

The RFUS is a multi-purpose engineered solution for attaching trusses to concrete or masonry walls. Screw Anchor fastening eliminates mislocated cast-in-place anchor bolts and allows retrofit installations.

Materials: 10 gauge

Finish: Primer

Codes: FL

Installation:

- **Always install in pairs.**
- Use all specified fasteners. See Product Notes, page 18.
- Designer shall be responsible for design of masonry structure, including any required reinforcement.
- MiTek's WS structural wood screws are included with RFUS connector.
- For 1-ply applications, add filler block. Refer to page 287 for wood filler block installation.
- **Moisture barrier may be required.**

MiTek USP Stock No.	Ref. No.	Steel Gauge	No. of Plies ⁶	Fastener Schedule ⁵				DF/SP Allowable Loads (Lbs.)	Code Ref.
				Rafter/Truss		Concrete/Masonry ⁴			
				Qty	Type ⁷	Qty	Screw Anchor ^{2,3}	Uplift 160% ¹	
RFUS	FGTR	10	≥ 2 Ply	12	WS3	4	3/4" x 6"	7100	FL

1) Uplift loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.

2) Use DeWalt 3/4" x 6" Screw-Bolt™+; or equal, installed in accordance with manufacturer's specifications.

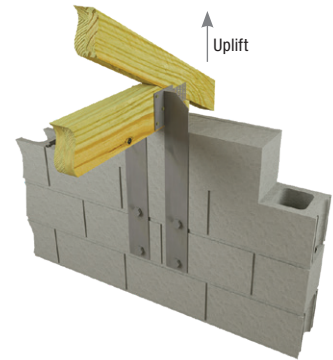
3) DeWalt 3/4" x 6" Screw-Bolt™+ are not supplied with RFUS ties. See page 45 for anchor information.

4) Fasteners shall be installed to fully grouted and reinforced masonry units (CMU) type S or better mortar or reinforced concrete (f'c = 2,500 psi at 28 days).

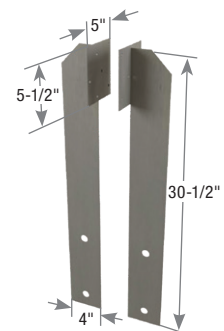
5) Fastener schedule is for two straps used together. The straps shall be installed in pairs.

6) Truss plies shall be fastened together to act as a single unit.

7) MiTek's WS3 structural wood screws are 1/4" dia. x 3" long and are supplied with RFUS connector.



Typical RFUS installation



RFUS

UGTS – 2-screw anchor shorter design when space is limited

USC – 4-screw anchor high load design

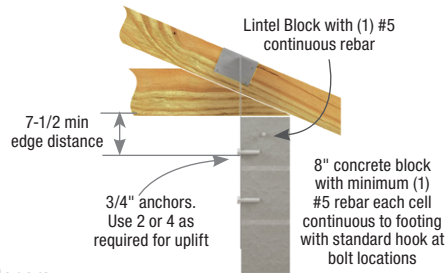
Materials: 10 gauge

Finish: Primer

Codes: FL

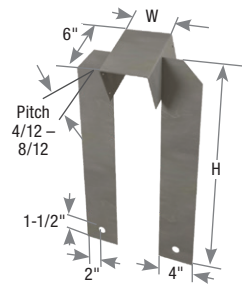
Installation:

- Use all specified fasteners. See Product Notes, page 18.
- Place connector over truss or rafter and fasten with specified fasteners.
- Designer shall be responsible for design of masonry structure, including any required reinforcement.
- For 2-ply applications, add filler block. Refer to page 287 for wood filler block installation.
- Works with heel heights up to 14".
- **Moisture barrier may be required.**

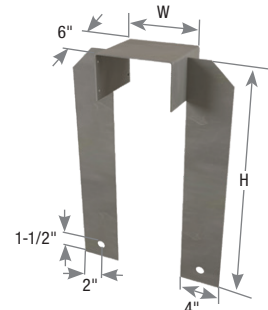


Typical USC53 installation

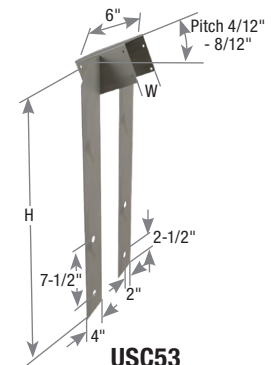
UGTS Similar



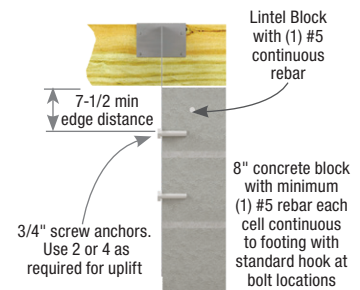
UGTS63



UGTS4F

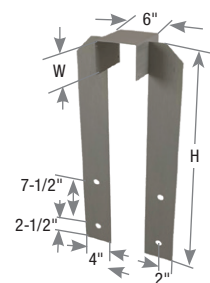


USC53



Typical USC3F installation

UGTS similar



USC3F

Description	MiTek USP Stock No.	Ref. No.	Steel Gauge	Dimensions (in)		Fastener Schedule				DF/SP Allowable Loads (Lbs.)	Code Ref
				W	H	Rafter/ Truss		Concrete/ Masonry Wall		Uplift 160% ¹	
						Qty	Type ⁵	Qty	Screw Anchor ^{2,3,4}		
3-Ply Flat	UGTS3F	--	10	4-3/4	23	8	16d	2	3/4" x 6"	7813	FL
	USC3F	--	10	4-3/4	30-1/2	8	16d	2 4	3/4" x 6"	7813 10133	
4-Ply Flat	UGTS4F	--	10	6-1/2	23	8	16d	2	3/4" x 6"	7813	
	USC4F	--	10	6-1/2	30-1/2	8	16d	2 4	3/4" x 6"	7813 10133	
4/12 pitch	UGTS43	--	10	4-3/4	23	8	16d	2	3/4" x 6"	7813	
	UGTS44	--	10	6-1/2	23	8	16d	2	3/4" x 6"	7813	
	USC43	--	10	4-3/4	30-1/2	8	16d	2 4	3/4" x 6"	7813 10133	
	USC44	--	10	6-1/2	30-1/2	8	16d	2 4	3/4" x 6"	7813 10133	
5/12 pitch	UGTS53	--	10	4-3/4	23	8	16d	2	3/4" x 6"	7813	
	UGTS54	--	10	6-1/2	23	8	16d	2	3/4" x 6"	7813	
	USC53	--	10	4-3/4	30-1/2	8	16d	2 4	3/4" x 6"	7813 10133	
	USC54	--	10	6-1/2	30-1/2	8	16d	2 4	3/4" x 6"	7813 10133	
6/12 pitch	UGTS63	--	10	4-3/4	23	8	16d	2	3/4" x 6"	7813	
	UGTS64	--	10	6-1/2	23	8	16d	2	3/4" x 6"	7813	
	USC63	--	10	4-3/4	30-1/2	8	16d	2 4	3/4" x 6"	7813 10133	
	USC64	--	10	6-1/2	30-1/2	8	16d	2 4	3/4" x 6"	7813 10133	
7/12 pitch	UGTS73	--	10	4-3/4	23	8	16d	2	3/4" x 6"	7813	
	UGTS74	--	10	6-1/2	23	8	16d	2	3/4" x 6"	7813	
	USC73	--	10	4-3/4	30-1/2	8	16d	2 4	3/4" x 6"	7813 10133	
	USC74	--	10	6-1/2	30-1/2	8	16d	2 4	3/4" x 6"	7813 10133	
8/12 pitch	UGTS83	--	10	4-3/4	23	8	16d	2	3/4" x 6"	7813	
	UGTS84	--	10	6-1/2	23	8	16d	2	3/4" x 6"	7813	
	USC83	--	10	4-3/4	30-1/2	8	16d	2 4	3/4" x 6"	7813 10133	
	USC84	--	10	6-1/2	30-1/2	8	16d	2 4	3/4" x 6"	7813 10133	

- 1) Uplift loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.
- 2) Use DeWalt 3/4" dia. x 6" Screw-Bolt™+; or equal, installed in accordance with manufacturer's specifications.
- 3) DeWalt 3/4" dia. x 6" Screw-Bolt™+ are not supplied with ties. See page 45 for anchor information.
- 4) Fasteners shall be installed to fully grouted and reinforced masonry units (CMU) type S or better mortar or reinforced concrete (f'c = 2,500 psi at 28 days).
- 5) **NAILS:** 16d nails are 0.162" dia. x 3-1/2" long.

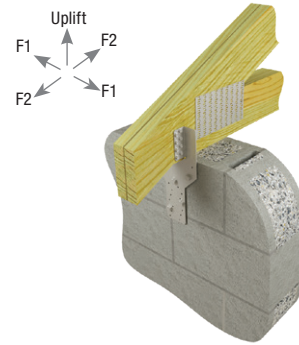
The LUGT series is an adaptable tiedown for girder trusses and offers several installation options to accommodate different framing conditions. It is an ideal retrofit solution to reinforce truss connections to transfer high wind loads to supporting walls and can be used on either concrete or CMU block walls. Sizes available for 2-ply, 3-ply and 4-ply trusses.

Materials: See chart

Finish: G90 galvanizing

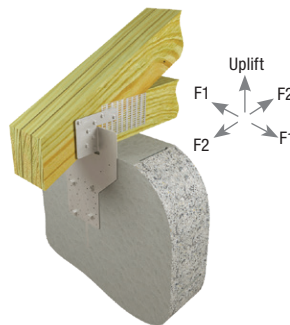
Installation:

- Use all specified fasteners. See Product Notes, page 18.
- All large fastener holes must be filled with specified fasteners to achieve loads listed in the chart. Smaller fastener holes are for girder-to-stud applications (reference page 257) and do not need to be filled when used for concrete/masonry installations.
- MiTek's WS structural wood screws are included with LUGT3 and LUGT4.
- **For concrete and masonry applications, a moisture barrier may be required, check local building code.**

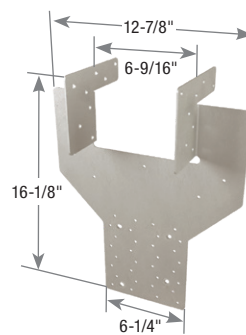


**Typical LUGT2
masonry installation**

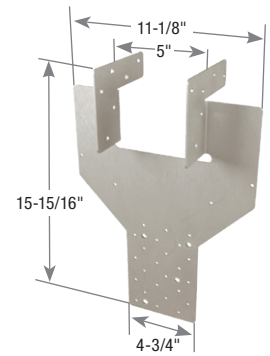
LUGT2



**Typical LUGT4
masonry installation**
(LUGT3 similar)



LUGT4



LUGT3

MiTek USP Stock No.	Ref. No.	Steel Gauge	No. of Plies	Fastener Schedule ²				DF/SP			S-P-F			Code Ref.
				Rafter/Truss		CMU/Concrete Wall ⁴		Allowable Loads (Lbs.) ¹			Allowable Loads (Lbs.) ¹			
								Uplift	F1	F2	Uplift	F1	F2	
				Qty	Type ^{5,6}	Qty	Screw Anchor ³	160%	160%	160%	160%	160%	160%	
Concrete/Masonry Installation														
LUGT2	LGT2	14	2	16	10d	5	1/4" x 3"	1655	1015	475	1460	790	475	--
LUGT3	LGT3-SDS2.5	12	3	12	WS25	4	3/8" x 5"	3380	--	--	3380	--	--	
LUGT4	LGT4-SDS3	12	4	16	WS3	4	3/8" x 5"	3380	--	--	3380	--	--	

1) Allowable loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.

2) Additional anchorage products to be designed by others.

3) Use DeWalt Screw-Bolt™+ 1/4" dia. x 3" or 3/8" dia. x 5" screw anchors; or equal, installed in accordance with manufacturer's specification. Screw Anchors must be ordered separately, see page 44 for anchor information.

4) Fasteners must be installed in fully grouted and reinforced concrete masonry (f'm = 1,500 psi) or reinforced concrete (f'c = 2,500 psi).

5) MiTek's WS25 structural wood screws are 1/4" dia. x 2-1/2" long (supplied with LUGT3) and WS3 structural wood screws are 1/4" dia. x 3" long (supplied with LUGT4).

6) **NAILS:** 10d nails are 0.148" dia. x 3" long.

New products or updated product information are designated in **blue font**.

MUGT15 Girder Tiedown

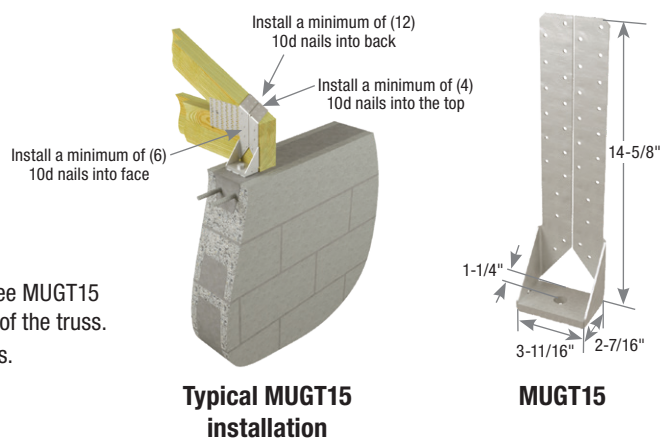
Truss & Rafter

Designed for higher uplift resistance for concrete block construction. The MUGT15 can accommodate variable truss bearing depths.

Materials: 12 gauge
Finish: G90 galvanizing
Codes: IBC, FL, LA

Installation:

- Use all specified fasteners. See Product Notes, page 18.
- When straps are wrapped over the truss, install nails in backside of truss. See MUGT15 installation diagram for minimum nail requirements into the face and on top of the truss.
- If installed straight-up with no wrap over the top of the truss, fill all nail holes.
- **Moisture barrier may be required.**



MiTek USP Stock No.	Ref. No.	Steel Gauge	Mounting Condition	Fastener Schedule ³						DF/SP Allowable Loads (Lbs.)	S-P-F Allowable Loads (Lbs.)	Code Ref.
				Anchor Bolt ^{2,4}	Rafter/Truss ⁵							
					Qty	Dia (in)	Top Qty	Face Qty	Back Qty	Type		
Concrete/Masonry Installation												
MUGT15	MGT	12	Face-Max	1	5/8	--	28	--	10d	4240	3730	IBC, FL, LA
			Top-Min	1	5/8	4	6	12	10d	3945	3160	

1) Allowable loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.

2) MiTek CIA-GEL 7000-C may be used to anchor 5/8" threaded rod when installed into an 8" wide reinforced masonry or concrete wall. With 12" minimum embedment, the MUGT15 will achieve loads listed in table. Reinforcement is to be specified by the certified designer.

3) Additional anchorage products to be designed by others.

4) Designer must specify anchor bolt type, length, and embedment.

5) **NAILS:** 10d nails are 0.148" dia. x 3" long.

New products or updated product information are designated in blue font.

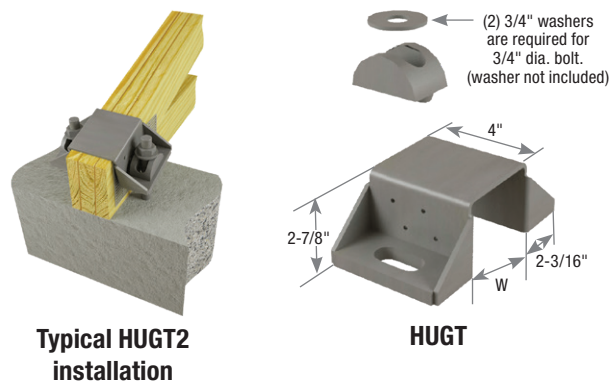
HUGT Girder Tiedowns

The HUGT series high uplift girder tiedowns can be installed on beams and top chords of trusses with slopes from 0° to 34°.

Materials: 7 gauge
Finish: Primer
Codes: FL

Installation:

- Use all specified fasteners. See Product Notes, page 18.
- Install the HUGT over the beam or truss (see "W" dimension on chart for appropriate width).
- Attached members shall be designed to resist applied loads.
- **Moisture barrier may be required.**



MiTek USP Stock No.	Ref. No.	Steel Gauge	W (in)	O.C. Dim Between Anchors (in)	Fastener Schedule ^{3,4,5}				DF/SP Allowable Loads (Lbs.) ^{1,2}	S-P-F Allowable Loads (Lbs.) ^{1,2}	Code Ref.
					Threaded Rod		Girder				
					Qty	Dia (in)	Qty	Type	Uplift 160%	Uplift 160%	
Concrete/Masonry Installation											
HUGT2	HGT-2	7	3-5/16	5-3/4	2	3/4	8	10d	9575	6925	FL
HUGT3	HGT-3	7	4-15/16	7-3/8	2	3/4	8	10d	9860	7805	
HUGT4	HGT-4	7	6-7/8	9	2	3/4	8	10d	9860	7790	

1) Allowable loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.

2) Listed loads apply where roof pitch is between 3:12 and 8:12.

3) Additional anchorage products to be designed by others.

4) Designer must specify anchor bolt type, length, and embedment.

5) **NAILS:** 10d nails are 0.148" dia. x 3" long.

New products or updated product information are designated in blue font.

The LUGT series is an adaptable tiedown for girder trusses and offers several installation options to accommodate different framing conditions. It is an ideal retrofit solution to reinforce truss connections to transfer high wind loads to supporting walls. Sizes available for 1-ply, 2-ply, 3-ply and 4-ply trusses.

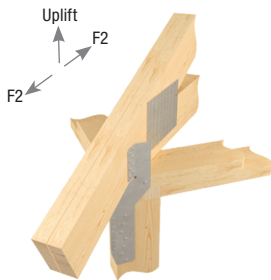
Materials: See chart

Finish: G90 galvanizing

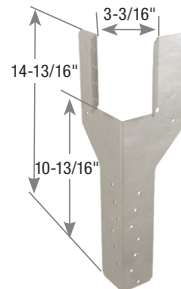
Codes: See chart for code references

Installation:

- Use all specified fasteners. See Product Notes, page 18.
- All fastener holes must be filled with specified fasteners to achieve loads listed in the chart. Large fastener holes are for concrete/masonry installations (reference page 253) and do not need to be filled when used for girder-to-stud applications.
- MiTek's WS structural wood screws are included with LUGT3 and LUGT4.



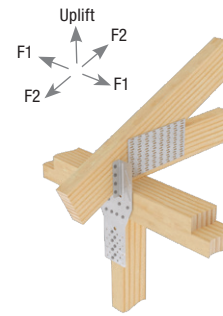
Typical LUGTC2 corner hip installation



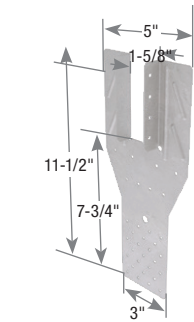
LUGTC2



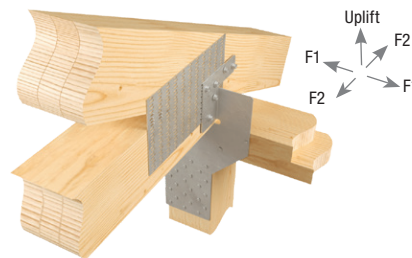
Typical LUGT1 offset stud installation
(See footnote #4)



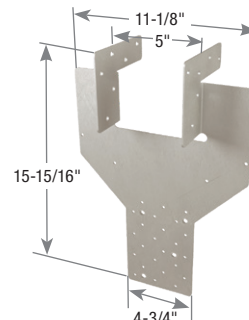
Typical LUGT1 installation



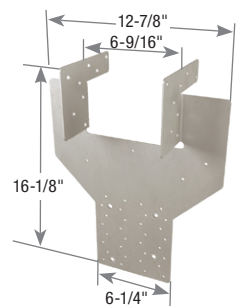
LUGT1



Typical LUGT3 installation
(LUGT4 similar)



LUGT3



LUGT4

No. of Plies	MiTek USP Stock No.	Ref. No.	Steel Gauge	Fastener Schedule ^{2,3,7,8}						DF/SP			S-P-F			Code Ref.
				Rafter/Truss		Plate		Stud		Allowable Loads (Lbs.) ¹			Allowable Loads (Lbs.) ¹			
				Qty	Type	Qty	Type	Qty	Type	Uplift ⁴ 160%	F1 160%	F2 160%	Uplift ⁴ 160%	F1 160%	F2 160%	
Wood-to-Wood Installation																
1	LUGT1	H10S	18	8	8d x 1-1/2	8	8d x 1-1/2	7	8d x 1-1/2	1045	600	175	920	470	175	--
2	LUGT2	LGT2	14	16	10d	2	10d	14	10d	2020	880	495	1780	685	495	IBC, FL, LA
	LUGTC2	--	14	16	10d	2	10d	14	10d	2020	455	--	1780	355	--	
3	LUGT3	LGT3-SDS2.5	12	12	WS25	4	16d Sinker	24	16d Sinker	3500	1980	890	3080	1575	665	--
4	LUGT4	LGT4-SDS3	12	16	WS3	5	16d Sinker	32	16d Sinker	4725	--	--	4160	--	--	--

1) Allowable loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.

2) Additional anchorage products to be designed by others.

3) For proper installation, the number of studs must be equal-to or greater-than the number of roof truss plies.

4) The LUGT1 can be installed with the stud offset from the rafter a maximum of 1" (center-to-center) for a reduced allowable uplift load of **955-lb (DF/SP)** and **840-lb (S-P-F)**.

5) Fasteners must be installed in fully grouted and reinforced concrete masonry ($f'm = 1,500$ psi) or reinforced concrete ($f'c = 2,500$ psi).

6) Use DeWalt Screw-Bolt™+ 1/4" dia. x 3" or 3/8" dia. x 5" screw anchors; or equal, installed in accordance with manufacturer's specification.

7) MiTek's WS25 structural wood screws are 1/4" dia. x 2-1/2" long (supplied with LUGT3) and WS3 structural wood screws are 1/4" dia. x 3" long (supplied with LUGT4).

8) **NAILS:** 8d x 1-1/2 are 0.131" dia. x 1-1/2" long, 10d nails are 0.148" dia. x 3" long, 16d Sinkers are 0.148" dia. x 3-1/4" long,

New products or updated product information are designated in **blue font**.

MUGT Girder Tiedown

Truss & Rafter

Designed for higher uplift resistance for wood frame construction.
The MUGT15 can accommodate variable truss bearing depths.

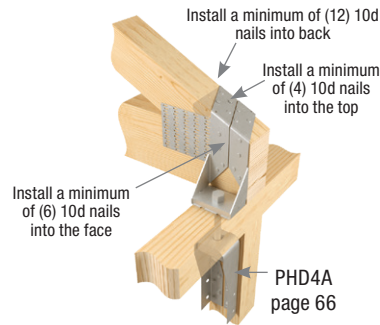
Materials: 12 gauge

Finish: G90 galvanizing

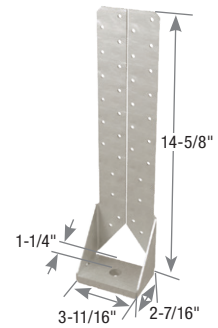
Codes: IBC, FL, LA

Installation:

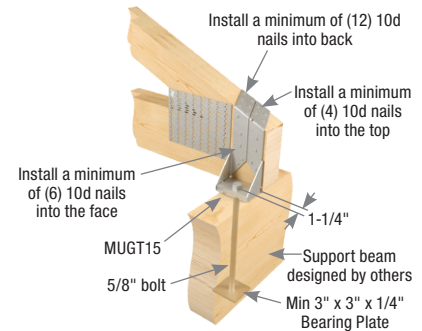
- Use all specified fasteners. See Product Notes, page 18.
- When straps are wrapped over the truss, install nails in backside of truss. See MUGT15 installation diagram for minimum nail requirements into the face and on top of the truss.
- If installed straight-up with no wrap over the top of the truss, fill all nail holes.
- **Moisture barrier may be required.**



**Typical MUGT15
top-min installation
with PHD4A**



MUGT15



**Typical MUGT15
connection to support beam**

MiTek USP Stock No.	Ref. No.	Steel Gauge	Mounting Condition	Fastener Schedule ²						DF/SP Allowable Loads (Lbs.)	S-P-F Allowable Loads (Lbs.)	Code Ref.
				Rod/Bolt ³		Rafter/Truss ⁴						
				Qty	Dia (in)	Top Qty	Face Qty	Back Qty	Type			
				Wood-To-Wood Installation						Uplift 160% ¹	Uplift 160% ¹	
MUGT15	MGT	12	Face-Max	1	5/8	--	28	--	10d	4240	3730	IBC, FL, LA
			Top-Min	1	5/8	4	6	12	10d	3945	3160	

1) Allowable loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.

2) Additional anchorage products to be designed by others.

3) Designer must specify anchor bolt type, length, and holdown device.

4) **NAILS:** 10d nails are 0.148" dia. x 3" long.

New products or updated product information are designated in **blue font**.

HUGT Girder Tiedowns

The HUGT series high uplift girder tiedowns can be installed
on beams and top chords of trusses with slopes from 0° to 34°.

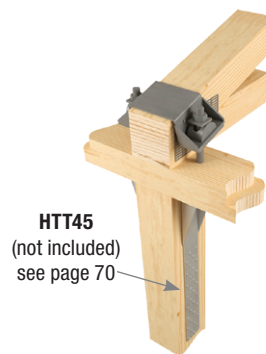
Materials: 7 gauge

Finish: Primer

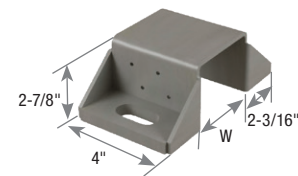
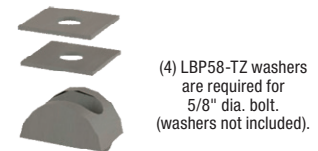
Codes: FL

Installation:

- Use all specified fasteners. See Product Notes, page 18.
- Install the HUGT over the beam or truss (see "W" dimension on chart for appropriate width).
- Install (4) LBP58-TZ washers for (2) 5/8" tension rod/bolts.
- Attached members shall be designed to resist applied loads.
- **Moisture barrier may be required.**



**Typical HUGT3
installation with HTT45's**



HUGT

MiTek USP Stock No.	Ref. No.	Steel Gauge	W (in)	O.C. Dim Between Anchors (in)	Fastener Schedule ^{3,5}						DF/SP Allowable Loads (Lbs.) ^{1,2}	S-P-F Allowable Loads (Lbs.) ^{1,2}	Code Ref.
					Anchor Washers		Threaded Rod		Girder				
					Qty	Type	Qty	Dia (in)	Qty	Type	Uplift 160%	Uplift 160%	
					Wood-to-Wood Installation								
HUGT2	HGT-2	7	3-5/16	5-3/4	4	LBP58-TZ	2	5/8	8	10d	9575	6925	FL
HUGT3	HGT-3	7	4-15/16	7-3/8	4	LBP58-TZ	2	5/8	8	10d	9860	7805	
HUGT4	HGT-4	7	6-7/8	9	4	LBP58-TZ	2	5/8	8	10d	9860	7790	

1) Allowable loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.

2) Listed loads apply where roof pitch is between 3:12 and 8:12.

3) Additional anchorage products to be designed by others.

4) Designer must specify anchor bolt type, length, and holdown device.

5) **NAILS:** 10d nails are 0.148" dia. x 3" long.

New products or updated product information are designated in **blue font**.

The Universal Girder Tiedown, UGTQ, is a high capacity tiedown designed to resist uplift loads on multi-ply roof trusses. The UGTQ installs with MiTek's WS structural wood screws and is fastened on one side for single connector installations or opposite sides for two connector installations. The UGTQ is available in left and right models for installation near the end of girders.

Features and Benefits:

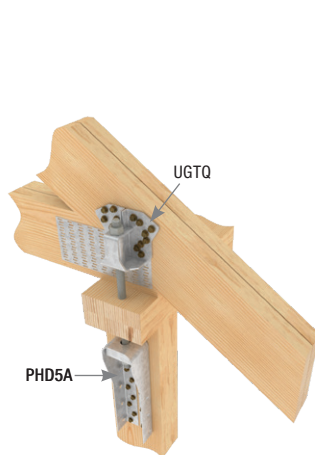
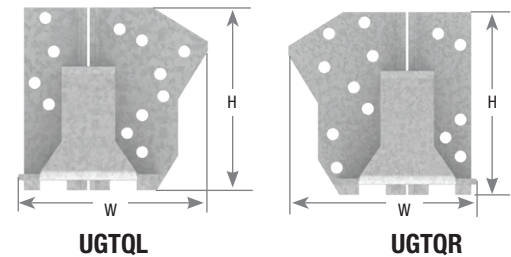
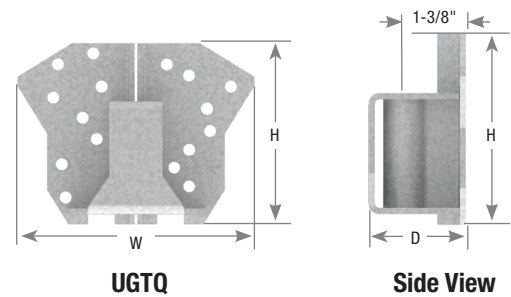
- UGTQs may be installed as a single connector or in pairs
- May be installed elevated from top plate
- Can be installed on trusses and beams with top chord slopes up to 8/12
- May be used with holdown device, bearing plate or embedded/epoxy rod

Materials: 10 gauge

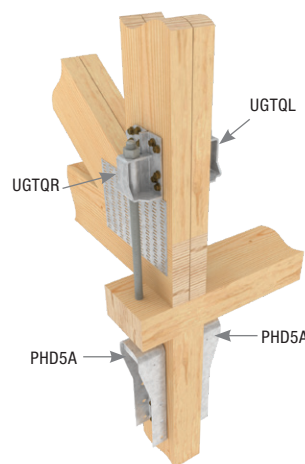
Finish: G90 galvanizing

Installation:

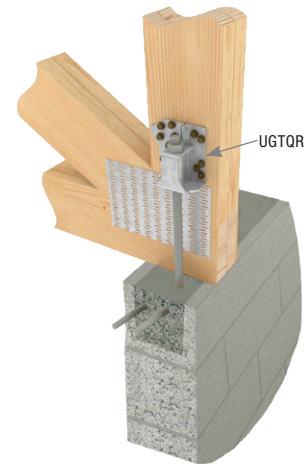
- Use all specified fasteners.
- MiTek's WS3 structural wood screws, 1/4" dia. x 3" long, are supplied with UGTQ tiedowns.
- Left and right connectors shall be installed as shown.
- UGTQL/R shall be installed a minimum 1/2" from the end of the supported member.



Typical UGTQ single installation with PHD5A



Typical UGTQL/R double installation with PHD5A



Typical UGTQR masonry installation (right shown)

MiTek USP Stock No.	Ref. No.	Steel Gauge	Dimensions (in)			Min. No. of Plies ⁵	Qty of UGTQs	Fastener Schedule				DF/SP	Code Ref.
			W	H	D			Connecting Rod		Truss/Rafter ⁵		Allowable Loads (Lbs) ^{1,2,3,6}	
								Qty	Type	Qty	Type ⁴	Uplift 160%	
UGTQ	--	10	5-9/16	4-1/4	2-1/8	2	1	1	5/8" Rod	16	WS3	5175	--
							2	2		32		9690	
UGTQL	--	10	4-1/4	4-1/4	2-1/8	2	1	1	5/8" Rod	13	WS3	3070	
							2	2		25		7175	
UGTQR	--	10	4-1/4	4-1/4	2-1/8	2	1	1	5/8" Rod	12	WS3	3070	
							2	2		25		7175	

1) Allowable loads are for one UGTQ or UGTQL/R installed on one side of a 2-ply minimum truss/rafter (Qty of UGTQs listed as 1) or one UGTQ or UGTQL/R installed on each side of a 2-ply minimum truss/rafter (Qty of UGTQs listed as 2).

2) Uplift loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.

3) Designer must specify the connection from the connecting rod to the supporting structure.

4) MiTek's WS3 structural wood screws are 1/4" dia. x 3" long and are included with UGTQ connectors.

5) Truss/rafter plies shall be fastened together to act as a single unit.

6) Anchorage into concrete/masonry must be designed by a designer.

New products or updated product information are designated in **blue font**.