

FGTR/LGT/VGT Retrofit Girder Tie-Downs



The LGT, VGT and FGTR products are moderate to high load capacity girder tie-downs for new or retrofit applications.

LGT connectors provide a low profile connection to the wall for easy installation of drywall. Simple to install and can be installed on the inside or outside of the wall.

The Variable Girder Tie-down (VGT) is a higher capacity alternative to the LGT and MGT for girder trusses. It attaches with Simpson Strong-Tie® Strong-Drive® screws (SDS) to the side of truss and features a predeflected crescent washer that allows it to accommodate top chord pitches up to 8:12. The VGT is also available with one flange concealed for attachment to trusses with no tail.

The Face Mount Girder Tie-Down (FGTR) is a non-pitch specific girder tie-down that offers the highest uplift capacity for retrofit applications. The FGTRHL/R is designed for corner hip applications.

MATERIAL: VGT—7 gauge; LGT2—14 gauge; LGT3/LGT4—12 gauge; FGTR—Straps: 7 gauge, Plate: 3 gauge

FINISH: VGT, LGT—Galvanized; FGTR—Powder Coated

INSTALLATION: • Use all specified fasteners. See General Notes.

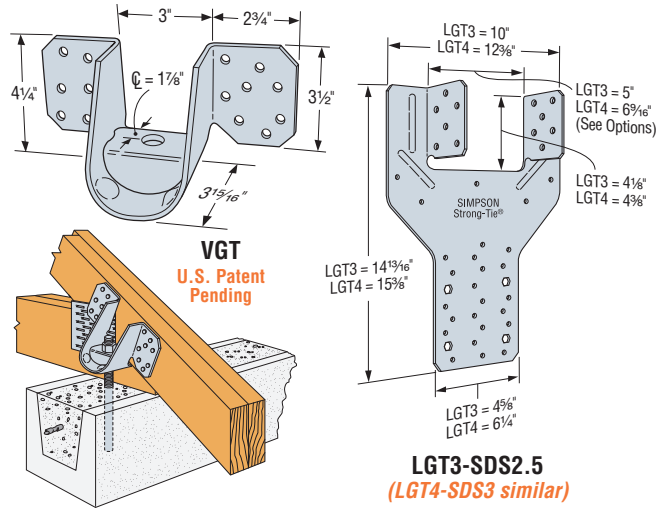
- Connectors attached using Titen® screws shall have hex heads.
- To achieve the loads listed in the table below, the product shall be attached to a grouted and reinforced block wall or a reinforced concrete wall designed by others to transfer the high concentrated uplift loads to the foundation.
- SDS screws included with LGT3, VGT Series and FGTR Series.

VGT/FGTR:

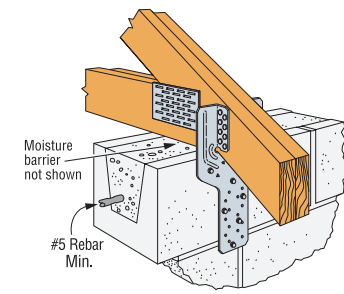
- Screw holes are configured to allow for double installation on a two-ply (minimum) truss.
- The product can be installed in a single application or in pairs to achieve a higher uplift capacity.
- Can be installed on roof pitches up to 8:12 or on a bottom chord designed to transfer the loads.
- FGTR—Only 2 of the 4 holes provided on each strap are required to be filled to achieve the catalog loads. The first Titen HD® anchor ½"x5" (THD) shall be installed a minimum of 4" from the top of the wall. Fasteners shall not be installed in adjacent holes.
- VGT—When installed on trusses with no overhangs, specify VGTR/L.
- VGT—Install washer component (provided) so that top of washer is horizontal as well as parallel with top of wall.

OPTIONS: LGT3 is available with reduced widths of $W = 4\frac{1}{16}"$ – order as LGT3N-SDS2.5.

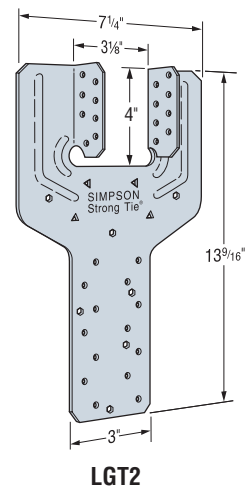
CODES: See page 12 for Code Reference Key Chart.



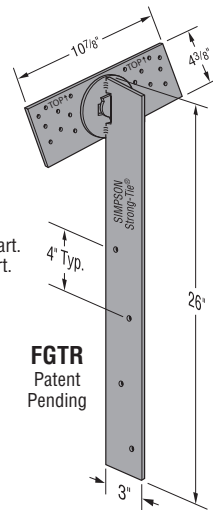
Typical VGT Installation



Typical LGT2 Installation into Masonry (LGT3 similar)



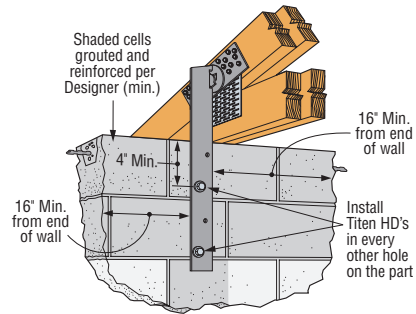
LGT2



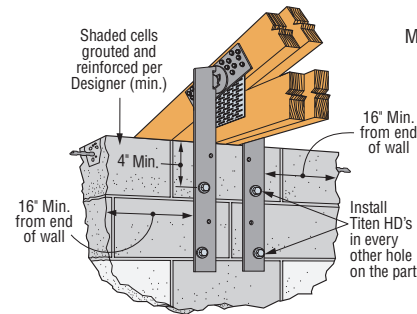
FGTR Patent Pending

Model No.	Qty.	No. of Pliers	Fasteners		Allowable Uplift Load (160)		Code Ref.
			To Girder	To Wall	DF/SP	SPF/HF	
LGT2	1	2 ply	16-16d Sinker	7-¼x2¼ Titen ¹¹	2150	1850	F26
LGT3-SDS2.5	1	3 ply	12-SDS ¼"x2½"	4-¾x5 Titen HD	3285	2365	
LGT4-SDS2.5	1	4 ply	16-SDS ¼"x2½"	4-¾x5 Titen HD	3285	2365	
VGT	1	2 ply min.	16-SDS ¼"x3"	1-5/8 ²	4940	3555	F26
		2 ply min.	32-SDS ¼"x3"	2-5/8 ²	7185	5175	
		3 ply min.	32-SDS ¼"x3"	2-5/8 ²	8890	6400	
VGT/L/R	1	2 ply min.	16-SDS ¼"x3"	1-5/8 ²	2230	1605	F27
			32-SDS ¼"x3"	2-5/8 ²	5545	3990	
FGTR	1	2 ply min.	18-SDS ¼"x3"	2-½x5 Titen HD	5000	3600	F27
			36-SDS ¼"x3"	4-½x5 Titen HD	9400	6770	
FGTRHL/R	1	2 ply min.	18-SDS ¼"x3"	2-½x5 Titen HD	3850	2770	

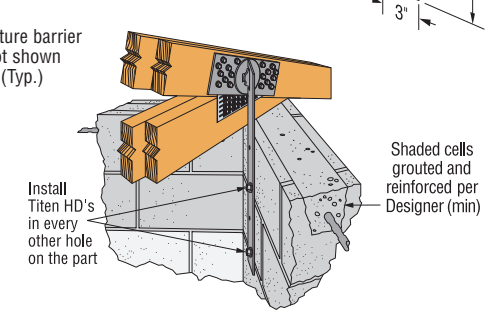
1. Allowable loads have been increased 60% for wind or earthquake loading with no further increase allowed; reduce where other loads govern.
2. To achieve the loads listed for the VGT single and double connector options, anchorage into a 8" wide concrete tie-beam or grouted and reinforced CMU tie-beam can be made using Simpson Strong-Tie® SET Epoxy-Tie® adhesive with a minimum embedment depth of 12", a minimum end distance of 12" and centered in the 8" member. Vertical reinforcement may be required to transfer the loads per Designer.
3. Minimum concrete strength f_c shall be 2500 psi. CMU shall have a minimum grout strength of 2500 psi with standard ASTM C90 units and type N or S mortar.
4. FGTR—Minimum edge distance for Titen HD anchor is 4".
5. FGTR—Titen HD anchors should be spaced in every other hole on the part.
6. FGTR—The Titen HD anchors and SDS screws are provided with the part.
7. LGT2—F₁ load = 700, F₂ load = 170.
8. See page 139 for Titen screw information.
9. Table allowable loads were determined using tested lowest ultimate/3 or fastener calculation values.
10. Products shall be installed such that the Titen screws and Titen HD anchors are not exposed to the weather.
11. For concrete wall applications use ¼"x1¼" Titen screws.
12. **NAILS:** 16d Sinker = 0.148" dia. x 3¼" long. See page 16-17 for other nail sizes and information.



Typical FGTR Single Installation



Typical FGTR Double Installation



FGTRHL Installation (FGTRHR similar)

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Masonry Connectors