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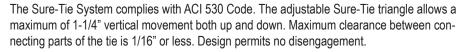


# **Sure-Tie for Steel**



Sure-Tie quickly and accurately pierces insulation and/or wallboard to abut with steel/studs in brick veneer applications.

- One-piece design provides superior strength.
- 12-24 Self Driller.
- Accommodates 1/2" and 5/8" wallboard and various thicknesses of insulation.
- Silver-gray Climaseal® finish resulted in 0% red rust at 1000 hours exposure to ASTM B-117 salt spray testing.



Sure-Tie allows positive contact with steel stud backup. Compression and tension loads in the veneer are transferred to the backup.

High strength barrel and slotted head fabricated from carbon steel. Manufactured and tested in conformance with SAE J78 (self-drilling and tapping screws).

Sure-Tie holds insulation in place, permitting contractors to install  $4' \times 8'$  sheets with ease, saving time, and money.

Sure-Tie meets seismic code requirements by simply adding the WIRE-BOND® welded clip and 9 gauge or 3/16" pencil rod.



### PERFORMANCE DATA

PULLOUT - STEEL STUD								
Measurements in pounds								
20 Gauge	18 Gauge	16 Gauge	14 Gauge	12 Gauge				
365 (1)	722 (1)	931 (1)	1215 (1)	1369 (2)				
462 (1)	730 (1)	962 (1)	1178 (1)	1429 (2)				
412 (1)	653 (1)	986 (1)	1203 (1)	1169 (2)				
438 (1)	700 (1)	957 (1)	1200 (2)	1161 (2)				
318 (1)	594 (1)	976 (1)	1220 (2)	1181 (2)				
399	680	962	1203	1262	Averages			
58	57	21	16	127	Std. Dev.			

<sup>(1)</sup> Pullout from Steel

#### PULLOUT FORCE TEST REPORT

"The Sure-Tie samples were pulled from the steel plates at a rate of 0.2 inches per minute. The plates were flat test plaques, except for the 12 gauge, which was cut from steel decking. The testing was performed using ITW test equipment. ITW personnel operated the test equipment. Trace Laboratories personnel witnessed the testing. The results were recorded and appear in the data section of this report. There were no abnormal occurrences to report".

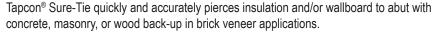
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<sup>(2)</sup> Cap/Anchor Separation

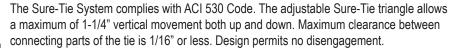


# Tapcon® Sure-Tie for Concrete and Wood





- One-piece design provides superior strength.
- 1-3/4" Tapcon® thread.
- Accommodates 1/2" and 5/8" wallboard and various thicknesses of insulation.
- Blue Climaseal® finish resulted in 0% red rust at 1000 hours exposure to ASTM B-117 salt spray testing.



Tapcon® Sure-Tie allows positive contact with concrete or wood. Compression and tension loads in the veneer are transferred to the backup.

High strength barrel and slotted head fabricated from carbon steel. Manufactured and tested in conformance with SAE J78 (self-drilling and tapping screws).

Tapcon® Sure-Tie holds insulation in place, permitting contractors to install 4' x 8' sheets with ease, saving time, and money.

Tapcon<sup>®</sup> Sure-Tie meets seismic code requirements by simply adding the WIRE-BOND<sup>®</sup> welded clip and 9 gauge or 3/16" pencil rod.



## **PERFORMANCE DATA**

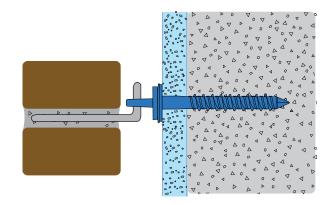
PULLOUT - CONCRETE/CMU (avg. lbs. ult.)					
3300 PSI Concrete (1-1/2" Embedment)	CMU Block (1-1/2" Embedment)				
1435	893				

PULLOUT - WOOD (avg. lbs. ult.)							
1/2" CDX Plywood	3/4" CDX Plywood	7/16" OSB	23/32" OSB	2 x 4 SPF			
350	690	258	385	905			

Tapcon® Sure-Tie Anchors must be installed using all Buildex system components (Tapcon Anchors, Condrive Tools, Drive Socket and Tapcon Drill Bits) in order to qualify for ITW Buildex system support.

Note: Indicated tension failure values were obtained in tests conducted at ITW Buildex. Designated holding power depends on the quality of the substrate material, depth of embedment, and proper hole size. These figures are offered only as a guide and are not guaranteed in any way by Illinois Tool Works, Inc. The figures indicate average ultimate tension failure values. A safety factor of 4:1 or 25% of ultimate value is generally accepted as a safe working load. However, reference should always be made to applicable codes for the specific safe working ratio. All values are basd on close tolerance holes drilled with Buildex Tapcon carbide drill bits. Performance of the Tapcon anchor may vary in extremely hard concrete aggregates. Consult your Buildex representative for further information.

As in the case with all applications, Buildex can only suggest typical fasteners for typical applications and that the connection design is the sole responsibility of the Building Design Engineer, Architect, or otherwise responsible person charged with the design of the connection. For further product information, please contact the nearest Authorized Buildex Distributor or the Buildex Technical Service Department at 1-800-323-0720.





# **INSTALLATION GUIDELINES**

# **STEEL**



Insert drive socket (p/n 1993910) into a 0-2500 RPM screw gun.



Insert Brick Tie Anchor into drive socket.



Apply adequate pressure to drive anchor until seated with head oriented as shown. **CAUTION:** Overdriving of anchor may cause thread stripout and inadequate pullout.

## **CONCRETE/MASONRY**



Place carbide bit into Condrive 500 drill adapter and tighten set screw. Place drill adapter into chuck of a hammer drill. Drill hole a min. of 1/4" deeper than thread length of anchor.



Insert Brick Tie drive socket into Condrive sleeve (3/16" Hex). Slide sleeve over drill adapter.



Insert head of Tapcon Brick Tie into drive socket.



Drive Tapcon Brick Tie Anchor until fully seated and head slot is aligned horizontally as shown.

Note: Overdriving of anchor may cause thread stripout or anchor failure.

## **INSTALLATION GUIDELINES FOR WOOD**

- 1. Insert drive socket into chuck of 0-2000 RPM screw gun.
- 2. Insert Brick Tie Anchor into socket.
- 3. Drive anchor until fully seated and head slot is aligned horizontally. **Note:** Overdriving of anchor may cause thread stripout or anchor failure.

### APPROVALS:

#### **COMMENTS:**