

## **Tension Ties**

## HTT45

The newest addition to our line of Tension Ties is the HTT45 which provides an increased load carrying capacity by utilizing the diamond hole nailing pattern. Tested to ICC-ES AC155, the HTT45's high load carrying capacity exceeds the requirements of the 2012 IRC Section R602.10.6.1 for Method ABW braced wall construction. Easily installs with 10d or 16d nails, the 16d Max nailing can be used when lower deflections are required by design. As an alternate to nail installations, the HTT45KT is sold as a kit with the HTT45 holdown and USP's LumberLok LL930 screws.

## **Features:**

- May be installed above the sill plate (recommended maximum height 18")
- · Easily installs as a retrofit tie to reinforce existing post and shear wall connections.
- Fully integrated 3Ga washer provides positive load transfer to wood framing members.
- No pre-drilling. Installs with 10d or 16d nails.
- A tension tie with predeflected holdown load carrying capacity.
- When installed using USP's 5/8" STB anchor bolt, the HTT45 Tension Tie becomes part of a fully-tested and structurally rated system.
- HTT45KT installs with LumberLok screws (included) for increased design values.

Materials: Body - 10Ga ASTM A653 Galvanized

Washer - 3Ga ASTM A36

Finish: G90 galvanizing

Codes: HTT45 - ESR-3847, FL17324, COLA City RR 26048

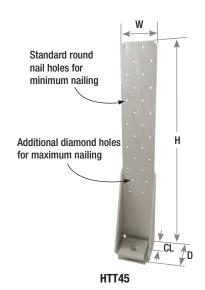
## Installation:

- Use all specified fasteners to attach the strap portion of the connector to the side of stud, post, joist, purlin, or beam. Secure the base to the concrete or masonry wall with specified anchor bolt. A design professional shall specify the type, length, and embedment of the anchor bolt.
- HTT45 Min Fill all round nail holes.
- HTT45 Max Fill all round and diamond nail holes.
- Tighten anchor bolt nut finger tight to base plus 1/3 to 1/2 additional turn with a wrench.
   No additional washer is required.
- LL930 LumberLok screws are included with HTT45KT.

			Dimensions (in)				Fastener Schedule						Allowable Tension		
							Anchor Bolt <sup>4</sup>		chor	Strap <sup>3,8,9</sup>		)	Loads (Lbs.) <sup>1</sup>		
									olt <sup>4</sup>			Nail	DF/SP		
USP		Steel					Min/		Dia.			Spacing			Ctn
Stock No.	Ref. No.	Gauge	W	Н	D	CL	Max	Qty	(in)	Qty	Туре	(in)	160%	∆ (in) <sup>5,6</sup>	Qty
HTT45	HTT4, HTT5	10	2-1/2	16	2	1-3/8	Min	1	5/8	18	10d	1-3/4	4215	0.115	10
											16d x 2-1/2		4160	0.108	
							Max	1	5/8	26	10d		5795	0.101	
											16d x 2-1/2		5005	0.101	
HTT45KT <sup>7</sup>	HTT5KT	10	2-1/2	16	2	1-3/8		1	5/8	26	LL930	1-3/4	5865 <sup>2</sup>	0.113	10

- 1) Allowable loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.
- 2) Allowable load for HTT45KT is 5865 lbs. for S-P-F.
- 3) 16d sinkers may be substituted for the specified 10d common nails with no load reduction.
- 4) The designer must specify anchor bolt type, length and embedment depth.
- 5) Deflections are derived from static, monotonic load tests of devices connected to DF wood members with specified fasteners.
- 6) HTT holdowns raised off of the sill plate may have higher deflection values.
- 7) HTT45KT is sold as a kit and includes (1) HTT45 and (26) LL930 screws.
- 8) LL930 LumberLok Screws are #9 x 2-7/8-in. long.
- 9) **NAILS:** 10d nails are 0.148-in. dia. x 3-in. long, 16d x 2-1/2" nails are 0.162-in. dia. x 2-1/2-in. long.

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





Typical HTT45
Max installation