

AT-3G™

High-Strength Hybrid Acrylic Adhesive



DESCRIPTION

AT-3G is a hybrid, acrylic-based adhesive for anchoring threaded rod and rebar into cracked and uncracked concrete. Ideal for cold weather and wet concrete application, AT-3G dispenses easily and offers a fast curing time for same-day bolt up.

SPECIFICATION COMPLIANCE

AT-3G has been tested in accordance with ICC-ES AC308, ACI 355.4 and applicable ASTM test methods.

CODE REPORTS, STANDARDS AND COMPLIANCE

Concrete — ICC-ES ESR-4057 (including post-installed rebar connections, City of LA and Florida Building Code), Florida FL15730.

Masonry — ICC-ES ESR pending.

ASTM C881 and AASHTO M235 — Types I/IV and II/IV, Grade 3, Class B & C.

UL Certification — CDPH Standard Method v1.2.

NSF/ANSI/CAN 61 (216 in.² / 1,000 gal.).

ASSESSMENT

WHERE TO USE

- Threaded rod anchoring and rebar doweling into concrete (cracked and uncracked)
- Post-installed rebar development
- Cold weather conditions or where fast cure is required
- Dry, water-saturated or water-filled hole installation in to concrete

FEATURES

- Excellent for use in cold weather conditions or applications where fast cure is required
- Recognized per ICC-ES AC308 for threaded rod and rebar anchoring, along with post-installed rebar development and splice length design provisions
- Conventional blow-brush-blow hole cleaning technique using a wire brush — no power brushing required

PRODUCT INFORMATION

Mix Ratio/Type	10:1 hybrid-acrylic
Mixed Color	Gray
Base Materials	Concrete — Cracked and Uncracked
Base Material Conditions	Dry, Water-Saturated, Water-Filled Holes
Anchor Type	Threaded Rod or Rebar
Substrate Installation Temperature	23°F (-5°C) to 104°F (40°C)
In-Service Temperature Range	-40°F (-40°C) to 320°F (160°C)
Storage Temperature	41°F (5°C) to 77°F (25°C)
Shelf Life	18 months
Volatile Organic Compound (VOC)	41 g/l

CURE SCHEDULE

Base Material Temperature		Gel Time	Cure Time
(°F)	(°C)	(min.)	(hr.)
23	-5	50	5
32	0	25	3½
41	5	15	2
50	10	10	1
59	15	6	40 min.
68	20	3	30 min.
86	30	2	30 min.
104	40	2	30 min.

1. Cartridge temperature must be between 41°F (5°C) and 104°F (40°C) at the time of installation.

2. For water-saturated concrete, the cure times must be doubled.



TYPICAL PROPERTIES

Property		Class A (35°–40°F)	Class B (40°–60°F)	Class C (>60°F)	Test Method
Consistency		non-sag	non-sag	non-sag	ASTM C881
Bond Strength, Slant Shear	Hardened-to-Hardened Concrete, 2-Day Cure ¹	2,800 psi	2,800 psi	2,820 psi	ASTM C882
	Hardened-to-Hardened Concrete, 14-Day Cure ¹	3,200 psi	3,100 psi	3,250 psi	
Compressive Yield Strength, 7-Day Cure ²		10,300 psi	13,400 psi	15,000 psi	ASTM D695
Compressive Modulus, 7-Day Cure ²		1,400,000 psi	1,550,000 psi	1,650,000 psi	ASTM D695
Heat Deflection Temperature, 7-Day Cure ³		258°F (126°C)			ASTM D648
Glass Transition Temperature, 7-Day Cure ³		237°F (114°C)			ASTM E1640
Decomposition Temperature, 24-Hour Cure ³		480°F (250°C)			ASTM E2550
Water Absorption, 24 Hours, 7-Day Cure ³		0.90%			ASTM D570
Shore D Hardness, 24-Hour Cure ³		81			ASTM D2240
Linear Coefficient of Shrinkage, 7-Day Cure ³		0.000 in./in.			ASTM D2566
Coefficient of Thermal Expansion ³		2.6 × 10 ⁻⁵ in./in.°F			ASTM C531

1. Material and curing conditions: Class A at 35 ± 2°F, Class B at 40 ± 2°F, Class C at 60 ± 2°F

2. Material and curing conditions: Class A at 0 ± 2°F, Class B at 40 ± 2°F, Class C at 60 ± 2°F

3. Material and curing conditions: 73 ± 2°F

HOLE CLEANING ACCESSORIES

Wire Brush Heads/T-Handle Extensions

Designed for use with AT-3G to permit proper hole cleaning at embedments up to 20 times the anchor diameter.

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	#9	5	25
ETBS-TH	T-handle			8 1/2	25
ETBS-EXT	Extension			11 1/2	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.

CARTRIDGE SYSTEM TABLE

Model No.	Capacity (oz.)	Cartridge Type	Carton Qty.	Dispensing Tool(s)	Mixing Nozzle
AT3G10 ¹	9.4	Coaxial	6	CDT10S	AMN19Q
AT3G30 ¹	28	Side-by-Side	5	ADT30S, ADTA30P or ADTA30CKT	

1. One AMN19Q mixing nozzle with integrated extension is supplied with each cartridge.

2. Use only Simpson Strong-Tie® mixing nozzles in accordance with Simpson Strong-Tie instructions. Modifications or improper use of mixing nozzle may impair AT-3G adhesive performance.

3. Use of rodless pneumatic tools to dispense single-tube, coaxial cartridges is prohibited.

4. Detailed information on dispensing tools, mixing nozzles and other adhesive accessories is available at strongtie.com.

5. Cartridge estimation guidelines are available at strongtie.com/apps.

ADHESIVE PISTON PLUG DELIVERY SYSTEM

For consistent dispensing of anchoring adhesives in any installation orientation, the Simpson Strong-Tie Adhesive Piston Plug Delivery System offers you an easy-to-use, more reliable and less time-consuming means to dispense adhesive into drilled holes for threaded rod and rebar dowel installations at overhead, upwardly inclined and horizontal orientations.

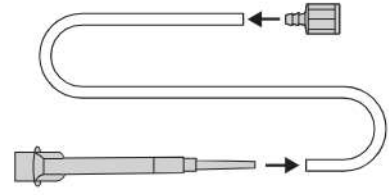
The matched tolerance design between the piston plug and drilled hole virtually eliminates the formation of voids and air pockets during adhesive dispensing.



Adhesive Piston Plug Family



Piston Plug Delivery System



Mixing Nozzle with Delivery System

IMPORTANT INFORMATION

It is the responsibility of each purchaser and user of each Product to determine the suitability of the Product for its intended use. Prior to using any Product, consult a qualified design professional for advice regarding the suitability and use of the Product, including whether the capacity of any structural building element may be impacted by a repair. As jobsite conditions vary greatly, a small-scale test patch is required to verify product suitability prior to full-scale application. The installer must read, understand, and follow all written instructions and warnings contained on the product label(s), Product Data Sheet(s), Safety Data Sheet(s) and the strongtie.com website prior to use. For industrial use only by qualified applicators. KEEP OUT OF REACH OF CHILDREN!

⚠ WARNING! Cancer and reproductive harm — www.P65Warnings.ca.gov.