

**META/HETA/HHETA/HETAL/DETAL/TSS** Embedded Truss Anchors and Truss Seat Snap-In

The embedded truss anchor series provides an engineered method to properly attach roof trusses to concrete and masonry walls. The products are designed with staggered nail patterns for greater uplift resistance. Information regarding the use of two anchors on single- and multi-ply trusses is included.

The TSS, a companion product of the META, provides a moisture barrier between the concrete and truss. The preassembled unit is riveted with no height adjustment.

**NEW!** The DETAL20 is a high capacity embedded truss anchor for attachment of single-ply trusses to concrete and masonry walls. It combines dual embedded anchors with a structural moisture-barrier seat that is partially embedded in the concrete or grout. This seat serves to protect the truss and also provides additional lateral and uplift capacity. The embedded anchors are pre-attached to the moisture barrier through slots that allow for a slight amount of adjustability, providing flexibility during installation to avoid rebar. The moisture-barrier seat includes tabs at each end for optional attachment to the form board in concrete tie-beam applications.

**MATERIAL:** HHETA-14 gauge; HETA-16 gauge; HETAL-strap 16 gauge, truss seat 18 gauge; META-18 gauge; TSS-22 gauge; DETAL-16 gauge (Barrier-18 gauge)

**FINISH:** Galvanized. Some products available in ZMAX® coating; see Corrosion Information, page 10-11.

**INSTALLATION:** • Use all specified fasteners. See General Notes.

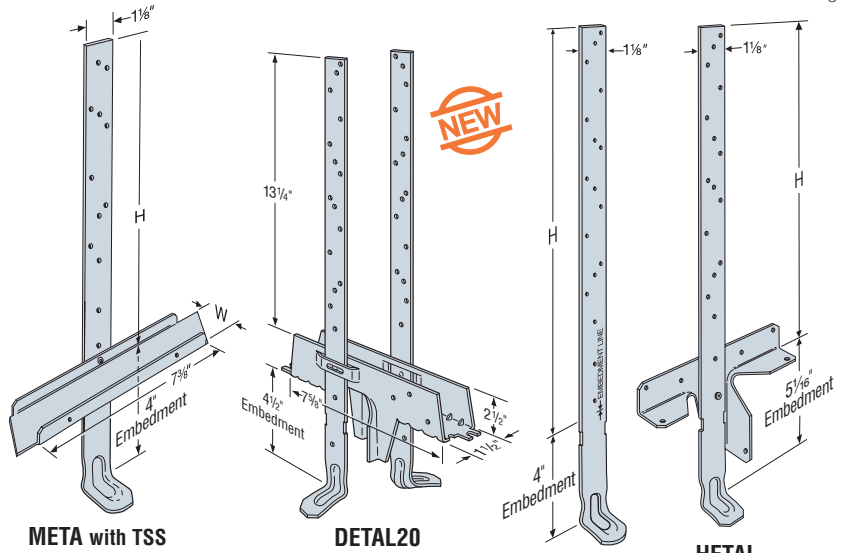
- The META, HETA and HHETA are embedded 4" into a concrete beam or grouted block wall; HETAL is embedded 5 1/16"; **DETAL is embedded 4 1/2"**.
- The DETAL20 is installed centered and flush on top of an 8" masonry bond beam or concrete tie beam. The moisture barrier seat bears on masonry face shell or concrete tie beam form boards; the two flanges embed into grout or concrete. The two embedded anchors shall be installed vertically into grout or concrete.
- The TSS moisture barrier may be preattached to the truss using 6d commons.
- A shim is required between the truss and the embedded truss anchor when there is a space of 1/8" to 1 1/2".
- In double embedded anchor installations, do not install fasteners where the straps overlap when wrapped over the truss heel.

**CODES:** See page 12 for Code Reference Key Chart.

These products are available with additional corrosion protection. Additional products on this page may also be available with this option, check with Simpson Strong-Tie for details.

**Single Embedded Anchor Installation**

Model No.	H	SP Uplift Load 160 Load Duration Increase				Lateral Loads (160)		Code Ref.
		10dx1 1/2		16d		F <sub>1</sub>	F <sub>2</sub>	
		Quantity	Load	Quantity	Load			
META12	8	7	1450	6	1450	340	725	F27
META14	10	7	1450	6	1450	340	725	
META16	12	7	1450	6	1450	340	725	
META18	14	7	1450	6	1450	340	725	
META20 <sup>6</sup>	16	7	1450	6	1450	340	725	
META22	18	7	1450	6	1450	340	725	
META24	20	7	1450	6	1450	340	725	
META40	36	7	1450	6	1450	340	725	
HETA12	8	7	1520	7	1780	340	725	
HETA16	12	9	1810	8	1810	340	725	
HETA20 <sup>6</sup>	16	9	1810	8	1810	340	725	
HETA24	20	9	1810	8	1810	340	725	
HETA40	36	9	1810	8	1810	340	725	
HHETA12	8	7	1565	7	1820	340	815	
HHETA16	12	10	2235	9	2235	340 <sup>7</sup>	815	
HHETA20 <sup>6</sup>	16	10	2235	9	2235	340 <sup>7</sup>	815	
HHETA24	20	10	2235	9	2235	340 <sup>7</sup>	815	
HHETA40	36	10	2235	9	2235	340 <sup>7</sup>	815	
HETAL12	7	10 <sup>4</sup>	1085	10 <sup>4</sup>	1270	415 <sup>5</sup>	1100	
HETAL16	11	14 <sup>4</sup>	1810	13 <sup>4</sup>	1810	415 <sup>5</sup>	1100	
HETAL20	15	14 <sup>4</sup>	1810	13 <sup>4</sup>	1810	415 <sup>5</sup>	1100	



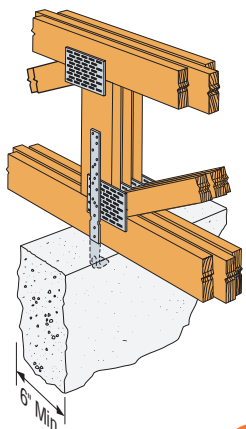
META with TSS

DETAL20

HETA20 (HHETA similar)

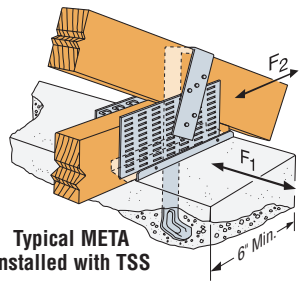
HETAL

Model No.	W
TSS2	1 3/4"
TSS2-2	3 1/8"
TSS4	3 5/8"

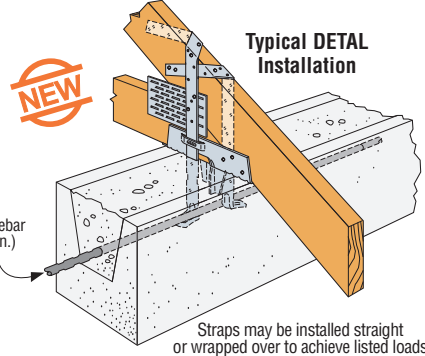


Moisture barrier not shown (Typ.)

Typical HETA20 Installation



Typical META Installed with TSS



Typical DETAL Installation

Straps may be installed straight or wrapped over to achieve listed loads

1. Loads include a 60% load duration increase on the fasteners for wind or seismic loading.
2. Minimum f<sub>c</sub> = 2500 psi. Minimum f<sub>m</sub> = 1500 psi.
3. For simultaneous loads in more than one direction, the connector must be evaluated as described in Note e, page 14 under Instructions to the Designer.
4. Five nails must be installed into the truss seat of the HETAL.
5. Parallel-to-wall load towards face of HETAL is 1975 lbs.
6. It is acceptable to use a reduced number of fasteners provided that there is a reduction in uplift load capacity. See example on page 151. Lateral loads do not apply when fewer than 7 fasteners are used with the HETA and HHETA anchors or less than 6-16d or 7-10dx1 1/2 fasteners are used with the META anchor.
7. The HHETA allowable F<sub>1</sub> load can be increased to 435 lbs. if the strap is wrapped over the truss and a minimum of 12 nails are installed.
8. Minimum spacing for multiple anchor installation is 2 times the embedment depth for full load. See Double Embedded Anchor Installation table on page 144 for loads on closer spaced anchors.
9. Single ply trusses may use either 10dx1 1/2 or 16d nails. 2 or 3 ply trusses shall use 16d nails.
10. **NAILS:** 16d = 0.162" dia. x 3 1/2" long, 10dx1 1/2 = 0.148" dia. x 1 1/2" long. See page 16-17 for other nail sizes and information.