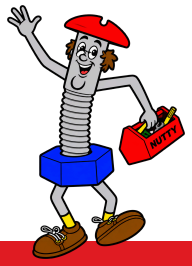
THE NUTTY COMPANY INC
FASTENER SPECIALISTS SINCE 1977

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PRODUCT DATA SHEET

Sure-Set® ACR-10 & ACR-28 Plus+ Epoxy Acrylate

1.0 Product Injectable adhesive anchoring system for concrete





- Two-component **vinylester (epoxy acrylate)** anchoring adhesive – rapid curing, high strength.
- **ICC-ES ESR-5945** – cracked & uncracked concrete, seismic (SDC A–F).
- For **threaded rod, rebar and steel dowels**, 3/8"–1-1/4" rod and #3–#10 rebar.
- Installs in **dry, wet, submerged** concrete or water-filled holes; horizontal, vertical & overhead.
- WQA **Gold Seal** certified for drinking water system components; fire tested.
- Low odor, high chemical resistance • 2-year shelf life.

Nutty Stock #	Product	Cartridge	Carton Qty.	Dispensing Tool	Mixing Nozzle
ACR10	**Sure-Set® ACR-10 Plus+**	9.5 oz (280 ml)	12	DT10 manual (all-metal)	MN10
ACR28	**Sure-Set® ACR-28 Plus+**	27.9 oz (825 ml)	12	DT28 manual	MNA28

Use with Aerosmith dispensing tools and mixing nozzles only. Use a new mixing nozzle for each new cartridge and after any stop longer than the gel time.

2.0 Gel (Working) & Full Cure Times

Base Material Temp.		Gel (Working) Time	Full Cure Time
14°F	-10°C	90 min	**24 hours**
23°F	-5°C	90 min	**14 hours**
32°F	0°C	45 min	**7 hours**
41°F	5°C	25 min	**2 hours**
50°F	10°C	15 min	**90 min**
68°F	20°C	6 min	**45 min**
86°F	30°C	4 min	**25 min**
95°F	35°C	2 min	**20 min**
104°F	40°C	1.5 min	**15 min**

For base material between 14°F and 23°F, condition the cartridge to 68–95°F before use. Cartridge temperature at installation: 32–95°F (0–35°C).

Approvals & Listings

- ICC-ES ESR-5945, cracked and uncracked concrete, Category 1
- IBC and IRC code compliant (2024, 2021, 2018, 2015)
- Florida Building Code (FBC) and Florida Residential Code (FRC)
- City of Los Angeles (COLA) listed
- Tested to ICC-ES AC308 and AC58
- WQA Gold Seal – drinking water system components

Base Materials

Concrete (normal-weight, f'c 2,500–8,500 psi per ESR-5945), hard natural stone, solid rock, solid masonry.

3.0 Setting Information – Threaded Rod

Rod Dia. (in.)	Drill Bit d_o (in.)	Wire Brush Cat. #	Embedment h_{ef} (in.)		Max. Torque T_{max} (ft-lbs)		Min. Spacing (in.)	Min. Edge Dist. (in.)	Min. Member Thickness
			Min.	Max.	Rod (exc. A36/A307)	A36 / A307 Rod			
3/8*"	7/16	716	2-3/8	4-1/2	16	10	1-7/8	1-3/4	h_{ef} + 1-1/4
1/2"	9/16	716	2-3/4	6	33	25	2-1/2	1-3/4	h_{ef} + $2d_o$
5/8"	11/16 or 3/4†	916 / 1116	3-1/8	7-1/2	60	50	3-1/8	1-3/4	h_{ef} + $2d_o$
3/4"	7/8	1116	3-1/2	9	105	90	3-3/4	1-3/4	h_{ef} + $2d_o$
7/8"	1	78	3-1/2	10-1/2	125	125	4-3/8	1-3/4	h_{ef} + $2d_o$
1"	1-1/8	1	4	12	165	165	5	1-3/4	h_{ef} + $2d_o$
1-1/4"	1-3/8	138	5	15	280	280	6-1/4	2-3/4	h_{ef} + $2d_o$

Setting Information – Reinforcing Bar

Rebar Size	Drill Bit d_o (in.)	Wire Brush Cat. #	Embedment h_{ef} (in.)		Min. Spacing (in.)	Min. Edge Dist. (in.)	Min. Member Thickness
			Min.	Max.			
#3*	1/2	716	2-3/8	4-1/2	1-7/8	1-3/4	h_{ef} + 1-1/4
#4	5/8	916	2-3/4	6	2-1/2	1-3/4	h_{ef} + $2d_o$
#5	11/16 or 3/4†	916 / 1116	3-1/8	7-1/2	3-1/8	1-3/4	h_{ef} + $2d_o$
#6	7/8	1116	3-1/2	9	3-3/4	1-3/4	h_{ef} + $2d_o$
#7	1	78	3-1/2	10-1/2	4-3/8	1-3/4	h_{ef} + $2d_o$
#8	1-1/8	1	4	12	5	1-3/4	h_{ef} + $2d_o$
#9	1-3/8	138	4-1/2	13-1/2	5-5/8	2-3/4	h_{ef} + $2d_o$
#10	1-1/2	138	5	15	6-1/4	2-3/4	h_{ef} + $2d_o$

* 3/8" rod and #3 bar: uncracked concrete only, Seismic Design Categories A & B. † 3/4" bit preferred for 5/8" rod / #5 bar. Min. edge distance shown is with 100% T_{max}; at edge < 5d reduce torque per ESR-5945. Use a brush extension for holes deeper than the brush length. d_o = hole diameter. Threaded rod must be clean, continuously threaded, zinc plated (ASTM B633 SC1 or B695 Class 55) or stainless (ASTM F593).

4.0 Installation

1. **Drill** the hole with a hammer drill and carbide bit (ANSI B212.15) to the diameter and embedment in Section 3.0. Remove any standing water.
2. **Clean** – blow out with compressed air (min. 90 psi) 4 times, brush 4 times with the listed wire brush, then blow out 4 more times. (3/8"–3/4" rod / #3–#6 bar in uncracked concrete may use a hand pump instead of compressed air.)
3. **Prepare** – check the expiration date; cartridge must be 32–95°F. Attach a new mixing nozzle and dispense until the adhesive is a uniform gray color.
4. **Mark** the embedment depth on the clean, straight anchor rod or rebar.
5. **Fill** the hole about 2/3 full from the bottom up, withdrawing the nozzle slowly to avoid air pockets. Use a piston plug for 5/8"–1-1/4" rod and #5–#10 bar in horizontal and overhead holes.
6. **Insert** the anchor with a slight turning motion to the full embedment, within the gel time; adhesive should show at the top of the hole.
7. **Cure** – do not disturb or load until fully cured (Section 2.0). Then install the fixture and tighten no more than T_{max}.

5.0 Setting Tools & Accessories

Aerosmith catalog numbers

Item	Catalog # / Use
Dispensing tool	DT10 standard all-metal manual tool (9.5–11 oz cartridges) • DT28 manual tool (28 oz cartridges)
Mixing nozzle	MN10 (9.5 oz) • MNA28 (28 oz) – use only Aerosmith nozzles; do not modify the mixer
Steel wire brush	716, 916, 1116, 78, 1 and 138 brush – see Section 3.0 for the brush to use with each hole
Brush extension	16098 – required for holes deeper than the brush length
Piston plug	By drill bit: 11/16" 40355 • 3/4" 40341 • 7/8" 40343 • 1" ET916 • 1-1/8" 40346 • 1-3/8" 40349 • 1-1/2" 40350 (not needed for 7/16–5/8" holes)
Extension tube	ET916 – for deep, horizontal and overhead holes
Hand pump	16007 – hole blow-out (3/8–3/4" rod / #3–#6 bar, uncracked concrete only); otherwise compressed air, min. 90 psi

6.0 Typical Applications

- Structural anchoring in cracked & uncracked concrete
- Post-installed rebar connections & rebar doweling
- Structural steel, base plates & sill plates to concrete
- Railings, signage & lighting stanchions
- Crash barriers, conveyors, racking & cable trays
- Pinning building facades

7.0 Safety, Handling & Storage

- Wear safety glasses, gloves and a dust mask when drilling and dispensing. Avoid skin and eye contact; flush eyes with water and seek medical attention.
- Use a NIOSH-approved respirator indoors or in confined spaces. Read the Safety Data Sheet (SDS) before use.
- Contains crystalline silica; do not sand or drill cured adhesive without respiratory and eye protection.
- Store at 32–86°F (0–30°C) in a cool, dry, dark place. Do not use expired product.
- Partly used cartridges can be saved with the hardened nozzle attached; use a new nozzle and discard the first adhesive when restarting.
- Do not install where concrete temperature can swing from 40°F or less to 80°F or more within 12 hours.

Data from Aerosmith Fastening Systems and ICC-ES ESR-5945. Design loads must be calculated by a qualified engineer per ACI 318 and ESR-5945.

Disclaimer: The above is a compilation of data from various industry standards. The Nutty Company, Inc. has made every effort to present the data accurately. However, The Nutty Company, Inc. cannot be held liable for any claim traceable to any errors, typographical or otherwise, contained herein.



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