Mechanical repair anchors for stabilizing existing facades

We help you get a grip on your façade problems! Add high strength mechanical anchors to an existing brick facade to fortify and stabilize against external forces. CTP Grip-Ties are an excellent solution to re-anchor a masonry or stone façade to metal or wood stud, structural steel, tile, block, concrete, and brick.

**CTP GRIP-TIE**

**Mechanical Grip**
Brass shield expanders for flexible & durable gripping action

**Durable Materials**
Every component is corrosion resistant

**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

**Jobsite Quality Control**
Mechanical activation provides a means to inspect during installation and after by either torque measurement or tension testing

**Stabilizing Grip**
The design of the anchor prevents drawing the wythes of material together which prevents additional lateral stresses
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.
GRIP-TIE APPLICATIONS

Re-anchoring brick façade to wood stud back-up

Re-anchoring brick façade to metal stud back-up

Brick veneer cavity walls with
• Insufficient or corroded ties
• Concrete or metal stud back-up
• Wind-load fortification

Composite walls where header brick have failed
• Soft Brick or Mortar
• Deep Reaching Multi-Wythe Connections

Peripheral areas around bulges in walls or areas to be removed

Non-brick façades such as
• Limestone
• Granite
• Precast
# Tension Capacities with Various Back-Up Material

## Back-Up Material

**Ultimate Tension Capacity (lbs)**

<table>
<thead>
<tr>
<th>METAL STUD</th>
<th>WOOD</th>
<th>CTP Anchor Series</th>
<th>Back-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>CTP 5300R SERIES</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OR STEEL  WOOD</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>CTP 5300 SERIES</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OR STEEL  WOOD</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>METAL STUD</th>
<th>WOOD</th>
<th>CTP Anchor Series</th>
<th>Back-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>CTP 5000R SERIES</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SOLID MATERIAL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>CTP 5000 SERIES</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SOLID MATERIAL</td>
<td></td>
</tr>
</tbody>
</table>

## Typical CTP Grip-Tie Shaft Properties

**Ultimate Shaft Buckling Strength**

<table>
<thead>
<tr>
<th>SHAFT LENGTH (in)</th>
<th>CAPACITY (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 1/2</td>
<td>1620</td>
</tr>
<tr>
<td>6 1/2</td>
<td>1425</td>
</tr>
<tr>
<td>9 1/2</td>
<td>1100</td>
</tr>
<tr>
<td>11 1/2</td>
<td>725</td>
</tr>
</tbody>
</table>
# Tension/Compression Capacities with Various Veneers

## CTP Anchor Series

<table>
<thead>
<tr>
<th>Veneer Material</th>
<th>CTP 5300R SERIES</th>
<th>CTP 5300 SERIES</th>
<th>CTP 5000R SERIES</th>
<th>CTP 5000 SERIES</th>
<th>CTP 5100 SERIES</th>
<th>CTP 5200 SERIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>MORTAR JOINT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soft</td>
<td>900</td>
<td>800</td>
<td>900</td>
<td>900</td>
<td>900</td>
<td>900</td>
</tr>
<tr>
<td>Hard</td>
<td>1600</td>
<td>800</td>
<td>1600</td>
<td>1600</td>
<td>1600</td>
<td>1600</td>
</tr>
<tr>
<td>BRICK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soft</td>
<td>800</td>
<td>800</td>
<td>800</td>
<td>800</td>
<td>800</td>
<td>800</td>
</tr>
<tr>
<td>Hard</td>
<td>1200</td>
<td>1200</td>
<td>1200</td>
<td>1200</td>
<td>1200</td>
<td>1200</td>
</tr>
<tr>
<td>PRECAST</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soft</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
</tr>
<tr>
<td>Hard</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
</tr>
<tr>
<td>LIMESTONE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tension</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
</tr>
<tr>
<td>Compression</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
</tr>
<tr>
<td>GRANITE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tension</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
</tr>
<tr>
<td>Compression</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
</tr>
</tbody>
</table>

**CTP Anchor Series**

- **CTP 5300R SERIES**
  - Hole Site: 3/8"'
  - Set Back: 3/8" - 5/8"

- **CTP 5300 SERIES**
  - Hole Site: 9/16"'

- **CTP 5000R SERIES**
  - Hole Site: 3/8"'

- **CTP 5000 SERIES**
  - Hole Site: 1/2"'

- **CTP 5100 SERIES**
  - Hole Site: 1/2"'

- **CTP 5200 SERIES**
  - Hole Site: 1/2"'

**Veneer Material**

- **CTP 5300 SERIES**
  - Veneer: CTP 5000R SERIES

- **CTP 5300 SERIES**
  - Veneer: CTP 5000 SERIES

- **CTP 5000 SERIES**
  - Veneer: CTP 5100 SERIES

- **CTP 5000 SERIES**
  - Veneer: CTP 5200 SERIES

**Ultimate Tension Capacity (lbs)**

- **CTP 5300 SERIES**
  - CTP 5300R SERIES: 900, 1600
  - CTP 5300 SERIES: 800, 1600

- **CTP 5000 SERIES**
  - CTP 5000R SERIES: 900, 1600
  - CTP 5000 SERIES: 800, 1600

- **CTP 5100 SERIES**
  - CTP 5100 SERIES: 900, 1600
  - CTP 5200 SERIES: 800, 1600

**Customer Care**

- Customer Care: 800-255-4255
- Prosoco.com
KELLY
Field Support
Our on-site service includes troubleshooting, training and installation support.

STEVE
Engineering Support
Engineering details and personalized solutions for your specific needs.
You. Us. The project.

We strive to provide the best construction products on the market, but we also know this business is about people. That’s why we dedicate our human resources and services to make your job easier. Our nationwide network of sales representatives is here to do whatever we can to help solve your job-site problems.

BRIAN
Field Support
We come to you to support your projects when and where you need us.

COLLEEN
Customer Care
We’re real live people who answer the phones! Really. We’re here M-F, 8a-5p, CST.
INSTALLATION

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”.
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.

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 1/2” hole through mortar joint (no impact) and a 7/16” hole in the steel back-up.
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 onto the 5/16 hex nut of the installed anchor, tighten 50 – 100 in-lbs.
7. Remove socket, patch hole.
**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.
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.

**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.
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.
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 tool, patch hole.
SPECIAL DUAL DIAMETER DRILL BITS
8” and 14” Dual Diameter Drill Bits for CTP 5100 Series

SETTING TOOLS

Notes

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.

Approval
You. Us. The project.

PROSOCO’s nationwide network of field reps and technical advisers from coast to coast are here to help solve your biggest problems, your smallest problems and everything in between.

Phone support
1-800-255-4255

Job-site support
When and where you need it.

Training
Ensure the job’s done right.