



The VTT is a Valley Truss Tie designed to transfer loads from a valley truss into the supporting structure below. It also resists the sliding forces from downward loads when the valley truss is set upon a sloped lower roof. The ability to resist the sliding force eliminates the need for support wedges under the valley truss bottom chord or special order valley roof trusses with a bevel-cut bottom chord.

**Materials:** 18 gauge  
**Finish:** G90 galvanizing

### Features

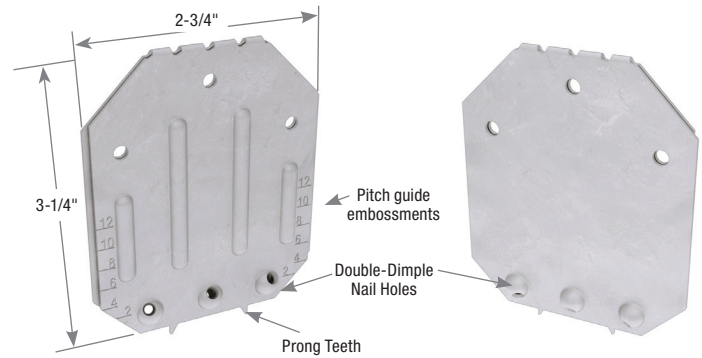
- Double-dimple nail holes assure the nails are driven in at the correct angle into the supporting member every time.
- Flat design requires no field bending to match the supporting roof pitch.
- 2-Ply steel with stiffening ribs provides a high resistance to sliding forces from downward loads.
- Prong teeth help hold the VTT in place while nailing.
- Accommodates supporting roof pitches from 0/12 to 12/12.
- Pitch guide embossments allow attachment to valley truss on ground.

### Installation:

- Mark the location of the supporting truss located below the lower roof sheathing.
- Place the VTT flat against the valley truss, centered over the top chord of the truss below. Tap the top edge down with a hammer to engage the prong teeth.
- Nail the VTT to the bottom chord of the valley truss using (3) 10d x 1-1/2" nails.
- Install (3) 10d common nails through the double-dimples and drive them through the sheathing into the top chord of the supporting truss below. One nail will be centered in the top chord below. The other two nails are driven in at preset angles guided by the dimple holes.

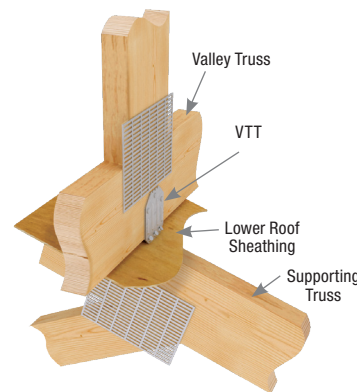
### Alternate Installation for Ground/Pre-Placement of VTT

- Mark the location of the supporting truss located below the lower roof sheathing. Center VTT horizontally on that mark.
- Use pitch guide embossments on part to locate the vertical position of VTT. Pitch numbers on connector are the numerator in the pitch slope ratio. (i.e. "6" indicates a 6/12 pitch, "12" indicates a 12/12 pitch, etc.)
- Secure the VTT to valley truss with (3) 10d x 1-1/2" nails.
- When valley truss is hoisted into proper position on roof, install (3) 10d common nails through the double-dimples and drive them through the sheathing into the top chord of the supporting truss below. One nail will be centered in the top chord below. The other two nails are driven in at a preset angles guided by the dimple holes.

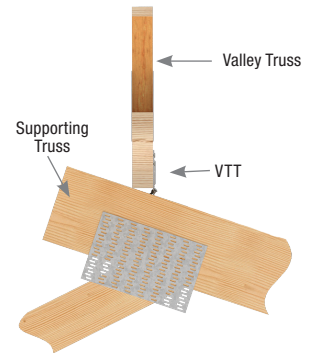


**VTT Front View**

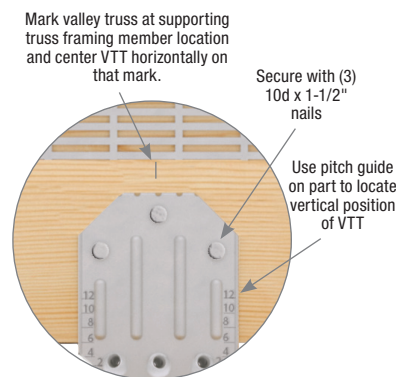
**VTT Back View**



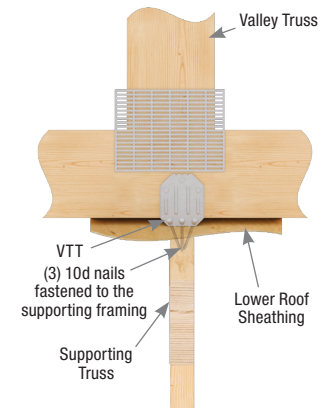
**Typical VTT installation**



**Typical VTT side view installation**



**Alternate Installation for Ground/Pre-Placement installation**



**Typical VTT front view installation**

MiTek Stock No.	Ref. No.	GA	Dimensions (in)		Fastener Schedule <sup>3</sup>				Supporting Roof Pitch	D Fir-L Factored Resistance <sup>2</sup>				S-P-F Factored Resistance <sup>2</sup>				Ctn Qty
					Supporting Framing		Valley Truss			Download 100%		Uplift 115% <sup>1</sup>		Download 100%		Uplift 115% <sup>1</sup>		
			W	H	Qty	Type	Qty	Type		Lbs	kN	Lbs	kN	Lbs	kN	Lbs	kN	
VTT	VTCR	18	2-3/4	3-1/4	3	10d	3	10d x 1-1/2	< 4/12 4/12 to < 8/12 8/12 to 12/12	995	4.43	235 290 335	1.05 1.29 1.49	870	3.87	180 225 265	0.80 1.00 1.18	100

- 1) Factored uplift resistances have been increased 15% for short-term loads such as wind and earthquake; no further increase is allowed.
- 2) Factored resistances are based on installation over 7/16" or 15/32" sheathing.
- 3) **NAILS:** 10d x 1-1/2" nails are 0.148" dia. x 1-1/2" long, 10d nails are 0.148" dia. x 3" long.