

# RPS-752

Epoxy Bonding Agent

**SIMPSON**

**Strong-Tie**

CSI Specification: 03 01 00 Maintenance of Concrete

## DESCRIPTION

RPS-752 Epoxy Bonding Agent is a 100% solids, two-component, moisture-tolerant epoxy system designed to increase the bond between freshly-placed repair mortars or concrete mixes and existing concrete.

## SPECIFICATION COMPLIANCE

RPS-752 exceeds the performance requirements of ASTM C 881, Type II, Grade 2, Class B.

ASSESSMENT

### WHERE TO USE

- Bonding new concrete or repair mortars to existing concrete

### FEATURES

- Bonds to both damp and dry concrete
- Can be applied by brush, roller, spray or squeegee

## PRODUCT DATA

All testing performed at 73°F (23°C) and 50% R.H.

### Generic Description

Epoxy bonding agent

### Packaging

Kit Size	Model No.
2 Quart Kit (1.9 L)	RPS-752KT2QT
2 US Gallon Kit (7.6 L)	RPS-752KT2
10 US Gallon Kit (37.8 L)	RPS-752KT10

### Color

Gray

### Mixing Ratio

1A:1B

### Application Rate

60–100 ft.<sup>2</sup>/US gal. (1.5–2.5 m<sup>2</sup>/L) depending on substrate profile and porosity

### Pot Life

30 min. at 60°F (16°C)

25 min. at 75°F (24°C)

15 min. at 90°F (32°C)

### VOC

4 g/L (mixed)

### Tack-Free Time (7.5-8.0 mil thickness)

6 hours at 60°F (16°C)

3 hours at 75°F (24°C)

1 hour at 90°F (32°C)

### Storage

Store dry between 40–95°F (4–35°C)

### Shelf Life

2 years in unopened packaging



## TECHNICAL INFORMATION

The data herein is based on laboratory testing under controlled conditions. Variations may result from mixing methods and jobsite conditions. All testing performed at 73°F (23°C) and 50% R.H., unless otherwise noted.

### Viscosity

#### ASTM D2556

50°F (10°C) 10,140 cps

75°F (24°C) 7,300 cps

### Bond Strength

#### ASTM C882, hardened to plastic

14 days 1,800 psi 12.4 MPa

### Tensile Strength

#### ASTM D638

Type I mold cured at 40°F (4.4°C)

7 days 2,900 psi 20 MPa

### Tensile Elongation

#### ASTM D638

type I mold cured at 40°F (4.4°C)

7 days 3%

### Flexural Strength

#### ASTM D790

14 days 7,100 psi 49 MPa

### Compressive Strength

ASTM D695	Cured at 40°F (4.4°C)	Cured at 73°F (23°C)	
8 hours		2,700 psi	18.6 MPa
16 hours		4,000 psi	27.6 MPa
1 day		5,000 psi	27.6 MPa
3 days		5,600 psi	38.6 MPa
7 days		6,000 psi	41.4 MPa

### Gel Time

#### ASTM C881, 50°F (10°C)

170 minutes

### Water Absorption

#### ASTM D570

7 days < 1%

### Modulus of Elasticity

#### ASTM D695

cured at 40°F (4.4°C)

7 days 440,000 psi 3,034 MPa

**PLANNING****LIMITATIONS**

- For optimal product performance, apply to surfaces between 40°F (4°C) and 95°F (35°C)
- Material is a vapor barrier after cure, contact Simpson Strong-Tie for use in exterior on-grade applications
- Repair mortars and concrete mixes must be applied while RPS-752 is still tacky
- Existing concrete should be fully cured prior to application

**PREPARATION****SURFACE PREPARATION**

Concrete surface must be sound, clean and free of all contaminants that could impair product adhesion, bond or performance. Concrete should be a minimum of 28 days old or substantially cured to the equivalent design strength prior to RPS-752 installation. Prepare concrete in accordance with ICRI Guideline 310.2R CSP 5-9, taking care to avoid micro-cracking. Remove all loose or deteriorated concrete by chipping hammer, water jetting, or other mechanical means to achieve an open pore structure and sound concrete surface. Remove all cleaning media and debris by vacuum or blowing with high-pressure, oil-free air.

**MIXING**

For optimal product performance, condition individual components to 70°F (21°C) and mix thoroughly prior to use. Do not prepare more material than can be used in the pot life of the product. Proportion Component “A” and Component “B” at a 1A:1B ratio by volume in a clean pail. Mix thoroughly with a low-speed (300–600 rpm) drill and mixing paddle for 3 minutes, scraping unmixed material from sides and bottom of mixing container as needed. Avoid entrapping air into mixture.

**EXECUTION****APPLICATION**

Remove all standing water by vacuum or blowing with oil-free, compressed air prior to installation. RPS-752 can be installed on damp or dry surfaces. Do not install through standing water. Avoid installing at high temperatures or windy conditions to maximize open time. Never apply in direct sunlight.

Apply RPS-752 Epoxy Bonding Agent by brush, roller, spray or squeegee at a rate of 60–100 ft.<sup>2</sup>/US gal. (1.5–2.5 m<sup>2</sup>/L), depending on surface profile and porosity. Immediately install repair materials or concrete mix into wet RPS-752. Do not allow RPS-752 to dry or become tack-free before concrete or mortar installation. If RPS-752 does dry or becomes tack-free, abrade surface and recoat. Do not apply more bonding agent than can be effectively covered with repair mortars or concrete mixes while remaining wet.

## CAUTION

**Component “A”:** WARNING! Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects.

**Component “B”:** DANGER! Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation. Suspected of causing genetic defects. Suspected of damaging fertility or the unborn child. May cause damage to organs (central nervous system, kidney, liver) through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.

**Protective Measures:** The use of safety glasses and chemically resistant gloves is recommended. Use appropriate clothing to minimize skin contact. The use of a NIOSH-approved respirator is required to protect respiratory tract when ventilation is not adequate to limit exposure below the PEL. Refer to Safety Data Sheet (SDS) available at [strongtie.com/sds](http://strongtie.com/sds) for detailed information.

## FIRST AID

**Eye Contact:** Hold open eyes under running water for 15 minutes. Seek medical advice.

**Skin Contact:** Wash skin with soap and water. Seek medical advice if irritation develops.

**Inhalation:** Remove affected person to fresh air. If necessary, use artificial respiration. Seek medical advice.

**Ingestion:** If product is swallowed, call physician or poison control center. DO NOT INDUCE VOMITING, or give diluents to someone who is unconscious, having convulsions, or unable to swallow. Seek medical advice.

## CLEAN-UP

**Spills:** Construct a dike to prevent spreading. Soak up with absorbent material such as clay, sand or other non-reactive material. Place in leak-proof containers. Keep out of sewers, storm drains, surface waters, and soils.

**Surface Clean:** Clean spills and drips from surfaces with solvent (MEK, acetone, etc.). Cured material can only be removed by mechanical means.

**Tools and Equipment:** Clean all tools and equipment with solvent (MEK, acetone, etc.). Cured material can only be removed by mechanical means.

**Skin:** Use a non-toxic pumice-based soap, citrus-based hand cleaner, or waterless hand cleaner towel. Never use solvents to remove product from skin.

**Disposal:** Dispose of container and unused contents in accordance with federal, state, and local requirements. Containers may be recycled; consult local regulations for exceptions.

## LIMITED WARRANTY

This product is covered by the Simpson Strong-Tie RPS Product One-Year Limited Warranty, which is available at [strongtie.com/limited-warranties](http://strongtie.com/limited-warranties) or by calling Simpson Strong-Tie at (800) 999-5099.

### 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 Limited Warranty, product label(s), Product Data Sheet(s), Safety Data Sheet(s), and the [strongtie.com](http://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](http://www.P65Warnings.ca.gov).