

TECHNICAL DATA SHEET

DESCRIPTION

Pro-Poxy™ 300 FAST is two component, moisture-insensitive, 100% solids, high modulus epoxy gel adhesive that meets ASTM C-881 and AASHTO M-235 and it is listed by the ICC (formerly ICBO).

USE

Pro-Poxy™ 300 FAST is ideal for anchoring bolts, dowels, and reinforcing steel in concrete. It is also ideal for vertical and horizontal structural bonding and patching. Pro-Poxy™ 300 FAST may also be used to seal cracks and set injection ports prior to injection grouting.

FEATURES

- High-strength structural adhesive
- ICC listed
- Ideal for anchoring dowels, bolts, reinforcing steel and threaded rod
- Easy dispensing and no mixing with pre-filled cartridges
- Moisture tolerant
- Certified to conform to NSF/ANSI Standard 61 by WQA
- Fast-setting
- Non-sag gel consistency
- Excellent adhesion



PROPERTIES

ASTM C-881/ AASHTO M-235, Types I, II*, IV, V* Grade 3, Classes B & C*

Mix ratio – 1 part A to 1 part B by volume

Mixed color – gray

Consistency – non-sag gel

Gel Time – 60 gm mass - 6-8 minutes at 75°F (28°C)

Initial Cure – 2 hours

Compressive Strength – ASTM D-695: 11,050 psi (76 MPa) at 7 days

Concrete Bond Strength – ASTM C-882: 2,900 psi (19.9 MPa), at 2 days 3,730 psi (26 MPa) at 14 days

Compressive Modulus – ASTM D-695: 316,100 psi, (2,180 MPa)

Water Absorption - ASTM D-570 - 0.8%

* Except for minimum gel time due to fast set

Ultimate Tension Loads

(Pull-Out Tests with Threaded Rod)

Rod Diameter	Hole Diameter	Hole Depth	4000 psi (27 MPa)	5500 psi (38 MPa)
3/8" (1 cm)	7/16" (1.1 cm)	3-3/8" (8.6 cm)	8250 lbs (3742 kg)	9200 (4173)

3/8" (1 cm)	7/16" (1.1 cm)	5-5/8" (14.3 cm)	11360 lbs. (5153 kg)	11740 (5325)
1/2" (1.3 cm)	9/16" (1.4 cm)	4 1/2" (11.4 cm)	11,730 lbs. (5320 kg)	12920 (5860)
1/2" (1.3 cm)	9/16" (1.4 cm)	7 1/2" (19.0 cm)	17,010 lbs. (7716 kg)	19360 (8782)
5/8" (1.6 cm)	3/4" (1.9 cm)	5-5/8" (14.3 cm)	18870 lbs. (8560 kg)	22940 (10405)
5/8" (1.6 cm)	3/4" (1.9 cm)	9-3/8" (23.8 cm)	26260 lbs. (11911 kg)	30960 (14043)
3/4" (1.9 cm)	7/8" (2.2 cm)	6 3/4" (17.1 cm)	25870 lbs. (11734 kg)	29360 (13317)
3/4" (1.9 cm)	7/8" (2.2 cm)	11 1/4" (28.6 cm)	34340 lbs. (15576 kg)	38360 (17400)

Cured @ 75°F (24°C) J-51 attains 90% of strength in 2 hrs.

VOC

Pro-Poxy™ 300 FAST has a VOC content of 0 g/L . Compliant with all Canadian and U.S. VOC regulations including Federal EPA, OTC, LADCO, SCAQMD & CARB.

ESTIMATING GUIDE

Rebar Size	Hole Diameter	Hole Depth	Anchors Per. 22 fl.oz. Cart.
3/8"	7/16"	3-3/8"	112
3/8"	7/16"	5-5/8"	71
1/2"	9/16"	4-1/2"	61
1/2"	9/16"	7-1/2"	36
5/8"	3/4"	5-5/8"	26
5/8"	3/4"	9-3/8"	15
3/4"	7/8"	6-3/4"	17
3/4"	7/8"	11-1/4"	10
1"	1-1/8"	9"	9
1-1/4"	1-3/8"	11-1/4"	5

PACKAGING

ITEM #	PACKAGE	SIZE	
		Gallons	Liters
140187	Uni-cartridge	0.07	250 ml
140204	Cartridge	0.16	600 ml
140228	Cartridge	0.40	1500 ml
140172	Unit	1	3.79

140177	Unit	2	7.57
140192	Unit	10	37.85

STORAGE

The material should be stored above 50°F (10°C). Shelf life of properly stored, unopened containers is 24 months

APPLICATION

Surface Preparation: Surface to be bonded must be clean and sound. Remove dust, dirt, grease, laitance, curing compounds and other foreign matter by sandblasting, mechanical abrasion or hydro blasting. For drilled holes, clean with a nylon bristle brush. Remove all water and dust with clean compressed air prior to installation. Air and surface temperature must be 40°F (5°C) or above.

Mixing: Condition material to 65°-95°F (18°-35°C) before using. Premix each component, then mix equal volumes of Part A and Part B for 3 minutes with a low speed drill, a jiffy mixer or paddle. Mix only what can be used during the pot life.

Placement: For use as a structural adhesive, apply the Pro-Poxy™ 300 Fast material neat and work into substrate. The glue line should not exceed 1/8 in. (0.3cm).

For dispensing epoxy with the cartridges, first cut the static nozzle mixer tip to the preferred opening for the job. Next, remove plugs from cartridge, attach the static nozzle mixer with the nut, and tighten. Load the cartridge into the dispensing gun and dispense a bead of epoxy until the color is uniform. Now the cartridge is ready to use. Dispense the epoxy into the anchoring hole filling from the bottom up. The annular space around the bolt should not exceed 1/8 in. (0.3 cm). Insert the bolt, dowel or anchor turning it slowly during insertion. After insertion, the hole should be completely full of epoxy.

To produce a mortar for interior patching repairs, mix 1 to 1-1/2 parts by volume of clean, dry, well graded silica sand to one part by volume of mixed epoxy. Place the mortar, working it into the concrete substrate. Each mortar lift should not exceed 1 in. (2.5 cm)

CLEAN UP

Tools and Equipment: Clean before the epoxy sets.

Use xylene or Unitex Citrus Cleaner.

LIMITATIONS FOR PROFESSIONAL USE ONLY

Per NTSB Safety Recommendations, the use of adhesive anchors is prohibited in sustained overhead load anchoring applications. This product is certified to a maximum surface area to volume ratio of 10.0 sq. cm/L

Do not thin with solvents.

Surface and ambient temperature must be above 50°F (10°C). For applications with constant high temperature (above 120°F, 49°C), contact Dayton Superior.

Do not expose stored product to cold or freezing temperature (below 35°F, 2°C) for any length of time.

Note: High temperature will accelerate the setting time and cool temperature will slow the setting time. As a general rule, the gel time of the epoxy will be cut in half for each 10° to 15° increase in temperature above 75°F and the gel time will double for each 10° to 15° drop below 75°F (24°C).

Minimum age of concrete must be 3-7 days, depending on curing and drying conditions

PRECAUTIONS

READ MSDS PRIOR TO USING PRODUCT

- Component A – Irritant
- Component B – Corrosive
- Product is a strong sensitizer
- Use with adequate ventilation
- Wear protective clothing, gloves and eye protection (Goggles, Safety Glasses and/or Face Shield)
- Keep out of the reach of children
- Do not take internally
- In case of ingestion, seek medical help immediately
- May cause skin irritation upon contact, especially prolonged or repeated. If skin contact occurs, wash immediately with soap and water and seek medical help as needed
- If eye contact occurs, flush immediately with clean water and seek medical help as needed
- Dispose of waste material in accordance with federal, state and local requirements
- Cured Epoxy Resins Are Innocuous