

# SET EPOXY-TIE®

## High Strength Epoxy

**SIMPSON**

**Strong-Tie**  
ANCHOR SYSTEMS

TM

### DESCRIPTION

Epoxy-Tie SET epoxy is a two-component, low odor, 1:1 ratio, 100% solids epoxy-based adhesive for use as a high strength, non-shrink anchor grouting material. Resin and hardener are dispensed and mixed simultaneously through the mixing nozzle. SET meets the ASTM C-881 specification for Type I, II, IV and V, Grade 3, Class B and C.

### USES

- Threaded rod anchoring
- Rebar dowelling
- Bonding hardened concrete to hardened concrete
- Pick proof sealant around doors, windows and fixtures

### CODES

ICC/ICBO ER-5279; City of L.A. RR25279; Florida FL 402.3; Metro Dade 01-1026.02; Caltrans approved; multiple DOT listings; ANSI/NSF Standard 61, except SET1.7KTA. The Load Tables list values based upon results from the most recent testing and may not reflect those in current code reports. Where code jurisdictions apply, consult the current reports for applicable load values.

### APPLICATION

Surfaces to receive epoxy must be clean. The base material temperature must be 40° F or above at the time of installation. For best results, material should be 70° - 80° F at the time of application. Cartridges should not be immersed in water to facilitate warming. To warm cold material, the cartridges should be stored in a warm, uniformly heated area or storage container for a sufficient time to allow epoxy to warm completely. Mixed material in nozzle can harden in 5-7 minutes at a temperature of 40° F or above.

### SHELF LIFE

Two years from date of manufacture in unopened side-by-side cartridge. SET-PAC cartridge - 18 months from date of manufacture, unopened.

### STORAGE CONDITIONS

For best results store between 45° F - 90° F. To store partially used cartridges, leave hardened nozzle in place. To re-use, attach new nozzle.

### COLOR

Resin—white; Hardener—black; amine based. When properly mixed SET adhesive will be a uniform light gray color.

### CLEAN UP

Uncured Material—Wipe up with cotton cloths. If desired scrub area with abrasive, waterbased cleaner and flush with water. If approved, solvents such as ketones (MEK, acetone, etc.), laquer thinner or adhesive remover can be used. **DO NOT USE SOLVENTS TO CLEAN ADHESIVE FROM SKIN.** Take appropriate precautions when handling flammable solvents. Solvents may damage surfaces to which they are applied. Cured Material – Chip or grind off surface.

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## TEST CRITERIA

Anchors installed with Epoxy-Tie (SET) adhesive have been tested in accordance with ICBO's Acceptance Criteria for Adhesive Anchors in Concrete and Masonry Elements (AC58). ICBO report ER-5279 recognizes Epoxy-Tie (SET) adhesive for the following:

- Seismic and Wind Loading.
- Long Term Creep at Elevated Temperature.
- Static Loading at Elevated Temperature.
- Damp and Water-Filled Holes.
- Freeze-Thaw Conditions.
- Critical and Minimum Edge Distance and Spacing.

In addition, anchors installed with Epoxy-Tie (SET) adhesive have been tested in accordance with ICBO's Acceptance Criteria for Unreinforced Masonry Anchors (AC60).

PROPERTY	TEST METHOD	RESULTS
Consistency	ASTM C 881	Non-Sag/Thixotropic Paste
Heat Deflection	ASTM D 648	136° F (58° C)
Bond Strength	ASTM C 882 (moist cure)	3,218 psi (2 days) 3,366 psi (14 days)
Water Absorption	ASTM D 570	0.110% (24 hrs)
Compressive Yield Strength	ASTM D 695	5,065 psi (24 hours) 12,650 psi (7 days)
Compressive Modulus	ASTM D 695	439,000 psi ( 7 days)
Gel Time (75° F)	ASTM C 881	30 min - 60 gram mass 60 min - thin film

## CHEMICAL RESISTANCE

Very good to excellent against distilled water, inorganic acids and alkalis. Fair to good against organic acids and alkalis, and many organic solvents. Poor against Ketones.

## SET Cartridge Systems

Model No.	Capacity ounces (cubic inches)	Cartridge Type	Carton Quantity	Dispensing Tool(s)	Mixing Nozzle
SET1.7KTA	1.7 (3.1)	side-by-side	12	Adaptor Included for Standard Caulking Tool	EMN1.7 (included)
SETPAC10	10 (18.1)	single	12	Standard Caulking Tool	None Needed
SET22	22 (39.7)	side-by-side	10	EDT22A or EDT22AP	EMN22
SET56	56 (101.1)	side-by-side	6	EDT56AP	EMN50

## SUGGESTED SPECIFICATIONS:

Anchoring Adhesive shall be a two-component 100% solids epoxy based system supplied in manufacturer's standard side-by-side cartridge and dispensed through a static-mixing nozzle supplied by the manufacturer. Epoxy shall meet the minimum requirements of ASTM C-881 specification for Type I, II, IV, and V, Grade 3, Class B and C and must develop a minimum 12,650 psi compressive yield strength after 7 day cure. Epoxy must have a heat deflection temperature of a minimum 136°F (58°C). Adhesive shall be Epoxy-Tie SET from Simpson Strong-Tie, Dublin, CA. Anchors shall be installed per Simpson Strong-Tie's instructions for Epoxy-Tie SET.