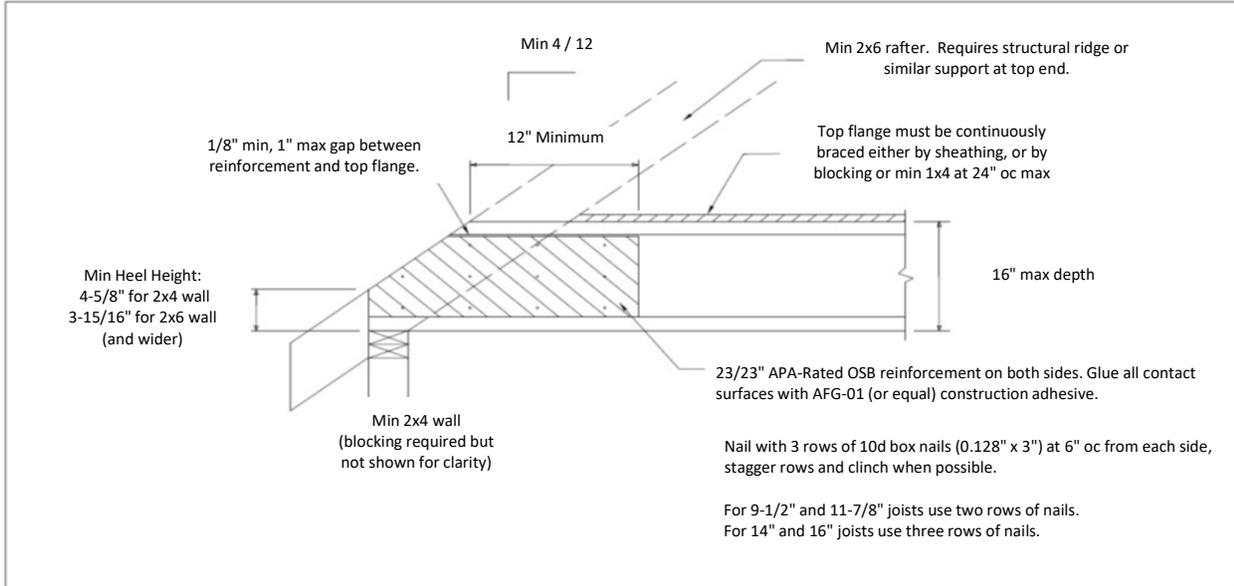


**Bevel/Scarf Cut Detail and Maximum Reaction Table and Reinforcing Detail**

**This Tech Note must be used in conjunction with the appropriate PWT Technical Guide.**



**Bevel/Scarf Cut I-Joist Factored Reaction and Bearing Resistance (lbs)**

Depth	Series	by Roof Pitch (x:12)					Factored Shear (lb)
		4	6	8	10	12	
9 1/2	PWI 18S	952	1,078	1,190	1,316	1,421	1,582
	PWI 20S	1,057	1,197	1,323	1,463	1,589	1,764
	PWI 32S	1,057	1,197	1,323	1,463	1,589	1,764
11 7/8	PWI 18S	1,120	1,274	1,400	1,554	1,680	1,869
	PWI 20S	1,246	1,414	1,561	1,729	1,869	2,079
	PWI 32S	1,246	1,414	1,561	1,729	1,869	2,079
	PWI 36L	1,246	1,414	1,561	1,729	1,869	2,079
	PWI 42S	1,365	1,547	1,708	1,890	2,051	2,275
	PWI 56L	1,365	1,547	1,708	1,890	2,051	2,275
14	PWI 20S	1,414	1,596	1,764	1,953	2,114	2,352
	PWI 32S	1,414	1,596	1,764	1,953	2,114	2,352
	PWI 36L	1,414	1,596	1,764	1,953	2,114	2,352
	PWI 42S	1,575	1,785	1,967	2,177	2,366	2,625
	PWI 56L	1,575	1,785	1,967	2,177	2,366	3,262
16	PWI 20S	1,568	1,778	1,967	2,170	2,359	2,618
	PWI 32S	1,568	1,778	1,967	2,170	2,359	2,618
	PWI 36L	1,568	1,778	1,967	2,170	2,359	2,618
	PWI 42S	1,778	2,016	2,219	2,457	2,667	2,961
	PWI 56L	1,778	2,016	2,219	2,457	2,667	2,961

**Notes:**

1. Reaction and Bearing Resistance are for standard load duration and shall be reduced according to code for longer loading duration.
2. The live load component of the reaction must be greater than the dead load component.
3. The tabulated reaction capacity may be increased for a heel height greater than the minimum required. Interpolation between the tabulated capacity and full joist shear is permitted (see example). Reinforcement is still required as shown above.

**Example:**

A 16" PWI 42S with a 9" heel height and a 6:12 bevel cut on a 2x4 wall.  
 Tabulated Reaction Capacity with minimum heel height = 2520 lb  
 Full Joist Shear = 3711 lb  
 Minimum Required Heel Height = 4.625"  
 Reaction Capacity w/ 9" heel height = 3711 lb - (3711 lb - 2520 lb) \* (16" - 9") / (16" - 4.625") = 2978 lb

Our literature is updated frequently.  
 Please visit [www.pwtewp.com](http://www.pwtewp.com) for the most current version of our specifications.

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