THGQ/THGQH Truss Girder Hangers



This product is preferable to similar connectors because of a) easier installation, b) higher loads, c) lower installed cost, or a combination of these features.

A lower cost alternative to bolted hangers, the THGQ and THGQH hangers for multi-ply girder trusses use Simpson Strong-Tie[®] Strong-Drive[®] screws (SDS) to provide high load capacities and easier installation compared to bolts. The SDS screws help transfer the load between the plies of the supporting girder when they penetrate all plies.

THGQ and THGQH models offer minimum and optional maximum fastener quantities to accommodate varying design needs. Allowable loads for various girder web member sizes provide additional installation options.

MATERIAL: THGQ—7 gauge, THGQH—3 gauge FINISH: THGQ—Galvanized, THGQH—Simpson Strong-Tie® gray paint INSTALLATION: • Use all specified fasteners. See General Notes.

- · Can be installed filling round holes only, or filling round and triangle holes for maximum values.
- SDS screws supplied for all round and triangle holes.
- Installation may not require use of all SDS screws.
- All multiple members must be fastened together to act as a single unit.
- The thickness of the supporting girder must be equal to or greater than the screw length. For applications where the length of the supplied screws exceeds the thickness of the supporting girder, 3" or 41/2" screws may be substituted for the longer length screws with no load reduction, or a shim block may be used as approved by the Designer.
- Girders must be adequately laterally braced to prevent excessive displacement due to secondary torsional stresses (*Ref ANSI/TPI 1-2007 Section 7.5.3.5*).
- OPTIONS: THGQH hangers may be skewed 45 degrees, see Hanger Options on pages 181-183. **CODES:** See page 12 for Code Reference Key Chart.





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SIMPSON

Strong-Tie

(THGQH4-SDS6 Similar)

U.S. Patent Pending

Model No.	Dim. (in.)		Max.	Min. Vert.	SDS Fasteners		DF/SP Allowable Loads					SPF/HF Allowable Loads					Code
	w	Н	Depth	Web Size	Face	Joist	Uplift (160)	Floor (100)	Snow (115)	Roof (125)	Wind Down (160)	Uplift (160)	Floor (100)	Snow (115)	Roof (125)	Wind Down (160)	Ref.
THGQ2-SDS3	25/.	16	0,0	2x6	(22) ¼"x3"	(10) ¼"x3"	3600	7920	7920	7920	7920	2590	5700	5700	5700	5700	F23
(Min)	3916	10	2,10	2x8	(28) ¼"x3"		3600	10080	10080	10080	10080	2590	7260	7260	7260	7260	
THGQ2-SDS3	25/	16	2x8	2x6	(22) ¼"x3"	(14) ¼"x3"	4535	9240	9770	9770	9770	3265	6655	7035	7035	7035	
(Max)	J716	10		2x8	(28) ¼"x3"		4535	11760	12435	12435	12435	3265	8465	8955	8955	8955	
THGQH2-SDS3	25/	25	2x10	2x6	(18) ¼"x3"	(12) ¼"x3"	3875	7560	8275	8275	8275	2790	5445	5960	5960	5960	
(Min)	J716	6 ZJ		2x8	(28) ¼"x3"		3875	11760	11950	11950	11950	2790	8465	8605	8605	8605	
THGQH2-SDS3 ,	2540	25	2x10	2x6	(18) ¼"x3"	(26) ¼"x3"	7635	7560	7940	7940	7940	5495	5445	5715	5715	5715	
(Max)	0/16			2x8	(28) ¼"x3"		9900	11760	12350	12350	12350	7130	8465	8890	8890	8890	
THGQ3-SDS4.5	A15/-	16	2x8	2x6	(22) ¼"x4½"	(10) ¼"x4½"	3600	7920	7920	7920	7920	2590	5700	5700	5700	5700	
(Min)	4.716			2x8	(28) ¼"x4½"		3600	10080	10080	10080	10080	2590	7260	7260	7260	7260	
THGQ3-SDS4.5 (Max)	415/16	16	2x8	2x6	(22) ¼"x4½"	(14) ¼"x4½"	4535	9140	9140	9140	9140	3265	6580	6580	6580	6580	
				2x8	(28) ¼"x4½"		4535	11635	11635	11635	11635	3265	8375	8375	8375	8375	
THGQH3-SDS4.5 (Min)	4 ¹⁵ ⁄16	25	2x10	2x8	(32) ¼"x4½"	(12) ¼"x4½"	3875	12565	12565	12565	12565	2790	9045	9045	9045	9045	
				2x10	(38) ¼"x4½"		3875	14920	14920	14920	14920	2790	10740	10740	10740	10740	
THGQH3-SDS4.5 (Max)	415/16	25	2x10	2x8	(32) ¼"x4½"	(26) ¼"x4½"	9900	12980	12980	12980	12980	7130	9345	9345	9345	9345	
				2x10	(38) ¼"x4½"		9900	15415	15415	15415	15415	7130	11100	11100	11100	11100	
THGQH4-SDS6	69/10	25	2v12	2x8	(34) ¼"x6"	(12) 1/"v6"	3875	13875	13875	13875	13875	2790	9990	9990	9990	9990	
(Min)	0/16	20	2712	2x10	(40) ¼"x6"	(12) /4 XU	3875	16320	16320	16320	16320	2790	11750	11750	11750	11750	
THGQH4-SDS6	6%16	25	2x12	2x8	(34) ¼"x6"	(26) ¼"x6"	9900	14280	14335	14335	14335	7130	10280	10320	10320	10320	
(Max)		25		2x10	(40) ¼"x6"		9900	16800	16865	16865	16865	7130	12095	12145	12145	12145	

Allowable uplift loads have been increased 60% for wind or earthquake loading with no further increase allowed; reduce where other loads govern.
Connector must be installed centered on girder vertical webs.

- Simpson Strong-Tie Strong-Drive screws are permitted to be installed through metal truss plates as approved by the Truss Designer, provided the requirements of ANSI/TPI 1-2007 Section 8.9.2 are met (*pre-drilling* 3 required through the plate using a maximum of 5/32" bit).
- SDS screws that penetrate all plies of the supporting girder (screws must penetrate a minimum of 1" into the last truss ply) may also be used to



transfer the load through all the plies of the supporting girder. When SDS screws do not penetrate all plies of the supporting girder truss, supplemental SDS screws at the hanger locations may be required to transfer the load to the truss plies not penetrated by the face

The supporting girder truss must have adequate thickness to accommodate the screw length, so that the screw does not protrude out the back of the girder. 3° or $4\frac{1}{2^{\circ}}$ long SDS screws

may be substituted for the longer SDS screws with no load reduction. 6. For installations to LSL, use SDS ½"x3" and use the DF/SP table loads.



Vertical Web Face Fasteners