

RPS-406

Zinc-Rich Primer

SIMPSON

Strong-Tie

CSI Specification: 03 01 20 Maintenance of Concrete Reinforcing

DESCRIPTION

RPS-406 Zinc-Rich Primer is a single-component, fast-drying, zinc-rich coating designed to protect steel from corrosion by combining a barrier coating with the sacrificial galvanic protection of zinc.

ASSESSMENT

WHERE TO USE

- Priming reinforcing steel to protect against corrosion
- As a corrosion-resistant steel primer for protective coating systems

FEATURES

- High zinc content provides superior corrosion protection of steel
- Excellent bond to steel
- Can be shop or field applied
- Ready to use, simply stir and apply
- Single-component product
- Fast drying

PRODUCT DATA

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.

Generic Description

Zinc-rich primer

Packaging

Kit Size	Model No.
1 Quart (0.94 L)	RPS-406QT

Color

Gray

Finish

Flat

Application Rate

- 4–5 mils DFT total applied in 2 coats
- 300–400 ft.²/US gallon (7.3–9.8 m²/L) per coat depending on surface profile
- **#4 Rebar:** 775–1,000 lin. ft./US gallon (60–80 m/L)
- **#5 Rebar:** 600–825 lin. ft./US gallon (45–65 m/L)

Dry to Touch

ASTM D1640

1 hr. at 73°F (22.8°C)

Storage

Store dry between 40° and 95°F (4°–35°C)

Shelf Life

2 years in unopened packaging

% Solids by Volume

49%

% Solids by Weight

ASTM D2369

83%

VOC

356 g/L

Viscosity

ASTM D2556

2,800 cps

Density

ASTM D1475

18.2 lbs./US gallon (2.2 kg/mm³)

Corrosion Resistance

ASTM D1654, 7 days

Creep Rating of 10 after being exposed to ASTM D5894 cyclic weathering with UV and Salt Fog for 336 hours

PLANNING

LIMITATIONS

- Do not apply to surfaces below 50°F (10°C)
- Do not apply to surfaces above 95°F (35°C)
- Not recommended for use under high-solvent, low-solids coatings or lacquer-type products
- Apply to dry substrates only

PREPARATION

SURFACE PREPARATION

Remove existing corrosion by sandblasting or other mechanical means. All freshly prepared surfaces must be coated before flash rusting can occur.

MIXING

For optimal product performance, condition to 70°F (21°C) and stir thoroughly prior to and intermittently during use to ensure homogenous mixture. RPS-406 is packaged ready-to-use.

EXECUTION

APPLICATION

RPS-406 may be applied by brush, roller, or spray. First coat must be dry to touch prior to application of subsequent coat(s). Two coats recommended.



CAUTION

FLAMMABLE LIQUID! May cause eye and skin irritation. May cause skin sensitization.

Protective Measures: The use of safety glasses and chemical-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 permissible exposure limit (PEL). Refer to Safety Data Sheet (SDS) available at 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 who cannot 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: Wipe up uncured material with cotton cloths. If desired, scrub area with abrasive, water-based cleaner and flush with water. If approved, solvents such as ketones (MEK, acetone, etc.), or adhesive remover can be used. Cured material can be removed only by mechanical means.

Tools and Equipment: Remove uncured material with ketones (MEK, acetone, etc.), or adhesive remover. Cured material can be removed only 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 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 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.