

Technical data sheet

SIMPSON

Strong-Tie

VTOR Valley Truss Clip

Specifically designed to provide an effective connection allowing valley trusses to be connected to common trusses. The VTCR eliminates the need to add a support wedge under the valley truss or to bevel the bottom chord to match the roof pitch. Site-adjustable, this single piece solution can be used on roof pitch angles from 10° to 40°.

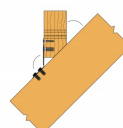
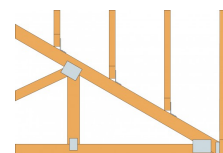
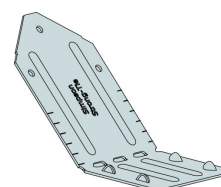
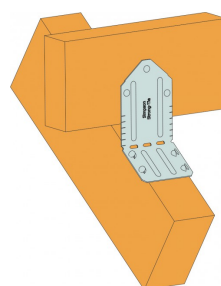
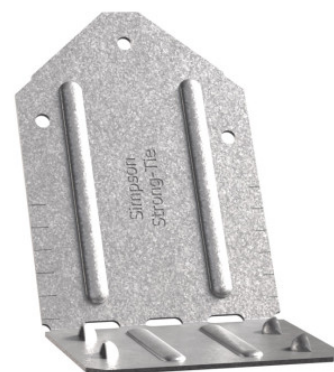
Features

Material

- Pre-galvanised mild steel.

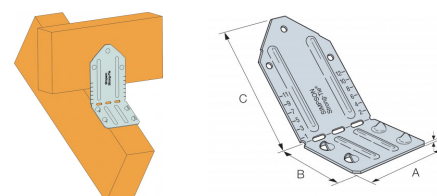
Key Features

- Structural valley connection.
- Single sided for new construction or retro fit.
- Field adjustment for pitch. Adjustable between 10 and 40 degrees.
- Eliminates bottom chord bevelling or wedging.
- Reduces valley installation cost.
- Reduces valley truss manufacture cost.
- Suitable for use with 35mm and 47mm wide truss timbers
- The dome holes assist in installing the fasteners into the supporting truss at approximately 45°



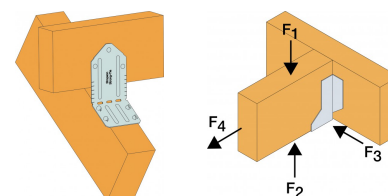
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Technical Data



Product Dimensions

References	Tun / DB nr.	NOB nr.	Dimensions [mm]				Flange B	Flange C	Box Quantity	Weight [kg]
			A	B	C	t	Ø3.8 Dome	Ø4		
VTOR	1862291	51165955	64	51	90	1.2	4	3	100	0.082



Performance Values

References	Number of Fasteners				Characteristic Capacity [kN]		
	Common truss (Flange B)		Valley Truss (Flange C)		$R_{1,k}$		$R_{2,k}$
	Qty	Specification	Qty	Specification	35mm	47mm	
VTOR	4	N3.35x65	3	N3.75x30	6	8	1

1. 35mm and 47mm refers to the thickness of the supporting common truss timbers
2. R_2 loads are applicable to 35mm and 47mm timbers

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Installation

Installation

- Install VTOR with all specified fasteners: 3.35x65mm round wire nails into the supporting truss and 3.75x30mm square twist nails into the valley truss
- Position the VTOR onto the supporting truss and install the 3.35x65mm nail at an angle of 45° through the dome nail holes. (Fig 1)
 - Note: when the supporting truss is 35mm thick, a portion of the nails will be exposed before penetrating into the side of the truss (Fig 3)
- Bend the upper flange of the VTOR to the required angle; position the valley truss against this leg and install the 3.75x30mm nail into the bottom chord of the valley truss (Fig 1)
- Install a VTOR on each of the top chords of the supporting trusses at each intersection of supporting truss and valley truss

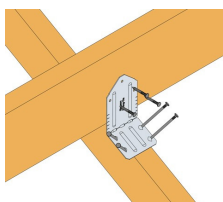


Fig 1: VTOR - Nailing positions

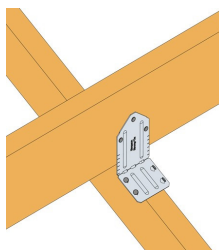


Fig 2: VTOR - All nails installed

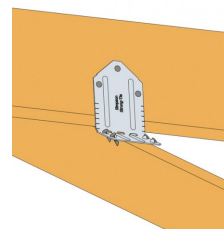


Fig 3: VTOR - View showing correct fastener installation into supporting truss

VTOR
Valley Truss Clip

