# Hole-Cleaning Brushes

Brushes are used for cleaning drilled holes prior to adhesive installation.

**Note:** The standard hole-cleaning method (blow-brush-blow) can be avoided by using the Speed Clean<sup>™</sup> vacuum dust extraction system (DXS) with SET-XP<sup>®</sup>, AT-XP<sup>®</sup> and SET-3G<sup>™</sup>. See p. 236 for details.

### Wire Brush - Standard

(For use with SET-3G)

Adhesive Anchors

Model No.	Hole Diameter (in.)	Anchor Diameter (in.)	Rebar Size	Usable Length (in.)	Carton Quantity
ETB43S	7⁄16	3⁄8	—	5	25
ETB50S	1/2	_	#3	5	25
ETB56S	9⁄16	1/2	—	5	25
ETB62S	5⁄8	—	#4	5	25
ETB68S	11/16	5⁄8	—	5	25
ETB75S	3⁄4	—	#5	5	25
ETB87S	7⁄8	3⁄4	#6	5	25
ETB100S	1	7⁄8	#7	5	25
ETB112S	1 1⁄8	1	#8	5	25
ETB137S	1 3⁄8	1 1⁄4	#10	5	25
ETBS-TH		81⁄2	25		
ETBS-EXT		11½	25		



1. T-handle is required for use with all sizes of standard wire brush.

2. To obtain total usable length, add the usable length for each part used.

### Nylon Brush - Standard

(For use with SET-XP, AT-XP and ET-HP®)

Model No.	Hole Diameter (in.)	Anchor Diameter (in.)	Rebar Size	Usable Length (in.)	Carton Quantity
ETB4	3⁄8 — 7⁄16	1⁄4 — 5⁄16	—	7	24
ETB6	1/2 - 3/4	3/8 - 5/8	#3 – #5	15	24
ETB8	<sup>13</sup> / <sub>16</sub> — <sup>7</sup> / <sub>8</sub>	3⁄4	#6	15	24
ETB8L	<sup>13</sup> / <sub>16</sub> — <sup>7</sup> / <sub>8</sub>	3⁄4	#6	23	24
ETB10	1 – 1 1⁄8	7∕8 — 1	#7 – #8	28	24
ETB12	1 ¾ 6 - 1 ⅔	1 1⁄4	#10	33	24

1. All standard nylon brushes are one-piece which includes a twisted wire handle.

#### Nylon Brush - Rebar

(For use with SET-XP and SET-3G) (Note: Brushes are only applicable for SET-3G when used for post-installed rebar connections.)

Hole Diameter (in.)	Rebar Size	Usable Length (in.)	Carton Quantity
1/2 - 3/4	#3 – #5	6	25
7⁄8	#6	6	25
1 – 1 1/8	#7 – #8	8	25
1 3⁄8	#10	8	25
1 3⁄4	#11	7	25
T-handle and exte	351⁄4	25	
	(in.) 1/2 - 3/4 7/8 1 - 11/8 13/8 13/4	(in.)     Size       ½-¾     #3-#5       ½     #6       1-1½     #7-#8       1¾     #10	Hole Diameter (in.)     Hebar Size     Length (in.) $\frac{1}{2} - \frac{3}{4}$ #3 - #5     6 $\frac{7}{8}$ #6     6 $1 - 1\frac{1}{8}$ #7 - #8     8 $1\frac{3}{8}$ #10     8 $1\frac{3}{4}$ #11     7

1. ETBR-EXT is required for use with all sizes of rebar nylon brushes.

 To obtain total usable length, add the usable length for each part used.
Brushes are used when rebar is installed to replace cast-in-place bar for lap splices and development length.



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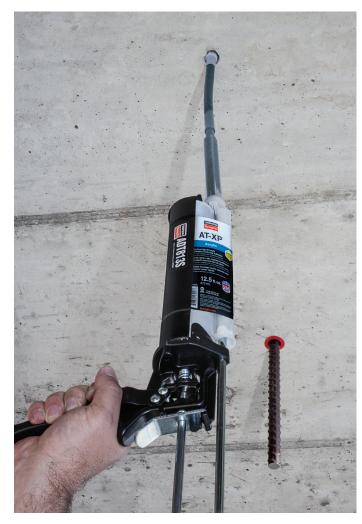
# Piston Plug Delivery System

The Simpson Strong-Tie® Piston Plug Delivery System for adhesives offers you an easy-to-use, reliable and less time-consuming means to dispense adhesive into drilled holes for threaded rod and rebar dowel installations in overhead, upwardly inclined and horizontal orientations. The matched tolerance design between the piston plug and drilled hole virtually eliminates the formation of voids and air pockets during adhesive dispensing.

The Piston Plug Delivery System consists of three components: piston plug, flexible extension tubing, and adhesive retaining cap.

#### Features

- Designed for dispensing adhesive into drilled holes in overhead, upwardly inclined and horizontal orientations, as well as deep embedments
- Suitable for use with all Simpson Strong-Tie anchoring adhesives
- Adhesive piston plugs are sized to fit each drilled hole diameter
- Model number is embossed on each adhesive piston plug for identification
- A barbed end provides a reliable connection to the flexible extension tubing
- Flexible extension tubing is available in 25-foot-long rolls to be cut to required lengths



# Use the piston plug delivery system with all Simpson Strong-Tie<sup>®</sup> adhesive products:





SET-XP®

ET-HF

SET-3G<sup>™</sup>



AT-XP®

ET-HP®

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# Piston Plug Delivery System (cont.)

#### Piston Plugs

Model No.	Hole Size (in.)	Pkg. Quantity	Carton Quantity*
PP56-RP10	9⁄16	10	10 packs of 10
PP62-RP10	5⁄8	10	10 packs of 10
PP68-RP10	11/16	10	10 packs of 10
PP75-RP10	3⁄4	10	10 packs of 10
PP81-RP10	<sup>13</sup> ⁄16	10	10 packs of 10
PP87-RP10	7/8	10	10 packs of 10
PP100-RP10	1	10	10 packs of 10
PP112-RP10	1 1/8	10	10 packs of 10
PP137-RP10	1%	10	10 packs of 10
PP175-RP10	1¾	10	10 packs of 10

\*Product is sold by package.

#### Tubing

Model No.	Description	Package Quantity
PPFT25	Piston Plug Flexible Extension Tubing — 25 ft. roll	1

1. Tubing dimensions: inner diameter 3%", outer diameter 1/2".

## Adhesive Retaining Caps

Adhesive retaining caps make overhead and horizontal installation easier by preventing the adhesive from running out of the hole. They also center the rod in the hole, making them ideal for applications where precise anchor placement is required. It may be necessary to provide support for the anchor during cure time. Adhesive retaining caps are not designed to support the weight of the anchor in overhead installations. Adhesive retaining caps should be used for horizontal and overhead adhesive installations. ARCs may be used in conjunction with the Piston Plug Delivery system.

#### Retaining Caps

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Model No.	Hole Size (in.)	Anchor Diameter (in.)	Rebar Size	Cap Depth (in.)	Package Quantity	Carton Quantity* (ea.)
ARC37A-RP25	7⁄16	3⁄8	"0	7⁄16	25	8 packs of 25
ARC37-RP25	1/2	3⁄8	#3	7⁄16	25	8 packs of 25
ARC50A-RP25	9⁄16	1/2		1/2	25	8 packs of 25
ARC50-RP25	5⁄8	1/2	#4	1/2	25	8 packs of 25
ARC62A-RP25	11/16	5⁄8	#5	9⁄16	25	8 packs of 25
ARC62-RP25	3/4	5⁄8	- #3	9⁄16	25	8 packs of 25
ARC75A-RP25	13/16	3⁄4	#6	9⁄16	25	8 packs of 25
ARC75-RP25	7/8	3⁄4	#0	9⁄16	25	8 packs of 25
ARC87-RP25	1	7/8	#7	11/16	25	8 packs of 25
ARC100A-RP25	1 1⁄16	1	"0	11/16	25	8 packs of 25
ARC100-RP25	1 1/8	1	#8	11/16	25	8 packs of 25
ARC125-RP25	1 %	1 1⁄4	#10	7⁄8	25	8 packs of 25
ARC137-RP25	13⁄4	_	#11	11/16	25	8 packs of 25

**Piston Plugs** 



**Piston Plug Flexible Extension Tubing** 



\*Product is sold by package.

# Opti-Mesh Adhesive-Anchoring Screen Tubes

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. The Simpson Strong-Tie® Opti-Mesh screen tube with woven mesh insert provides the advantages of a plastic screen tube while providing superior performance to steel screen tubes and competitive plastic screen tubes.

#### Material: Plastic

Caution: Screen tubes are designed for a specific adhesive type.

Epoxy screen tubes must be used with SET-XP®. Acrylic screen tubes must be used with AT-XP®.

Integral Cap: Serves to center and secure the rod in the screen tube, while displaying important information such as rod diameter, drill bit diameter and the Simpson Strong-Tie<sup>®</sup> "≠" symbol for easy inspection after installation. The cap also prevents adhesive from running out the front of the screen tube. Flanges: Prevents the screen tube from slipping into over-drilled holes. Allows screen tube to function in holes that are drilled too deep. Open-Mesh Collar: This section of larger mesh allows extra adhesive to flow out the screen tube behind the face shell of hollow block applications. The extra "collar" of adhesive increases bearing area and results in higher load capacities in hollow concrete block. Color-Coded, Formula-Specific Mesh: The openings between the woven mesh screen tube strands are 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 to bond the rod. **EWSP Epoxy Adhesive** Screen Tube (mesh is black) For use with SET-XP US Patent 6,837,018 The integral cap centers the rod and displays drill bit and rod diameter. **3GWSP Adhesive Screen Tube** (gray frame with gray mesh) For use with SET-3G" **AWSP Acrylic Adhesive** Screen Tube (mesh is white) For use with AT-XP

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# Opti-Mesh Adhesive-Anchoring Screen Tubes (cont.)

Screen Tubes - Plastic

Adhesive Anchors

For Rod Diameter (in.)	Hole Size (in.)	Length (in.)	EWSP Model No. for SET-XP®	AWSP Model No. for AT-XP®	3GWSP Model No. for SET-3G™	Carton Quantity
		31⁄2	EWS373P	AWS373P	3GWS373P	150
3⁄8	9⁄16	6	EWS376P	AWS376P	3GWS376P	150
		10	EWS3710P	AWS3710P	3GWS3710P	100
1/2 3/4		31⁄2	EWS503P	AWS503P	3GWS503P	100
	3⁄4	6	EWS506P	AWS506P	3GWS506P	100
		10	EWS5010P	AWS5010P	3GWS5010P	50
		31⁄2	EWS623P	AWS623P	3GWS623P	50
5⁄8	7/8	6	EWS626P	AWS626P	3GWS626P	50
		10	EWS6210P	AWS6210P	3GWS6210P	25
3⁄4	1	8	EWS758P	AWS758P	3GWS758P	25
74	1	13	EWS7513P	AWS7513P	3GWS7513P	25



Specially sized holes in Opti-Mesh screens allow for adhesive to seep out at the appropriate location at the hollow portion of the CMU to create a better bond to the face shell.

## Steel Adhesive-Anchoring Screen Tubes

Screen tubes are used in hollow base material applications to contain adhesive around the anchor and prevent it from running into voids. Simpson Strong-Tie® screen tubes are specifically designed to work with AT-XP® and ET-HP® adhesives in order to precisely control the amount of adhesive that passes through the mesh. This results in thorough coating and bonding of the rod to the screen tube and base material. Order screen tubes based upon rod diameter and adhesive type. The actual outside diameter of the screen tube is larger than the rod diameter.

Material: ATS screen tubes: 50 mesh stainless steel ETS screen tubes: 60 mesh carbon steel



**Caution:** Screen tubes are designed for a specific adhesive type. ETS screen tubes must be used with ET-HP formulations and ATS screen tubes must be used with AT-XP.



Screen Tube Screen tubes are for use in hollow CMU, hollow brick and unreinforced masonry applications.

#### Screen Tubes

For	Hole Size (in.)	ATS Stainless Steel Screen Tubes for AT-XP		ETS Carbon Steel Sc (SET-XP® ¾	<u>.</u>	
Rod Diameter (in.)		Actual Screen Size 0.D./Length (in.)	Model No.	Actual Screen Size 0.D./Length (in.)	Model No.	Carton Quantity
3/8	9/	_	_	<sup>15</sup> ⁄32 X 6	ETS376	150
78	9⁄16	_	_	<sup>15</sup> ⁄32 X 10	ETS3710	100
1/2		—	—	<sup>19</sup> ⁄32 X 6	ETS506	100
/2	11/16	_	—	<sup>19</sup> ⁄32 X 10	ETS5010	50
		_	_	<sup>25</sup> ⁄32 X 6	ETS626	50
5⁄8	7⁄8	_	_	<sup>25</sup> ⁄32 x 10	ETS6210	25
			_	<sup>25</sup> ⁄32 X 13	ETS6213	25
		<sup>31</sup> / <sub>32</sub> X 8	ATS758	<sup>31</sup> / <sub>32</sub> X 8	ETS758	25
2/	1	<sup>31</sup> / <sub>32</sub> x 13	ATS7513	<sup>31</sup> / <sub>32</sub> x 13	ETS7513	25
3⁄4	1	<sup>31</sup> / <sub>32</sub> x 17	ATS7517	<sup>31</sup> / <sub>32</sub> x 17	ETS7517	25
		_	_	<sup>31</sup> ⁄32 X 21	ETS7521	25

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## **Retrofit Bolts**

RFBs are pre-cut threaded rod, supplied with nut and washer. Each end of the threaded rod is stamped with the rod length in inches and our No-Equal® symbol for easy identification after installation.

Material: ASTM F1554 Grade 36

Adhesive Anchors

Coating: Zinc-plated, hot-dip galvanized



Retrofit Bolts

Size. (in.)	Zinc-Plated Model No.	Hot-Dip Galvanized Model No.	Carton Quantity	Hot-Dip Galvanized Retail Model No.*	Package Quantity	Carton Quantity
1⁄2 x 4	RFB#4x4		50		—	_
½ x 5	RFB#4x5	RFB#4x5HDG	50	RFB#4X5HDGP2	2	5 packs of 2
1⁄2 x 6	RFB#4x6	RFB#4x6HDG	50	_	_	_
½ x 7	RFB#4x7	RFB#4x7HDG	50	—	—	_
1⁄2 x 8	_	RFB#4X8HDG	_	RFB#4X8HDGP2	2	5 packs of 2
½ x 10	RFB#4x10	RFB#4x10HDG	25	—	—	_
5% x 5	RFB#5x5	RFB#5x5HDG	50	RFB#5X5HDGP2	2	5 packs of 2
5% x 8	RFB#5x8	RFB#5x8HDG	50	RFB#5X8HDGP2	2	5 packs of 2
5∕8 x 10	RFB#5x10	RFB#5x10HDG	50	_	_	_
5⁄8 x 12	_	RFB#5X12HDG	—	RFB#5X12HDGP2	2	5 packs of 2
5% x 16	RFB#5x16	RFB#5x16HDG	25	RFB#5X16HDGP2	2	5 packs of 2
3⁄4 x 101∕2	RFB#6x10.5	RFB#6x10.5HDG	25	—	—	_

\* Retail products packaged in a polybag.

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#### Strong-Tie

# All Thread Rod

ATRs are pre-cut threaded rod for use with Simpson Strong-Tie® adhesives.

Material: ASTM F1554 Grade 36, A36 or A307

min  $f_{\text{y}}$  = 36 ksi, min  $F_{\text{u}}$  = 58 ksi and not to exceed 80 ksi

Coating: Uncoated, zinc-plated; hot-dip galvanized

> ATR All Thread Rod

Description Dia. x Length (in.)	Uncoated Model No.	Zinc-Plated Model No.	Hot-Dip Galvanized Model No.	Carton Quantity
3∕8 x 12	ATR3/8x12	_		1
3∕8 x 24	ATR3/8x24		_	1
3∕% x 36	ATR3/8x36	_	ATR3/8x36HDG	1
½ x 12	ATR1/2x12	ATR1/2x12ZP	ATR1/2x12HDG	1
½ x 18	ATR1/2x18		ATR1/2x18HDG	1
1⁄2 x 24	ATR1/2x24	ATR1/2x24ZP	ATR1/2x24HDG	1
1⁄2 x 36	ATR1/2x36	ATR1/2x36ZP	ATR1/2x36HDG	1
5% x 12	ATR5/8x12	ATR5/8x12ZP	ATR5/8x12HDG	1
5% x 18	ATR5/8x18	ATR5/8x18ZP	ATR5/8x18HDG	1
5% x 24	ATR5/8x24	ATR5/8x24ZP	ATR5/8x24HDG	1
5% x 30	ATR5/8x30		_	1
5% x 36	ATR5/8x36	ATR5/8x36ZP	ATR5/8x36HDG	1
3⁄4 x 12	ATR3/4x12	ATR3/4x12ZP	ATR3/4x12HDG	1
3⁄4 x 18	ATR3/4x18	ATR3/4x18ZP	ATR3/4x18HDG	1
3⁄4 x 24	ATR3/4x24	ATR3/4x24ZP	ATR3/4x24HDG	1
3⁄4 x 36	ATR3/4x36	ATR3/4x36ZP	ATR3/4x36HDG	1
7∕8 x 12	ATR7/8x12	ATR7/8x12ZP	ATR7/8x12HDG	1
7∕8 x 18	ATR7/8x18	ATR7/8x18ZP	ATR7/8x18HDG	1
7∕8 x 20	ATR7/8x20		_	1
7∕8 x 24	ATR7/8x24	ATR7/8x24ZP	ATR7/8x24HDG	1
7∕8 x 26	ATR7/8x26	_	_	1
7∕8 x 36	ATR7/8x36	ATR7/8x36ZP	ATR7/8x36HDG	1
1 x 12	ATR1x12	ATR1x12ZP	ATR1x12HDG	1
1 x 18	ATR1x18	ATR1x18ZP	ATR1x18HDG	1
1 x 24	ATR1x24	ATR1x24ZP	ATR1x24HDG	1
1 x 36	ATR1x36	ATR1x36ZP	ATR1x36HDG	1