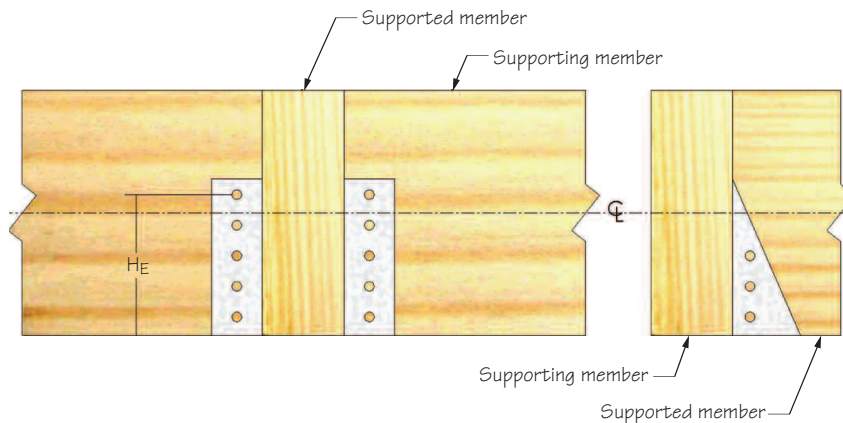


ANSI/TPI 1-1995 and ANSI/TPI 1-2002 are the National Design Standards for Metal Plate Connected Wood Truss Construction. The ANSI/TPI 1-1995/1997 NDS is referenced in the 2000 IBC and the ANSI/TPI 1-2002/2001 NDS is referenced in the 2003 IBC.

These standards state: any connection which includes a tension perpendicular to grain stress shall be designed to resist cross grain tension forces. Although the ANSI/TPI 1-1995 and ANSI/TPI 1-2002 standards do not affect the carrying capacity of hangers, the cross grain tension of the lumber may be limiting. The controlling factors that affect the calculated value of the hangers are wood species, cross-sectional area of the wood (number of plies), and the location of the upper most fastener in the hanger (H_E). Face Mounted Hangers with carrying capacities over 800 pounds may be affected by these standards.



USP developed spreadsheets listing allowable loads for face mount hangers attached to one and two ply girder trusses with bottom chords of Douglas-Fir Larch, Southern Pine, Spruce-Pine-Fir, and Hem Fir wood based on ANSI/TPI 1-1995/1997 NDS Allowable Loads and ANSI/TPI 1-2002/2001 NDS Allowable Loads criteria.

USP Stock No.	Ref. No.	H_E^1	Min. Heel Height ²	Sup'ting Member Plys	Fasteners ^{3,4}		Normal Loads		Uplift		2 x 4 Sup't Member					2 x 6 Sup't Member								
					Sup'ting Member	Supported Member	100%	Hanger Max.	133%	160%	Floor			Roof		Wind		Floor			Roof		Wind	
											100%	115%	125%	133%	160%	100%	115%	125%	133%	160%				
1 Ply Carried Member																								
JL24	LU24	2.794	2.66	1	(4) 10d	(2) 10d x 1 1/2	450	595	245	295	450	520	565	595	595	450	520	565	595	595				
					(4) 16d		505	740	245	295	505	580	630	670	740	505	580	630	675	740				
					(4) 10d		455	595	245	295	455	525	570	595	595	455	525	570	595	595				
					(4) 16d		545	740	245	295	545	625	680	725	740	545	625	680	725	740				
JRSSS	LU24-18	2.834	2.70	1	(4) 10d	(2) 10d x 1 1/2	450	570	245	295	450	520	565	570	570	450	520	565	570	570				
					(4) 16d		505	685	245	295	505	580	630	670	685	505	580	630	675	685				
					(4) 10d		455	570	245	295	455	525	570	570	570	455	525	570	570	570				
					(4) 16d		550	685	245	295	550	635	685	685	685	550	635	685	685	685				
JESSS	--	2.753	2.66	1	(4) 10d	(2) 8d x 1 1/2	450	550	230	245	450	520	550	550	550	450	520	550	550	550				
					(4) 16d		505	550	230	245	505	550	550	550	550	505	550	550	550	550				
					(4) 10d		455	550	230	245	455	525	550	550	550	455	525	550	550	550				
					(4) 16d		550	550	230	245	550	550	550	550	550	550	550	550	550	550				
SUH24	U24	2.938	2.69	1	(4) 10d	(2) 10d x 1 1/2	450	625	245	295	450	520	565	600	625	450	520	565	600	625				
					(4) 16d		510	745	245	295	510	585	640	680	745	510	585	640	680	745				
					(4) 10d		465	625	245	295	465	535	580	620	625	465	535	580	620	625				
					(4) 16d		550	745	245	295	550	635	690	730	745	550	635	690	735	745				

Example of ANSI/TPI 1-2002/2001 NDS Allowable Load chart. For readability purposes only partial chart is shown.

Each table is sorted by supported member size and various specialty hangers like hip/jack and 45° skewed hangers.

ANSI/TPI Allowable Load tables are available from USP's Web Site:

- Connectors unaffected by ANSI/TPI Standards
- ANSI/TPI 1-1995/1997 NDS Design Loads
- ANSI/TPI 1-2002/2001 NDS Design Loads

Log on to www.USPconnectors.com and click to select: **Technical Resources > ANSI/TPI Allowable Loads**