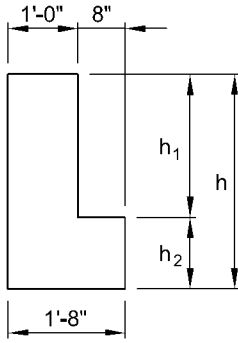


L-BEAMS

Normal Weight Concrete



$f'_c = 5,000$ psi
 $f_{pu} = 270,000$ psi
 1/2 in. diameter
 low-relaxation strand

Designation	h in.	h_1/h_2 in./in.	A in. ²	I in. ⁴	y_b in.	S_{b_3} in. ³	S_{t_3} in. ³	wt plf
20LB20	20	12/8	304	10,160	8.74	1,163	902	317
20LB24	24	12/12	384	17,568	10.50	1,673	1,301	400
20LB28	28	16/12	432	27,883	12.22	2,282	1,767	450
20LB32	32	20/12	480	41,600	14.00	2,971	2,311	500
20LB36	36	24/12	528	59,119	15.82	3,737	2,930	550
20LB40	40	24/16	608	81,282	17.47	4,653	3,608	633
20LB44	44	28/16	656	108,107	19.27	5,610	4,372	683
20LB48	48	32/16	704	140,133	21.09	6,645	5,208	733
20LB52	52	36/16	752	177,752	22.94	7,749	6,117	783
20LB56	56	40/16	800	221,355	24.80	8,926	7,095	833
20LB60	60	44/16	848	271,332	26.68	10,170	8,143	883

1. Check local area for availability of other sizes.
2. Safe loads shown include 50% superimposed dead load and 50% live load. 800 psi top tension has been allowed, therefore, additional top reinforcement is required.
3. Safe loads can be significantly increased by use of structural composite topping.

Key

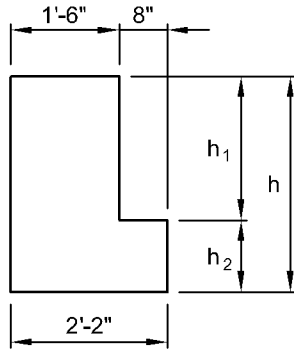
- 6566 – Safe superimposed service load, plf.
- 0.3 – Estimated camber at erection, in.
- 0.1 – Estimated long-time camber, in.

Table of safe superimposed service load (plf) and cambers (in.)

Designation	No. Strand	$y_s(\text{end})$ in. $y_s(\text{center})$ in.	Span, ft																											
			16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50										
20LB20	98-S	2.44	6566	5131	4105	3345	2768	2318	1961	1674	1438	1243	1079																	
		2.44	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2								
20LB24	108-S	2.80	9577	7495	6006	4904	4066	3414	2896	2479	2137	1854	1617	1416	1244	1097	969													
		2.80	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0
20LB28	128-S	3.33			8228	6733	5596	4711	4009	3443	2979	2595	2273	2000	1768	1567	1394	1243	1110	992										
		3.33			0.4	0.4	0.5	0.6	0.6	0.7	0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.2	1.2	1.3	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
20LB32	148-S	3.71				8942	7446	6281	5356	4611	4001	3495	3071	2712	2406	2143	1914	1715	1540	1386										
		3.71				0.4	0.5	0.5	0.6	0.7	0.7	0.8	0.9	1.0	1.0	1.1	1.2	1.2	1.3	1.3	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2
20LB36	168-S	4.25					9457	7988	6823	5883	5113	4476	3941	3489	3103	2771	2483	2231	2011	1816										
		4.25					0.4	0.5	0.5	0.6	0.7	0.8	0.8	0.9	1.0	1.1	1.1	1.2	1.2	1.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
20LB40	188-S	4.89						9812	8386	7235	6293	5513	4858	4305	3832	3425	3073	2765	2495	2257										
		4.89						0.4	0.5	0.6	0.6	0.7	0.8	0.8	0.9	1.0	1.0	1.1	1.1	1.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
20LB44	198-S	5.05							8959	7803	6845	6042	5363	4783	4284	3851	3474	3143	2850											
		5.05							0.5	0.6	0.6	0.7	0.8	0.8	0.9	0.9	1.0	1.1	1.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
20LB48	218-S	5.81								9226	8100	7158	6360	5678	5092	4584	4140	3751	3408											
		5.81								0.5	0.6	0.6	0.7	0.8	0.8	0.9	0.9	1.0	1.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	
20LB52	238-S	6.17									9634	8521	7578	6774	6082	5482	4958	4499	4094											
		6.17									0.6	0.6	0.7	0.7	0.8	0.9	0.9	1.0	1.0	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3		
20LB56	258-S	6.64										9954	8860	7927	7124	6427	5820	5287	4816											
		6.64										0.6	0.7	0.7	0.8	0.8	0.9	1.0	1.0	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3			
20LB60	278-S	7.33											9089	8173	7380	6688	6080	5544												
		7.33											0.7	0.7	0.8	0.9	0.9	1.0	0.3	0.3	0.3	0.3	0.3	0.3						

L-BEAMS

Normal Weight Concrete



$f'_c = 5,000$ psi
 $f_{pu} = 270,000$ psi
 1/2 in. diameter
 low-relaxation strand

Designation	Section Properties							
	h in.	h_1/h_2 in./in.	A in. ²	I in. ⁴	y_b in.	S_b in. ³	S_t in. ³	wt plf
26LB20	20	12/8	424	14,298	9.09	1,573	1,311	442
26LB24	24	12/12	528	24,716	10.91	2,265	1,888	550
26LB28	28	16/12	600	39,241	12.72	3,085	2,568	625
26LB32	32	20/12	672	58,533	14.57	4,017	3,358	700
26LB36	36	24/12	744	83,176	16.45	5,056	4,255	775
26LB40	40	24/16	848	114,381	18.19	6,288	5,244	883
26LB44	44	28/16	920	152,104	20.05	7,586	6,351	958
26LB48	48	32/16	992	197,159	21.94	8,986	7,566	1,033
26LB52	52	36/16	1,064	250,126	23.83	10,496	8,879	1,108
26LB56	56	40/16	1,136	311,586	25.75	12,100	10,300	1,183
26LB60	60	44/16	1,208	382,118	27.67	13,810	11,819	1,258

1. Check local area for availability of other sizes.
2. Safe loads shown include 50% superimposed dead load and 50% live load. 800 psi top tension has been allowed, therefore, additional top reinforcement is required.
3. Safe loads can be significantly increased by use of structural composite topping.

Key

- 9672 – Safe superimposed service load, plf.
- 0.4 – Estimated camber at erection, in.
- 0.2 – Estimated long-time camber, in.

Table of safe superimposed service load (plf) and cambers (in.)

Designation	No. Strand	$y_s(\text{end})$ in. $y_s(\text{center})$ in.	Span, ft																					
			16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50				
26LB20	158-S	2.67 2.67	9672	7563	6054	4938	4089	3428	2903	2480	2134	1847	1607	1403	1230	1080	950							
			0.4	0.5	0.6	0.7	0.8	1.0	1.1	1.2	1.4	1.5	1.6	1.7	1.8	1.9	1.9							
			0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.6						
26LB24	158-S	2.67 2.67	9165	7493	6221	5231	4445	3811	3293	2863	2503	2198	1938	1714	1520	1350	1202	1070						
			0.5	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.3	1.4	1.5	1.5	1.5	1.5						
			0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.0					
26LB28	188-S	3.33 3.33	8437	7170	6056	5207	4511	3935	3452	3043	2694	2394	2134	1907	1707	1532								
			0.6	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.3	1.4	1.5	1.5	1.5	1.6							
			0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2						
26LB32	218-S	4.00 4.00	9265	7906	6809	5912	5169	4545	4018	3568	3180	2844	2551	2294	2067									
			0.6	0.7	0.7	0.8	0.9	1.0	1.1	1.2	1.2	1.3	1.4	1.5	1.5	1.5								
			0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3							
26LB36	248-S	4.50 4.50	8722	7585	6643	5854	5186	4615	4125	3699	3328	3002	2715											
			0.7	0.8	0.9	0.9	1.0	1.1	1.2	1.3	1.3	1.4	1.4	1.5										
			0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4							
26LB40	278-S	5.11 5.11	9372	8216	7246	6426	5726	5123	4601	4145	3745	3392												
			0.7	0.8	0.9	0.9	1.0	1.1	1.2	1.2	1.3	1.3	1.4											
			0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4										
26LB44	288-S	5.29 5.29	8992	7986	7127	6388	5748	5189	4698	4266														
			0.8	0.8	0.9	1.0	1.0	1.1	1.2	1.2	1.2	1.2												
			0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3										
26LB48	328-S	5.75 5.75	9635	8609	7726	6961	6294	5708	5191															
			0.8	0.9	1.0	1.0	1.1	1.1	1.2	1.3														
			0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4													
26LB52	358-S	6.29 6.29	9137	8241	7459	6773	6167																	
			0.9	1.0	1.1	1.1	1.2																	
			0.4	0.4	0.4	0.4	0.5																	
26LB56	378-S	7.00 7.00	9539	8641	7853	7158																		
			0.9	1.0	1.1	1.1																		
			0.4	0.4	0.4	0.4																		
26LB60	388-S	7.68 7.68	9904	9008	8217																			
			0.9	0.9	1.0																			
			0.3	0.3	0.3																			