

GLB/HGLB/GLBT Beam Seats

The GLB Series provides a connection between beam and concrete or CMU pilaster.

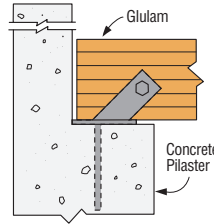
FINISH: Simpson gray paint

INSTALLATION: • Use all specified fasteners. See General Notes.

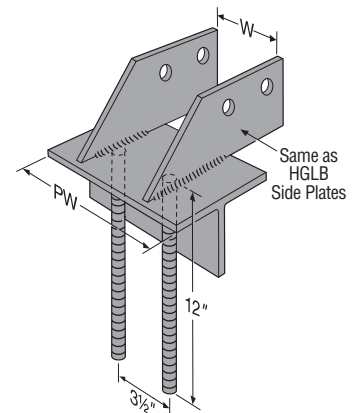
- Bolt holes shall be a minimum of 1/32" to a maximum of 1/16" larger than the bolt diameter (per 10.4.1.2 CSA 086-01).
- Check the rebar spacing requirements on all installations.

OPTIONS: • Sawn timber and other sizes may be ordered by specifying special dimensions; use the letter designations shown on the illustrations.

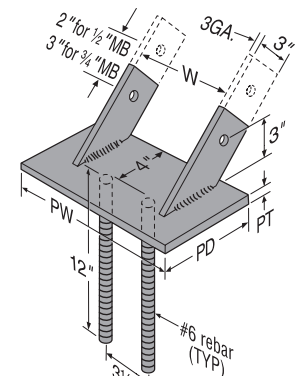
- Specify if two-bolt GLB model is desired; see illustration.



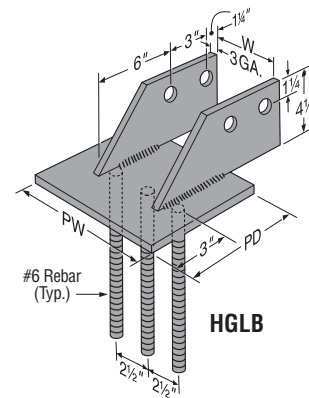
Typical GLB Installation



GLBT



GLB



HGLB

Model No.	Dimensions (in)				Bolts		Factored Bearing Resistance (K _D =1.00)						Factored Horizontal Resistance (K _D =1.15)	
	W ⁶	PD	PW	PT	Qty	Dia	D. Fir-L Glulam			Spruce-Pine Glulam			D. Fir-L Glulam	Spruce-Pine Glulam
							Concrete Block Masonry ¹		Concrete ²	Concrete Block Masonry ¹		Concrete ²		
							Type N Mortar	Type S Mortar		Type N Mortar	Type S Mortar			
lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs		
	kN	kN	kN	kN	kN	kN	kN	kN	kN	kN	kN	kN	kN	
GLB5A	5 1/4	5	7	3 ga	1	1/2	14220	17775	20785	14220	17220	17220	—	—
							63.4	79.17	92.58	63.34	76.71	76.71	—	—
GLB5B	5 1/4	6	7	3/8	1	1/2	17065	21330	24715	17065	20665	20665	—	—
							76.01	95.01	110.10	76.01	92.05	92.05	—	—
GLB5C	5 1/4	7	7	3/8	1	1/2	19905	24885	29095	19905	24110	24110	—	—
							88.67	110.84	129.61	88.67	107.39	107.39	—	—
GLB5D	5 1/4	8	7	3/8	1	1/2	22750	28440	33255	22750	27555	27555	—	—
							101.34	126.68	148.13	101.34	122.47	122.74	—	—
GLB7A	6 7/8	5	9	3 ga	1	3/4	18285	22850	27880	18285	22850	23100	—	—
							81.44	101.79	124.19	81.44	101.79	102.90	—	—
GLB7B	6 7/8	6	9	3/8	1	3/4	21940	27425	33455	21940	27425	27720	—	—
							97.72	122.15	149.03	97.72	122.15	123.48	—	—
GLB7C	6 7/8	7	9	3/8	1	3/4	25595	31995	39035	25595	31995	32340	—	—
							114.01	142.51	173.87	114.01	142.51	144.06	—	—
GLB7D	6 7/8	8	9	3/8	1	3/4	29250	36565	44610	29250	36565	36960	—	—
							130.30	162.87	198.71	130.30	162.87	164.64	—	—
HGLBA	3 1/4	5	10	3/8	2	3/4	9635	9635	9635	9635	9635	9635	7980	7165
							42.91	42.91	42.91	42.91	42.91	42.91	35.54	31.91
							19160	19160	19160	17220	17220	17220	9115	9115
							85.34	85.34	85.34	76.71	76.71	76.71	40.60	40.60
HGLBA	5 1/4	5	10	3/8	2	3/4	20315	25390	27880	20315	23100	23100	9115	9115
							90.48	113.10	124.19	90.48	102.90	102.90	40.60	40.60
							20315	25390	34470	20315	25390	28565	9115	9115
							90.48	113.10	153.55	90.48	113.10	127.23	40.60	40.60
HGLBB	3 1/4	6	10	3/8	2	3/4	11560	11560	11560	11560	11560	11560	7980	7165
							51.49	51.49	51.49	51.49	51.49	51.49	35.54	31.91
							22990	22990	22990	20665	20665	20665	9115	9115
							102.41	102.41	102.41	92.05	92.05	92.05	40.60	40.60
HGLBB	5 1/4	6	10	3/8	2	3/4	24375	30470	33460	24375	27270	27270	9115	9115
							108.58	135.73	149.03	108.58	123.48	123.48	40.60	40.60
							24375	30470	41365	24375	30470	34275	9115	9115
							108.58	135.73	184.26	108.58	135.73	152.67	40.60	40.60
HGLBC	3 1/4	7	10	3/8	2	3/4	13490	13490	13490	13490	13490	13490	7980	7165
							60.08	60.08	60.08	60.08	60.08	60.08	35.54	31.91
							26825	26825	26825	24110	24110	24110	9115	9115
							119.48	119.48	119.48	107.39	107.39	107.39	40.60	40.60
HGLBC	5 1/4	7	10	3/8	2	3/4	28440	35550	39035	28440	32340	32340	9115	9115
							126.68	158.35	173.87	126.68	144.06	144.06	40.60	40.60
							28440	35550	48260	28350	35550	39990	9115	9115
							126.68	158.35	214.97	126.28	158.35	178.12	40.60	40.60
HGLBD	3 1/4	8	10	3/8	2	3/4	15415	15415	15415	15415	15415	15415	7980	7165
							68.66	68.66	68.66	68.66	68.66	68.66	35.54	31.91
							30655	30655	30655	27555	27555	27555	9115	9115
							136.55	136.55	136.55	122.74	122.74	122.74	40.60	40.60
HGLBD	5 1/4	8	10	3/8	2	3/4	32500	40630	44610	32500	36960	36960	9115	9115
							144.77	180.97	198.71	144.77	164.64	164.64	40.60	40.60
							32500	40630	55155	32500	40630	45700	9115	9115
							144.77	180.97	245.68	144.77	180.97	203.56	40.60	40.60
GLBT512 ⁴	—	5 1/4	12	5/16	2	3/4	25595	31995	44180	25595	31995	36605	—	—
							114.01	142.51	196.79	114.01	142.51	163.05	—	—
GLBT612 ⁴	—	6 1/2	12	3/8	2	3/4	31690	39610	54700	31690	39610	45320	—	—
							141.15	176.44	243.64	141.15	176.44	201.88	—	—
GLBT516	—	5 1/4	16	5/16	2	3/4	34125	42660	—	34125	42660	—	—	
							152.01	190.02	—	152.01	190.02	—	—	
GLBT616	—	6 1/2	16	3/8	2	3/4	42255	52815	—	42255	52815	—	—	
							188.21	235.26	—	188.21	235.26	—	—	
GLBT520	—	5 1/4	20	5/16	2	3/4	42660	53325	—	42660	53325	—	—	
							190.02	237.52	—	190.02	237.52	—	—	
GLBT620	—	6 1/2	20	3/8	2	3/4	52815	66020	—	52815	66020	—	—	
							235.26	294.07	—	235.26	294.07	—	—	

See footnote 8

See footnote 3

1. Factored bearing resistances for concrete block masonry assume a compressive unit strength of 15.0 MPa (net area) using solid or grouted units as per Table 5 of CSA S304.1-94.
2. Factored bearing resistances for concrete assume a 28 day compressive strength (f_c) of 15.0 MPa as per CSA A23.3-04.
3. Bearing resistance of wood member will govern for these applications. Calculate factored resistance in accordance with CSA O86.
4. Bearing resistances shown assume a glulam width of 10 1/2". For smaller widths, ensure that the factored bearing resistance of the wood member does not govern.
5. The GLBT5 has a WT4x9 structural tee; the GLTB6 has a WT4x12 structural tee.
6. Specify "W" dimension when ordering HGLB and GLTB beam seats.
7. Factored horizontal resistances include a 15% increase for short term loading; reduce if masonry or concrete is limiting.
8. Use HGLBD factored horizontal resistances for corresponding beam species and width.