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# THIN-TOP SUPREME



# SINGLE COMPONENT CEMENTITIOUS TOPPING & REPAIR MORTAR FOR THIN APPLICATIONS

#### **PACKAGING**

50 lb (22.7 kg) bags and pails Code: 160T 50 (bag) Code: 160T 05 (pail, MTO)

#### **APPROXIMATE YIELD**

**50 lb (22.7 kg) unit:** 0.43 ft<sup>3</sup> (0.011 m<sup>3</sup>) per unit when mixed with 3.0 qt (2.8 L) of potable water.

### MINIMUM/MAXIMUM APPLICATION THICKNESS

1/16 to 3/8 inches (1.6 to 10 mm)

#### **CLEAN UP**

Clean tools and equipment with water before the material hardens.

#### **SHELF LIFE**

2 years in original, unopened package

## SPECIFICATIONS AND COMPLIANCES

 Canadian Food Inspection Agency, MTQ and MTO

#### **DESCRIPTION**

THIN-TOP SUPREME is a latex and microsilica modified cementitious mortar designed for use as a floor or deck topping at thicknesses of 1/16" to 3/8" (1.6 mm to 9.5 mm). This product is a single-component formula which incorporates a powder latex technology. It provides excellent durability under freeze-thaw cycling as well as reducing the ingress of water and de-icing salts. THIN-TOP SUPREME offers normal set times in a trowelable consistency for easy workability.

#### PRODUCT CHARACTERISTICS

#### **FEATURES/BENEFITS**

- Provides a strong, wear resistant thin overlay
- Excellent durability in freeze-thaw cycles
- Contains an integral corrosion inhibitor
- Excellent bond to prepared concrete
- Reduces the penetration of water and de-icing salts for substrate protection
- Suitable for both interior and exterior use

#### **COMMON METHODS**

Trowelable (horizontal applications)

#### **PRIMARY APPLICATIONS**

- Parking decks
- Pavements
- Joints
- Marine structures
- Curbs and gutters
- Ramps
- Floors
- Walkways

#### **APPEARANCE**

THIN-TOP SUPREME is a free-flowing powder as packaged. After mixing and placing, the color may initially appear darker than the surrounding concrete. The color will lighten up substantially as it cures and dries out, though it may always appear somewhat darker than the surrounding concrete.

#### **PHYSICAL PROPERTIES**

Single component

Mixes with 2.75 to 3.25 quarts (2.6 to 3.08 L) of potable water per 50 lb (22.7

kg) bag/pail

Working Time: 30 to 40 minutes
Initial Set: 1 to 1.5 hour
Final Set: approximately 3 hours
Unit Weight: 130 lb/ft³ (2082 kg/m³)

Physical properties based on measurements at 70 °F in laboratory conditions.

#### **TECHNICAL INFORMATION**

The following are typical values obtained under laboratory conditions. Expect reasonable variation under field conditions.

Test Method	Test Property	Values
ASTM C109* 2" (50 mm) cubes	Compressive Strength	1 day 2,000 psi (13.8 MPa) 7 days 4,000 psi (27.6 MPa) 28 days 6,000 psi (41.3 MPa)
ASTM C157	Linear Shrinkage	28 days0.15%
ASTM C348	Flexural Strength	7 days 1,000 psi (6.9 MPa) 28 days 1,200 psi (8.3 MPa)
ASTM C496	Split Tensile Strength	7 days 300 psi (2.1 MPa) 28 days 400 psi (2.8 MPa)
ASTM C666 Procedure A	Freeze/Thaw Resistance	300 cycles 89% relative dynamic modulus

<sup>\*</sup>Mixed at 2.9 quarts (2.7 L) potable water per 50 lb (22.7 kg) bag

#### **DIRECTIONS FOR USE**

**Surface Preparation:** Concrete surfaces must be structurally sound, free of loose or deteriorated concrete and free of dust, dirt, paint, efflorescence, oil and all other contaminants. Mechanically abrade the surface to achieve a surface profile equal to CSP 4-6 in accordance with ICRI Guideline 310.2. Properly clean profiled area.

**Priming and Bonding (Saw Cut and Chipped Out Repairs):** Thoroughly clean any exposed reinforcing steel and apply DURALPREP A.C. to the concrete and the reinforcing steel within the repair area. Refer to the DURALPREP A.C. technical data sheet for full instructions. Alternatively, application of EUCOWELD 2.0 to a dry substrate or a scrub coat of THIN-TOP SUPREME to the SSD concrete substrate may be used for bonding.

**Priming & Bonding (Horizontal Toppings):** For the best adhesion to concrete, use EUCOFLOOR EPOXY PRIMER seeded with sand as the bonding coat. Refer to the EUCOFLOOR EPOXY PRIMER technical data sheet for full instructions. Alternatively, application of EUCOWELD 2.0 to a dry substrate or a scrub coat of THIN-TOP SUPREME to the saturated surface dry (SSD) concrete surface may be used for bonding. The topping material must be placed on the scrub coat before the scrub coat dries out.

**Mixing:** One 50 lb (22.7 kg) unit requires 2.75 to 3.25 qt (2.6 to 3.08 L) of potable water. All materials should be in the proper temperature range of 60 to 90 °F (15 to 32 °C). Single 50 lb (22.7 kg) units may be mixed with a drill and "jiffy" mixer. A paddle type mortar mixer or pan mixer may be used for large jobs. Add the appropriate amount of potable water to a clean mixing vessel, then gradually add the dry product. Do not exceed maximum water or add any additional additives. Mix for 3 to 5 minutes. Do not retemper.

**Placement:** Ambient and surface temperatures should be in the range of 45 to 100 °F (7 to 38 °C). Working time at 72 °F (22 °C) is approximately 30 to 40 minutes. To make repairs, completely fill repair area with material ensuring no voids and screed to match surrounding concrete. On large areas, use screed strips with a vibratory screed to level. For repairs and toppings thicker than 3/8" (9.5 mm), use CONCRETE-TOP SUPREME instead. Do not use THIN-TOP SUPREME for repairs less than 1/16" (1.6 mm) deep.

**Finishing:** This product is designed to be finished with a float or broom texture. For a hard, flat troweled surface, delay finishing until the product is near final set (approx. 3 hours) to reduce the risk of blistering during troweling. Do not add water to the surface during the finishing operation. When placing under hot and windy conditions, the use of EUCOBAR evaporation retarder is recommended to prevent the loss of surface moisture. Always re-establish floor and slab joints when using this product as an overlay.

**Curing and Sealing:** Do not wet cure. Proper curing procedures are important to ensure the durability and quality of the repair. To mitigate surface cracking, cure the material with a high solids curing compound, such as SUPER AQUACURE VOX or SUPER DIAMOND CLEAR VOX. If a curing compound is not desired, cover with quality plastic sheeting for a minimum of 3 days. Do not use a solvent based curing compound on this product.

#### PRECAUTIONS/LIMITATIONS

- Store in a dry place.
- Always mix full units.
- Do not use material at temperatures below 45 °F (7 °C) or above 100 °F (38 °C).
- Do not allow repairs to freeze until the material has reached a minimum of 1,000 psi (7 MPa) compressive strength.
- Do not use DURALPREP A.C. as a bonding agent for toppings and overlays done with THIN-TOP SUPREME.
- When necessary, follow the recommendations in ACI 305R "Guide to Hot Weather Concreting" or ACI 306R "Guide to Cold Weather Concreting".
- For repairs and toppings thicker than 3/8" (9.5 mm), use CONCRETE-TOP SUPREME.
- No heavy traffic until the product has cured.
- Do not wet cure. Do not use a solvent based curing compound on this product.
- In all cases, consult the Safety Data Sheet before use.

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