DESIGN PROPERTIES FOR WIDE FLANGE JOISTS

Joist	Joist Depth	WI Weight [*] (lbs/ft)	GPI Weight [*] (lbs/ft)	El (10º inch² lbs)	Moment (ft-lbs.)	Shear (lbs.)	Allowable Reactions		_	
							End (lbs)	Intermediate (lbs)	C (10º ft-lbs/in)	APA® PRI™
40 Series WI or GPI	9½"	2.6	2.9	193	2355	1120	1080	2160	0.412	9½" PRI 40
	11%"	2.9	3.1	330	3145	1420	1200	2500	0.515	11%" PRI 40
	14"	3.3	3.5	482	3860	1710	1200	2500	0.607	14" PRI 40
	9½"	2.8	2.9	231	3245	1120	1080	2160	0.412	9½" PRI 60
60 Series WI or GPI	11%"	3.2	3.1	396	4335	1420	1200	2500	0.515	11%" PRI 60
	14"	3.4	3.5	584	5320	1710	1200	2500	0.607	14" PRI 60
	16"	3.7	3.7	799	6250	1970	1200	2500	0.693	16" PRI 60
80 Series WI only	11%"	3.9	_	547	6130	1420	1280	2760	0.515	11%" PRI 80
	14"	4.2	_	802	7525	1710	1280	3020	0.607	14" PRI 80
	16"	4.5	_	1092	8845	1970	1280	3020	0.693	16" PRI 80

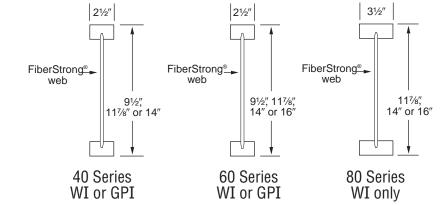
^{*} Weights of joists for dead load calculations. For shipping weights contact Georgia-Pacific.

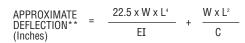
For PSF dead load calculation, use weight per lineal foot divided by o.c. spacing in feet. Ex: 14" WI 60 @ 19.2 o.c. = 3.4 ÷ 1.6 = 2.1 PSF.

NOTES:

- 1. Allowable moment values may be increased 7% for repetitive usage (minimum 3 joists spaced at 24" o.c. or less)
- 2. Allowable moment, shear, and allowable reaction values are for normal duration loading and may be increased for other load durations in accordance with code.
- 3. Allowable end reaction is based on a minimum bearing length of 1¾" without bearing stiffeners. For a bearing length of 4", the allowable end reaction may be set equal to the tabulated shear value. Interpolation of the end reaction between 1¾" and 4" bearing is permitted. For end reaction values over 1,550 lbs, bearing stiffeners are required.
- 4. Allowable intermediate reaction is based on a minimum bearing length of 3½".

WIDE FLANGE JOIST CROSS SECTIONS





^{**}Constants have been adjusted to maintain unit consistency.

W = Uniform Load (lbs/foot)

L = Span (feet)

EI = Stiffness Constant

C = Shear Deflection Constant