CTP is now part of the PROSOCO family

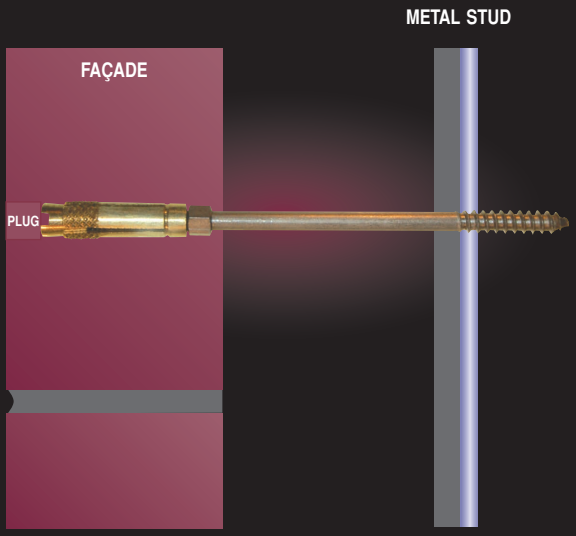
PROSOCO

Secure Existing Brick and Stone Veneers Safely, Efficiently Without Exposed Hardware

CTP GRIP-TIE

We help you get a grip on your façade problems quick and easy!

Usage Shown Here Re-Anchoring Brick Façade to Typical Wood or Metal Stud Back-Up



Re-Attach Existing Brick Veneers with Certainty and Security

- *Add high strength mechanical anchors to an existing brick facade to fortify and stabilize against external forces*
- *No exposed hardware*
- *Delivers 100% performance expectations due to its positive torque gripping activation*
- *No chemicals or disturbing hammering activity*
- *An excellent solution to re-anchor a masonry or stone façade to metal or wood stud, structural steel, tile, block, concrete, and brick*

Mechanical Repair Anchors for Stabilizing Veneers

CTP
CONSTRUCTION TIE PRODUCTS

Construction Tie Products, Inc. is committed to supplying the highest quality masonry tie and construction systems in North America and satisfying all stringent national codes and standards for today's building structures. CTP, Inc. promises to be a reliable product source along with on-time business integrity for all demanding builders. Call anytime for technical assistance or recommendations.

CTP Grip-Tie Mechanical Repair Anchors for Stabilizing Existing Façades

Product Line Description

Typically, masonry façades are intended to resist wind loads. In lieu of tear down or replacement, an existing masonry or terra cotta façade can be fortified by the addition of mechanical ties or anchors. The **CTP Grip-Tie** anchors provide additional façade stability which may be needed to fulfill a myriad of requirements. The **CTP Grip-Tie** selection process evolves by evaluating the type of anchors one can use to satisfy the repair (compatibility) and strengthening criteria. Also, one cannot ignore the means and methods of installation which can also influence the remedial anchor choice.

Post installed **CTP Grip-Tie** repair anchors are available to accomplish the task. When dealing with a repair situation, the as built material quality and current building conditions are often unknown. It is therefore not uncommon that installation criteria and performance qualification be obtained via field tests in order to confirm design assumptions. The **CTP Grip-Tie** mechanical repair anchors consist of a dual expansion anchor for a mechanical connection that grips the back-up and veneer which is then bridged with an anchor rod. The **CTP Grip-Tie** anchor creates formidable gripping strength to the base material to which it is attached. The anchor does not draw walls together, thereby eliminating additional tension stresses between wythes of material. The back-up material can be concrete, metal stud, wood stud, CMU (hollow or grouted), structural steel, or brick. The veneer can be brick, stone, or precast. The **CTP Grip-Tie** anchor assembly is manufactured from corrosion resistant materials which will contribute to the façade's long term durability and design life. The **CTP Grip-Tie** anchorage system has been designed to accommodate easy installation via hand tools or power tools. Combining the strength, generous spacing, and affordable installation technique, the **CTP Grip-Tie** mechanical repair anchor product line is a value reward choice for façade re-anchoring.

CTP Grip-Tie Selection Guide

The following application descriptions will provide a quick CTP Grip-Tie Repair Anchor Guideline when determining the appropriate series tie for veneers greater than 3" thick:

- The **solid back-up** conditions – refer to the **CTP 5000** or **CTP 5000R Series Anchors**
- The **hollow back-up** conditions – refer to the **CTP 5100 Series Anchors**
- The **structural steel back-up** conditions – refer to the **CTP 5200 Series Anchors**
- The **stud (wood or steel) back-up** conditions – refer to the **CTP 5300 Series Anchors**

Anchor Spacing

It is recommended to first check with local building codes for spacing condition requirements for proper masonry tie spacing. Typically, the **CTP Grip-Tie** is spaced at one tie per four square feet of veneer for masonry or concrete back-up conditions. For metal or wood stud back-up, a 16" horizontal by 24" vertical is common spacing. Consult with local design professionals to establish wind load criteria for all scenarios.

Performance

Each construction site is unique and the appropriate use of this product is the responsibility of the engineers, architects, and other professionals who are familiar with the specific requirements of the project. The data reflects results of lab, field and in-house tests and are provided as a guideline for the designer. Site testing is encouraged for verification of load capacity.

CTP
CONSTRUCTION TIE PRODUCTS

www.CTPanchors.com
Phone: (785) 830-7380
Fax: (219) 874-3626

The CTP Grip-Tie Advantage

Mechanical Grip

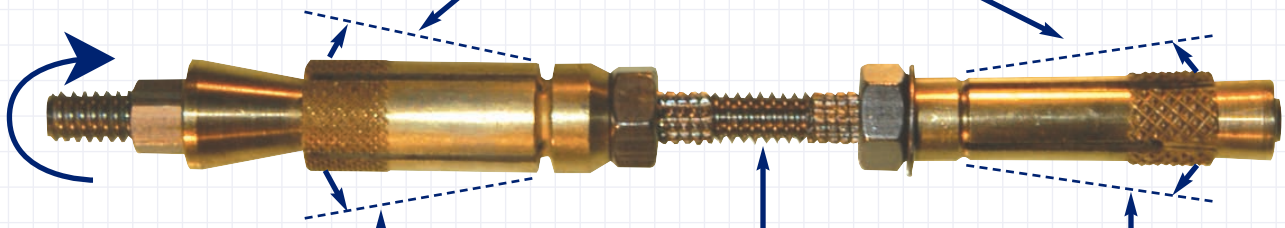
Brass Shield Expanders for Flexible and Durable Gripping Action

Jobsite Quality Control

Mechanical Activation Provides a Means to Inspect During Installation and After by Either Torque Measurement or Tension Testing

Durable Materials

Every Component of the CTP Grip-Tie Anchor Assembly is Manufactured of Corrosion Resistant Materials



Engineered Shaft Design

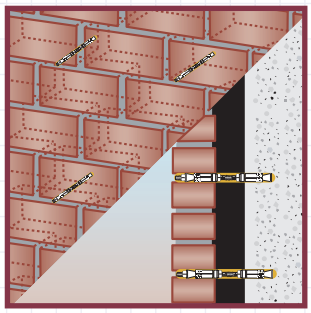
A Stainless Steel Connector for the Back-Up and Veneer Anchorage that Provides for Flexibility During Thermal Cycles and Strength to Resist Live Loads

Stabilizing Grip

The Design of the Anchor Prevents Drawing the Wythes of Material Together Which Prevents Additional Lateral Stresses

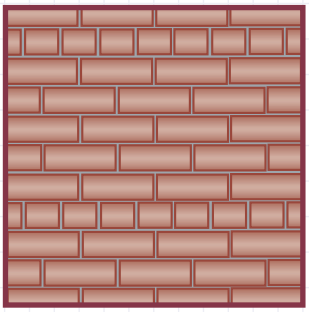
CTP 5100 shown here

Typical Applications



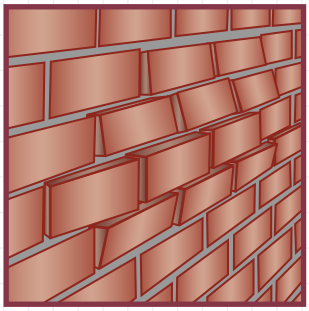
Make It Strong Again!

Brick Veneer Cavity Walls With:
- Insufficient Ties
- Corroded Ties
- Concrete Back-Up
- Metal Stud Back-Up
- Wind-Load Fortification



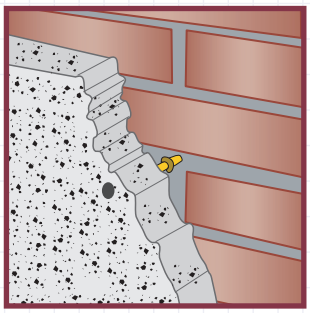
Multi-Tasked!

- Composite Walls Where Header Brick Have Failed
- Soft Brick or Mortar
- Deep Reaching Multi-Wythe Connections



Tough Problems Solved!

- Peripheral Areas Around Bulges in Walls or Areas to be Removed



We Make It Easy!

Non-Brick Façades Such As:
- Limestone
- Granite
- Precast

CTP, Inc. • www.ctpanchors.com • Phone: (785) 830-7380 • Fax: (219) 874-3626

CTP Grip-Tie Tension Capacities With Various Back-Up Material

Back-Up Material

Ultimate Tension Capacity (lbs)

METAL STUD		WOOD				
16 Gauge	18 Gauge	2 x 4	4 x 4	1/2" Plywood	7/16" OSB	1" Sheathing

LIGHT WEIGHT CMU	NORMAL WEIGHT CMU	CONCRETE	SOLID BRICK	CLAY TILE	STRUCTURAL STEEL	GROUTED CMU	SOFT BRICK	CINDER BLOCK
Ultimate Tension Capacity (lbs)								

CTP Anchor Series

CTP Anchor Series	BACK-UP		
CTP 5300R Series	835	500	900	1200	475	320	800
CTP 5300 Series	835	500	900	1200	475	320	800
CTP 5000R Series	N/R	N/R	2000	1200	N/R	N/R	1200	800	N/R
CTP 5000 Series	N/R	N/R	2300	1500	N/R	N/R	1600	1300	N/R
CTP 5100 Series	1000	1100	1500	1200	700	2000 ≥ 5/16"	1100	800	500
CTP 5200 Series	N/R	N/R	N/R	N/R	750	2000 ≤ 5/16"	N/R	N/R	N/R

CTP 5300R Series — OR STEEL — WOOD

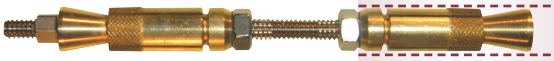
CTP 5300 Series — OR STEEL — WOOD

Typical CTP Grip-Tie Shaft Properties

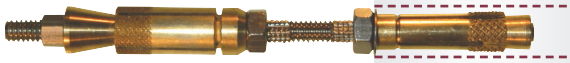
Ultimate Shaft Buckling Strength

SHAFT LENGTH (in)	CAPACITY (lb)
5 1/2	1620
6 1/2	1425
9 1/2	1100
11 1/2	725

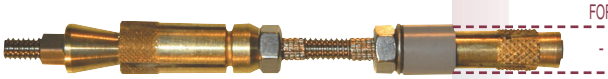
CTP 5000R Series — SOLID MATERIAL — 3/8" DRILL DIAMETER



CTP 5000 Series — SOLID MATERIAL — 1/2" DRILL DIAMETER



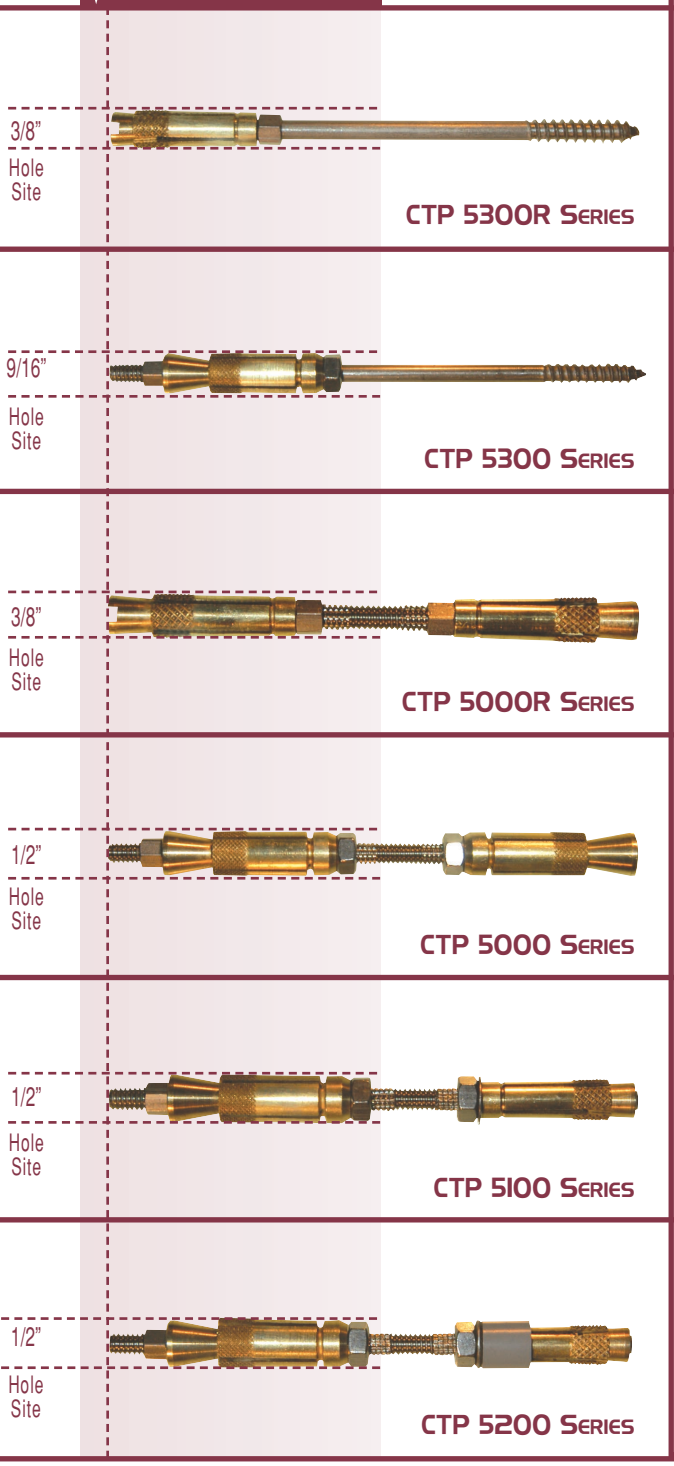
CTP 5100 Series — CMU — 3/8" DRILL DIAMETER



CTP 5200 Series — TILE: 3/8" DRILL DIAMETER FOR TILE — - or - — OR STEEL: 7/16" DRILL DIAMETER FOR STEEL

CTP Grip-Tie Tension/Compression Capacities With Various Veneers

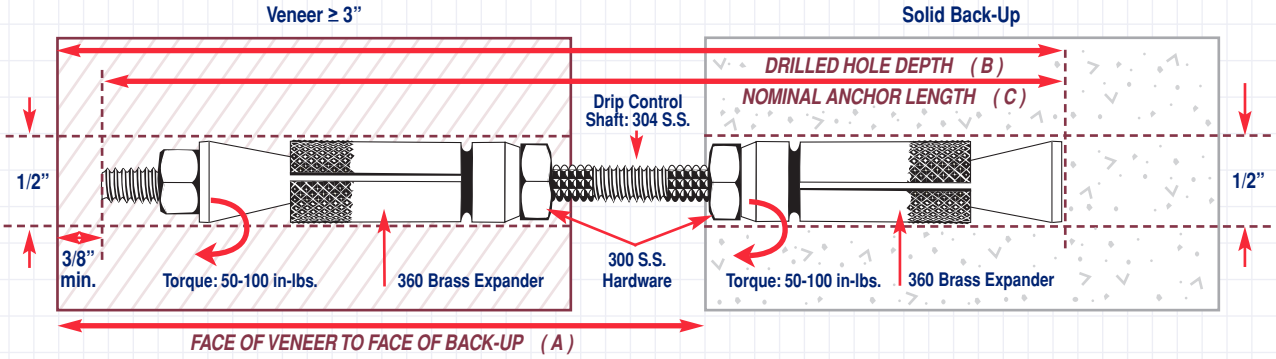
CTP Anchor Series	Veneer Material													
	Ultimate Tension Capacity (lbs)													
	MORTAR JOINT				BRICK				PRECAST		LIMESTONE		GRANITE	
	Soft		Hard		Soft		Hard							
	TENSION	COMPRESSION	TENSION	COMPRESSION	TENSION	COMPRESSION	TENSION	COMPRESSION	TENSION	COMPRESSION	TENSION	COMPRESSION	TENSION	COMPRESSION
3/8" Hole Site — CTP 5300R Series	900	800	1600	800	1200	1500	1500	1500	1500	1500	1500	1500	1500	1200
9/16" Hole Site — CTP 5300 Series			1600	1300	1500	1500	1700	1700	2000	1500	2000	1500	2000	1500
3/8" Hole Site — CTP 5000R Series	900	800	1600	800	1200	1500	1500	1500	1500	1500	1500	1200	1500	1200
1/2" Hole Site — CTP 5000 Series	900	800	1600	1300	1500	1500	1700	1700	2000	1500	2000	1200	2000	1200
1/2" Hole Site — CTP 5100 Series	900	800	1600	1300	1500	1500	1700	1700	2000	1500	2000	1200	2000	1200
1/2" Hole Site — CTP 5200 Series	900	800	1600	1300	1500	1500	1700	1700	2000	1500	2000	1200	2000	1200



Product Series of CTP Grip-Tie

CTP 5000 Series Anchor

INSTALLATION PROCEDURE AND CRITERIA FOR SOLID BACK-UP

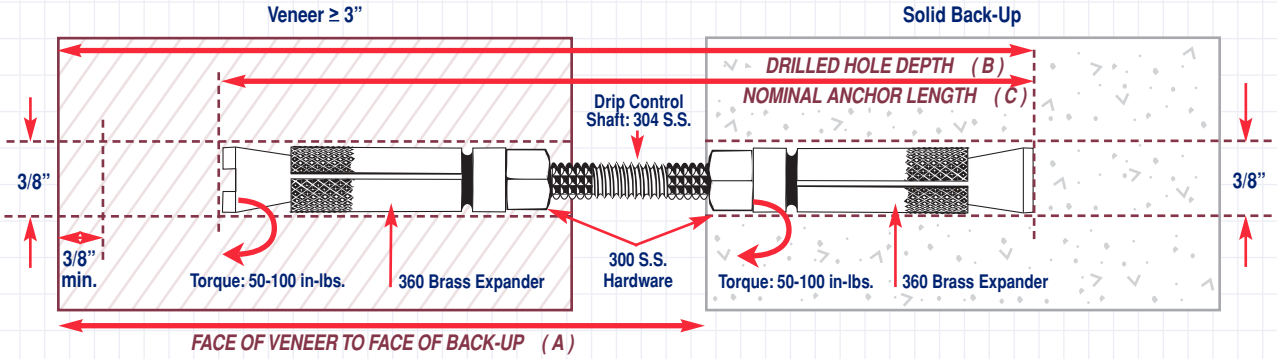


1. Select proper anchor length based on face of veneer to face of back-up (dimension A).
2. Drill appropriate hole at "TEE" joint location (no impact) to depth "B".
3. Blow out drill fines.
4. Assemble threaded portion of complete anchor assembly to the 501 setting tool. (Hex bolt on tool MUST be seated) thread shaft into tool until it stops.
5. Insert entire assembly into drilled hole until it bottoms, tighten 50 – 100 in-lbs, remove setting tool. (Loosen bolt head on tool while holding tool firmly, spin tool from anchor).
6. Slide socket and adaptor onto the square drive of the 501 Tool, and onto the 5/16 hex nut of the installed anchor, tighten 50-100 in-lbs.
7. Remove socket and plug hole.

Catalog #	A	B	C
CTP-5054	4 – 5"	6	5 1/2"
CTP-5064	4 – 6"	7	6 1/2"
CTP-5074	4 – 7"	8	7 1/2"
CTP-5084	4 – 8"	9	8 1/2"
CTP-5084	4 – 8"	10	9 1/2"
OTHER LENGTHS AVAILABLE UPON REQUEST			

CTP 5000R Series Anchor

INSTALLATION PROCEDURE AND CRITERIA FOR SOLID BACK-UP



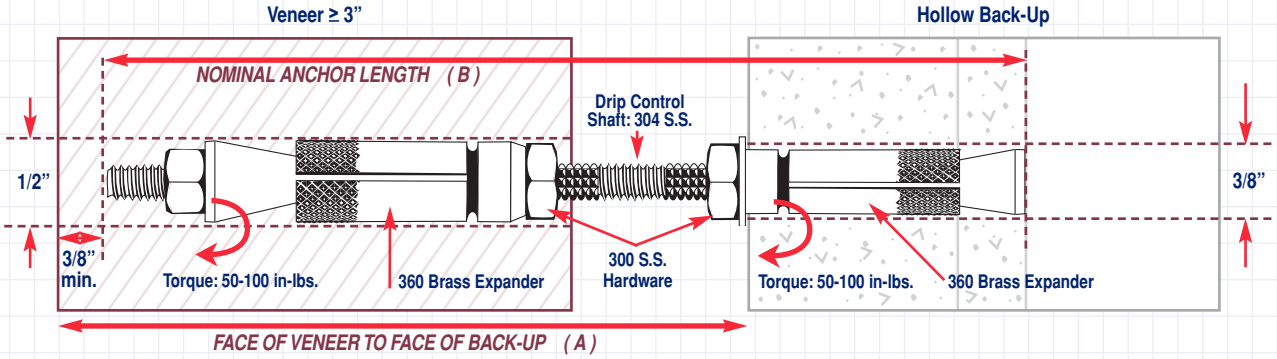
1. Select proper anchor length based on face of veneer to face of back-up (dimension A).
2. Drill appropriate hole through mortar joint (no impact) to depth illustrated (C).
3. Blow out drill fines.
4. Fit threaded shaft, with expander assembly opposite, to the 501R setting tool. (Hex bolt on tool MUST be seated) thread shaft into tool until it stops; Insert assembly into drilled hole until it bottoms; Tighten 50-100 in-lbs.
5. Remove tool by holding firmly and loosening the hex bolt, then spin tool off anchor shaft by hand.
6. Place outer brass shield over main body (slots facing outward) and slide over shaft until it stops against nut; Place slot of tapered cone onto the 501R tangs; Position tapered cone onto shaft and tighten 50-100 in-lbs.
7. Remove tool, patch hole.

Catalog #	A	B	C
CTP-5054R	4 – 6"	6 1/2"	6"
CTP-5064R	4 – 7"	7 1/2"	7"
CTP-5074R	4 – 8"	8 1/2"	8"
CTP-5084R	4 – 9"	9 1/2"	9"
OTHER LENGTHS AVAILABLE UPON REQUEST			

Product Series of CTP Grip-Tie

CTP 5100 Series Anchor

INSTALLATION PROCEDURE AND CRITERIA FOR HOLLOW BACK-UP

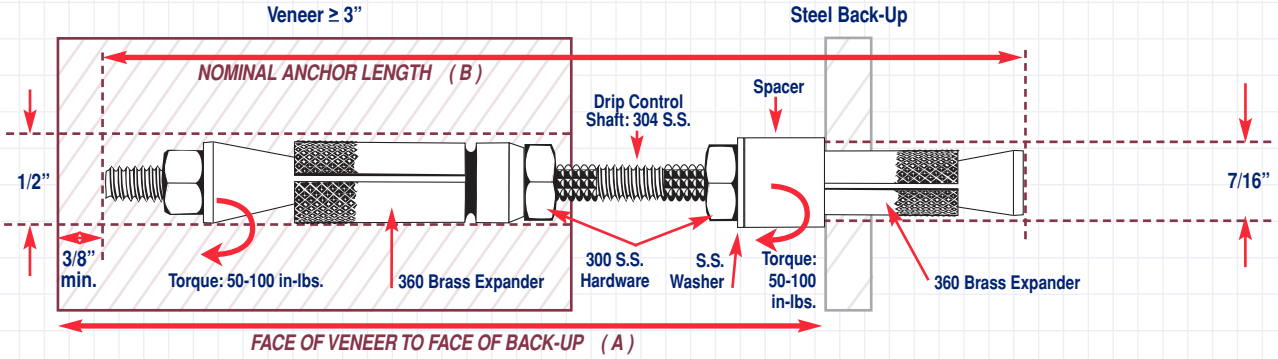


1. Select proper anchor length based on face of veneer to face of back-up (dimension A).
2. Drill 1/2" hole through "tee" joint (no impact) and a 3/8" hole in the back-up, at least 2" deep.
3. Blow out drill fines.
4. Assemble threaded portion of complete anchor assembly to the 501 setting tool. (Hex bolt on the setting tool MUST be seated), thread shaft into setting tool until it stops; Insert assembly into drilled hole until it bottoms; tighten 50 – 100 in-lbs.
5. Remove tool by holding firmly and loosening the hex bolt, then spin tool off anchor shaft by hand.
6. Slide socket drive and adaptor onto the square drive of the 501 tool and on to the 5/16" nut of the installed anchor, tighten 50 – 100 in-lbs.
7. Remove socket, patch hole.

Catalog #	A	B
CTP-5154	4 – 5"	5 1/2"
CTP-5164	5 – 6"	6 1/2"
CTP-5174	6 – 7"	7 1/2"
CTP-5184	7 – 8"	8 1/2"
OTHER LENGTHS AVAILABLE UPON REQUEST		

CTP 5200 Series Anchor

INSTALLATION PROCEDURE AND CRITERIA FOR STEEL BACK-UP



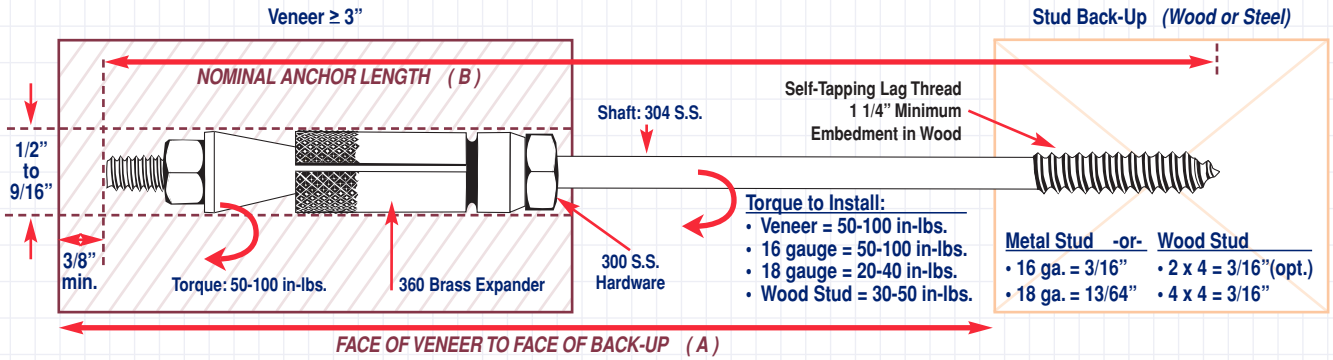
1. Select proper anchor length based on face of veneer to face of back-up (dimension A).
2. Drill 1/2" hole through mortar joint (no impact) and a 7/16" hole in the steel back-up.
3. Blow out drill fines.
4. Assemble threaded portion of complete anchor assembly to the 501 setting tool. (Hex bolt on the setting tool MUST be seated), thread shaft into setting tool until it stops; Insert assembly into drilled hole until it bottoms; tighten 50 – 100 in-lbs.
5. Remove tool by holding firmly and loosening the hex bolt, then spin tool off anchor shaft by hand.
6. Slide socket drive and adaptor onto the square drive of the 501 tool and on to the 5/16" nut of the installed anchor, tighten 50 – 100 in-lbs.
7. Remove socket, patch hole.

Catalog #	A	B
CTP-5254	4 1/2 – 5 1/2"	5 1/2"
CTP-5264	5 1/2 – 6 1/2"	6 1/2"
CTP-5274	6 1/2 – 7 1/2"	7 1/2"
CTP-5284	7 1/2 – 8 1/2"	8 1/2"
OTHER LENGTHS AVAILABLE UPON REQUEST		

Product Series of CTP Grip-Tie

CTP 5300 Series Anchor

INSTALLATION PROCEDURE AND CRITERIA FOR STUD BACK-UP

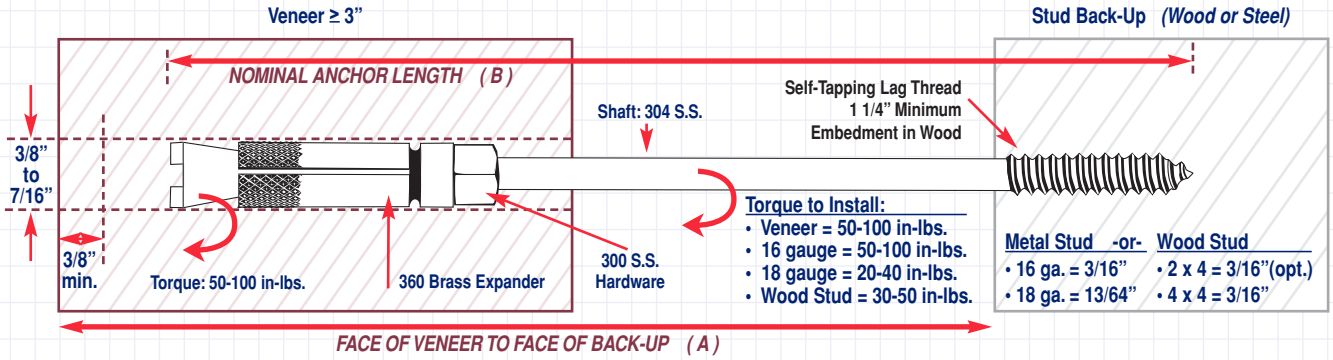


1. Select proper anchor length based on face of veneer to face of back-up (dimension A).
2. Drill appropriate hole in mortar joint at stud location using a rotary hammer or hammer drill. Rotary only in soft material.
3. Drill 9/16" hole through outer wythe of material.
   - For metal stud, a 5/32" pilot hole is needed for 18, 20 and 22 gauge stud, a pilot hole of 3/16" for 16 gauge and greater is required.
   - For wood stud back-up, a pilot may not be needed, 3/16" if necessary.
4. Blow out excess drill fines.
5. Assemble threaded portion of complete anchor assembly to the setting tool. (Hex bolt on the setting tool must be fully seated) thread anchor shaft into setting tool until it stops.
6. Insert entire assembly into drilled hole until the pointed end of the shaft makes contact with the stud, firmly thread by hand in drilled hole back-up.
7. Rotate tool clockwise and tighten back-up anchor in metal stud 20 - 50 in-lb. (50 - 100 in-lb. in 16 ga. and wood stud) remove setting tool.
8. To remove setting tool, loosen bolt head while holding setting tool firmly, spin off by hand.
9. Slide socket drive tool over hex segment of setting tool on the hex nut of the anchor and tighten to 50 - 100 in-lb.
10. Remove socket and plug hole.

Catalog #	A	B
CTP-5354	4 – 5"	5 1/2"
CTP-5364	5 – 6"	6 1/2"
CTP-5374	6 – 7"	7 1/2"
CTP-5384	7 – 8"	8 1/2"
OTHER LENGTHS AVAILABLE UPON REQUEST		

CTP 5300R Series Anchor

INSTALLATION PROCEDURE AND CRITERIA FOR STUD BACK-UP



1. Select proper anchor length based on face of veneer to face of back-up (dimension A).
2. Drill appropriate hole in mortar joint at stud location using a rotary hammer or hammer drill. Rotary only in soft material.
3. Drill 3/8" hole through outer wythe of material.
   - For metal stud, a 5/32" pilot hole is needed for 18, 20 and 22 gauge stud, a pilot hole of 3/16" for 16 gauge and greater is required.
   - For wood stud back-up, a pilot may not be needed, 3/16" if necessary.
4. Blow out excess drill fines.
5. Assemble threaded portion of anchor shaft to the 501R setting tool. (Hex bolt on the setting tool must be fully seated) thread anchor shaft into setting tool until it stops.
6. Insert entire assembly into drilled hole until the pointed end of the shaft makes contact with the stud, firmly thread by hand in drilled hole back-up.
7. Rotate tool clockwise and tighten back-up anchor in metal stud 20 - 50 in-lb. (50 - 100 in-lb. in 16 ga. and wood stud) remove setting tool.
8. To remove setting tool, loosen bolt head while holding setting tool firmly, spin off by hand.
9. Place outer brass shield over main body (slots facing outward) and slide over shaft until it stops against nut. Place slot of tapered cone onto the 501R tangs; Position tapered cone onto shaft and tighten 50-100 in-lbs.
10. Remove tool, patch hole.

Catalog #	A	B
CTP-5344R	4 – 5"	4 1/2"
CTP-5354R	5 – 6"	5 1/2"
CTP-5364R	6 – 7"	6 1/2"
CTP-5374R	7 – 8"	7 1/2"
OTHER LENGTHS AVAILABLE UPON REQUEST		

CTP Grip-Tie Specification

PART 1 GENERAL

1.1 SECTION INCLUDES
- A. Masonry repair systems

1.2 RELATED SECTIONS
- A. Section 04900 – Masonry Restoration and Cleaning: Coordination and installation requirements.

1.3 REFERENCES
- A. ACI 530.1/ASCE 6/TMS – Specifications for Masonry Structures
- B. American Society for Testing and Materials (ASTM) B 16, Type 360 Brass
- C. ASTM – 580A, Type 304 S.S.
- D. BIA TEK NOTE 46

1.4 SUBMITTALS
- A. Submit under provisions of Section 01300
- B. CTP Grip-Tie: manufacturers data sheets on each product to be used, including:
  1. Preparation instructions and recommendations.
  2. Storage and handling requirements and recommendations.
  3. Installation methods

1.5 DELIVERY, STORAGE AND HANDLING
- A. Store products in manufacturer's unopened packaging until ready for installation.

PART 2 PRODUCTS

2.1 MANUFACTURER
- A. Acceptable Manufacturer:
  Construction Tie Products, Inc. (CTP, Inc.),
  Michigan City, IN, 46360-9390 USA.
  Tel: 219-878-1427 Fax: 219-874-3626
  salesctp@comcast.net

2.2 PRODUCTS
- A. Masonry Repair and Restoration Re-Anchoring Existing Veneers (Selection based on application):
  1. Application: Masonry Veneer to Solid Back-up.
     a. 5000 Series CTP Grip-Tie Mechanical Repair Anchor
     b. 5000R Series CTP Grip-Tie Mechanical Repair Anchor
  2. Application: Masonry Veneer to Hollow Back-up.
     a. 5100 Series CTP Grip-Tie Mechanical Repair Anchor
  3. Application: Masonry Veneer to Structural Steel Back-up.
     a. 5200 Series CTP Grip-Tie Mechanical Repair Anchor
  4. Application: Masonry Veneer to Timber/Steel Stud Back-up.
     a. 5300 Series CTP Grip-Tie Mechanical Repair Anchor
     b. 5300R Series CTP Grip-Tie Mechanical Repair Anchor

PART 3 EXECUTION

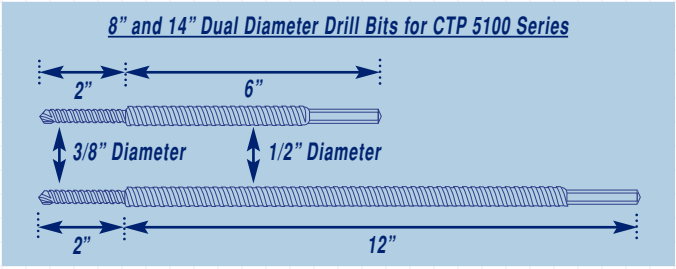
3.1 PREPARATION
- A. Locate anchors in the area to be anchored per project drawings and details.

3.2 INSTALLATION
- A. Select proper anchor length by field verification.
- B. Drill proper hole size per anchor type and blow out drill fines.
- C. Using appropriate setting tool and adapters, tighten back-up anchor to recommended torque range, then tighten facade portion to the recommended torque range.
- D. Conceal anchor with specified grout or caulk.

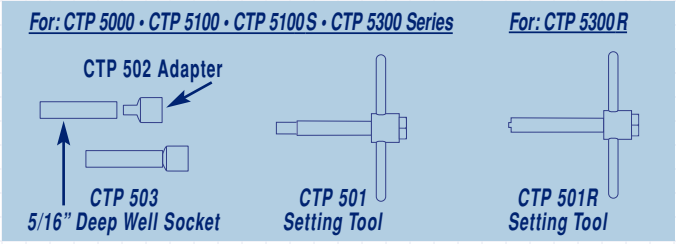
CONSTRUCTION TIE PRODUCTS

CTP Grip-Tie Planning Guide

Special Dual Diameter Drill Bits



Setting Tools



Warranty

Seller makes no warranty of any kind, expressed or implied, except that the goods sold under this agreement shall be of the standard quality of the seller, and buyer assumes all risk and liability resulting from the use of the goods, whether used singly or in combination with other goods. Seller neither assumes nor authorizes any person to assume for seller any other liability in conjunction with the sale or use of the goods sold, and there is no oral agreement or warranty collateral to or affecting this transaction.

Warning

The information contained in this publication does not constitute any professional opinion or judgement and should not be used as a substitute for competent professional determinations. Each construction project is unique and the appropriate use of this product is the responsibility of the engineers, architects, and other professionals who are familiar with the specific requirements of the project.

CTP is now part of the PROSOCO family

PROSOCO

CONSTRUCTION TIE PRODUCTS
3741 Greenway Circle • Lawrence, KS 66046
Phone: (785) 830-7380 • Fax: (219) 874-3626
www.CTPanchors.com

Engineered Anchoring Solutions Provider

Approval

© 2019 Construction Tie Products, Inc.