Valley Truss Tie
VTT

VTT Valley Truss Tie is 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.

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

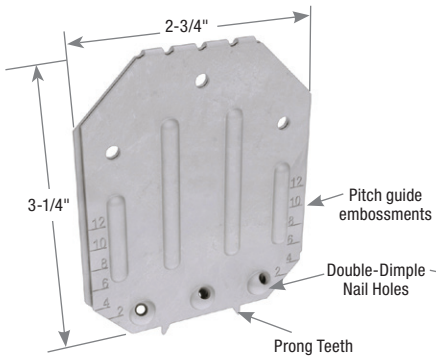
Materials: 18 gauge
Finish: G90 galvanizing
Patents: U.S. Patent No. #9,920,514 B1

Installation:

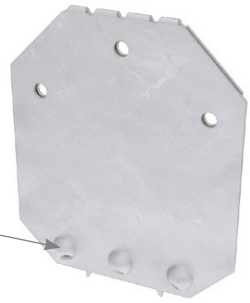
- Mark the location of the supporting truss located below the lower roof sheathing.
- Place the VTT flat against the valley truss, centered over the top chord of the truss below. Tap the top edge down with a hammer to engage the prong teeth.
- Nail the VTT to the bottom chord of the valley truss using (3) 10d (0.148") x 1-1/2" nails.
- Install (3) 10d (0.148" x 3") 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

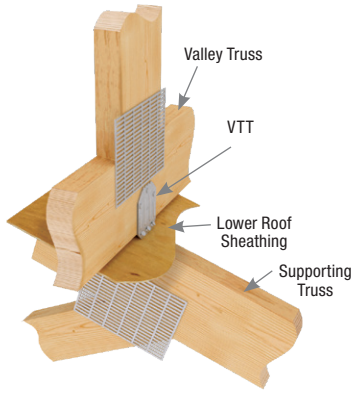
- Mark the location of the supporting truss located below the lower roof sheathing. Center VTT horizontally on that mark.
- Use pitch guide embossments on part to locate the vertical position of VTT. Pitch numbers on connector are the numerator in the pitch slope ratio. (i.e. “6” indicates a 6/12 pitch, “12” indicates a 12/12 pitch, etc.)
- Secure the VTT to valley truss with (3) 10d (0.148") x 1-1/2" nails.
- When valley truss is hoisted into proper position on roof, install (3) 10d (0.148" x 3") 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.



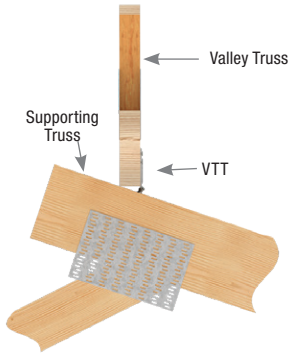
VTT Front View



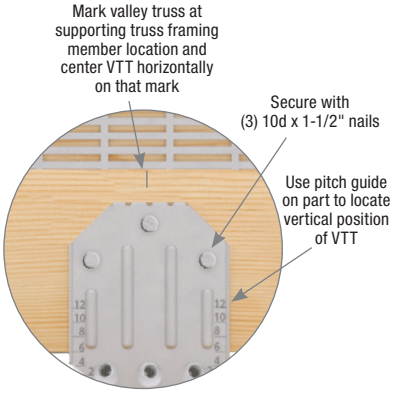
VTT Back View



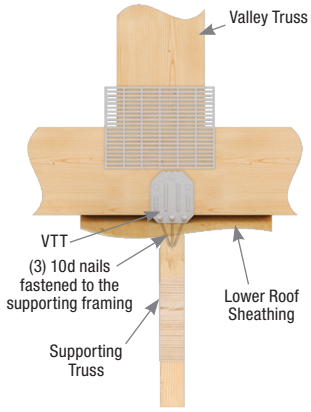
Typical VTT installation



Typical VTT side view installation



Alternate Installation for Ground / Pre-Placement installation



Typical VTT front view installation

MiTek Stock No.	Ref. No.	GA	Fastener Schedule[4] Supporting Framing Qty	Supporting Framing Type	Valley Truss Qty	Valley Truss Type	Supporting Roof Pitch	DF-L Allowable Loads (Lbs.) Download[3] 115%,125%,160%	DF-L Uplift[1,2] 160%	S-P-F Allowable Loads (Lbs.) Download[3] 115%,125%,160%	S-P-F Uplift[1,2] 160%	Ctn Qty
VTT	VTCR	18	3	10d	3	10d x 1-1/2	< 4/12	840	375	685	270	100
							4/12 to < 8/12	840	445	685	325	
							8/12 to 12/12	840	480	685	400	

1) Uplift loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.
2) Uplift loads are based on installation over 7/16" or 15/32" sheathing.
3) Downloads have been increased for snow, construction and wind loads; no further increase shall be permitted.
4) **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.