



DM0291

SOUTH CAROLINA
DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION
P.O. BOX 191
COLUMBIA, S.C. 29202

January 3, 1991

MEMORANDUM TO DESIGN GROUP LEADERS & CONSULTANTS

Subject: Structural Steel

When designing rolled beam spans the designer should make a comparison of designs using M270 Grade 36 and Grade 50 steels to determine the most economical design. The attached price list from Bethlehem Steel Corporation should be used as a guide for this comparison. In general, M270 Grade 50 should be specified if a savings in weight of 8% or more over a comparable design using M270 Grade 36 can be achieved.

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Attachment
cc:
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**Cost of Wide Flange
and Standard Structural
Shapes in Dollars
per Foot:**

SECTION	ASTM SPECIFICATIONS		
	A-36	A-572 GRADE 50	A-588 GRADE B
W36 x 393	96.29	104.15	123.99
W36 x 359	87.95	95.13	113.26
W36 x 328	80.36	86.92	103.48
W36 x 300	73.50	79.50	94.65
W36 x 280	68.60	74.20	88.34
W36 x 260	63.70	68.90	82.03
W36 x 245	60.03	64.93	77.30
W36 x 230	56.35	60.95	72.56
W36 x 256	62.72	67.84	80.77
W36 x 232	56.84	61.48	73.20
W36 x 210	51.45	55.65	66.25
W36 x 194	47.53	51.41	61.21
W36 x 182	44.59	48.23	57.42
W36 x 170	41.65	45.05	53.64
W36 x 160	39.20	42.40	50.48
W36 x 150	36.75	39.75	47.32
W36 x 135	33.08	35.78	42.59
W33 x 291	71.30	77.12	91.81
W33 x 263	64.44	69.70	82.98
W33 x 241	59.05	63.87	76.04
W33 x 221	54.15	58.57	69.73
W33 x 201	49.25	53.27	63.42
W33 x 169	41.41	44.79	53.32
W33 x 152	37.24	40.28	47.96
W33 x 141	34.54	37.36	44.49
W33 x 130	31.85	34.45	41.02
W33 x 118	28.91	31.27	37.23
W30 x 326	79.87	86.39	102.85
W30 x 292	71.54	77.38	92.13
W30 x 235	57.57	62.28	74.14
W30 x 211	51.69	55.91	66.57
W30 x 191	46.80	50.62	60.26
W30 x 173	42.39	45.85	54.58
W30 x 148	36.26	39.22	46.69
W30 x 132	32.34	34.98	41.65
W30 x 124	30.38	32.86	39.12
W30 x 116	28.42	30.74	36.60
W30 x 108	26.46	28.62	34.07
W30 x 99	24.26	26.24	31.23
W27 x 217	53.17	57.51	68.46
W27 x 194	47.53	51.41	61.21
W27 x 178	43.61	47.17	56.16
W27 x 161	39.45	42.67	50.80
W27 x 146	35.77	38.69	46.06
W27 x 129	31.61	34.18	40.70
W27 x 114	27.93	30.21	35.97
W27 x 102	24.99	27.03	32.18
W27 x 94	23.03	24.91	29.66
W27 x 84	20.58	22.26	26.50
W24 x 176	43.12	46.64	55.53
W24 x 162	39.69	42.93	51.11
W24 x 146	35.77	38.69	46.06
W24 x 131	32.09	34.72	41.33
W24 x 117	28.67	31.01	36.91
W24 x 104	25.48	27.56	32.81
W24 x 94	20.68	22.09	27.31
W24 x 84	18.48	19.74	24.40
W24 x 76	16.72	17.86	22.08
W24 x 68	14.96	15.98	19.75
W24 x 62	13.64	14.57	18.01
W24 x 55	12.10	12.93	15.98
W21 x 147	32.34	34.55	42.70
W21 x 132	29.04	31.02	38.35
W21 x 122	26.84	28.67	35.44
W21 x 111	24.42	26.09	32.25
W21 x 101	22.22	23.74	29.34

Based on Bethlehem Steel Corporation Structural Shapes Price Book.

Effective September 2, 1990.

Prices will be those in effect at time of shipment.