# **THIN-TOP SUPREME**

# PREMIUM POLYMER & MICROSILICA MODIFIED REPAIR & OVERLAY MORTAR FOR THIN APPLICATIONS



## **DESCRIPTION**

THIN-TOP SUPREME is a latex and microsilica modified cementitious mortar designed for use as a floor or deck topping at thicknesses of 1.6 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.

## **PRIMARY APPLICATIONS**

- Parking decks
- Pavements
- Joints
- Marine structures

- Curbs and gutters
- Ramps
- Floors
- Walkways

# **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 forsubstrate protection
- Suitable for both interior and exterior use

# **TECHNICAL INFORMATION**

Properties	Value
Compressive Strength ASTM C 109, 50 mm cubes	1 day - 19.3 MPa 7 days - 34.5 MPa 28 days - 46.2 MPa 56 days - 54.5 MPa
Linear Shrinkage ASTM C1 <i>57</i>	3 day - 0.02% 7 days - 0.05% 14 days - 0.08% 28 days - 0.10% 56 days - 0.11%
Unit weight	approx. 2082 kg/m³
Flexural Strength ASTM C348	7 days - 6.6 MPa 28 days - 7.9 MPa
Split Tensile Strength ASTM C496	7 days - 3.5 MPa 28 days - 3.8 MPa
Freeze/Thaw Resistance ASTM C666 Procedure A,300 cycles	100% relative dynamic modulus



Properties	VALUE
Working time	30 to 40 minutes
Initial set	1 to 1.5 hours
Final set	Approx. 3 hours

**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.

#### PACKAGING / YIELD

THIN-TOP SUPREME is packaged in 25 kg moisture resistant bags. Yield:  $0.011 \text{ m}^3/\text{bag}$  when mixed with 3.5 L of water. Typical water requirement is 3.0 to 3.5 L/bag.

## SHELF LIFE

12 months in original, unopened package

# **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:** Clean and prime exposed steel with DURALPREP A.C.. Concrete should be primed with a spray or brush coat of DURALPREP A.C. The primer coat of DURALPREP A.C. must be allowed to thoroughly dry prior to the application of the repair mortar. Alternately, a Saturated Surface Dry (SSD) concrete surface can be primed with a scrub coat of THIN TOP SUPREME. The repair must be made before the scrub coat dries out.

**Mixing:** Single bags may be mixed with a drill and "jiffy" mixer. Use a paddle type mortar mixer for large jobs. All material should be in the proper temperature range of  $15^{\circ}$  C to  $32^{\circ}$  C. Add the appropriate amount of water 3.0 to 3.5L per bag for the batch size and then add the dry product. Mix for 3 to 5 minutes.

**Placement:** Discharge material from mixer immediately and place on to the repair area. For repairs, spread with a trowel, come-a-long, or square tipped shovel to a thickness that matches the surrounding concrete. Work material into place by floating or troweling. On large areas, use screed strips with a vibratory screeding to level.

**Finishing:** This product is designed for finishing with a float or broom appearance. Do not add additional water to the surface during the finishing operation; use EUCOBAR evaporation retarder. 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.

**Curing and Sealing:** Proper curing procedures are important to ensure the durability and quality of the repair. To prevent surface cracking, cure the material with a high solids curing compound, such as SUPER AQUA-CURE VOX or SUPER DIAMOND CLEAR VOX.

**Note:** Do not use a solvent based curing compound on this product. If a curing compound is not desired, cover with polyethylene for a minimum of 3 days. Do not wet cure. Always re-establish floor and slab joints when using this product as an overlay.

#### CLEAN-UP

Clean tools and equipment with water before the material hardens. Hardened THIN-TOP SUPREME will require removal by mechanical means.

## **PRECAUTIONS/LIMITATIONS**

- Do not wet cure. Do not use a solvent based curing compound on this product.
- Do not allow repairs to freeze until the material has reached a minimum of 7 MPa compressive strength.
- Use only potable water for mixing.
- Do not add admixtures or sand.
- Do not use material at temperatures below 7°C or above 38°C.
- · No heavy traffic until the product has cured.
- Mixing partial bags may yield variable results; always mix full units.
- Store product in a dry place.
- For repairs and toppings thicker than 9.5 mm, use CONCRETE-TOP SUPREME.
- In all cases, refer the Safety Data Sheet before use.

