



Design Properties

$F_b = 3,000$ psi

$F_v = 300$ psi

$E = 2.1 \times 10^4$ psi

Width (in.)	Depth (in.)	Weight (lb/ft.)	Maximum Resistive Shear (lb/ft.)			Maximum Resistive Moment (ft.-lb/ft.)			EI (10 ⁶ in. ² - lb.)
			100%	115%	125%	100%	115%	125%	
3 1/2	9 1/2	8.3	6,650	7,648	8,313	13,161	15,136	16,452	525
	11 7/8	10.4	8,313	9,559	10,391	20,565	23,649	25,706	1,026
	14	12.3	9,800	11,270	12,250	28,583	32,871	35,729	1,681
	16	14.0	11,200	12,880	14,000	37,333	42,933	46,667	2,509
	18	15.8	12,600	14,490	15,750	47,250	54,338	59,063	3,572
Width (in.)	Depth (in.)	Weight (lb/ft.)	Maximum Resistive Shear (lb/ft.)			Maximum Resistive Moment (ft.-lb/ft.)			EI (10 ⁶ in. ² - lb.)
			100%	115%	125%	100%	115%	125%	
5 7/16	9 1/2	12.9	10,331	11,881	12,914	20,447	23,514	25,559	816
	11 7/8	16.1	12,914	14,851	16,143	31,949	36,741	39,936	1,593
	14	19.0	15,225	17,509	19,031	44,406	51,067	55,508	2,611
	16	21.8	17,400	20,010	21,750	58,000	66,700	72,500	3,898
	18	24.5	19,575	22,511	24,469	73,406	84,417	91,758	5,550
Width (in.)	Depth (in.)	Weight (lb/ft.)	Maximum Resistive Shear (lb/ft.)			Maximum Resistive Moment (ft.-lb/ft.)			EI (10 ⁶ in. ² - lb.)
			100%	115%	125%	100%	115%	125%	
7	9 1/2	16.6	13,300	15,295	16,625	26,323	30,271	32,904	1,050
	11 7/8	20.8	16,625	19,119	20,781	41,130	47,299	51,412	2,051
	14	24.5	19,600	22,540	24,500	57,167	65,742	71,458	3,361
	16	28.0	22,400	25,760	28,000	74,667	85,867	93,333	5,018
	18	31.5	25,200	28,980	31,500	94,500	108,675	118,125	7,144

Notes for BigBeam Design Properties:

- (1) Beam weight is assumed to be 36 pcf.
- (2) Maximum resistive moment shall be adjusted by the volume factor based on NDS-05.