



In the Specs – On the Job – At Your Service™

Opti-Mesh™ Screen Tubes

For Masonry Anchorage



Simpson Strong-Tie® Opti-Mesh® Screen Tubes

Adhesive screen tubes are vital to the performance of adhesive anchors in base materials that are hollow, or contain voids, such as hollow block and brick. Simpson Strong-Tie has redesigned the screen tube to offer better performance, reliability and economy.

The result: the Simpson Strong-Tie® Opti-Mesh® screen tube.



Integral Cap

Serves to center and secure the rod in the screen tube, while also displaying important information such as rod diameter, drill bit diameter and the Simpson Strong-Tie® "≠" sign for easy inspection after installation. The cap also prevents the adhesive from running out of the front of the screen tube as the rod is inserted.



The integral cap centers the rod and displays the drill bit and rod diameter.



Flanges

Prevents the screen tube from slipping into over-drilled holes. Allows screen tube to function in holes that are drilled too deep, giving the contractor more flexibility while drilling.

Open-Mesh Collar

This section of larger mesh allows extra adhesive to flow out of the screen tube behind the face shell of hollow block applications. The extra "collar" of adhesive increases the bearing area and results in higher load capacities in hollow concrete block.

Formula Specific Color-Coded Mesh

The screen mesh is sized to allow only the right amount of adhesive to flow through the screen tube to bond with the base material while the balance remains in the screen tube to bond the rod.

Color-Coded Mesh



Acrylic-Tie®
screen mesh is white

Epoxy-Tie®
screen mesh is black

Note the difference in mesh opening size.

Behind-the-Face-Shell Comparison

The photo on the left shows the Opti-Mesh® screen tube installed in a hollow CMU block. The extra collar of adhesive created by the open mesh collar results in increased bearing area and higher load values.

The typical screen tube shown on the right relies on the bond between the relatively small amount of adhesive in contact with the face shell of the block for its holding power.



Opti-Mesh® screen tube



Standard screen tube

Mesh Size Matters: An Inside View

The Simpson Opti-Mesh® screen tube (*top*) features formula specific mesh designed to control the flow of adhesive out of the screen tube. The result is uniform coverage of adhesive on the rod. The standard screen tube (*bottom*) utilizes mesh which allows adhesive to flow freely out of the screen tube when the rod is inserted. Too much adhesive is pushed out of the screen tube, leaving a large portion of the rod unbonded. This unbonded rod will pull out of the screen tube at a much lower load than a rod installed with an Opti-Mesh® screen tube.



Opti-Mesh screen tube completely bonds the anchor rod



Competitor's screen tube leaves portion of anchor rod unbonded

Product Data

Acrylic-Tie® screen tubes – Plastic

| For Rod Dia. (in) | Hole Size (in) | Length (in) | Model No. | Carton Qty. |
|-------------------|----------------|-------------|-----------|-------------|
| 3/8 | 9/16 | 3 1/2 | ATS373P | 150 |
| | | 6 | ATS376P | 150 |
| | | 10 | ATS3710P | 100 |
| 1/2 | 3/4 | 3 1/2 | ATS503P | 100 |
| | | 6 | ATS506P | 100 |
| | | 10 | ATS5010P | 50 |
| 5/8 | 7/8 | 3 1/2 | ATS623P | 50 |
| | | 6 | ATS626P | 50 |
| | | 10 | ATS6210P | 25 |
| | | 13 | ATS6213P | 25 |
| 3/4 | 1 | 8 | ATS758P | 25 |
| | | 13 | ATS7513P | 25 |
| | | 17 | ATS7517P | 25 |
| | | 21 | ATS7521P | 25 |

Epoxy-Tie® (SET & ET) screen tubes – Plastic

| For Rod Dia. (in) | Hole Size (in) | Length (in) | Model No. | Carton Qty. |
|-------------------|----------------|-------------|-----------|-------------|
| 3/8 | 9/16 | 3 1/2 | ETS373P | 150 |
| | | 6 | ETS376P | 150 |
| | | 10 | ETS3710P | 100 |
| 1/2 | 3/4 | 3 1/2 | ETS503P | 100 |
| | | 6 | ETS506P | 100 |
| | | 10 | ETS5010P | 50 |
| 5/8 | 7/8 | 3 1/2 | ETS623P | 50 |
| | | 6 | ETS626P | 50 |
| | | 10 | ETS6210P | 25 |
| | | 13 | ETS6213P | 25 |
| 3/4 | 1 | 8 | ETS758P | 25 |
| | | 13 | ETS7513P | 25 |
| | | 17 | ETS7517P | 25 |
| | | 21 | ETS7521P | 25 |

NOTE:
Screen tubes are designed for use with a specific adhesive type.

Epoxy-Tie® screen tubes must be used with SET or ET formulations and Acrylic-Tie® screen tubes must be used with Acrylic-Tie formulation.

Not for use with SET1.7KT or SET1.7KTA.

For load and technical data, see the Simpson Strong-Tie Anchor Systems®
Anchoring and Fastening Systems for Concrete and Masonry catalog (C-SAS-2009)

Installation Instructions

Apply to both hollow concrete block (CMU) and unreinforced masonry (URM)



NOTE: Always check expiration date on product label. Do not use expired product.



WARNING: When drilling and cleaning hole use eye and lung protection. When installing adhesive use eye and skin protection.



Blow



Brush



Fill



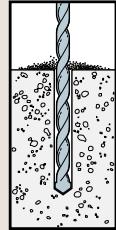
Insert / Close Cap



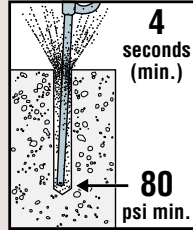
Insert Anchor Rod

1 HOLE PREPARATION: Concrete, Brick, Hollow and Grout-Filled CMU

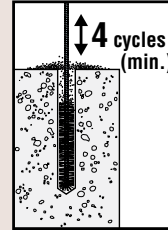
For horizontal, vertical and overhead applications.



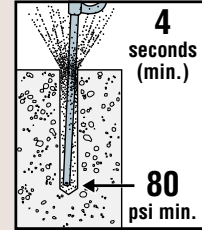
1. **Drill**—Drill hole to specified diameter and depth.



2. **Blow**—Remove dust from hole with oil-free compressed air for a minimum of 4 seconds.
80 psi min.



3. **Brush**—Clean with a nylon brush (see page 92 catalog (C-SAS-2009) for a minimum of 4 cycles.



4. **Blow**—Remove dust from hole with oil-free compressed air for a minimum of 4 seconds.
80 psi min.

Notes:

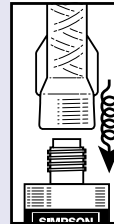
Refer to specific product page (within catalog C-SAS-2009) or product label for proper drill bit size.

Refer to page 92 of Simpson Strong-Tie Anchor Systems® Anchoring Systems for Concrete and Masonry catalog (C-SAS-2009) of this catalog for proper brush part number.

2 CARTRIDGE PREPARATION: For AT, ET and SET

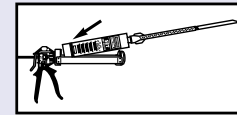
1. **Check**—Check expiration date on product label. **Do not use expired product.** Product is usable until end of printed expiration month.

2. **Open**—Open cartridge per package instructions.

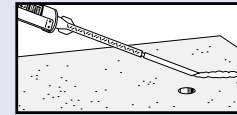


3. **Attach**—Attach proper Simpson Strong-Tie® nozzle to cartridge. Do not modify nozzle.

Note: Refer to page 89 for proper mixing nozzle and pages 87–88 of catalog C-SAS-2009 for dispensing tool part number.



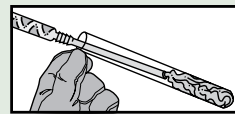
4. **Insert**—Insert cartridge into dispensing tool.



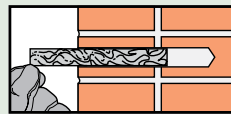
5. **Dispense**—Dispense adhesive to the side until properly mixed (uniform color).

3 FILLING THE HOLE: For AT, ET, and SET Adhesives (except SET1.7KT or SET1.7KTA)

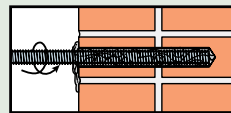
Prepare the hole per instructions “Hole Preparation”.



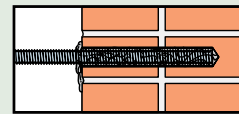
1. **Fill**—Fill screen tube completely. Fill from the bottom of the screen tube and withdraw the nozzle as the screen tube fills to prevent air pockets. Close integral cap after filling.



2. **Insert**—Insert adhesive filled screen tube into hole.



3. **Insert**—Insert clean, oil-free anchor, turning slowly until the anchor contacts the bottom of the screen tube.



4. **Do not disturb**—Do not disturb anchor until fully cured. (See cure schedule for specific adhesive.)

This flier is effective until June 30, 2011, and reflects information available as of May 1, 2009. This information is updated periodically and should not be relied upon after June 30, 2011; contact Simpson Strong-Tie for current information and limited warranty or see www.simpsonanchors.com.