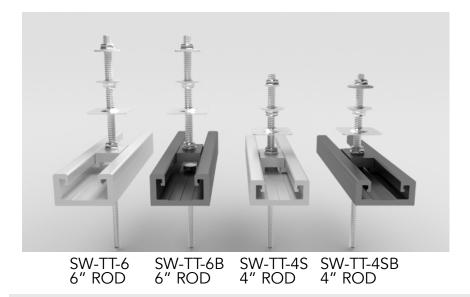


SWH Racking System Data Sheet Version 12.10.v2

SWH Solar Mount Tile Strut

MFG-PN: MR-SW-TT-6B, MR-SW-TT-6S, MR-SW-TT-4S, MR-SW-TT-4SB



Lag pull-out (withdrawal) capacities (lbs) in typical roof lumber (ASD)

	$\frac{5}{16}$ " lag screw* specifications				
	Specific gravity	per inch thread depth			
Douglas Fir, Larch	0.50	266			
Douglas Fir, South	.46	235			
Engelmann Spruce, Lodgepole Pine ¹	.46	235			
Hem, Fir, Redwood (close grain)	.43	212			
Hem, Fir (North)	.46	235			
Southern Pine	.55	307			
Spruce, Pine, Fir	.42	205 🗼 🧮			
Spruce, Pine, Fir ²	.50	266			
¹ MSR 1650 f & higher ² E of 2 million psi and higher grades o	Thread depth				

Axial Load Capacity

Note: Loads are given for tile strut only. Check load limits for lag screw or other attachment methods.

Base and Channel Nut Materials:

- 6005-T5 extruded aluminum alloy
- Clear or black anodized

Fasteners and Flashing Materials:

- 304 stainless steel
- Tigten threaded rod onto channel nut to 14 ft-lbs torque
- *Product not recommended for clay or slat tiles. ** 5/16" x 3.5" Stainless Steel lag bolt included.

CONFORMS TO UL SUB 2703



Sources: American Wood Council, NDS 2005, Table 11.2a, 11.3.2A.

Notes:

(1) Thread must be embedded in the side grain of a rafter or other structural member integral with building structure.

(2) Lag bolts must be located in the middle third of the structural member.

(3) These values are not valid for wet service.

(4) This table does not include shear capacities. If necessary, contact a local engineer to specify lag bolt size with regard to shear forces.

(5) Install lag bolts with head and washer flush to surface (no gap). Do not over-torque.

(6) Withdrawal design values for lag screw connections shall be multiplied by applicable adjustment factors if necessary. See Table 10.3.1 in the American Wood Council NDS for Wood Construction.

*Use flat washers with lag screws.



Ultimate Load Ibs (N) X±	Average Ultimate Load Ibs (N) Y±	Average Ultimate Load Ibs (N) Z±	Base Dimension W x L x H	Assembled Weight
154 (685)	137 (609)	7688 (34198)	1.75" x 8" x 1"	0.936 lbs
359 (1597)	370 (1646)	8569 (38117)	1.75" x 8" x 1"	0.888 lbs
150 (667)	139 (618)	4215 (18749)	1.75" x 8" x 0.75"	0.870 lbs
313 (1392)	313 (1392)	4279 (19034)	1.75" x 8" x 0.75"	0.822 lbs
	bs (N) X± 154 (685) 359 (1597) 150 (667)	Ibs (N) X± Ibs (N) Y± 154 (685) 137 (609) 359 (1597) 370 (1646) 150 (667) 139 (618)	Ibs (N) X± Ibs (N) Y± Ibs (N) Z± 154 (685) 137 (609) 7688 (34198) 359 (1597) 370 (1646) 8569 (38117) 150 (667) 139 (618) 4215 (18749)	Ibs (N) X± Ibs (N) Y± Ibs (N) Z± W x L x H 154 (685) 137 (609) 7688 (34198) 1.75" x 8" x 1" 359 (1597) 370 (1646) 8569 (38117) 1.75" x 8" x 1" 150 (667) 139 (618) 4215 (18749) 1.75" x 8" x 0.75"

*Independent Laboratory Tested