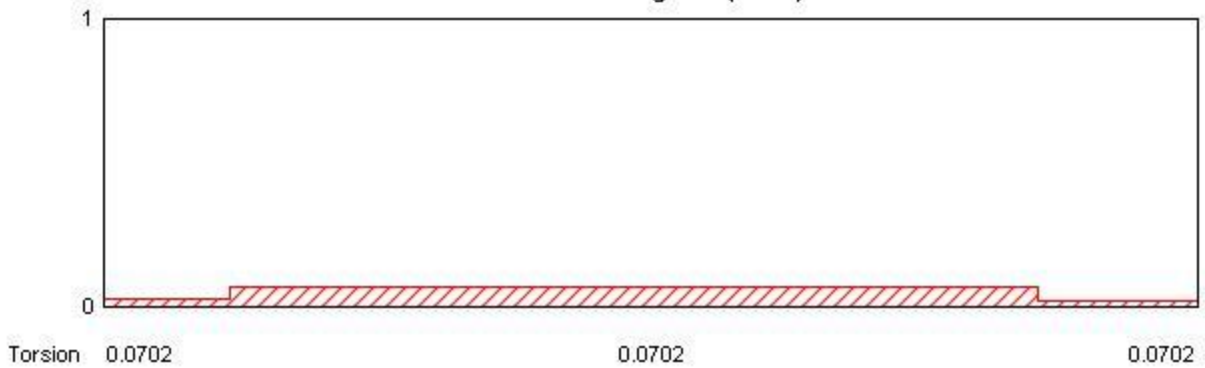
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



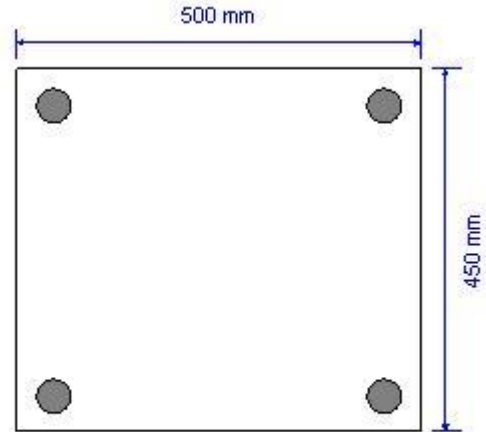
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B1  
Section Property = Viga45\*50  
Length = 7.08 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

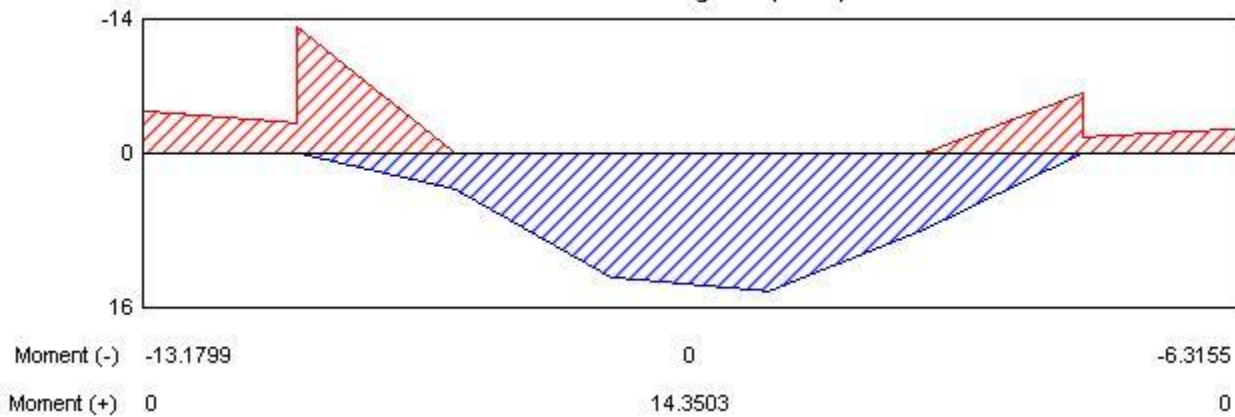


### Material Properties

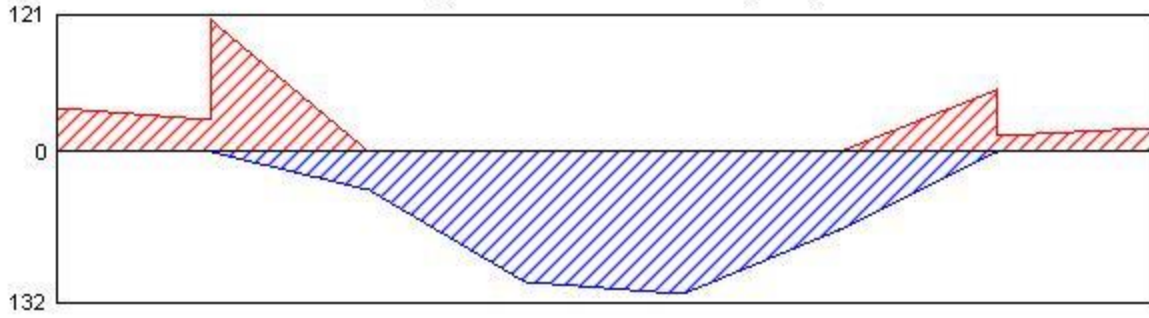
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



**Moment Diagram (kN-m)**

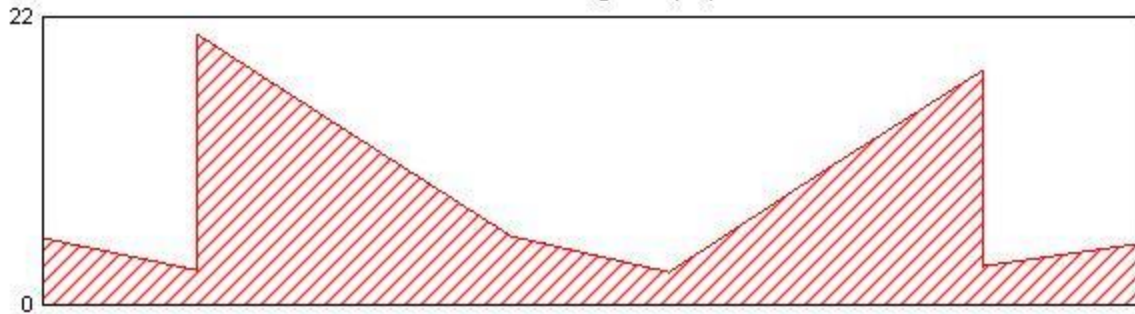


**Longitudinal Reinforcement (mm<sup>2</sup>)**



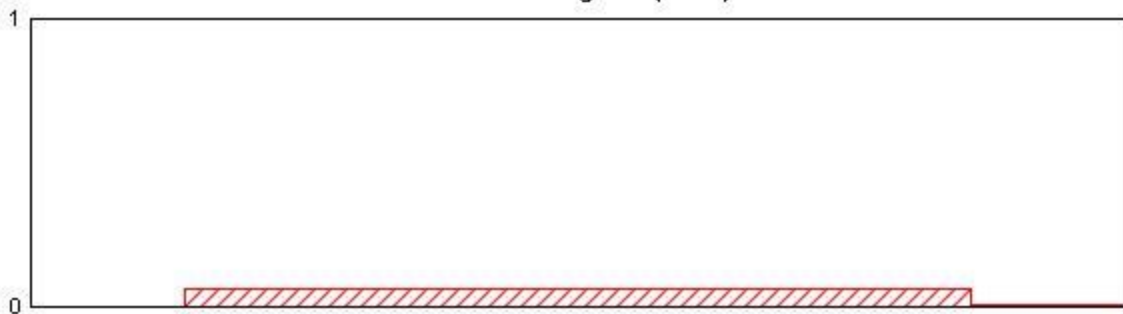
As (top)	86.418	0	41.328
Combo	Comb1		Comb1
As (bot)	0	94.124	0
Combo		Comb1	

**Shear Diagram (kN)**



Shear	20.554	12.873	17.851
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**Torsion Diagram (kN-m)**

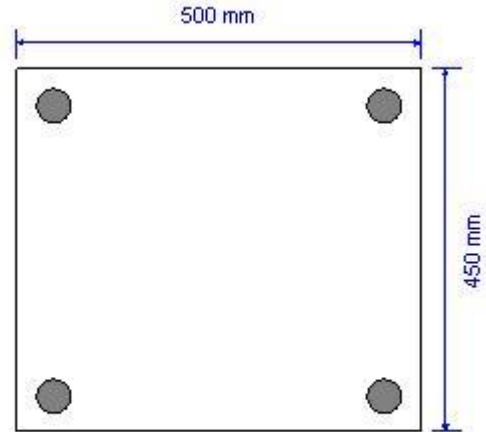


Torsion	0.0627	0.0627	0.0627
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## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B2  
Section Property = Viga45\*50  
Length = 7.08 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

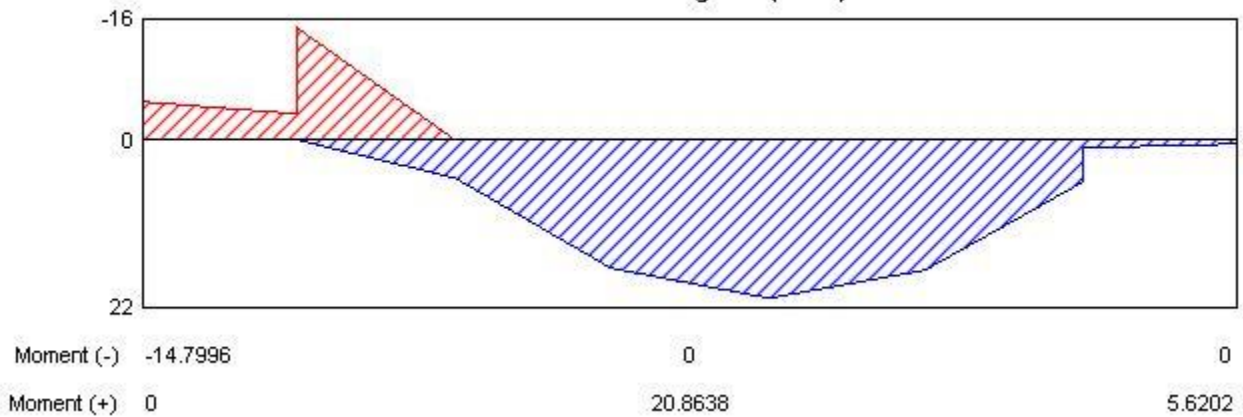


### Material Properties

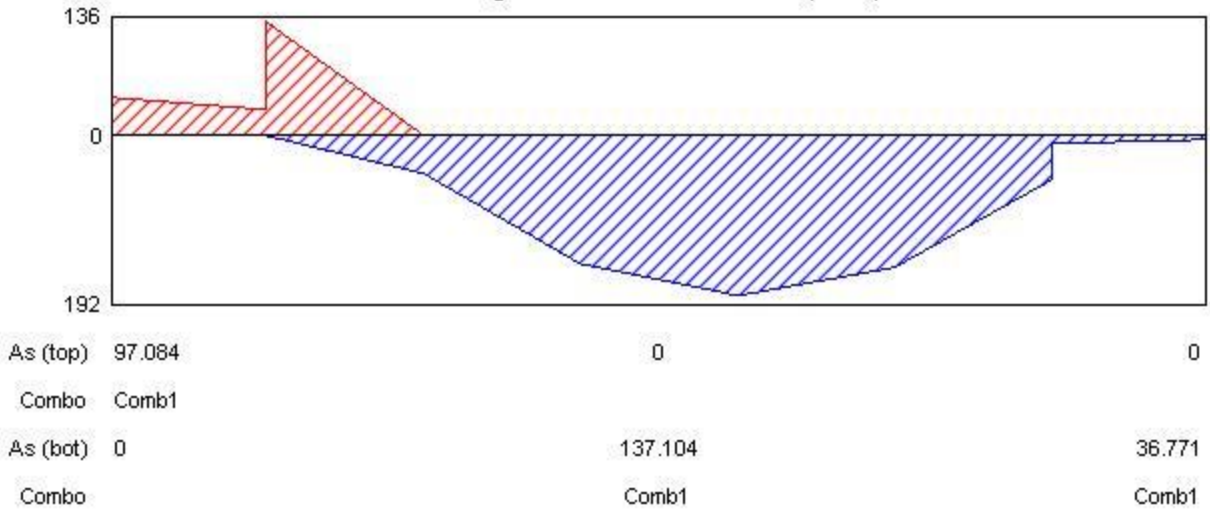
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



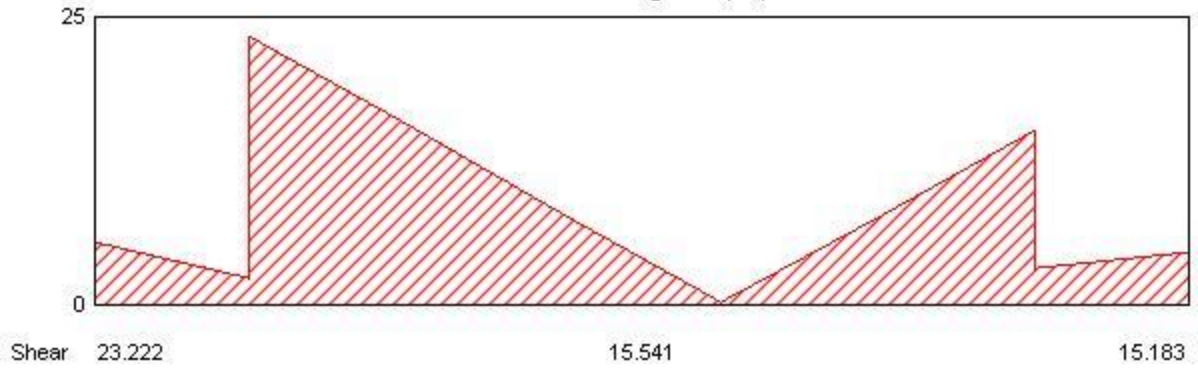
**Moment Diagram (kN-m)**



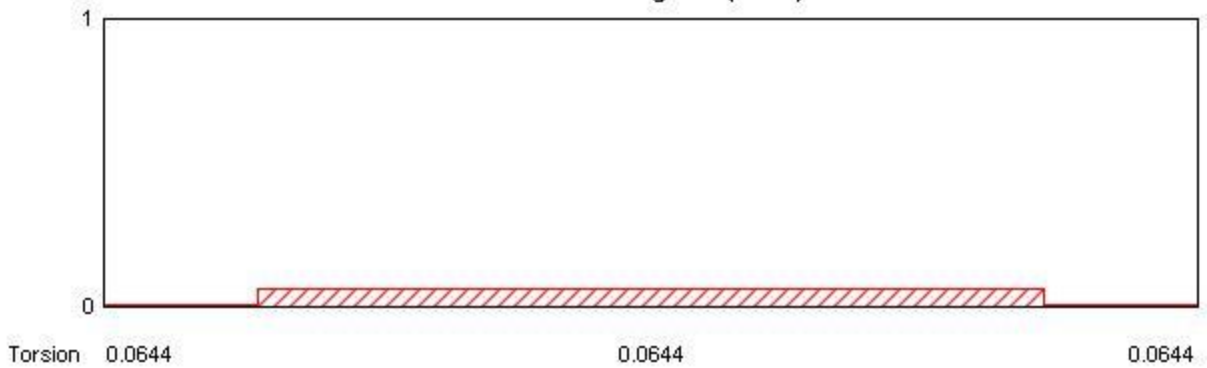
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



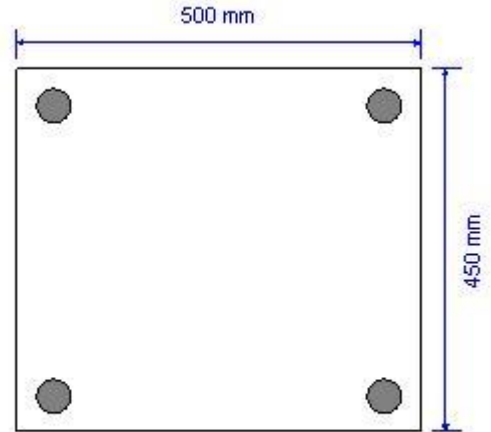
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
 Beam Label = B3  
 Section Property = Viga45\*50  
 Length = 3.62 m  
 Section Width = 500 mm  
 Section Depth = 450 mm  
 Distance to Top Rebar Center = 45 mm  
 Distance to Bot Rebar Center = 45 mm

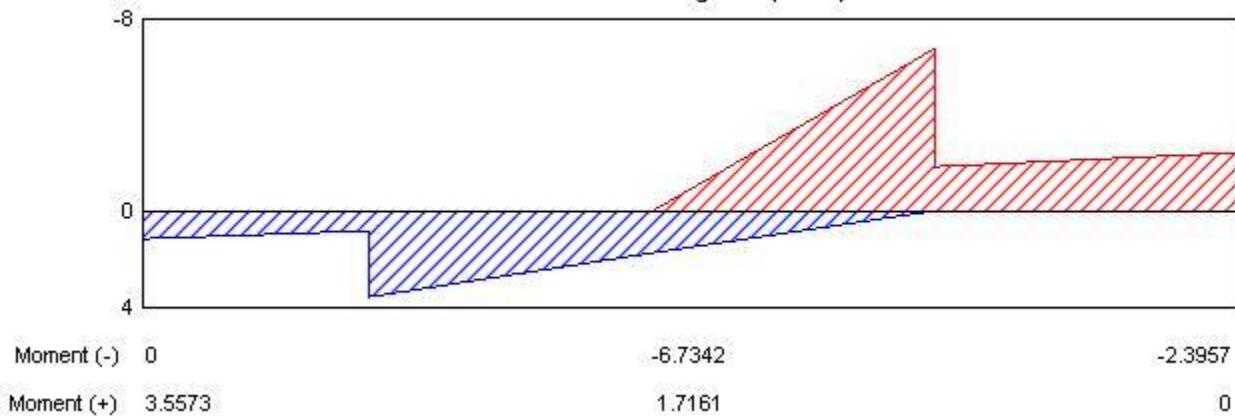


### Material Properties

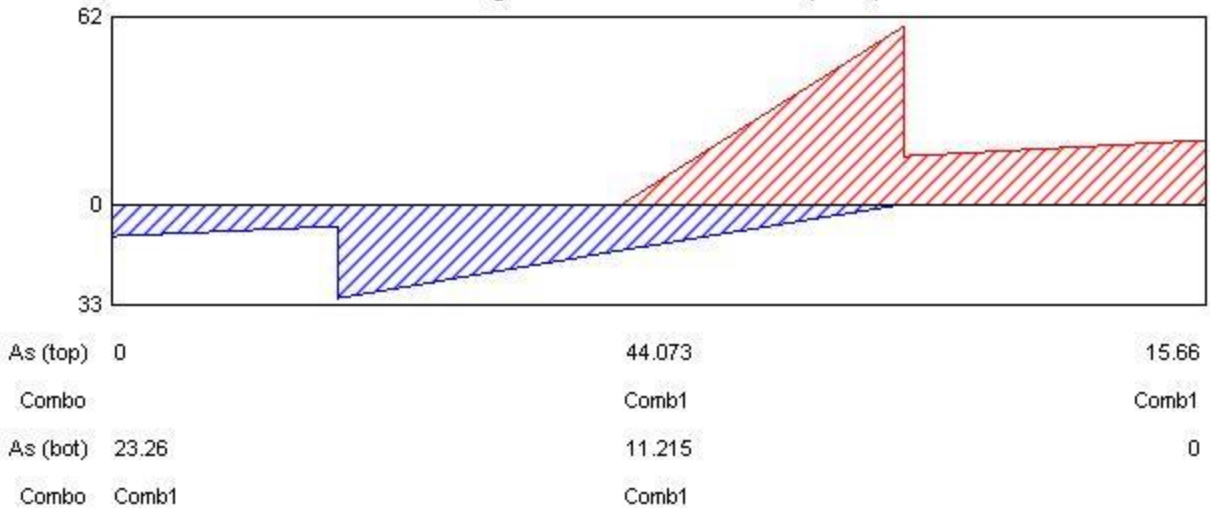
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
 Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
 Shear Rebar Yield = 420 N/mm<sup>2</sup>



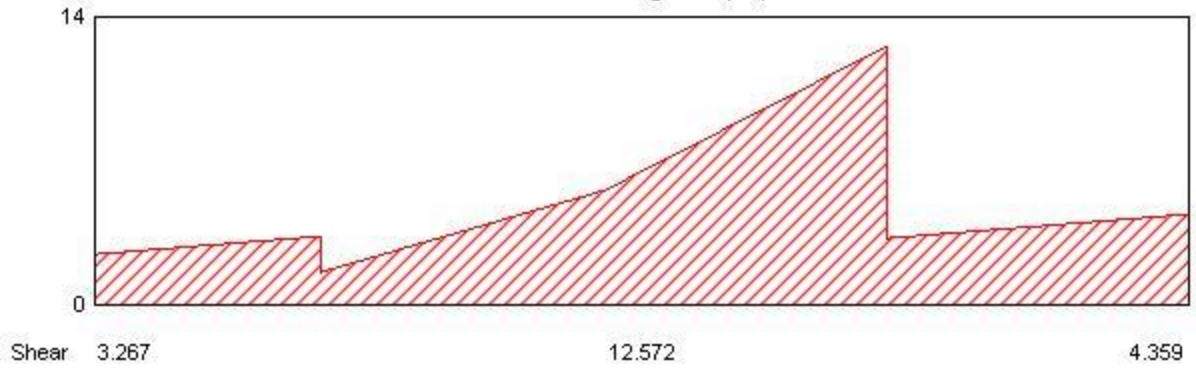
**Moment Diagram (kN-m)**



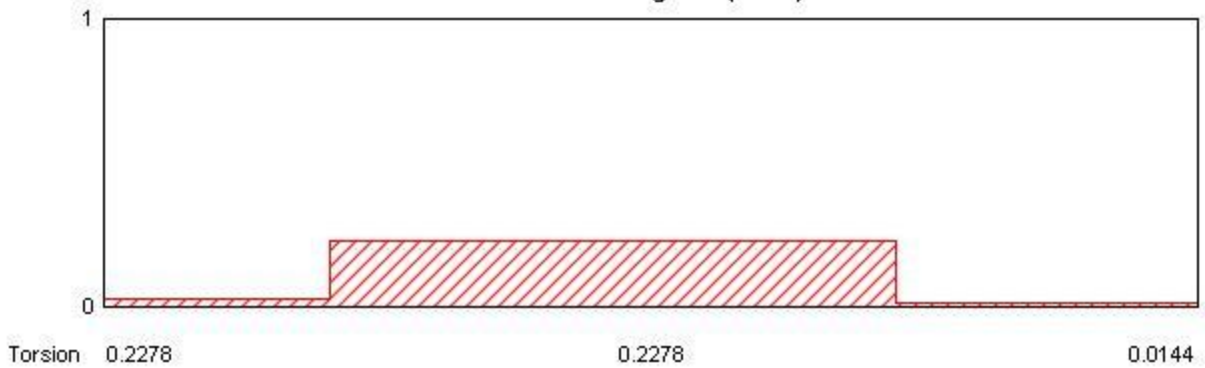
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



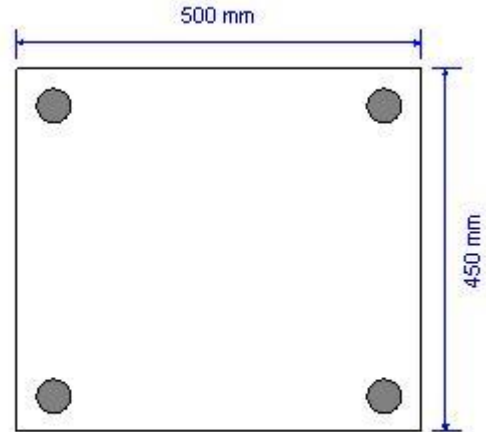
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B4  
Section Property = Viga45\*50  
Length = 3.62 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

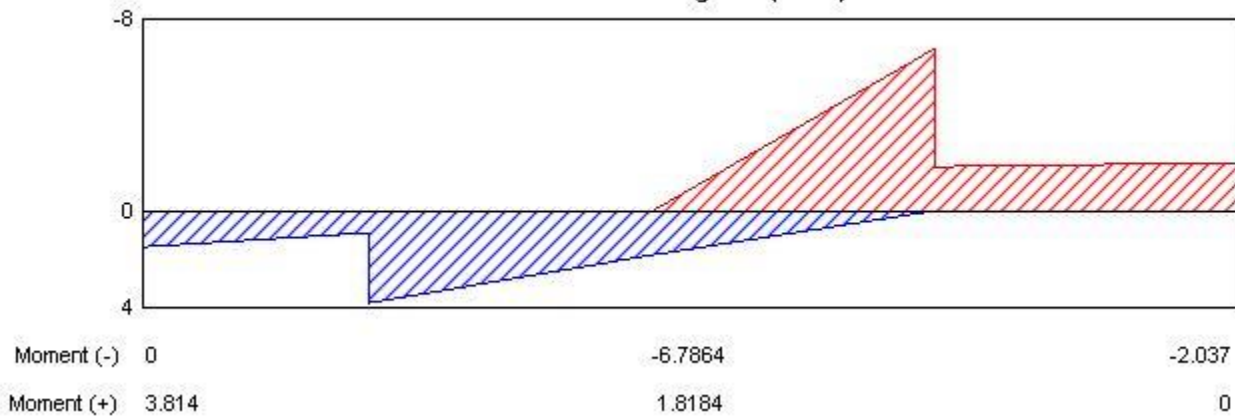


### Material Properties

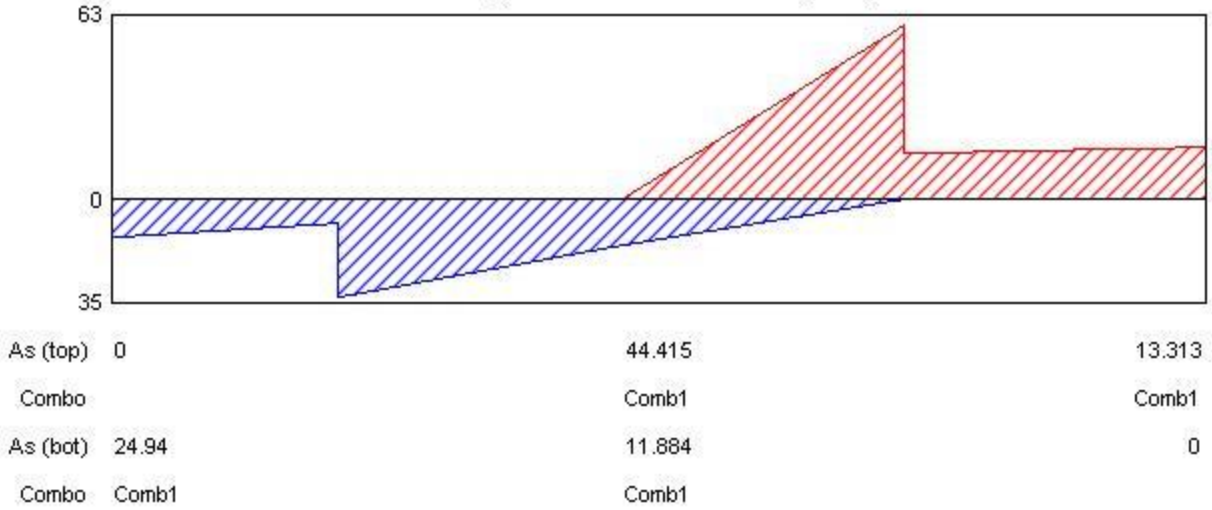
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



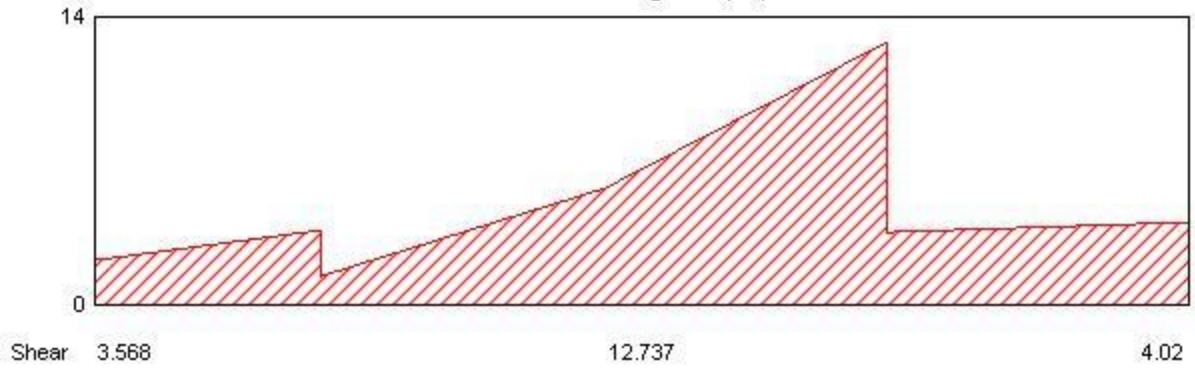
**Moment Diagram (kN-m)**



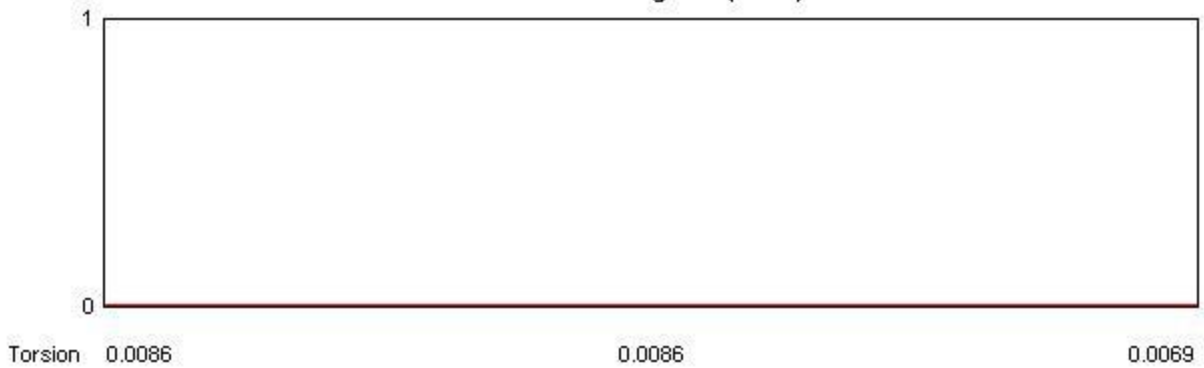
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



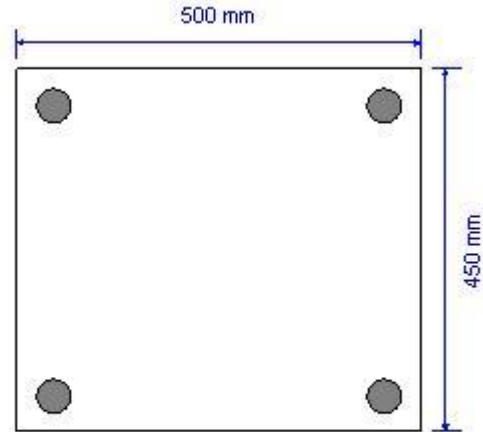
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

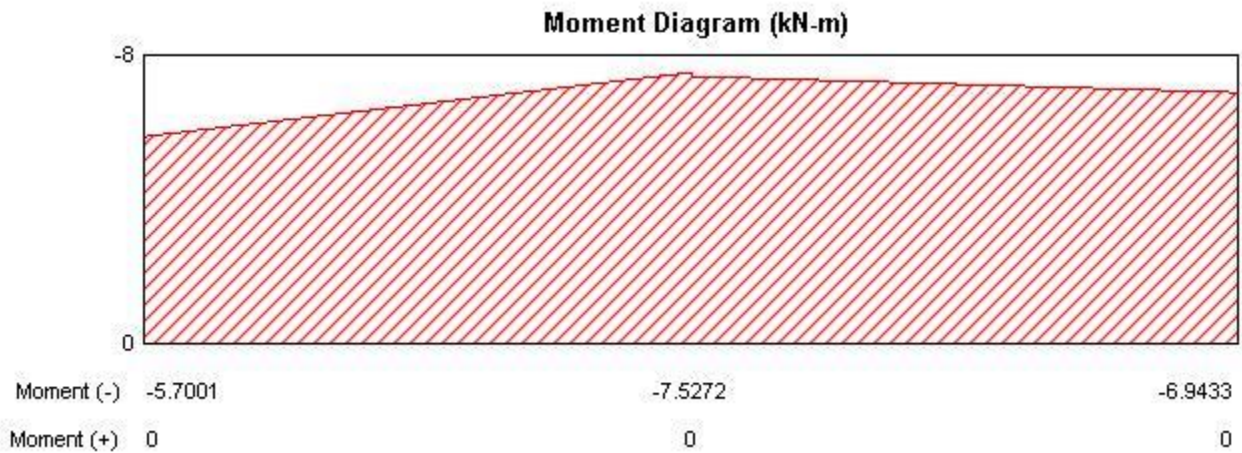
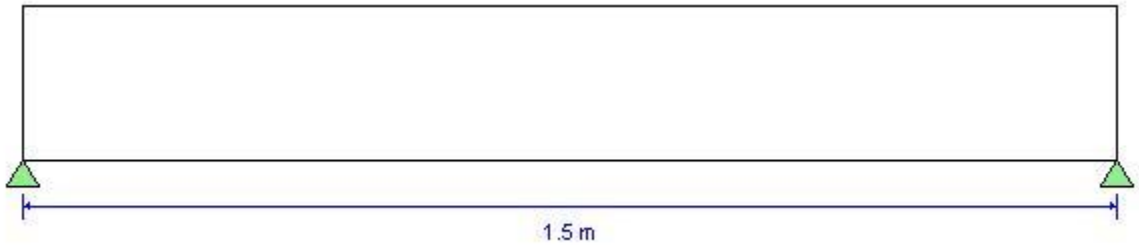
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B104  
Section Property = Viga45\*50  
Length = 1.5 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

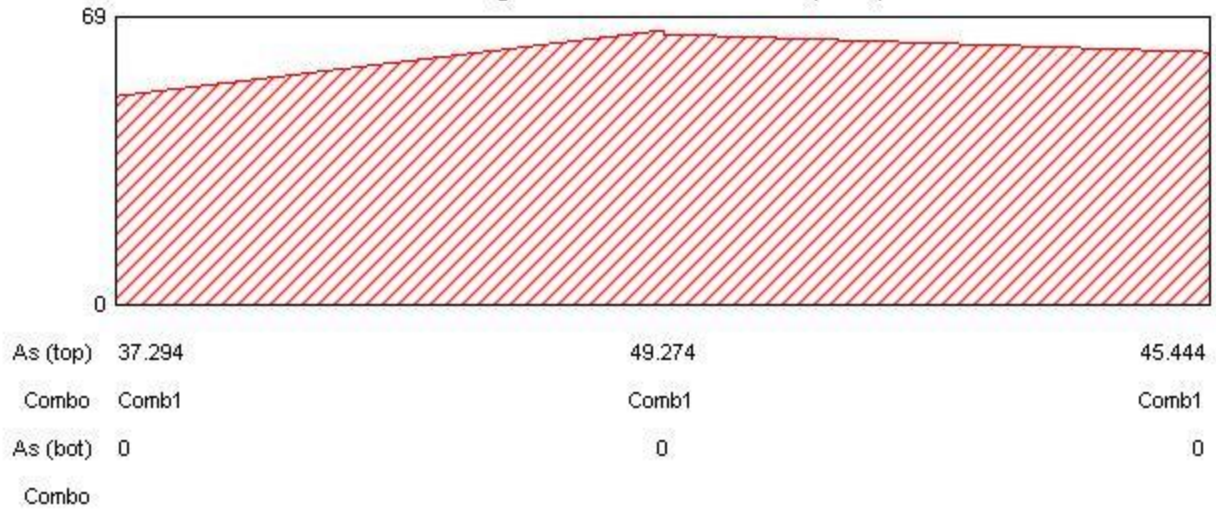


### Material Properties

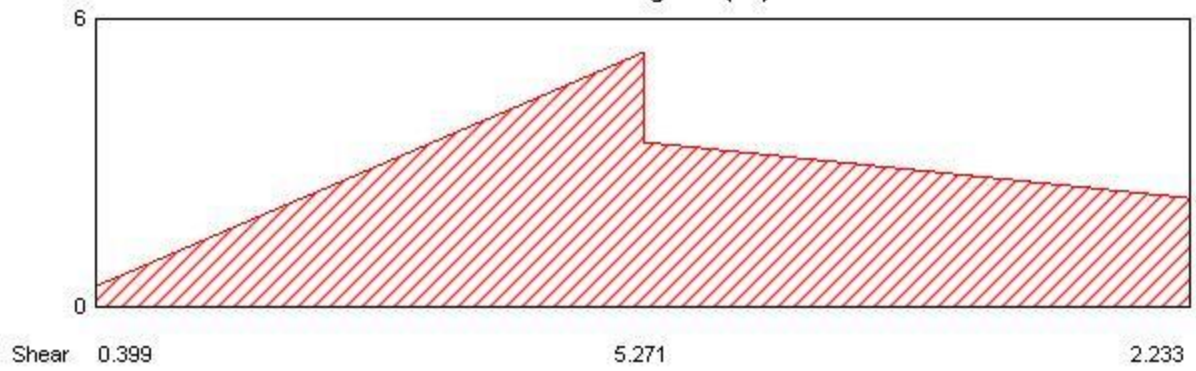
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



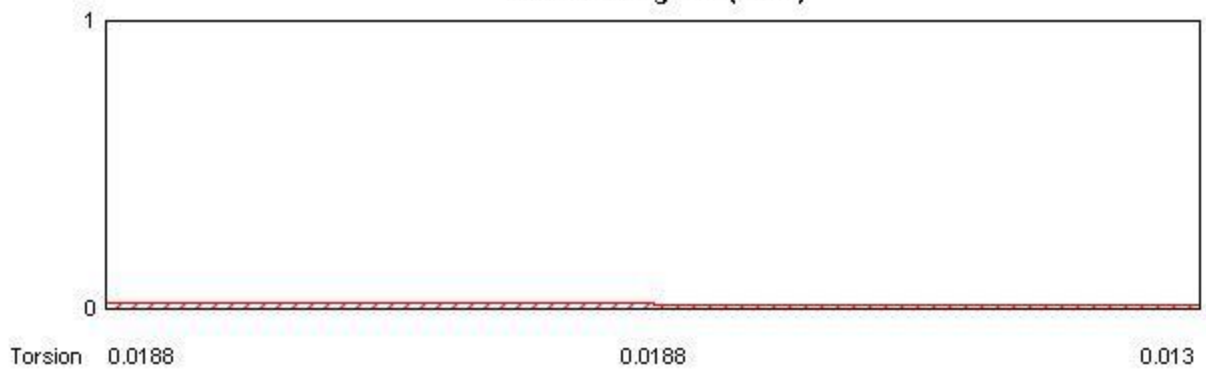
### Longitudinal Reinforcement (mm<sup>2</sup>)



### Shear Diagram (kN)



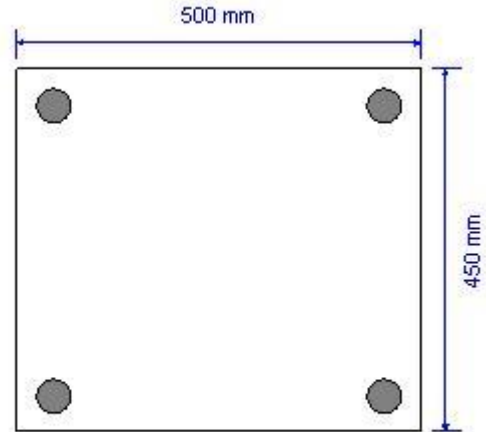
### Torsion Diagram (kN-m)



## ACI 318-14 Concrete Beam Design

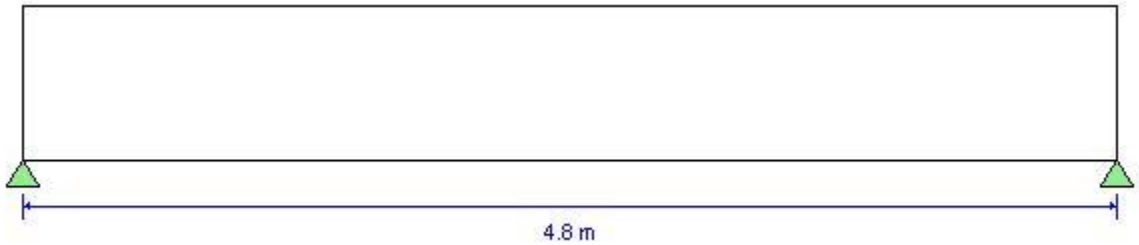
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B108  
Section Property = Viga45\*50  
Length = 4.8 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

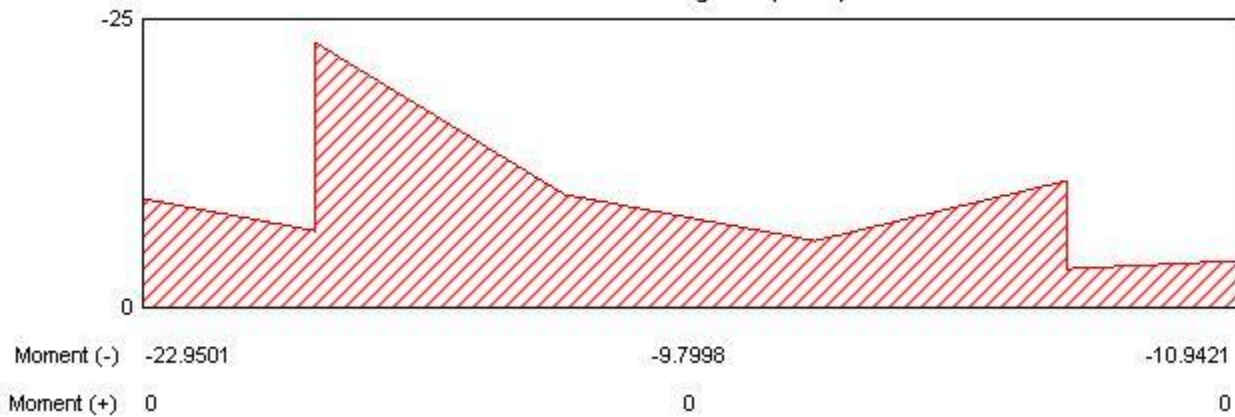


### Material Properties

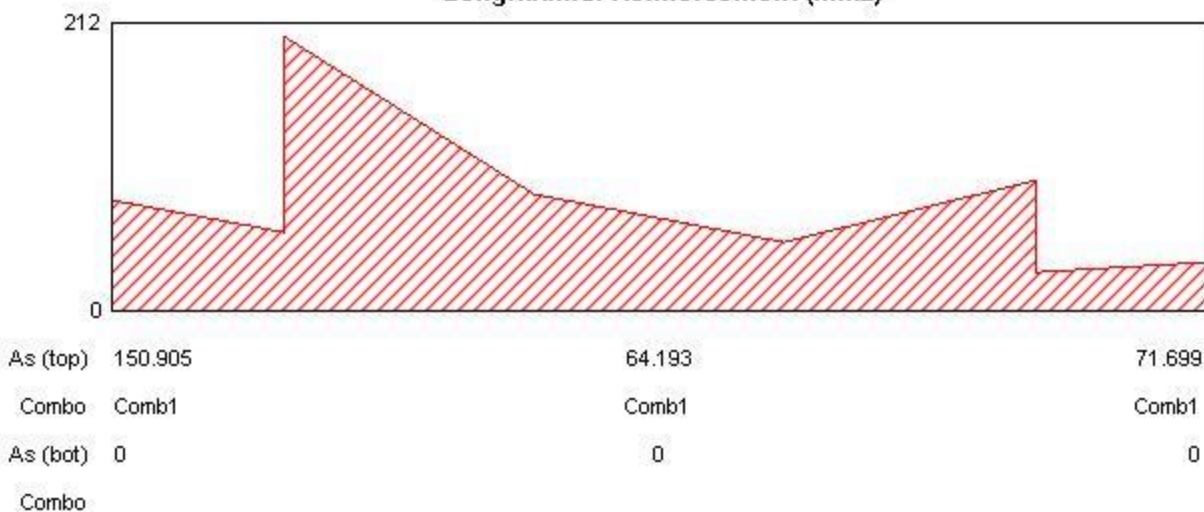
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



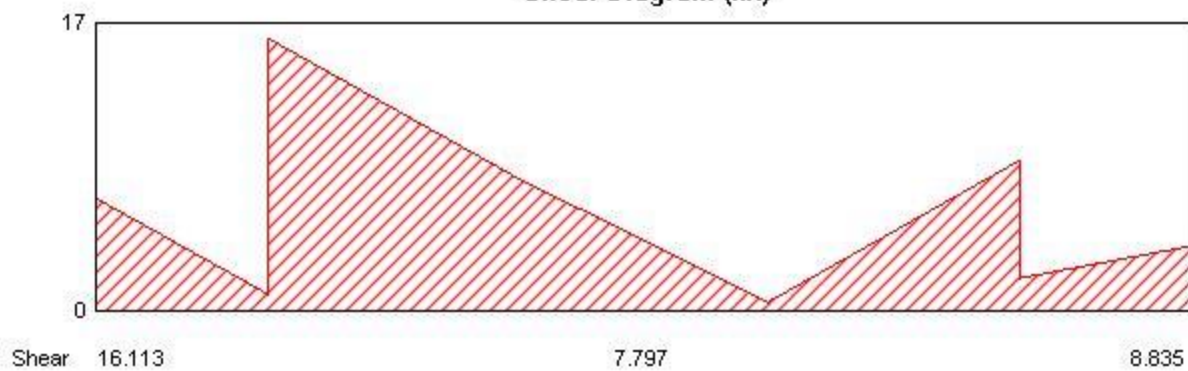
**Moment Diagram (kN-m)**



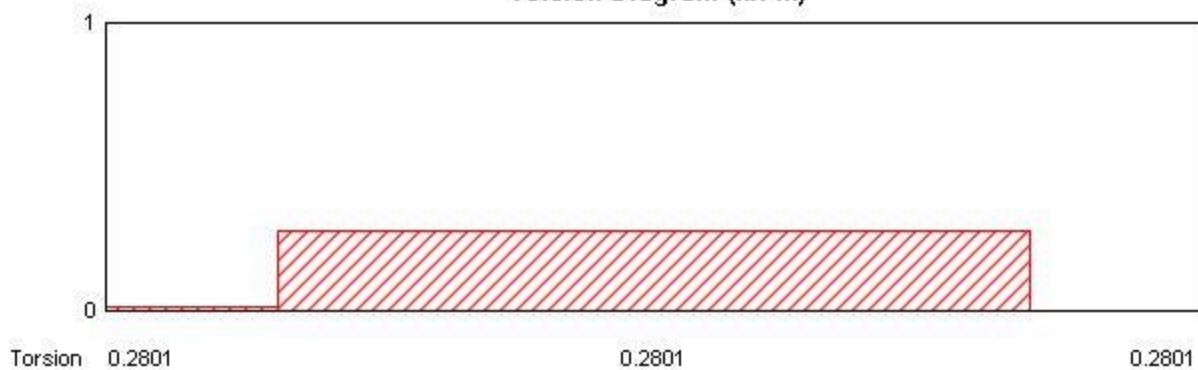
### Longitudinal Reinforcement (mm<sup>2</sup>)



### Shear Diagram (kN)



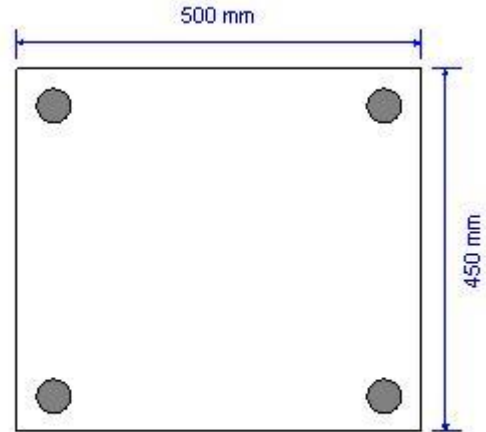
### Torsion Diagram (kN-m)



## ACI 318-14 Concrete Beam Design

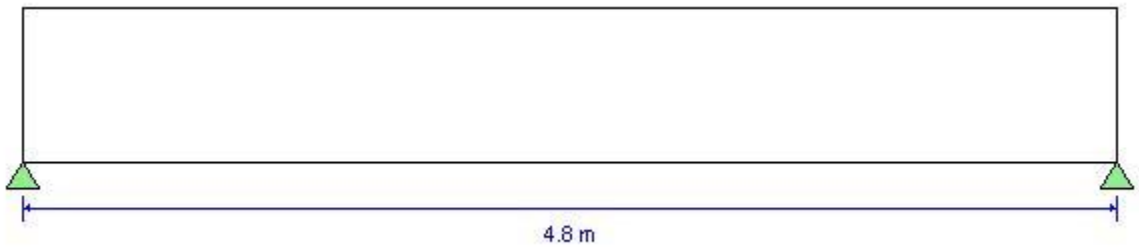
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B129  
Section Property = Viga45\*50  
Length = 4.8 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

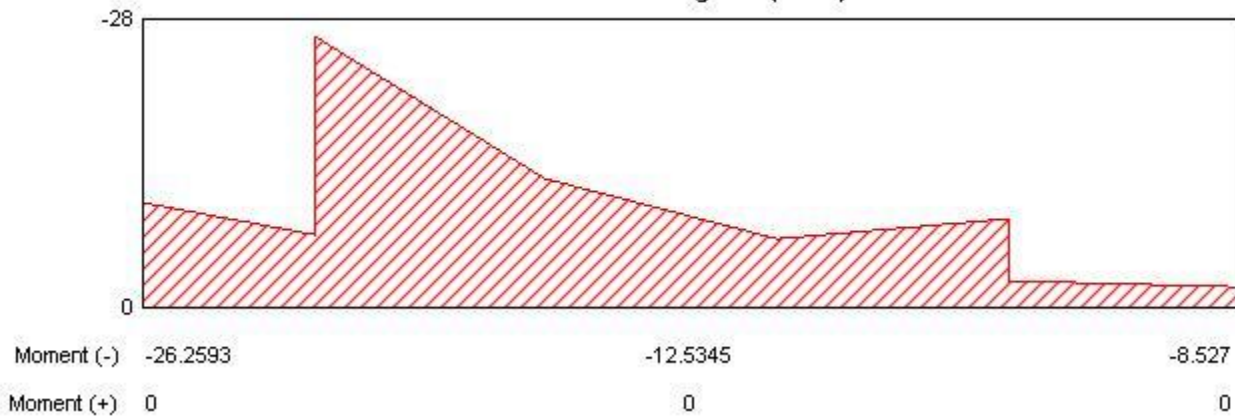


### Material Properties

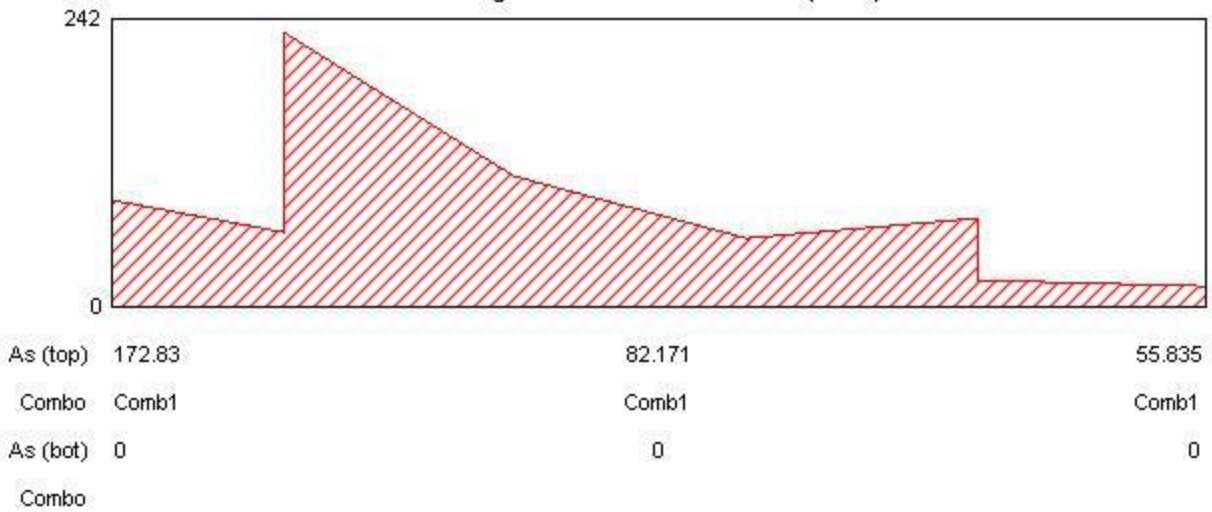
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



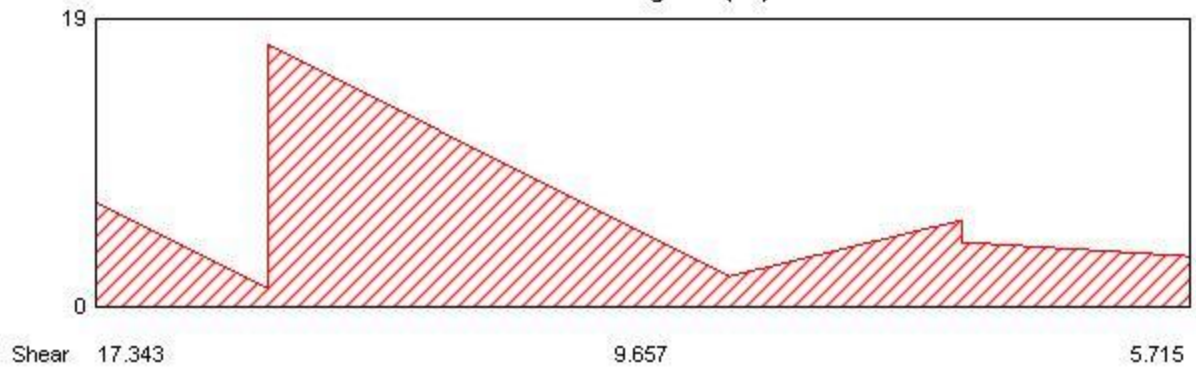
**Moment Diagram (kN-m)**



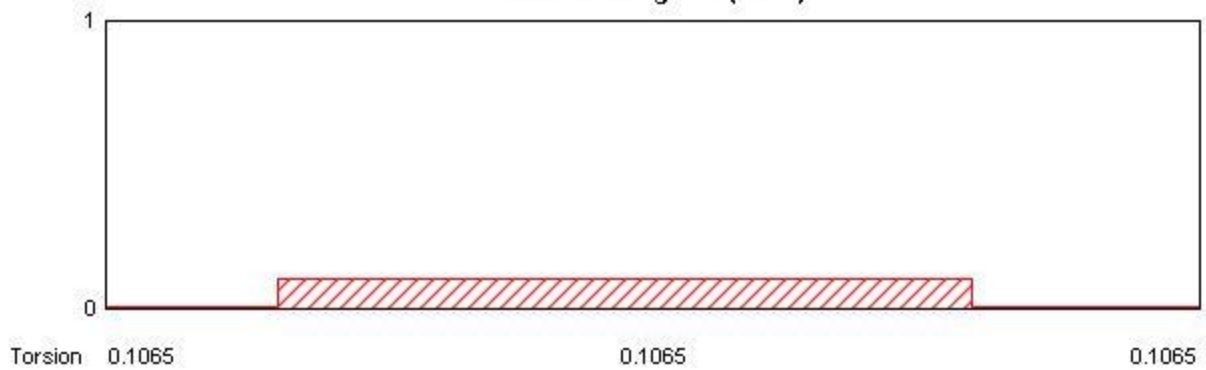
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**

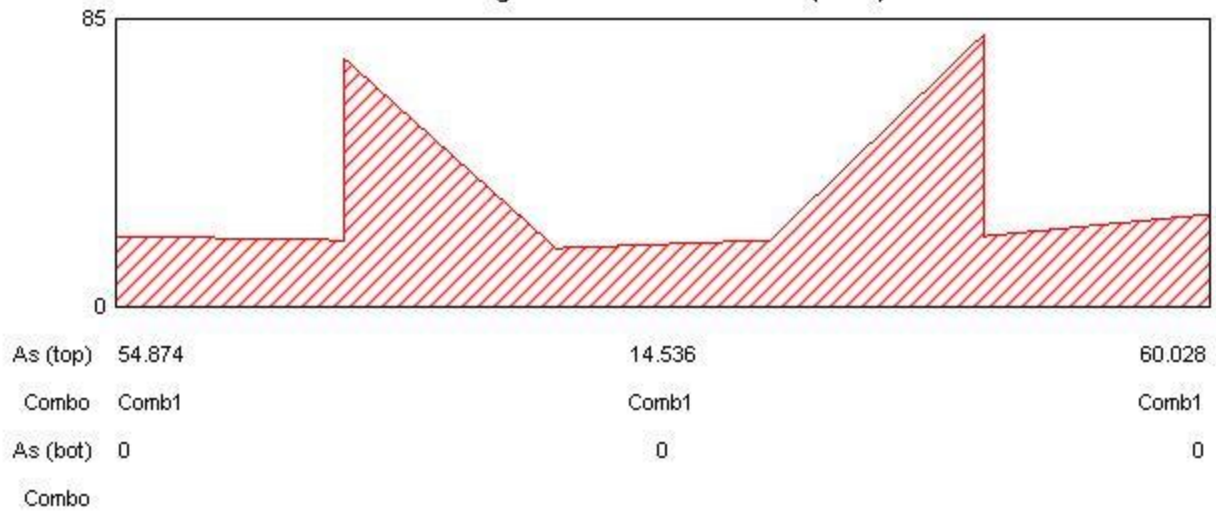


**Torsion Diagram (kN-m)**

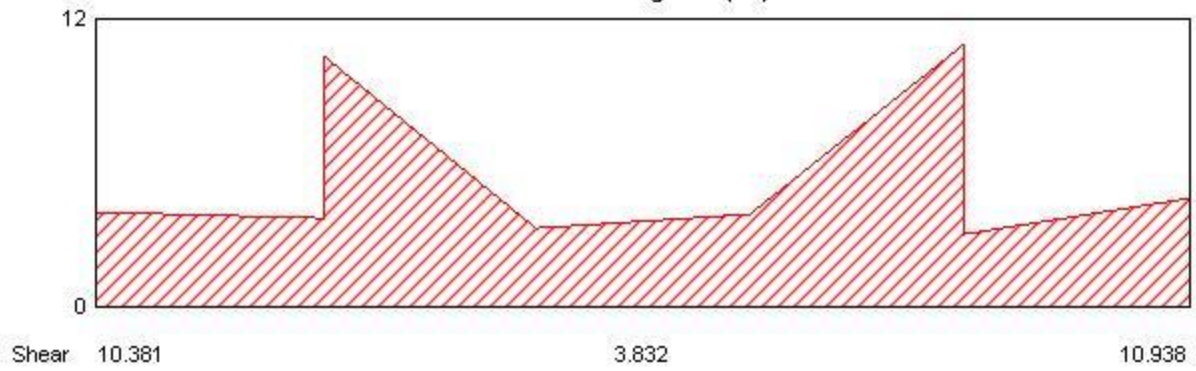




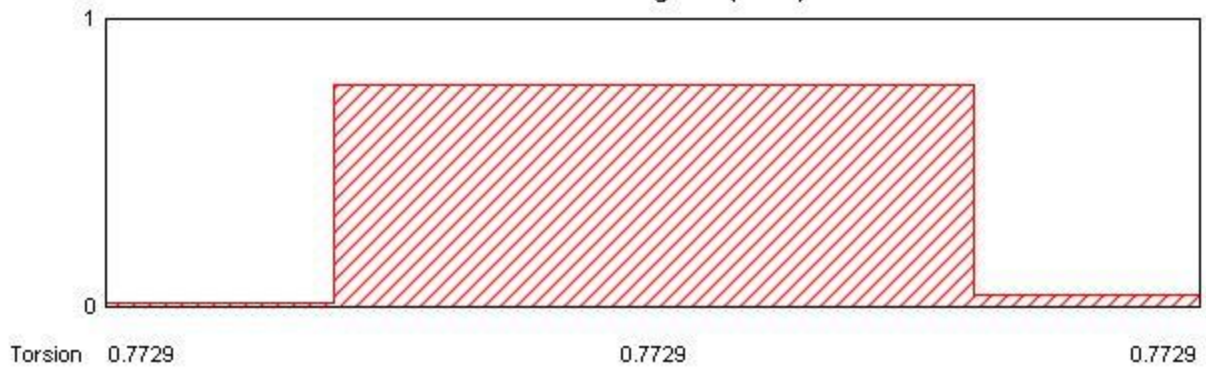
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



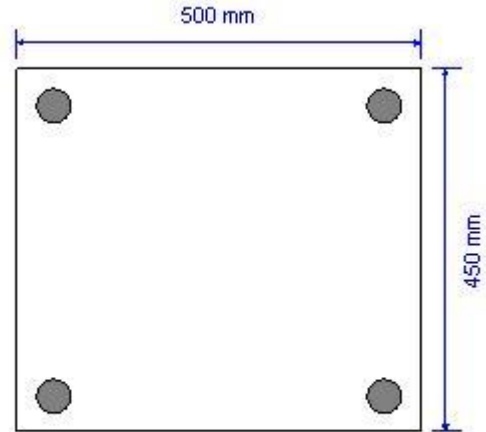
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

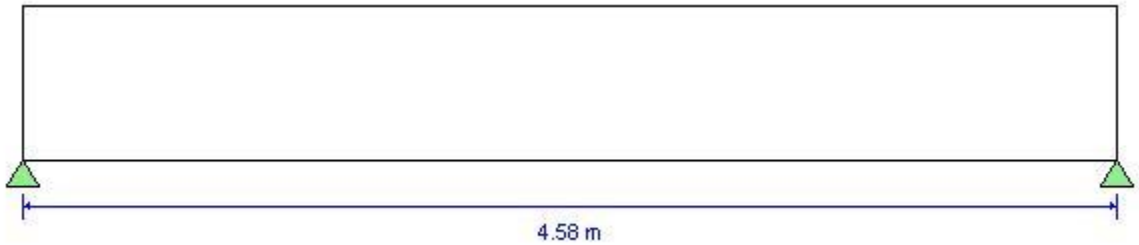
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B133  
Section Property = Viga45\*50  
Length = 4.58 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

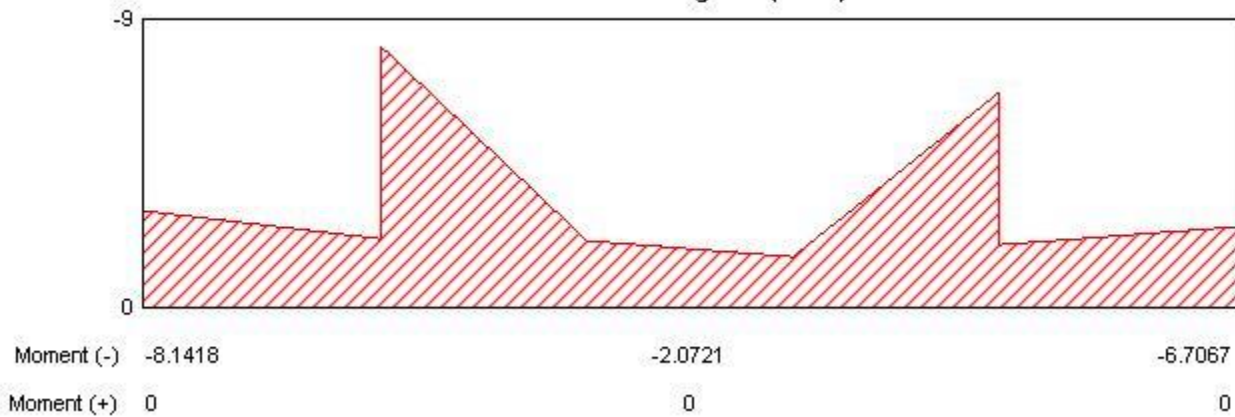


### Material Properties

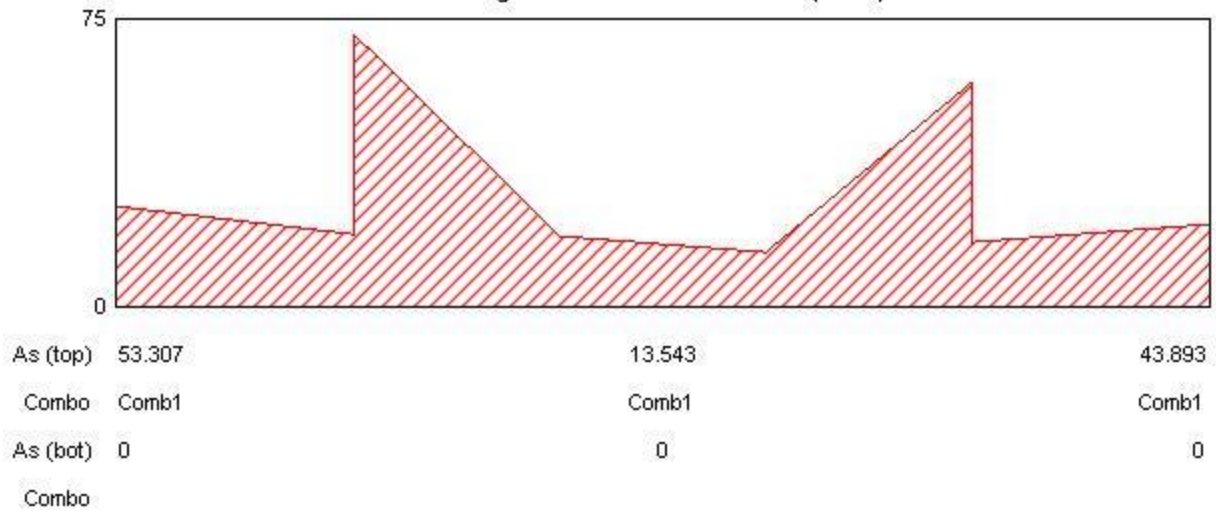
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



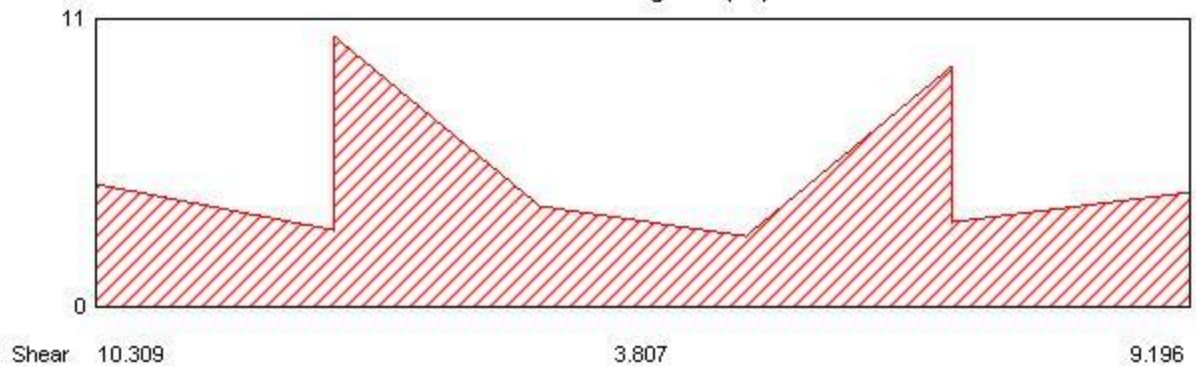
**Moment Diagram (kN-m)**



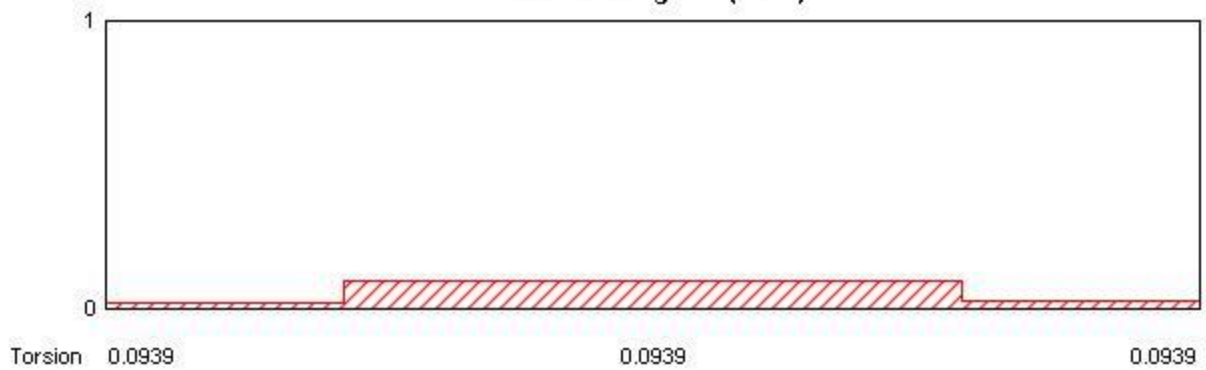
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



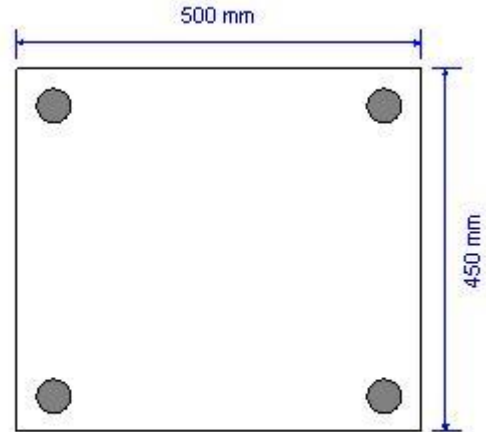
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

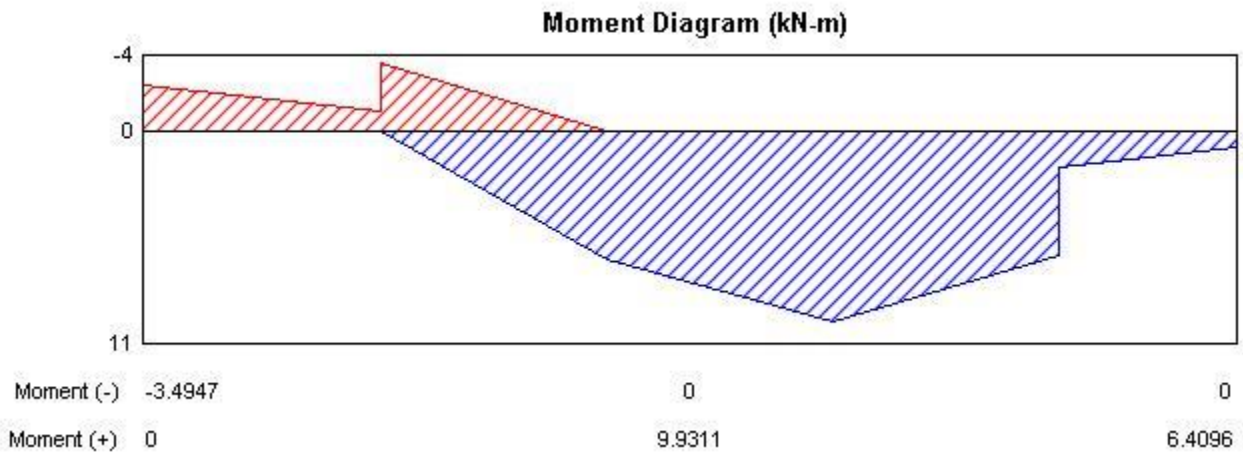
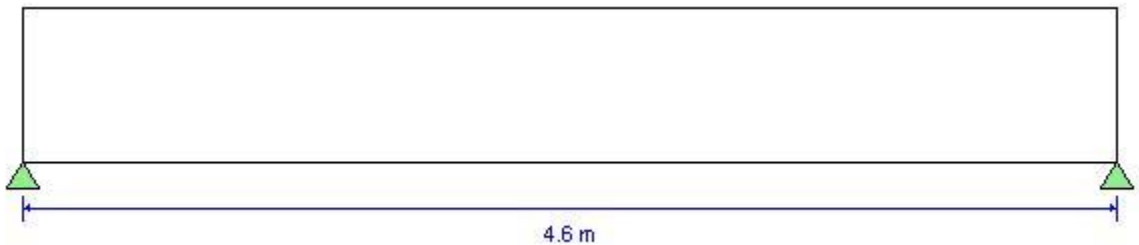
### Geometric Properties

Combination = Overall Envelope  
Beam Label = B134  
Section Property = Viga45\*50  
Length = 4.6 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

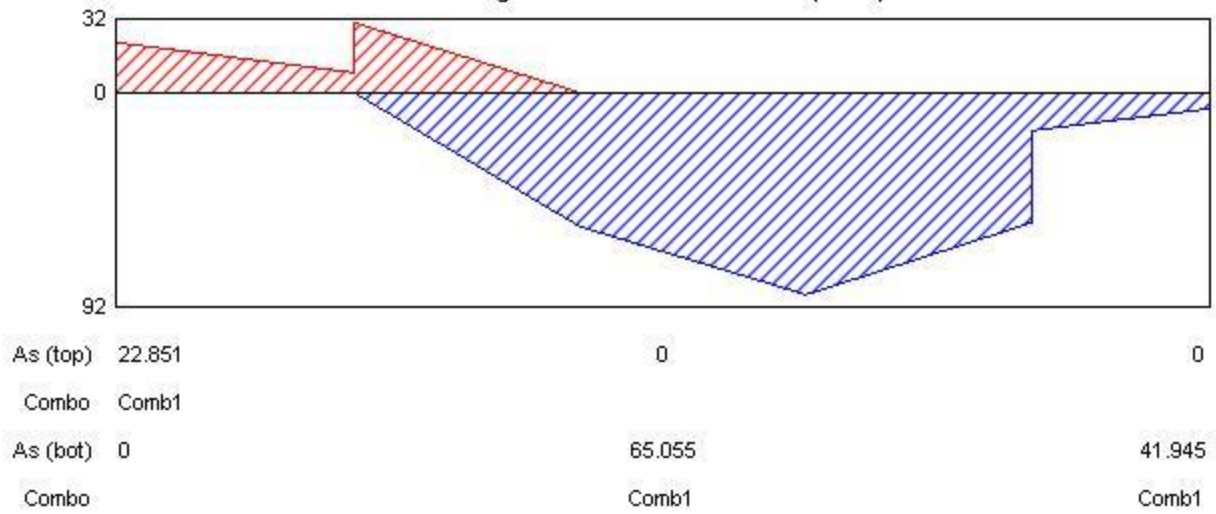


### Material Properties

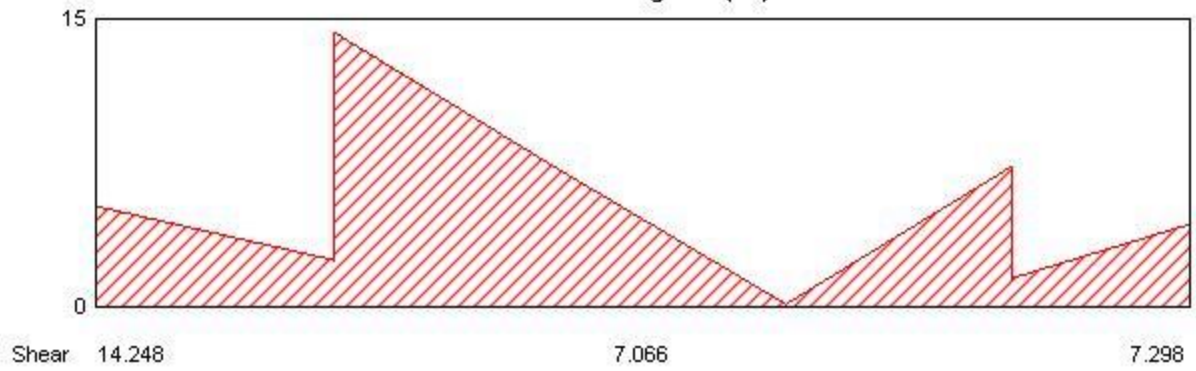
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



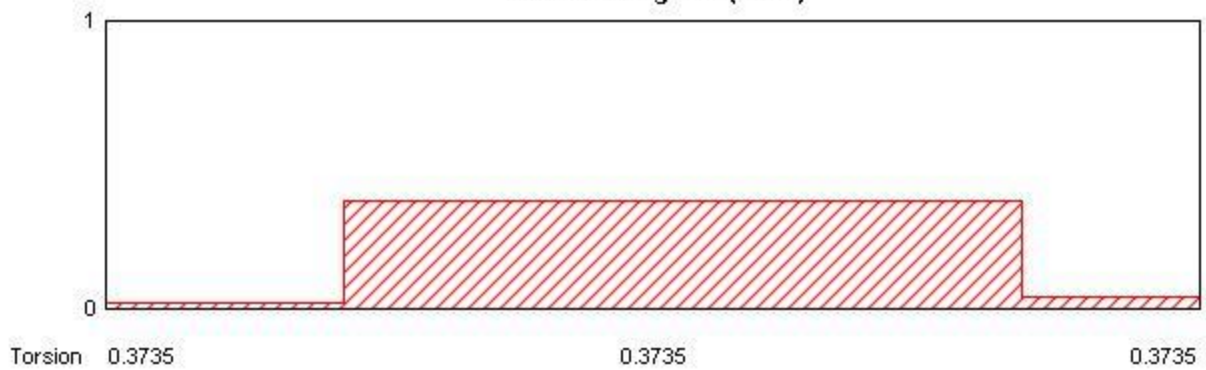
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**

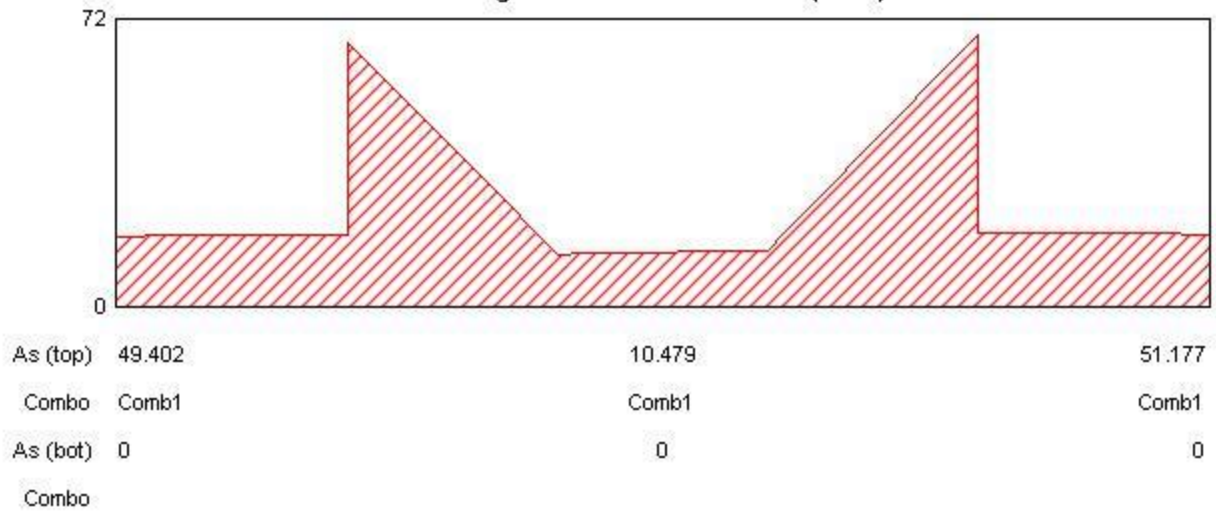


**Torsion Diagram (kN-m)**

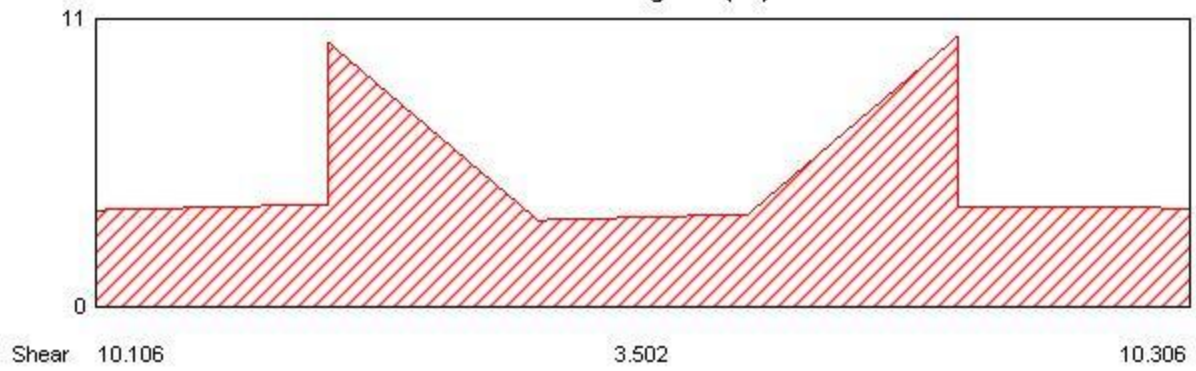




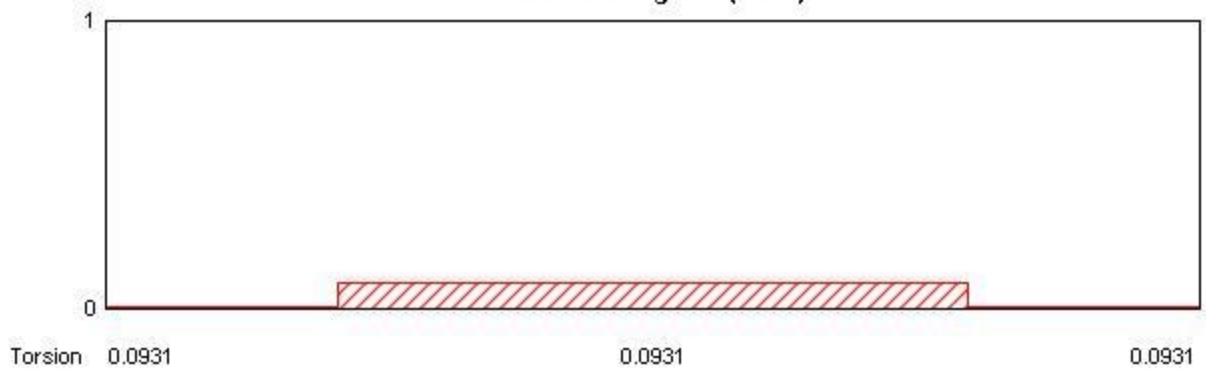
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



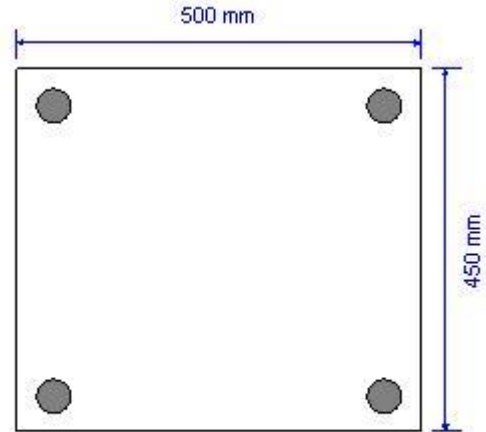
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B131  
Section Property = Viga45\*50  
Length = 6.05 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

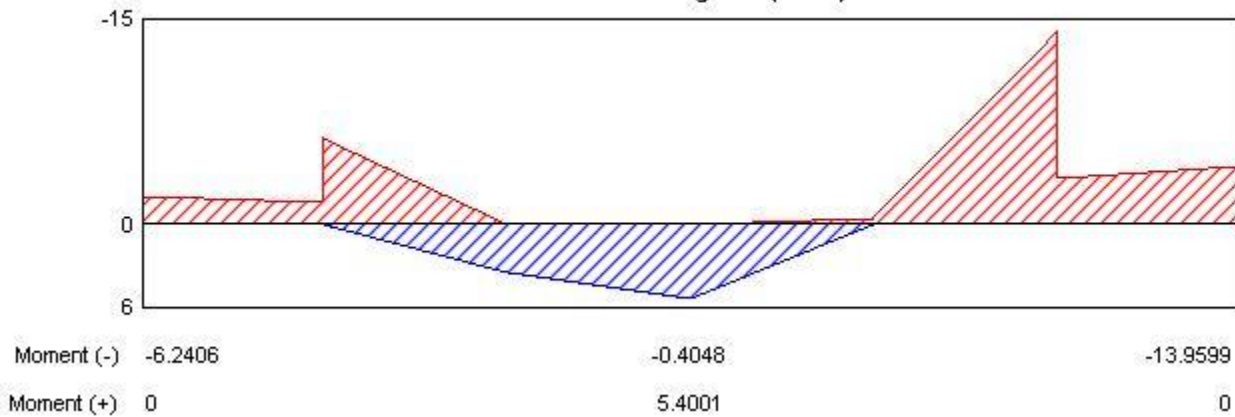


### Material Properties

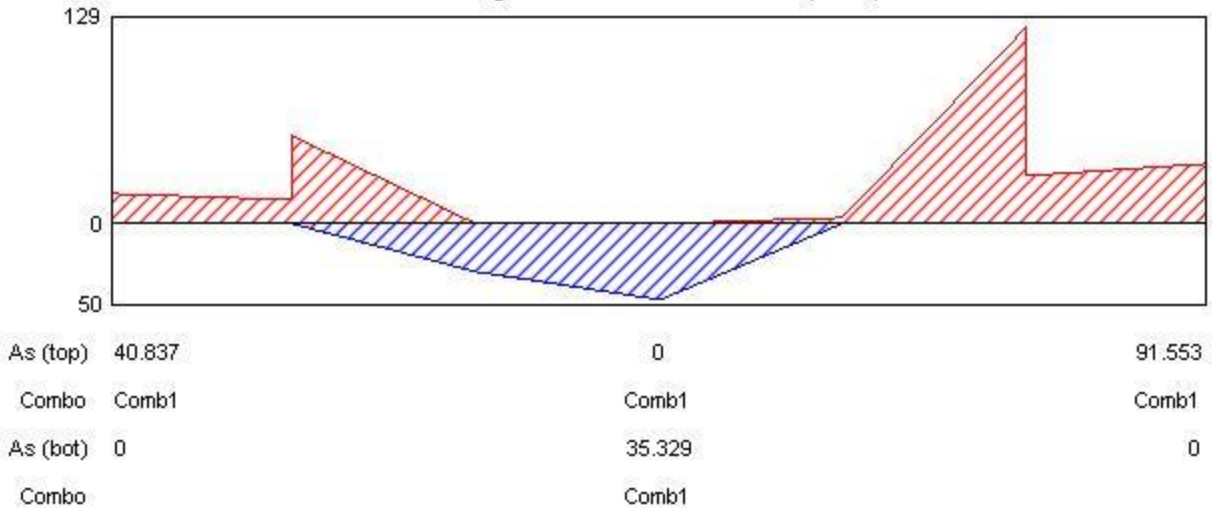
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



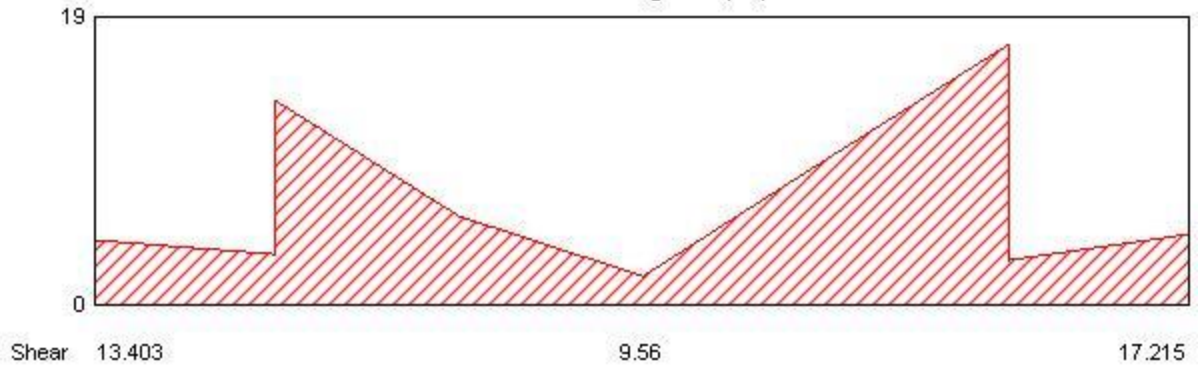
**Moment Diagram (kN-m)**



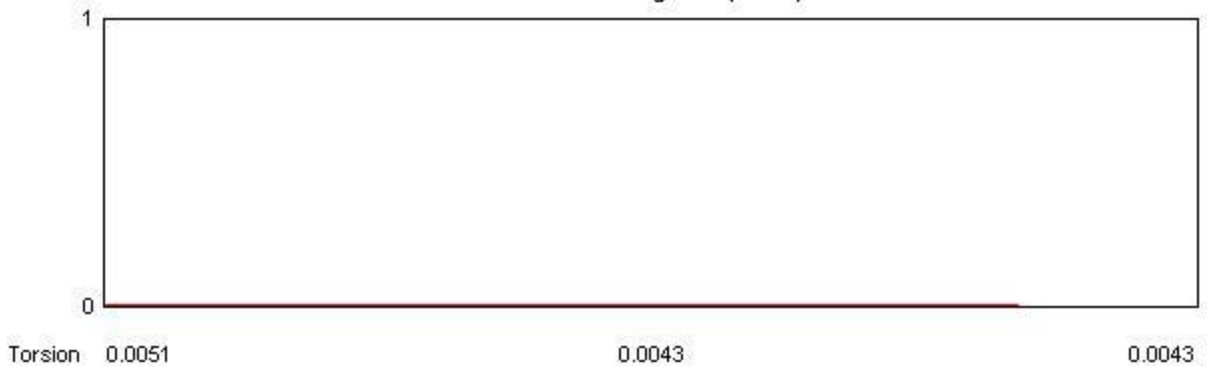
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



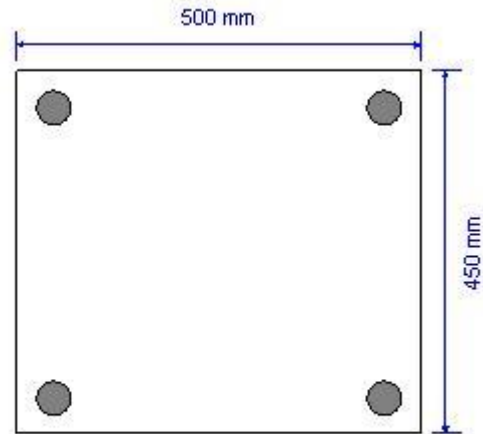
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

### Geometric Properties

Combination = Overall Envelope  
Beam Label = B28  
Section Property = Viga45\*50  
Length = 3.62 m  
Section Width = 500 mm  
Section Depth = 450 mm  
Distance to Top Rebar Center = 45 mm  
Distance to Bot Rebar Center = 45 mm

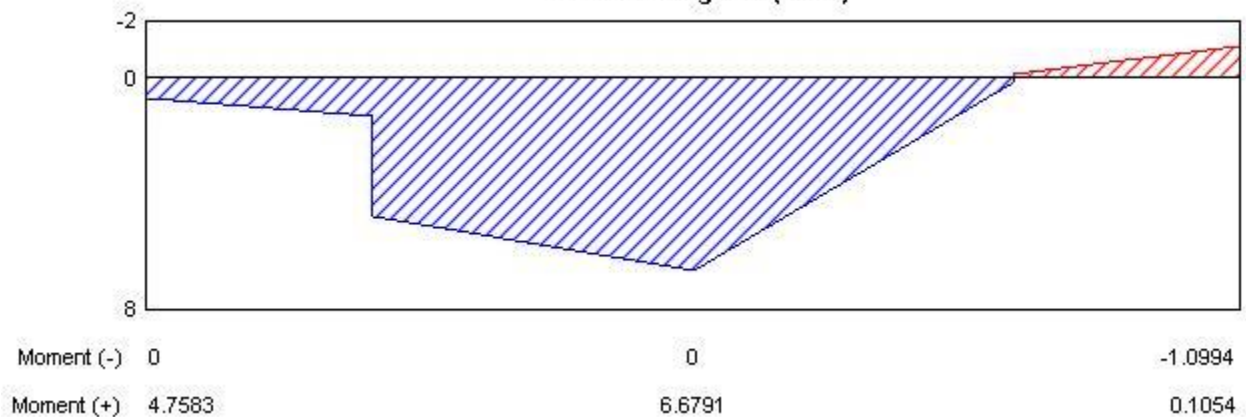


### Material Properties

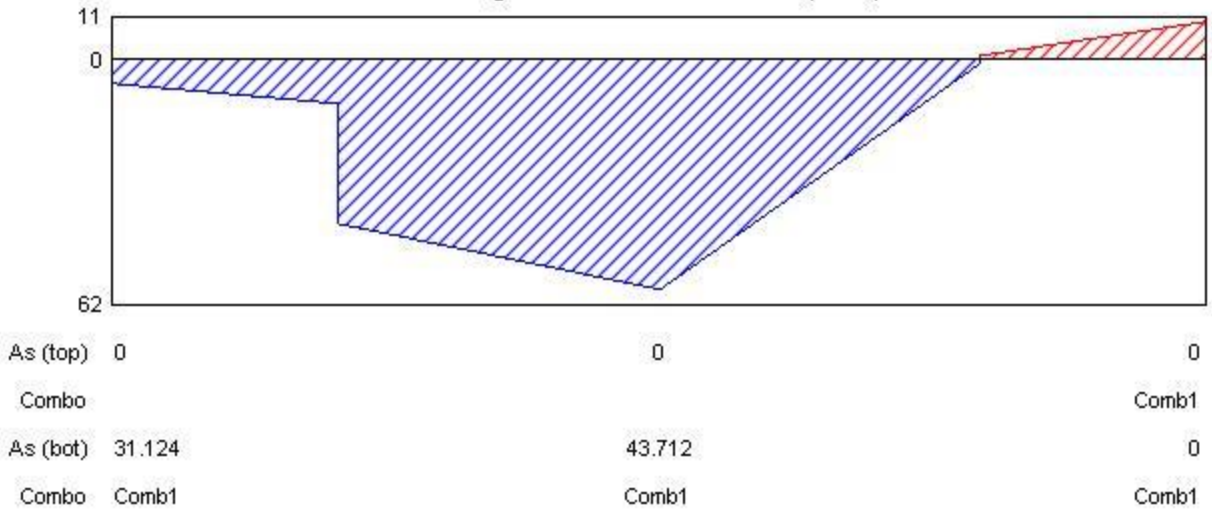
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
Shear Rebar Yield = 420 N/mm<sup>2</sup>



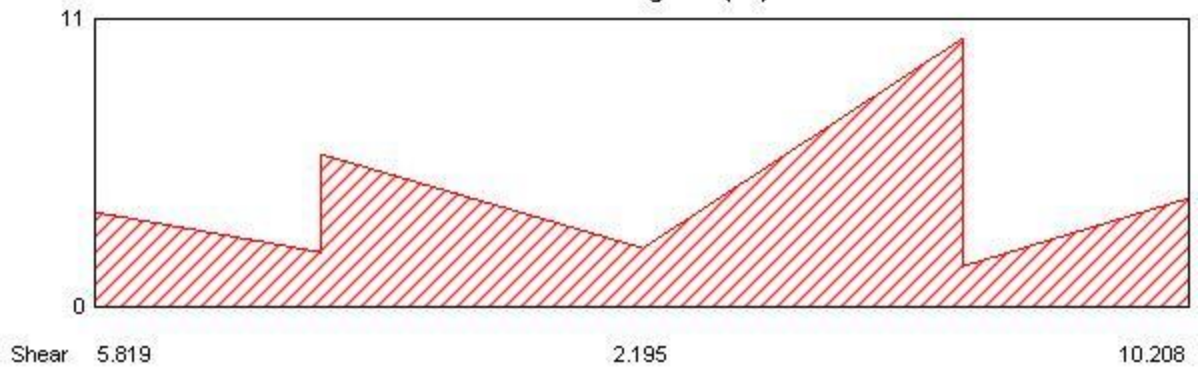
**Moment Diagram (kN-m)**



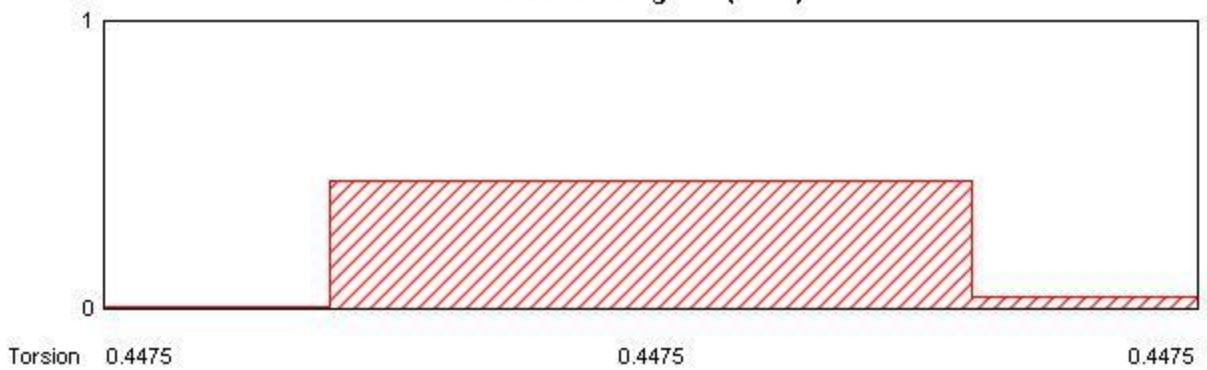
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



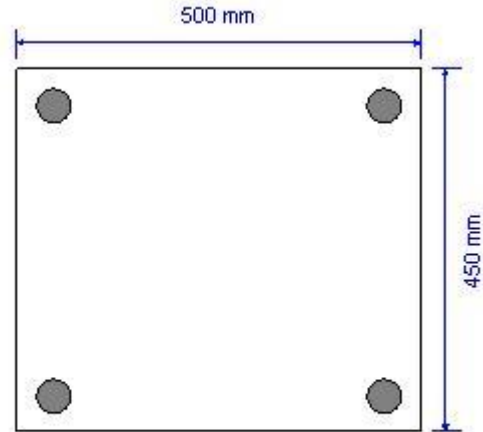
**Torsion Diagram (kN-m)**



## ACI 318-14 Concrete Beam Design

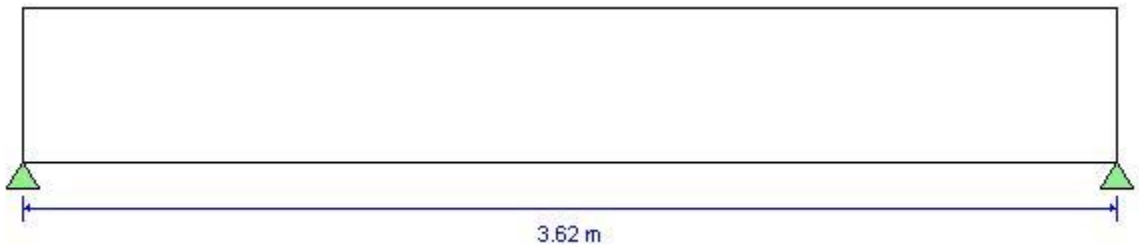
### Geometric Properties

Combination = Overall Envelope  
 Beam Label = B7  
 Section Property = Viga45\*50  
 Length = 3.62 m  
 Section Width = 500 mm  
 Section Depth = 450 mm  
 Distance to Top Rebar Center = 45 mm  
 Distance to Bot Rebar Center = 45 mm

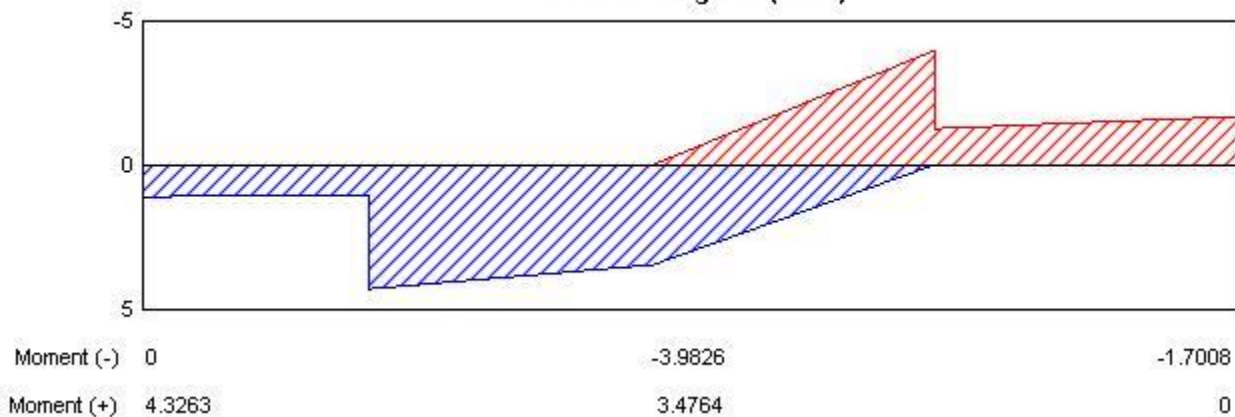


### Material Properties

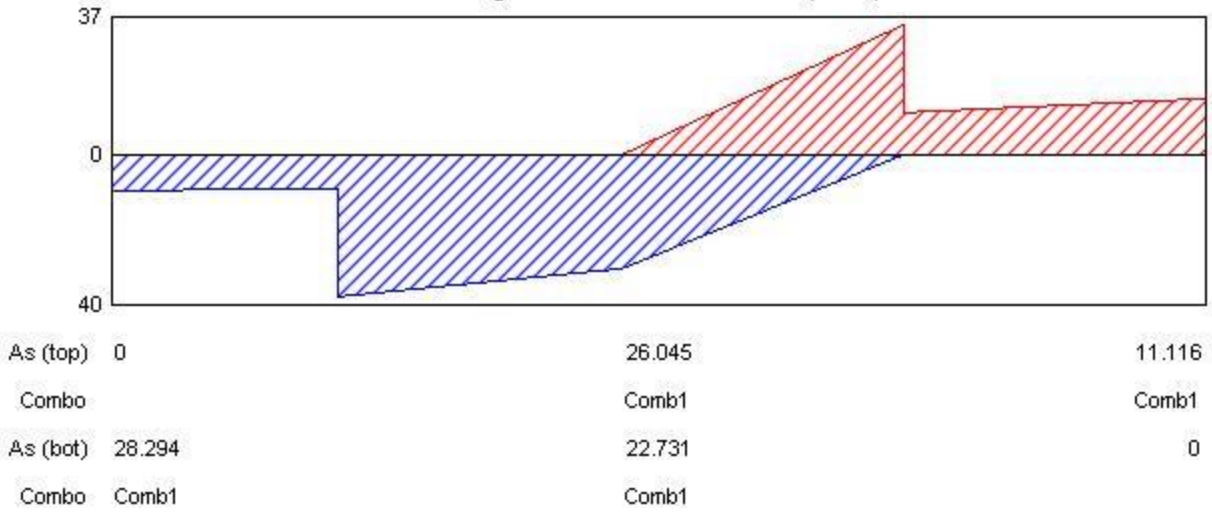
Concrete Comp. Strength = 28 N/mm<sup>2</sup>  
 Concrete Modulus = 24875.04 N/mm<sup>2</sup>  
 Longitudinal Rebar Yield = 420 N/mm<sup>2</sup>  
 Shear Rebar Yield = 420 N/mm<sup>2</sup>



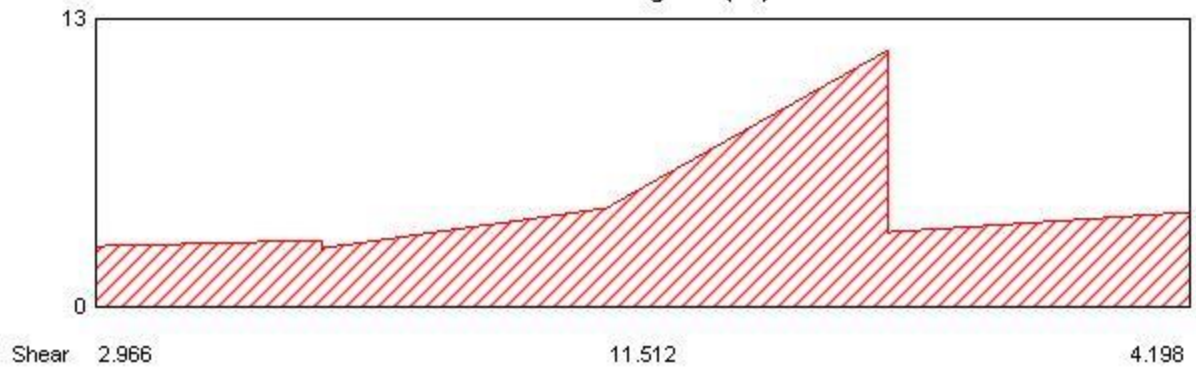
**Moment Diagram (kN-m)**



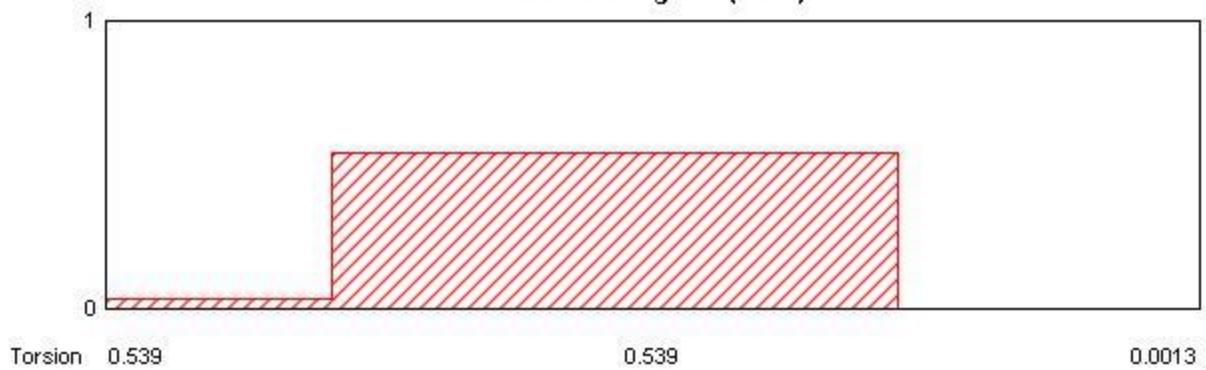
**Longitudinal Reinforcement (mm<sup>2</sup>)**



**Shear Diagram (kN)**



**Torsion Diagram (kN-m)**



## **6.5. *Punching check/design***

