

VGT and S/VGT2.5 Variable-Pitch Girder Tiedown

The variable-pitch girder tiedown, S/VGT2.5, is a high-capacity tiedown for single- or multi-ply CFS girder trusses. It attaches with self-drilling screws from the side of the truss. The VGT uses Simpson Strong-Tie® Strong-Drive® SDS Heavy-Duty Connector screws for wood truss applications. They both feature a predeflected crescent washer that allows them to accommodate top-chord pitches up to 8/12.

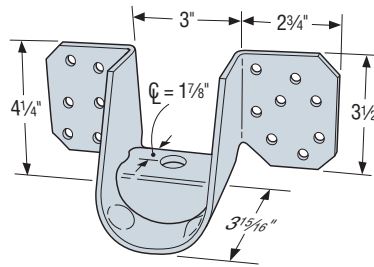
Material: 171 mil (7 ga.)

Finish: Galvanized (G90)

Installation:

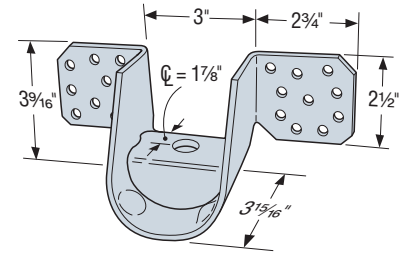
- Use all specified fasteners
- Screw holes are configured to allow for double installation on multi-member girders
- Install washer component (provided) so that top of washer is horizontal and parallel with top of wall

Codes: See p. 13 for Code Reference Key Chart



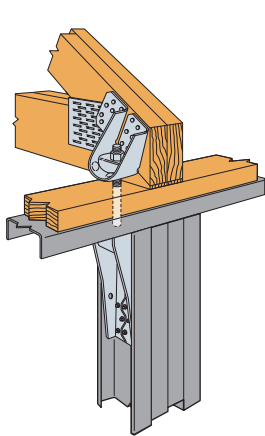
VGT

US Patent: 7,707,785

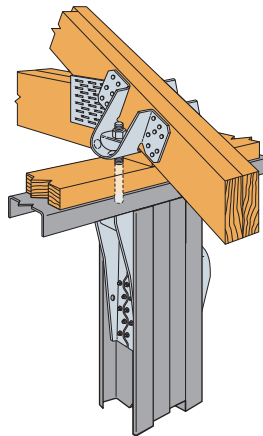


S/VGT2.5

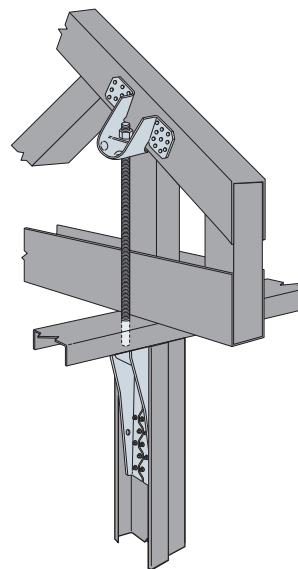
US Patent: 7,707,785



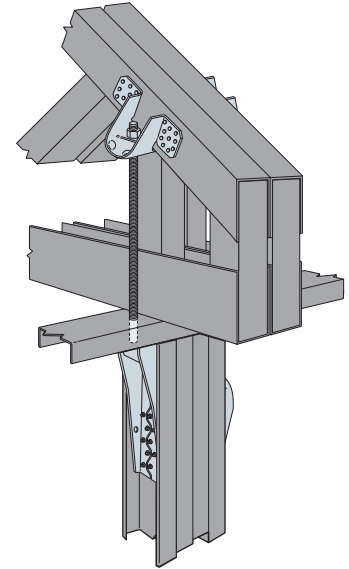
**Typical Hybrid VGTR
Single Installation
with S/HDU4**



**Typical Hybrid VGT
Double Installation
with S/HDU6**

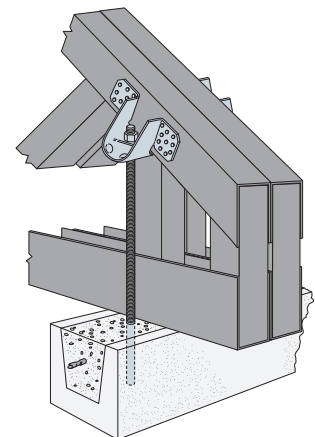


**Typical S/VGT2.5
Single Installation
with HDU6**



**Typical S/VGT2.5
Double Installation
with S/HDU6**

Model No.	Quantity	No. of Truss Plies	Fasteners ⁵		Allowable Uplift Load ² (lb.)		Code Ref.
			Anchor Dia.	Girder Truss	3/12	8/12	
Cold-Formed Steel Connection					54 mil (16 ga.)		
S/VGT2.5 (min.) ⁴	1	1	(1) %	(16) #14	3,050	2,620	—
	2	2	(2) %	(32) #14	6,100	5,240	
S/VGT2.5 (max.)	1	1	(1) %	(20) #14	3,860	3,130	—
	2	2	(2) %	(40) #14	7,720	6,260	
Hybrid Connection					Allowable Uplift Load³ up to 8/12 (lb.)		Code Ref.
					DF/SP (160)	SPF/HF (160)	
VGT	1	2	(1) %	(16) 1/4" x 3" SDS	4,940	3,555	FL
	2	2	(2) %	(32) 1/4" x 3" SDS	7,185	5,175	
	2	3	(2) %	(32) 1/4" x 3" SDS	8,890	6,400	
VGTR/L	1	2	(1) %	(16) 1/4" x 3" SDS	2,230	1,605	FL
	2	2	(2) %	(32) 1/4" x 3" SDS	5,545	3,990	



**Typical S/VGT2.5
Installation in CMU**

1. Designer shall insure attached members are adequately designed to resist applied loads.
2. Straight-line interpolation can be used to determine allowable loads for pitches between 3/12 and 8/12.
3. Allowable loads on wood have been increased 60% for wind or earthquake loading with no further increase allowed; reduce where other load duration factors govern.
4. For (min.) tabulated values, not all screw holes need to be filled. Install screws symmetrically.
5. See the current *Fastening Systems* catalog at strongtie.com for more information on Simpson Strong-Tie fasteners.