

Deck collapses are often caused by failure of the connection where the deck is attached to the main structure due to little or no lateral capacity. ADTT-TZ is an Adjustable Deck Tension Tie designed to effectively transfer the out of plane lateral loads of the deck to the house structure.

Features:

- Exceeds “Hold-down Device” requirements per 2018 IRC, Section 507.9.2 [Figure R507.9.2(2)]
- Adjustable design allows lag screw installation at variable distance below deck joist
- 2-hole break-out washer (BO-W) will work with multiple screw sizes
- Blocking extensions not required

Materials: 14 gauge

Finish: G-185 galvanizing

Codes: See chart for code references

Patents: U.S. Patent No. 9,809,974

Installation:

- Install with MiTek WS8-EXT structural wood screw or 3/8" HDG lag screw. WS8-EXT or 3/8" HDG lag screws may be installed adjacent or up to 4-3/8" below deck joist (see Figure A).
- Drive screw horizontally and aligned vertically with the deck joist into the wall top plate of the main (house) structure.
- Install four (4) of the specified joist fasteners into vertical legs. (Two (2) on each side of deck joist).
- Secure front brace with six (6) specified joist fasteners.
- Re-tighten the WS8-EXT or 3/8" HDG lag screw as needed to fully engage with the ADTT-TZ. **DO NOT OVERDRIVE.** Note: Minimum 3" thread penetration required for proper installation of WS8-EXT or HDG lag screw.
- For detailed installation instructions refer to MiTek-US.com.

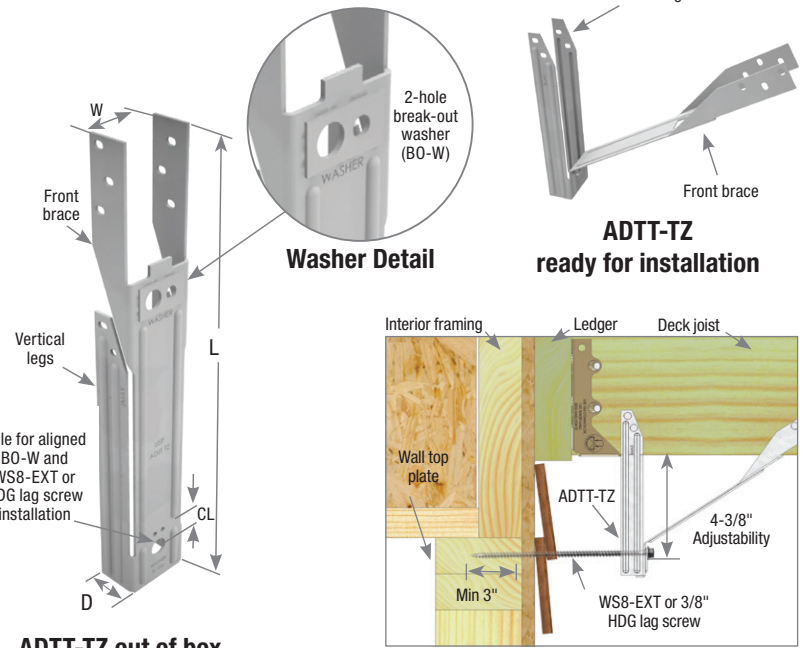
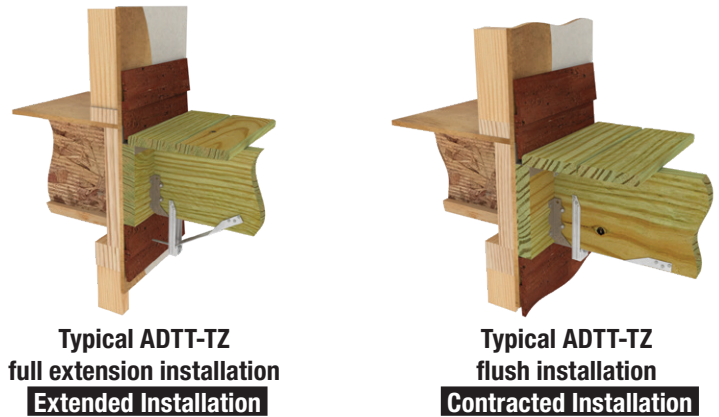


Figure A

MiTek USP Stock No.	Ref. No.	Steel Gauge	Dimensions (in)				Fastener Schedule				Installation Type ¹	DF/SP Allowable Tension (Lbs.)		S-P-F Allowable Tension (Lbs.)		Corrosion Finish	Code Ref.
			W	L	D	CL	Wall		Joist			160%	Δ (in) at 160% ²	160%			
							Qty	Type ^{3,4,5}	Qty	Type ^{6,8}							
ADTT-TZ	DTT1Z	14	1-9/16	10-1/2	15/16	3/8	1	3/8" HDG Lag Screw	10	10d x 1-1/2	Contracted	820	0.070	820	IBC, FL, LA		
									10	LL915	Extended	850	0.117	810		--	
									10	LL915	Contracted	820	0.121	780			
											Extended	790	0.114	780			
							1	WS8-EXT	10	10d x 1-1/2	Contracted	830	0.080	780		IBC, FL, LA	
									10	LL915	Contracted	830	0.121	780			
									10	LL915	Contracted	830	0.121	780			
											Extended	790	0.114	780			
ADTT-TZKT ⁷	DTT1Z-KT	14	1-9/16	10-1/2	15/16	3/8	1	WS8-EXT	10	LL915	Contracted	830	0.121	780	--		
									10	LL915	Extended	790	0.114	780			

1) Allowable loads are for the ADTT-TZ installed tight to the bottom of the joist (Contracted) or 4" from bottom of joist to ADTT-TZ bend line (Extended).
 2) Deflections are derived from static, monotonic load tests of devices connected to DF wood members with specified fasteners.
 3) WS8-EXT is a 1/4" dia. x 8" long double barrier coated screw sold by MiTek and must be ordered separately if not purchasing the kit. The minimum thread penetration into the top plate of the wall framing is 3".
 4) 3/8" HDG Lag Screw is an ASTM A307 Grade A lag screw with a thread diameter of 3/8" and is hot-dip galvanized to ASTM A153 standards. The minimum thread penetration into the top plate of the wall framing is 3". Lag screws are available at your local hardware store and must be purchased separately.

5) Check with your siding manufacturer for recommendations for fastening through your siding material.
 6) LL915 denotes a MiTek LumberLok Screw (#9 x 1-3/8" long) and must be ordered separately if not purchasing the kit.
 7) ADTT-TZKT is a kit with (4) ADTT-TZ packaged with MiTek WS8-EXT structural wood screws and LL915 LumberLok screws.
 8) **NAILS:** 10d x 1-1/2 nails are 0.148" dia. x 1-1/2" long.

Corrosion Finish ■ Stainless Steel ■ Gold Coat ■ HDG ■ Triple Zinc

Deck Tie Back reinforces the connection of rail posts to a deck. Also provides lateral strength of deck-to-ledger attachment by securing deck to house framing.

Materials: 14 gauge

Finish: G-185 galvanizing

Options: See chart for Corrosion Finish Options

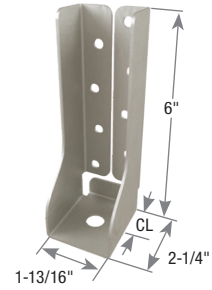
Codes: IBC, FL, LA
IRC R507.1

Installation:

- Use all specified fasteners. See Product Notes, page 18.
- Install with MiTek's THR 1/2" threaded rod or equivalent.
- Drive MiTek's WS15-EXT structural wood screws into joist.
- Re-install threaded rod or anchor bolt. Secure with washer and nut.
- Tighten anchor bolt nuts finger tight to base plus 1/3 to 1/2 additional turns with wrench.



Typical DTB-TZ rail post installation



DTB-TZ



Typical DTB-TZ deck to ledger installation

MiTek USP Stock No.	Ref. No.	Steel Gauge	Dimensions (in)				Fastener Schedule				Allowable Loads (Lbs.)			Corrosion Finish	IBC, FL, LA
			W	L	D	CL	Wall		Joist		DF/SP	S-P-F	Deflection Δ (in) at 160% ²		
							Qty	Bolt ³	Qty	Screws ¹	Tension 160%	Tension 160%			
DTB-TZ	DTT2Z, FSC	14	1-13/16	6	2-1/4	1-1/8	1	1/2	8	WS15-EXT	1835	1510	0.119	Triple Zinc	IBC, FL, LA

1) MiTek's WS15-EXT structural wood screws are 1/4" dia. x 1-1/2" long and are included with DTB-TZ Deck Tie-Backs.
 2) Deflections are derived from static, monotonic load tests of devices connected to DF wood members with specified fasteners.
 3) **Minimum ASTM A307 bolt or 1/2" threaded rod with cut washer and hex nut.**
 New products or updated product information are designated in **blue font**.

Corrosion Finish ■ Stainless Steel ■ Gold Coat ■ HDG ■ Triple Zinc

The CSH-TZ concealed stringer hanger provides a method of connecting a stair stringer with a hidden hanger. The seat of the hanger is adjustable to match the slope of the stair stringer.

The reversible design allows the connector to be used on the left, right, or interior stringers. The CSH-TZ may be used with MiTek's SCA Stair Angles for a complete, easy-to-use stair framing solution.

Materials: 18 gauge

Finish: G-185 galvanizing

Options: See chart for Corrosion Finish Options

Codes: IBC, FL, LA

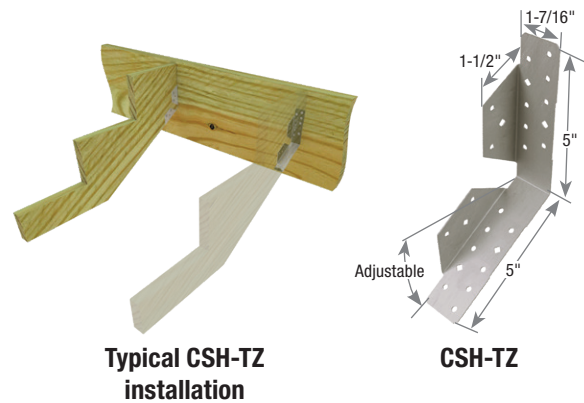
Patents: U.S. Patent No. 7,631,463

Installation:

- Use all specified fasteners. See Product Notes, page 18.
- **Bend angle only once.**

Steps:

1. Attach CSH-TZ to header with tabs positioned towards the inside of the stringer member.
2. Adjust the seat of the CSH-TZ to match the slope of the stringer member. Diamond shaped holes in the connector allow temporary installation of wood screws to aid in installation of the CSH-TZ.
3. Install 10d (0.148") x 1-1/2" HDG nails into the stringer and rim/band joist.



MiTek USP Stock No.	Ref. No.	Steel Gauge	Fastener Schedule ^{2,3}					DF/SP Allowable Loads (Lbs.)				S-P-F/Hem Fir Allowable Loads (Lbs.)				Corrosion Finish	Code Ref.
			Rim/Band Joist		Stringer			100%	115%	125%	Uplift 160%	100%	115%	125%	Uplift 160%		
			Qty	Type	Wide Face Qty	Narrow Face Qty	Type										
CSH-TZ	LSCZ	18	8	10d x 1-1/2 HDG	4	1	10d x 1-1/2 HDG	890	890	890	370	725	725	725	305	IBC, FL, LA	

- 1) Uplift loads are increased 60% for wind or seismic loads; no further increase shall be permitted.
 - 2) Stainless steel ring shank nails must be used with stainless steel connectors to achieve tabulated allowable loads.
 - 3) **NAILS:** 10d x 1-1/2 HDG nails are 0.148" dia. x 1-1/2" long.
- New products or updated product information are designated in **blue font**.

Corrosion Finish ■ Stainless Steel ■ Gold Coat ■ HDG ■ Triple Zinc

Connects deck boards to joists without face nails or screws. Eliminates rust stains on decks, as well as splintering or wood rot caused by screw or nail "craters". The DC50-TZ works like tongue-in-groove flooring and is easy to install. Raised dimples on the clip provide consistent spacing between deck boards.

Materials: 20 gauge

Finish: G-185 galvanizing

Options: See chart for Corrosion Finish Options

Installation:

- Use all specified fasteners. See Product Notes, page 18.
- Fits 1-1/8" or thicker decking.
- Fasten the first deck board onto the joists by toenailing up through the joist below into the deck board. Be sure no sharp points protrude above the deck surface. For subsequent deck board rows, nail DC50-TZ's onto the deck board edge, positioned 2" from each joist. Slide the deck board along the joist until the DC50-TZ "lip" is under the previously laid deck board. Toenail the deck board's exposed edge to the joist. Repeat until decking is completed. The last deck board will require toenailing up from below to secure the outside edge.



Typical DC50-TZ installation



DC50-TZ

MiTek USP Stock No.	Ref. No.	Steel Gauge	Fastener Schedule ^{1,2}		Corrosion Finish	Code Ref.
			Qty	Type		
DC50-TZ	DBT1Z	20	1	8d x 1-1/2 HDG	Green	--

1) Use with 1-1/8" or thicker wood decking.

2) **NAILS:** 8d x 1-1/2 nails are 0.131" dia. x 1-1/2" long.

Corrosion Finish ■ Stainless Steel ■ Gold Coat ■ HDG ■ Triple Zinc

ML Angles

ML angles are multi-purpose angles that install easily with MiTek's WS15 structural wood screws. The staggered fastener pattern allows for back-to-back installations.

Materials: 12 gauge

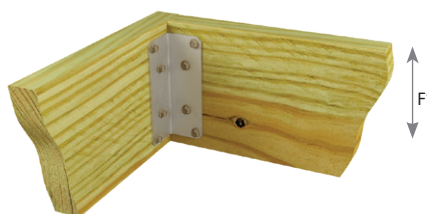
Finish: G-185 galvanizing

Options: See chart for Corrosion Finish Options

Codes: IBC, FL, LA

Installation:

- Use all specified fasteners. See Product Notes, page 18.
- MiTek's WS15 (1/4" dia x 1-1/2" long) structural wood screws are not supplied with ML angles.



Typical ML26-TZ installation (ML24-TZ similar)



ML26-TZ (ML24-TZ similar)

MiTek USP Stock No.	Ref. No.	Steel Gauge	Dimensions (in)		Fastener Schedule ^{2,3}			DF/SP Allowable Loads (Lbs.) ¹				S-P-F Allowable Loads (Lbs.) ¹				Corrosion Finish	Code Ref.
			W	H	Header Qty	Joist Qty	Type	F1				F1					
								100%	115%	125%	160%	100%	115%	125%	160%		
ML24-TZ	ML24Z	12	2	4	3	3	WS15	655	655	655	655	565	650	655	655	Green	IBC, FL, LA
ML26-TZ	ML26Z	12	2	6	4	4	WS15	920	1060	1090	1090	755	865	940	1090	Green	FL, LA

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

2) MiTek's WS15 structural wood screws are 1/4" dia. x 1-1/2" long and are not included with angles.

3) For exterior applications use MiTek's WS15-EXT structural wood screws with exterior coat finish.

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

Corrosion Finish ■ Stainless Steel ■ Gold Coat ■ HDG ■ Triple Zinc