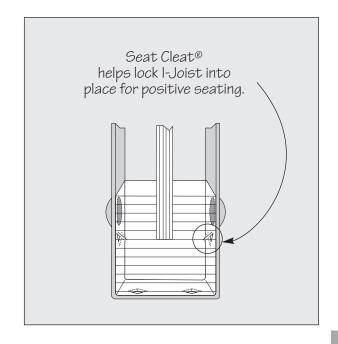
## THO, TFL, & THF SINGLE PLY I-JOIST HANGERS UPLIFT VALUES WITH NO JOIST NAILS INSTALLED

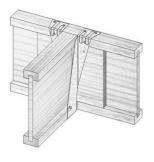
The following information is a summary of uplift testing performed by USP Structural Connectors related to the use of THO, TFL, and THF single ply engineered wood

I-Joist hangers installed without joist nails. USP recognizes that in some applications it may not be desirable or necessary to install joist nails into the bottom flange of the I-Joist.

For example, there may be instances where minimal uplift resistance is needed to achieve design uplift requirements.

When joist nails are not installed the *Seat Cleat®* prongs will hold the I-Joist in place and provide uplift resistance with the *THO*, *TFL*, and *THF* single ply hangers. Reference the chart below for test result uplift values. Notice the uplift resistance is the same for all *THO*, *TFL*, and *THF* single ply hangers as the Seat Cleat design is identical.





Typical **THO** installation



Typical **TFL** installation



Typical **THF** installation

USP Series No.	Fasteners as Installed in Field		DF-L / SP Allowable Loads	
			Floor	Uplift <sup>3</sup>
	Header	Joist <sup>1</sup>	100%²	160%
THF Series - Single Ply	Per Catalog		See Catalog	85
THO/TFL Series - Single Ply	Per Catalog		See Catalog	85

- 1) Catalog lists (2) 10d x 1-1/2 nails for correct installation.
- 2) 100% floor loading varies by USP stock number, joist type, and wood species.
- 3) The S-P-F uplift load is 75 lbs. at 160%.



## USP supplies quality products to build Stronger Safer Structures

Customer Service: Burnsville, MN Phone: 1-800-328-5934/ 1-952-898-8772 Fax: 1-952-898-8605 Manufacturing: Montgomery, MN Livermore, CA Largo, FL Thornhill, Ontario

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