

THGB/THGBH/THGW/THGBV/THGBHV/THGWV

Truss and SCL-to-Truss Girder Hangers

These high-capacity, welded hangers are designed for attaching two-ply, three-ply or four-ply-sized structural composite lumber (SCL) and multi-ply girder trusses to a girder truss.

The THGBV and THGB offer optional installation with Strong-Drive® SDS Heavy-Duty Connector screws, while the bolted THGBHV, THGWV, THGBH and THGW offer higher load capacities.

For the THGBV/THGBHV/THGWV series, two bucket heights are available for each width to accommodate a range of SCL sizes. Options for skewing or dropping the buckets for conditions where the SCL joist is lower than the girder bottom chord provide additional design flexibility for a variety of SCL-to-truss connections.

See the THGQ/THGQH series for a lower-cost alternative that uses Strong-Drive SDS Heavy-Duty Connector screws instead of bolts and offers high-load capacities.

Material: 3 gauge

Finish: Simpson Strong-Tie gray paint

Installation:

- Use all specified fasteners; see General Notes.
- All **multi-ply** members must be fastened together to act as a single unit.
- Maximum 11 $\frac{7}{8}$ " bottom chord in the carrying member to allow for the minimum bolt end distance.
- Bolts must be installed symmetrically when using fewer than eight bolts on the eight-bolt backplate.
- Girders must be adequately laterally braced to prevent excessive displacement due to secondary torsional stresses (Ref. ANSI/TPI 1-2014 Section 7.5.3.5).
- Shall be attached to a two-ply girder truss to allow for required minimum screw penetration. See footnote 4.

Options:

Skewed Seat

- THGB/THGBH/THGBV/THGBHV hangers can be skewed to a maximum of 45°. The maximum allowable down load and uplift load for skew is 0.87 of the table load.

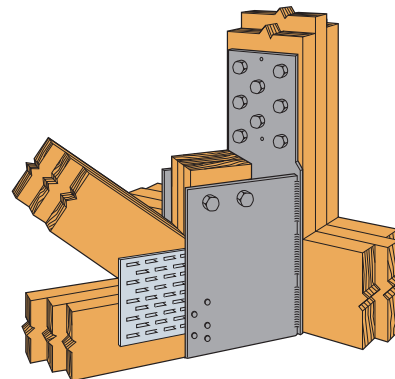
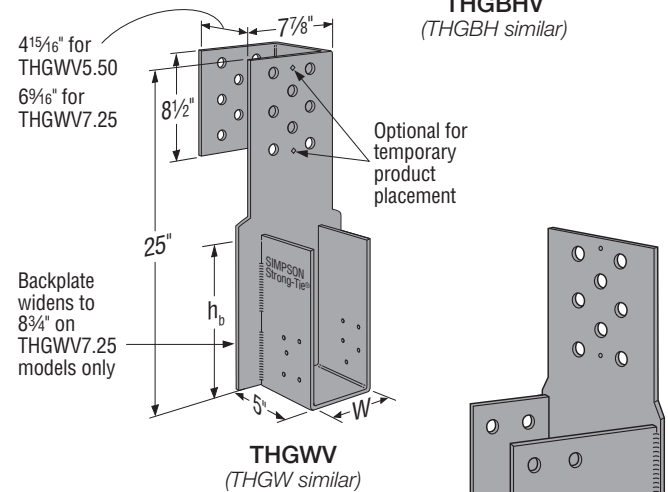
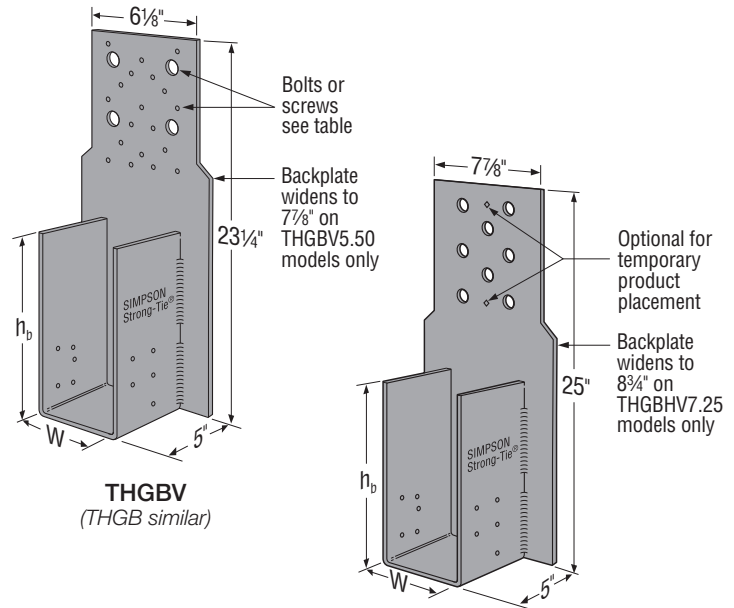
Dropped Bucket

- THGBV/THGBHV backplates can be extended to allow for up to a 6" dropped bucket.
- Allowable loads are 100% of the table loads.
- Order as "X" version, specify the total backplate height, BK_PLT, equal to the hanger height (H) plus the dropped bucket amount (d_b). Ex: a THGBV3.62/9 with a 4" dropped bucket would have a total backplate height of 27 $\frac{1}{4}$ ".

Codes: See p. 13 for Code Reference Key Chart

Web Applications:

Visit app.strongtie.com/hs to access our Hanger Selector web application.

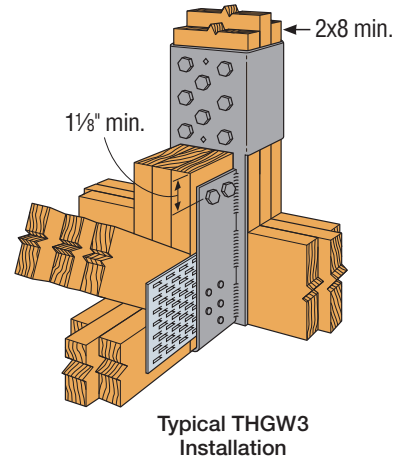



Typical THGBH Installation
Skewed Left

THGB/THGBH/THGW/THGBV/THGBHV/THGWV

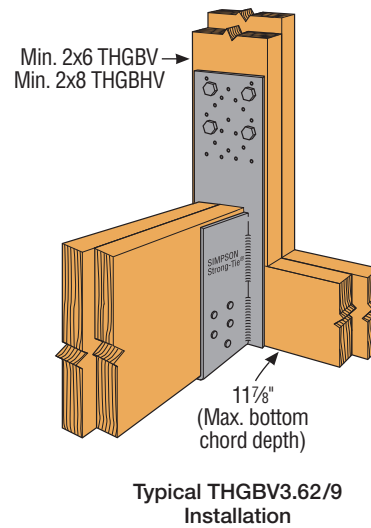
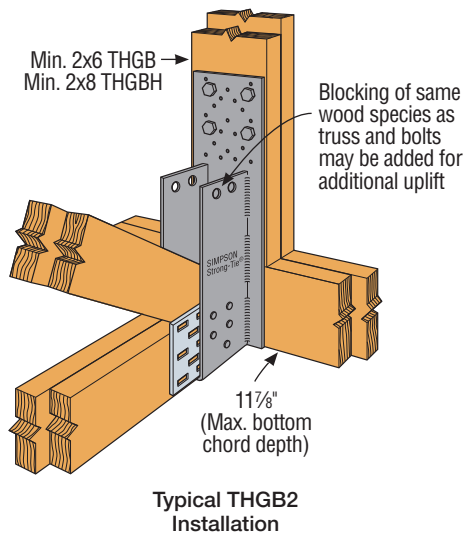
Truss and SCL-to-Truss Girder Hangers (cont.)

Joist Dimensions (in.)		Model No.	Hanger Dimensions (in.)			
Width	Depth		W	h _b		
3½	9¼ – 14	THGBV3.62/9	3½	9		
		THGBHV3.62/9		9		
	11¼ – 20	THGBV3.62/11		11	11	
		THGBHV3.62/11			11	
5¼	9¼ – 14	THGBV5.50/9	5½	9		
		THGBHV5.50/9			9	
		THGWV5.50/9				9
	11¼ – 20	THGBV5.50/11		11		
		THGBHV5.50/11			11	
		THGWV5.50/11				11
7	9¼ – 14	THGBHV7.25/9	7¼	9		
		THGWV7.25/9		9		
	11¼ – 20	THGBHV7.25/11		11	11	
		THGWV7.25/11			11	





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THGB/THGBH/THGW/THGBV/THGBHV/THGWV

Truss and SCL-to-Truss Girder Hangers (cont.)

Plated Truss Connectors

Model No.	Beam Width (in.)	Fasteners (in.)		Length of Bolt in Carrying Member	DF/SP Allowable Loads					SPF/HF Allowable Loads					Code Ref.
		Carried Member	Carrying Member		Uplift (160)	Floor (100)	Snow (115)	Roof (125)	Wind (160)	Uplift (160)	Floor (100)	Snow (115)	Roof (125)	Wind (160)	
THGBV3.62/9 THGBV3.62/11	3½	(10) 0.148 x 3	(4) ¼ MB	3	2,570	6,030	6,835	7,375	8,715	2,570	5,160	5,840	6,290	7,320	
				4½		6,910	7,780	8,350	8,715		6,385	7,185	7,320	7,320	
				6		6,910	7,780	8,350	8,715		6,400	7,200	7,320	7,320	
			(19) ¼ x 3 SDS	—		7,980	8,675	8,675	8,675		5,700	6,245	6,245	6,245	
THGBHV3.62/9 THGBHV3.62/11	3½	(10) 0.148 x 3	(8) ¼ MB	3	2,570	10,105	10,345	10,505	10,915	2,570	7,465	7,675	7,815	8,285	
				4½		10,915	10,915	10,915	10,915		9,165	9,165	9,165	9,165	
				6		10,915	10,915	10,915	10,915		9,165	9,165	9,165	9,165	
THGBV5.50/9 THGBV5.50/11	5¼	(10) 0.148 x 3	(4) ¼ MB	3	2,570	6,030	6,835	7,375	8,715	2,570	5,160	5,840	6,290	7,320	
				4½		6,910	7,780	8,350	8,715		6,385	7,185	7,320	7,320	
				6		6,910	7,780	8,350	8,715		6,400	7,200	7,320	7,320	
			(19) ¼ x 3 SDS	—		7,980	8,675	8,675	8,675		5,700	6,245	6,245	6,245	
THGBHV5.50/9 THGBHV5.50/11	5¼	(10) 0.148 x 3	(8) ¼ MB	3	2,570	10,915	10,915	10,915	10,915	2,570	9,165	9,165	9,165	9,165	
				4½		12,665	12,665	12,665	12,665		10,500	10,640	10,640	10,640	
				6		12,815	12,815	12,815	12,815		10,500	10,710	10,765	10,765	
THGBHV7.25/9 THGBHV7.25/11	7	(10) 0.148 x 3	(4) ¼ MB	3	2,570	6,040	6,850	7,390	8,715	2,570	5,165	5,845	6,295	7,320	
				4½		6,910	7,780	8,350	8,715		6,385	7,185	7,320	7,320	
				6		6,910	7,780	8,350	8,715		6,400	7,200	7,320	7,320	
THGBHV7.25/9 THGBHV7.25/11	7	(10) 0.148 x 3	(6) ¼ MB	3	2,570	9,065	10,010	10,010	10,010	2,570	7,750	8,410	8,410	8,410	
				4½		10,010	10,010	10,010	10,010		8,410	8,410	8,410	8,410	
				6		10,010	10,010	10,010	10,010		8,410	8,410	8,410	8,410	
THGBHV7.25/9 THGBHV7.25/11	7	(10) 0.148 x 3	(8) ¼ MB	3	2,570	10,915	10,915	10,915	10,915	2,570	9,165	9,165	9,165	9,165	
				4½		13,830	15,060	15,060	15,060		12,650	12,650	12,650	12,650	
				6		13,830	15,060	15,060	15,060		12,650	12,650	12,650	12,650	
THGWV5.50/9 THGWV5.50/11	5¼	(10) 0.148 x 3	(8) ¼ MB	4½	2,570	21,320	21,835	21,835	21,835	2,570	18,340	18,340	18,340	18,340	
THGWV7.25/9 THGWV7.25/11	7	(10) 0.148 x 3	(8) ¼ MB	6	2,570	24,165	24,165	24,165	24,165	2,570	20,300	20,300	20,300	20,300	

- Allowable loads are based on a SCL (LVL, PSL, or LSL) carried member with an allowable $F'_{c\perp}$ of 750 psi and equivalent Specific Gravity of 0.50 or higher.
- Uplift loads have been increased for earthquake or wind loading with no further increase allowed. Reduce where other loads govern.
- A three-ply carrying member is required for the THGWV5.50/9 and THGWV5.50/11; a four-ply carrying member is required for the THGWV7.25/9 and THGWV7.25/11.
- Strong-Drive® SDS Heavy-Duty Connector screws require a minimum two-ply (3") carrying member.
- Bolts and Strong-Drive SDS Heavy-Duty Connector screws (not included) may be installed through metal truss connector plates as approved by the Truss Designer, provided the requirements of ANSI/TPI 1-2014, Sections 7.5.3.4 and 8.9.2 are met.
- Wind (160) is a download rating.
- To achieve published loads, install bolts into the girder truss with the nut on the opposite side of the hanger with a standard-cut washer (except THGWVs). Standard-cut washers are required for THGBV and THGBHV.
- Fasteners:** Nail dimensions are listed diameter by length. SDS screws are Simpson Strong-Tie Strong-Drive SDS Heavy-Duty Connector screws. See pp. 23–24 for fastener information.

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THGB/THGBH/THGW/THGBV/THGBHV/THGWV

Truss and SCL-to-Truss Girder Hangers (cont.)

Model No.	Width (W) (in.)	Fasteners (in.)		Length of Bolt in Carrying Member	DF/SP Allowable Loads					SPF/HF Allowable Loads					Code Ref.
		Carried Member	Carrying Member		Uplift (160)	Floor (100)	Snow (115)	Roof (125)	Wind (160)	Uplift (160)	Floor (100)	Snow (115)	Roof (125)	Wind (160)	
THGB2	3 ⁵ / ₁₆	(10) 0.148 x 3 and (2) 3/4 MB	(4) 3/4 MB	3	9,250	6,030	6,840	7,375	9,250	7,765	5,160	5,845	6,290	7,770	FL
				4 1/2	9,700	6,915	7,780	8,350	9,350	8,145	6,390	7,185	7,320	7,855	
				6	9,700	6,915	7,780	8,350	9,350	8,145	6,405	7,200	7,320	7,855	
THGB2	3 ⁵ / ₁₆	(10) 0.148 x 3 and (2) 3/4 MB	(19) 1/4 x 3 SDS	—	9,510	7,980	9,175	9,510	9,510	6,845	5,700	6,605	6,845	6,845	
THGBH2	3 ⁵ / ₁₆	(10) 0.148 x 3 and (2) 3/4 MB	(8) 3/4 MB	3	9,700	10,105	10,345	10,505	10,915	8,145	7,465	7,675	7,815	8,285	
				4 1/2	9,700	10,105	10,345	10,505	10,915	8,145	8,490	8,690	8,825	9,165	
				6	9,700	10,105	10,345	10,505	10,915	8,145	8,490	8,690	8,825	9,165	
THGB3	4 ¹ / ₁₆	(10) 0.148 x 3 and (2) 3/4 MB	(4) 3/4 MB	3	9,250	6,030	6,840	7,375	9,250	7,765	5,160	5,845	6,290	7,770	
				4 1/2	9,700	6,915	7,780	8,350	9,350	8,145	6,390	7,185	7,320	7,855	
				6	9,700	6,915	7,780	8,350	9,350	8,145	6,405	7,200	7,320	7,855	
THGB3	4 ¹ / ₁₆	(10) 0.148 x 3 and (2) 3/4 MB	(19) 1/4 x 3 SDS	—	9,510	7,980	9,175	9,510	9,510	6,845	5,700	6,605	6,845	6,845	
THGBH3	4 ¹ / ₁₆	(10) 0.148 x 3 and (2) 3/4 MB	(8) 3/4 MB	3	9,700	10,915	10,915	10,915	10,915	8,145	9,165	9,165	9,165	9,165	
				4 1/2	9,700	12,665	12,665	12,665	12,665	8,145	10,500	10,640	10,640	10,640	
				6	9,700	12,815	12,815	12,815	12,815	8,145	10,500	10,710	10,765	10,765	
THGBH4	6 ⁹ / ₁₆	(10) 0.148 x 3 and (2) 3/4 MB	(4) 3/4 MB	3	9,270	6,040	6,850	7,390	9,270	7,785	5,165	5,845	6,295	7,785	
				4 1/2	9,700	6,915	7,780	8,350	9,350	8,145	5,810	7,185	7,320	7,855	
				6	9,700	6,915	7,780	8,350	9,350	8,145	5,810	7,200	7,320	7,855	
THGBH4	6 ⁹ / ₁₆	(10) 0.148 x 3 and (2) 3/4 MB	(6) 3/4 MB	3	9,700	9,065	10,010	10,010	10,010	8,145	7,750	8,410	8,410	8,410	
				4 1/2	9,700	10,010	10,010	10,010	10,010	8,145	8,410	8,410	8,410	8,410	
				6	9,700	10,010	10,010	10,010	10,010	8,145	8,410	8,410	8,410	8,410	
THGBH4	6 ⁹ / ₁₆	(10) 0.148 x 3 and (2) 3/4 MB	(8) 3/4 MB	3	9,700	10,915	10,915	10,915	10,915	8,145	9,165	9,165	9,165	9,165	
				4 1/2	9,700	13,830	15,060	15,060	15,060	8,145	12,650	12,650	12,650	12,650	
				6	9,700	13,830	15,060	15,060	15,060	8,145	12,650	12,650	12,650	12,650	
THGW3-3 ⁶	4 ¹ / ₁₆	(10) 0.148 x 3 and (2) 3/4 MB	(8) 3/4 MB	4 1/2	9,700	20,630	20,630	20,630	20,630	8,145	17,330	17,330	17,330	17,330	
6				9,700	20,630	20,630	20,630	20,630	8,145	17,330	17,330	17,330	17,330		
THGW4-3 ⁶	6 ⁹ / ₁₆	(10) 0.148 x 3 and (2) 3/4 MB	(8) 3/4 MB	4 1/2	9,700	22,840	22,840	22,840	22,840	8,145	19,185	19,185	19,185	19,185	
THGW4-4 ⁶				6	9,700	22,840	22,840	22,840	22,840	8,145	19,185	19,185	19,185	19,185	

- Uplift loads have been increased for earthquake or wind loading with no further increase allowed. Reduce where other loads govern.
- A three-ply carrying member is required for the THGW3-3 and THGW4-3; a four-ply carrying member is required for the THGW3-4 and THGW4-4. For all other models, a minimum two-ply carrying member is required.
- Strong Drive® SDS Heavy-Duty Connector screws require a minimum two-ply (3") carrying member.
- Bolts and Strong Drive SDS Heavy-Duty Connector screws (not included) may be installed through metal truss connector plates as approved by the Truss Designer, provided the requirements of ANSI/TPI 1-2014, Sections 7.5.3.4 and 8.9.2 are met.
- (10) 0.148" x 3" nails for the carried member will achieve the maximum downloads. Uplift loads are 2,570 lb. for DF/SP and 2,210 lb. for SPF/HF. To achieve maximum uplift, install nails and bolts listed in the table.
- Loads for THGW models require that the supported member have minimum 2x6 end verticals to ensure end-grain bearing. Contact Simpson Strong-Tie for loads when horizontal members are bearing in the hanger seat.
- Wind (160) is a download rating.
- To achieve published loads, install bolts into the girder truss with the nut on the opposite side of the hanger with a standard-cut washer (except THGWs). Standard-cut washers are required for THGB and THGBH.
- Fasteners:** Nail dimensions are listed diameter by length. SDS screws are Simpson Strong-Tie Strong-Drive SDS Heavy-Duty Connector screws. See pp. 23–24 for fastener information.