Taper Ties

High-capacity, reusable, gangform tie that spreads the tie spacing and reduces the number of ties

Taper Ties are used in forming situations where the ties are completely removed from the concrete after the pour has cured. Commonly used with gangform systems, Taper Ties enable contractors to efficiently assemble and strip formwork. Applying waterproof grease evenly on each Taper Tie prior to concrete placement facilitates removal.

Taper Ties are squared-off at each end, allowing the tie to be turned with a wrench during the removal process. The tie can also be struck on the squared-off end of the smaller side with a hammer for removal from the gangform and wall.

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High-capacity Taper Ties reduce the number of ties needed for gangforming.

Taper Ties*				
Part No.	Description	SWL** (lbs)		
TT303412	Taper Tie 30" 1/2:3/4	7,500		
TT363412	Taper Tie 36" 1/2:3/4	7,500		
SBTT423412	Taper Tie 42" 1/2:3/4	7,500		
TT36341	Taper Tie 36" 3/4:1	18,000		
TT42341	Taper Tie 42" 3/4:1	18,000		
TT48341	Taper Tie 48" 3/4:1	18,000		
TT60341	Taper Tie 60" 3/4:1	18,000		
TT361114	Taper Tie 36" 1:1-1/4	34,000		
TT421114	Taper Tie 42" 1:1-1/4	34,000		
TT481114	Taper Tie 48" 1:1-1/4	34,000		
TT601114	Taper Tie 60" 1:1-1/4	34,000		
TT36114112	Taper Tie 36" 1-1/4:1-1/2	50,000		
TT42114112	Taper Tie 42" 1-1/4:1-1/2	50,000		
TT48114112	Taper Tie 48" 1-1/4:1-1/2	50,000		



An assembly consists of the Taper Tie, two Flat Washers, and two Wing Nuts.



Hitting Taper Ties on the squared end will avoid thread damage and stripping difficulty.

TT60114112

Taper Tie 60" 1-1/4:1-1/2



50,000

^{*} Other sizes available on request.

^{**} Safe Working Load (tension) at safety factor of 2:1.

Wing Nuts					
Part No.	Description	SWL* (lbs)			
WN12	Wing Nut 1/2"	9,000			
WN34	Wing Nut 3/4"	18,000			
WN1	Wing Nut 1"	38,000			
WN114	Wing Nut 1-1/4"	52,000			
WN112	Wing Nut 1-1/2"	80,000			



^{*} Safe Working Load (tension) at safety factor of 2:1, but may be limited by Taper Tie capacity.

Flat Washers*					
Part No.	Description	Dimensions			
FW12551316	Flat Washer 1/2" Plate	5" x 5" with 13/16" Hole			
FW12551116	Flat Washer 1/2" Plate	5" x 5" with 1-1/16" Hole			
FW34551316	Flat Washer 3/4" Plate	5" x 5" with 13/16" Hole			
FW34551116	Flat Washer 3/4" Plate	5" x 5" with 1-1/16" Hole			
FW34551516	Flat Washer 3/4" Plate	5" x 5" with 1-5/16" Hole			
FW1551116	Flat Washer 1" Plate	5" x 5" with 1-1/16" Hole			



Installation:

- 1. Slide the proper size flat washer and thread a wing nut on to the coil thread of the <u>larger</u> side on each taper tie.
- 2. Apply waterproof grease that is not affected by the chemicals in concrete onto the tapered surface of each tie.
- 3. Align forms and insert a taper tie through the waler on the back, then guide it through the face, rebar and opposite gang.
- 4. Slide a flat washer on the open side of the taper tie and thread a wing nut, adjusting it as needed until the forms are set in position.
- 5. Once the concrete has been placed and cured, remove the wing nut and flat washer from the smaller end of the taper tie.
- 6. Use a hammer to strike the taper tie on the smaller end to remove it from the gangforms and wall.

Taper Tie Thread Dimensions					
Large End		Small End			
Thread Diameter	Thread Length	Thread Diameter	Thread Length		
3/4"	10"	3/4"	6"		
1"	10"	1"	6"		
1-1/4"	10"	1-1/4"	6"		
1-1/2"	10"	1-1/2"	6"		

^{*} Other sizes available on request.