



Design Values and Properties

 High Performance 2.1E IIC-Glulam	Width (in.)	Depth (in.)	Weight (lb/ft.)	Maximum Resistive Shear (lbf)			Maximum Resistive Moment (ft.-lbf)			EI (apparent) (10 ⁶ in. ² - lb.)
				100%	115%	125%	100%	115%	125%	
Design Properties F _b = 3,000 psi F _v = 300 psi E = 2.1 x 10 ⁶ psi True E = 2.2 x 10 ⁶ psi F _{ca} = 650 psi	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 (lbf)			Maximum Resistive Moment (ft.-lbf)			EI (apparent) (10 ⁶ in. ² - lb.)	
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 (lbf)			Maximum Resistive Moment (ft.-lbf)			EI (apparent) (10 ⁶ in. ² - lb.)	
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.
- (3) Design properties assume beam is loaded perpendicular to the wide faces of laminations (x-x axis).

 When You Need It To Last	Width (in.)	Depth (in.)	Weight (lb/ft.)	Maximum Resistive Shear (lbf)			Maximum Resistive Moment (ft.-lbf)			EI (apparent) (10 ⁶ in. ² - lb.)
				100%	115%	125%	100%	115%	125%	
Design Properties Dry-Use F _b = 2,400 psi F _v = 300 psi E = 1.8 x 10 ⁶ psi True E = 1.9 x 10 ⁶ psi F _{ca} = 740 psi	3 1/2	9 1/2	9.5	6,650	7,648	8,313	10,529	12,109	13,161	450
		11 7/8	11.8	8,313	9,559	10,391	16,452	18,920	20,565	878
		14	14.0	9,800	11,270	12,250	22,867	26,297	28,583	1,440
		16	15.9	11,200	12,880	14,000	29,867	34,347	37,333	2,151
		18	17.9	12,600	14,490	15,750	37,800	43,470	47,250	3,062
Width (in.)	Depth (in.)	Weight (lb/ft.)	Maximum Resistive Shear (lbf)			Maximum Resistive Moment (ft.-lbf)			EI (apparent) (10 ⁶ in. ² - lb.)	
5 7/16	9 1/2	14.7	10,331	11,881	12,914	16,358	18,811	20,447	698	
	11 7/8	18.4	12,914	14,851	16,143	25,559	29,393	31,949	1,366	
	14	21.7	15,225	17,509	19,031	35,525	40,854	44,406	2,237	
	16	24.8	17,400	20,010	21,750	46,400	53,360	58,000	3,341	
	18	27.9	19,575	22,511	24,469	58,725	67,534	73,406	4,757	

Notes for Treated Glulam Design Properties:

- (1) Beam weight is assumed to be 41 pcf.
- (2) Maximum resistive moment shall be adjusted by the volume factor based on NDS-05.
- (3) Design properties assume beam is loaded perpendicular to the wide faces of laminations (x-x axis).