Equivalent Glulam Sections for Steel Beams:

Steel Section	Roof Beams		Floor Beams	
W 6 x 9	3-1/8 x 10-1/2	or 5-1/8 x 9	3-1/8 x 10-1/2	or 5-1/8 x 9
W 8 x 10	3-1/8 x 12	or 5-1/8 x 9	3-1/8 x 13-1/2	or 5-1/8 x 12
W 12 x 14	3-1/8 x 16-1/2	or 5-1/8 x 13-1/2	3-1/8 x 18	or 5-1/8 x 15
W 12 x 16	3-1/8 x 18	or 5-a1/8 x 13-1/2	3-1/8 x 19-1/2	or 5-1/8 x16-1/2
W 12 x 19	3-1/8 x 19-1/2	or 5-1/8 x16-1/2	3-1/8 x 21	or 5-1/8 x18
W 10 x 22	3-1/8 x 21	or 5-1/8 x 16-1/2	3-1/8 x 19-1/2	or 5-1/8 x16-1/2
W 12 x 22	5-1/8 x 18	or 6-3/4 x 15	5-1/8 x 19-1/2	or 6-3/4 x 16-1/2
W 14 x 22	5-1/8 x 18	or 6-3/4 x 16-1/2	5-1/8 x 21	or 6-3/4 x 18
W 12 x 26	5-1/8 x 19-1/2	or 6-3/4 x 18	5-1/8 x 21	or 6-3/4 x 19-1/2
W 14 x 26	5-1/8 x 21	or 6-3/4 x 18	5-1/8 x 21	or 6-3/4 x 19-1/2
W 16 x 26	5-1/8 x 21	or 6-3/4 x 19-1/2	5-1/8 x 22-1/2	or 6-3/4 x 21
W 12 x 30	5-1/8 x 21	or 6-3/4 x 19-1/2	5-1/8 x 21	or 6-3/4 x 19-1/2
W 14 x 30	5-1/8 x 22-1/2	or 6-3/4 x 19-1/2	5-1/8 x 22-1/2	or 6-3/4 x 21
W 16 x 31	5-1/8 x 24	or 6-3/4 x 21	5-1/8 x 25-1/2	or 6-3/4 x 22-1/2
W 14 x 34	5-1/8 x 24	or 6-3/4 x 21	5-1/8 x 24	or 6-3/4 x 22-1/2
W 18 x 35	5-1/8 x 27	or 6-3/4 x 24	5-1/8 x 27	or 6-3/4 x 25-1/2
W 16 x 40	5-1/8 x 28-1/2	or 6-3/4 x 25-1/2	5-1/8 x 27	or 6-3/4 x 25-1/2
W 21 x 44	5-1/8 x 33	or 6-3/4 x 28-1/2	5-1/8 x 33	or 6-3/4 x 30
W 18 x 50	5-1/8 x 34-1/2	or 6-3/4 x 30	5-1/8 x 31-1/2	or 6-3/4 x 26-1/2
W 21 x 50	5-1/8 x 34-1/2	or 6-3/4 x 31-1/2	5-1/8 x 34-1/2	or 6-3/4 x 31-1/2
W 18 x 55	----------	or 6-3/4 x 31-1/2	----------	or 6-3/4 x 30
W 21 x 62	----------	or 6-3/4 x 36	----------	or 6-3/4 x 34-1/2

Key Specs of Conversion Charts Above:

- Roof beam sections are compared on the basis of equivalent bending resistance only. These sizes assume a dry condition of use and a 1.15 increase for duration of load (as for snow loading) as applicable to wood members. Sizes shown should also be checked for shear, deflection and other applicable strength properties and design considerations. For determining glulam roof beam sections an Fb value of 2400 psi, modified by the AITC volume effect factor, was used.
- Floor beam sections are compared on the basis of equivalent stiffness (E1) only assuming a dry condition of use for the wood members. Sizes shown should also be checked for shear,

bending and other applicable strength properties and design considerations. For determining glulam floor beam sections, an MOE value of 1,800,000 psi was used.

Steel sections were selected as the most economical from the "Manual of Steel Construction," AISC, 8th Edition. Design values used for conversion were:

Fy=36 ksi	Fb=0.66 x Fy	MOE=29,000 ksi