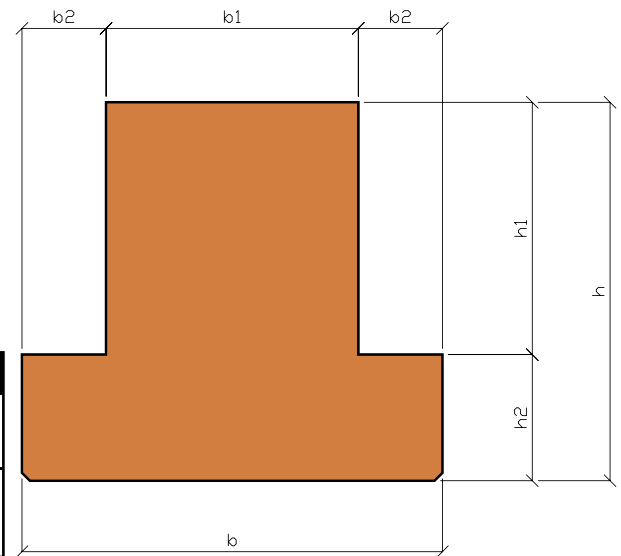


Beams



Inverted Tee



Section Properties

Designation	h (in.)	h_1/h_2 (in.)	b (in.)	b_1/b_2 (in.)	A (in. ²)	y_b (in.)	I (in. ⁴)	S_b (in. ³)	S_t (in. ³)	wt (psf)
24IT24	24	12/12	24	12/6	432	10	19008	1901	1358	450
30IT31	31	19/12	30	14/8	626	12.59	49074	3899	2665	652

Safe Superimposed Load (psf)

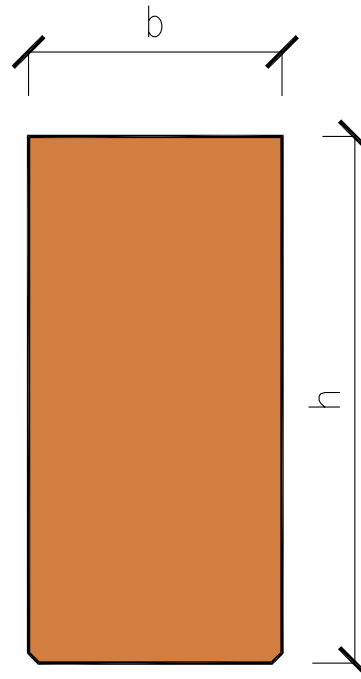
Designation	Strand	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
24IT24	12.8	9990	8500	7040	5940	5020	4320	3720	3240	2820							
30IT31	14.8						9100	7920	6920	6080	5400	4800	4200	3640	3260	2940	2420

Notes Load Charts are intended for preliminary design only. Other section available. Consult MBI Engineering Department
 Max tension allowed under full loading = 850 psi, therefore, additional top reinforcement is required
 Design criteria ACI 318-02
 Concrete strength at 28 days (f_c) = 6000 psi
 Design charts assume simple span
 Safe loads shown include 50% dead load and 50% live load
 Deflections must be checked according to design criteria
 Beams design includes an additional 3" topping 4000 psi. composite



Rectangular

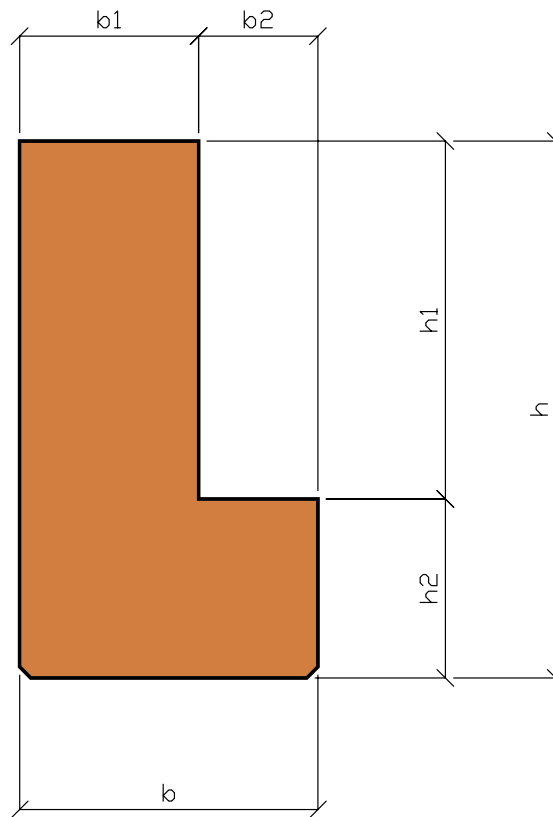
Section Properties							
Designation	b (in.)	h (in.)	A (in. ²)	y _b (in.)	I (in. ⁴)	S (in. ³)	wt (psf)
16RB24	16	24	384	12	18432	1536	400
16RB28	16	28	448	14	29269	2091	590
16RB32	16	32	512	16	43691	2731	674
16RB36	16	36	576	18	62208	3456	758
16RB40	16	40	640	20	85333	4267	842
20RB24	20	24	480	12	23040	1920	632
20RB28	20	28	560	14	36587	2613	737
20RB32	20	32	640	16	54613	3413	842
20RB36	20	36	720	18	77760	4320	947
20RB40	20	40	800	20	106667	5333	1053
24RB28	20	28	560	14	36587	2613	737
24RB32	20	32	640	16	54613	3413	842
24RB36	20	36	720	18	77760	4320	947
24RB40	20	40	800	20	106667	5333	1053



Safe Superimposed Load Capacity (psf)																		
Desig	Strand	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52
16RB24	14.8	9050	7360	6100	6130	4360	3750	3240	2840	2460	2150	1940	1720	1540	1380	1230	1100	
16RB28	16.8		9900	8430	7100	6080	5200	4500	3920	3480	3060	2740	2430	2170	1960	1770	159	1440
16RB32	18.0				9350	7990	6870	5980	5230	4600	4050	3620	3250	2900	2620	2350	2130	1950
16RB36	20.8					9900	8780	7620	6700	5900	5230	4680	4170	3760	3400	3060	2780	2540
16RB40	22.8						9900	9520	8320	7340	6530	5860	5230	4730	4260	3860	3500	3200
20RB24	16.8	9900	8230	6820	5730	4860	4160	3600	3130	2740	2400	2120	1880	1670	1490	1330	1150	
20RB28	18.8		9900	9600	8100	6900	5900	5100	4470	3930	3450	3070	2740	2430	2190	1950	1760	1590
20RB32	20.8				9900	9100	7860	6800	5980	5230	4650	4120	3690	3300	2950	2670	2410	2180
20RB36	22.8						9900	8700	7650	6720	5960	5310	4730	4260	3820	3460	3140	2850
20RB40	24.8							9900	9580	8480	7500	6700	6000	5400	4870	4400	4000	3640
24RB28	20.8			9900	9200	7830	6720	5800	5060	4450	3900	3470	3080	2750	2460	2200	1970	1780
24RB32	22.8					9900	8950	7750	6800	5960	5280	4690	4170	3740	3350	3020	2730	2460
24RB36	24.8							9900	8700	7620	6770	6000	5390	4830	4350	3930	3540	3200
24RB40	26.8								9900	9500	8400	7500	6700	6020	5440	4900	4430	4050

Notes Load Charts are intended for preliminary design only.
 Max tension allowed under full loading = 850 psi, therefore, additional top reinforcement is required.
 Design criteria ACI 318-02.
 Concrete strength at 28 days (f_c) = 6000 psi.
 Design charts assume simple span.
 Safe loads shown include 50% dead load and 50% live load.
 Deflections must be checked according to design criteria.

Ledger



Section Properties

Designation	h (in.)	h_1/h_2 (in.)	A (in. ²)	y_b (in.)	I (in. ⁴)	S_b (in. ³)	S_t (in. ³)	wt (plf)
20LB20	20	8/12	336	8.86	10249	920	1157	350
20LB24	24	12/12	384	10.5	17568	1301	1673	505
20LB28	28	16/12	432	12.22	27883	1767	2282	568
20LB32	32	20/12	480	14	41600	2311	2971	632
20LB36	36	24/12	528	15.82	59119	2930	3737	695
20LB40	40	24/16	608	17.47	81282	3608	4653	800
20LB44	44	28/16	656	19.27	108107	4372	5610	863
20LB48	48	32/16	704	21.09	140133	5208	6645	926
20LB52	52	36/16	752	22.94	177752	6117	7749	990



MBI
MORSE BROS INC



Beams

Safe Live Load Capacity (psf)

Designation	No. Strand	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	52
20LB20	8.8	6500	5080	4040	3300	2720	2260	1920	1640	1400	1200	1040							
20LB24	10.8		8000	6400	5220	4340	3650	3100	2660	2280	1980	1740	1520	1340	1180				
20LB28	12.8			9040	7400	6180	5200	4440	3820	3300	2880	2520	2230	1980	1760	1560	1400	1250	
20LB32	14.8				9640	8040	6780	5760	4980	4320	3780	3320	2920	2600	2320	2080	1860	1680	1520
20LB36	16.8						8820	7540	6480	5660	4960	4360	3880	3460	3080	2760	2500	2240	2040
20LB40	18.8							9420	8160	7080	6220	5500	4860	4340	3880	3500	3140	2840	2580
20LB44	20.8								9990	8760	7660	6800	6040	5360	4840	4340	3920	3560	3240
20LB48	22.8										9300	8240	7300	6560	5880	5300	4800	4360	3960
20LB52	24.8												8800	7820	7040	6400	5800	5260	4800

Notes Load Charts are intended for preliminary design only.
 Other section available. Consult MBI Engineering Department
 Max tension allowed under full loading = 850 psi, therefore, additional top reinforcement is required
 Design criteria ACI 318-02
 Concrete strength at 28 days (f_c) = 5000 psi
 Design charts assume simple span
 Safe loads shown include 50% dead load and 50% live load.
 Deflections must be checked according to design criteria