# **C**&URE

PRODUCT DESCRIPTION

PROFINISH 989 is a non-sanded, Portland cement compound for the skim coating and finishing of interior or exterior subfloors prior to the installation of resilient flooring such as vinyl and VCT, carpet, ceramic tile, slate, granite or marble. PROFINISH 989 provides a smooth finish and allows the installation of floor coverings in as little as 15 minutes with its revolutionary self-drying, Controlled Cure Technology™ (CCT). CCT controls the rate at which water evaporates during the curing process, promoting much faster and consistent hydration. Use to smooth ridges, patch cracks and holes, or as a skim coat on concrete, interior plywood, ceramic tile, stone, cement terrazzo, sheet vinyl and properly prepared old cutback adhesive. It features the performance characteristics of a patching material that can produce a fine featheredge finish. Polymer-modified, PROFINISH 989 is a one-part system that only requires the addition of water to produce a dense, water-resistant surface.

#### AREAS OF USE

PROFINISH 989 may be used on interior or exterior applications where a permanent, water-resistant surface is required. Like all Portland cement products, strength increases significantly during the initial 28 days.
PROFINISH 989 may be applied as thick as 3" (7.6 cm) to featheredge in a single application without fear of shrinking, cracking or spalling.

#### **LIMITATIONS**

Do not use PROFINISH 989 over gypsum-based surfaces, old adhesive residue, paints, particle board, plastics, vinyl products, epoxy or urethane floor coverings. Use in a temperature range of 40°F to 90°F (4°C to 32°C). (Do not allow mortar to freeze for the first 72 hours.) For installation of rubber tile and other non-porous backed flooring, use an epoxy or a pressure-sensitive contact adhesive. Flooring requiring special adhesives that may be sensitive to moisture should only be installed after PROFINISH 989 has cured 16 hours.

### ► APPLICABLE STANDARDS

Color — Gray.
Texture — Texture-Powder, consisting of Portland cement, organic and inorganic materials.

#### PACKAGING

15 lb. (6.8 kg) pails.

### **ProFinish** 989

## Skim Coat, Patching & Finishing Cement Underlayment

#### **INSTALLATION**

#### PREPARATORY WORK

All surfaces must be structurally sound and non-flexing. Deflection shall not exceed 1/360 of the span including live and dead load. Remove all dust, waxes, sealers, old adhesive residues (for cutback adhesive residue, see "Old Cutback Adhesive" section), curing compounds, oils, gypsum based materials, surface hardeners, paints, old floorings and other loose or foreign material before application.

#### **▶** CEMENTITIOUS FLOORS

Concrete floors shall be fully cured (28 days minimum), free of hydrostatic pressure and efflorescence. Chip, sandblast or hammer out loose, poorly bonded concrete. Clean off any resulting dust. Surfaces may be cleaned by acid-etching using C-CLEAN 985 or 10% muriatic acid wash. All acid sludge must be neutralized and flushed from the floor. Smooth, steel-troweled surfaces shall be roughened to provide a mechanical bond. Dampen concrete floor with clean water but do not let puddles remain. Apply underlayment while floor is still damp. In confined areas where you will find holes or conduit trenches, PROFINISH 989 may be applied up to 3" (7.6 cm) in depth.

#### **WOOD SUBSTRATES**

All wood flooring should be structurally sound with no flexing. Only spot patching should be done on wood substrates. If a leveling layer over 5 ft. (1.5 m) in diameter is required use LEVELCURE® SLU 961 or LCB 951 or proceed as follows: Exterior Grade Plywood (EGP) must first be securely fastened. Allow a gap of 3/16" to 1/4" (4.8 to 6.4 mm) between sheets of plywood for expansion by proper spacing during installation or saw cutting after installation of plywood. Cover the joint with adhesive tape prior to application of metal lath. All plywood flooring must be secured with screw-type nails and glued where possible. Nail or staple thin, galvanized metal lath to the floor. Install 1/4" to 1/2" (6.4 to 13 mm) thickness of PROFINISH 989 mortar over the metal lath.

#### OLD CUTBACK ADHESIVE

Old cutback adhesive residue shall be hard and well bonded to the substrate. Scrape off all ridges and remove any loose cutback. The old cutback must be thoroughly dried, hard and bonded. Residue shall be chemically or mechanically reduced to expose the substrate and that only a transparent residue shall be present. Remove all loose concrete or old patching or leveling compounds. Wet mop to remove any dust and dirt as necessary and let dry. Next, mix the Profinish 989 with clean water and apply to the entire area at 1/16" (1.6 mm) thick. For areas from 1/16" to 1/2" (1.6 to 13 mm), upgrade the mix with

undiluted CURECRYLIC® 939 latex additive at a rate of 3½ quarts (3.3 L) per 15 lb. (6.8 kg) pail. Dry time is one hour minimum depending on jobsite conditions. Always check for moisture prior to installation of flooring materials. For details see RFCI recommendations.

NOTE: Old cutback residue in installations can be used for carpet, vinyl or rubber flooring only. As a practical test, it is recommended that three test areas of 12 square inches (.3 m2) of the finished flooring be installed. Allow test areas to cure for three (3) days, then remove to assure adequate bond. For applications of ceramic tile and stone over cutback use UNIFLEX® 916, PERMABOND® 902 with PORCELAIN STONE & TILE 948 additive, or PRO M-FLEX STRATA® 914 to install the tile directly over the cutback.

#### SPECIAL SURFACES

Marble, terrazzo and existing ceramic tile surfaces must be well bonded to subfloor, cleaned of any waxes and abraded to a rough surface prior to application of PROFINISH 989. Use PORCELAIN STONE & TILE 948 in lieu of water for these types of installations.

#### MIXING

Mix one 15 lb. (6.8 kg) unit of PROFINISH 989 with 3 1/2 quarts (3.3 L) of clean water (2 parts powder: 1 part water) or PORCELAIN STONE & TILE 948 latex additive to increase bond and adhesive strength. Mix amounts that can be applied in 10 minutes. Always add the powder to the liquid and mix with a low speed drill (300 RPM or less) until a lump-free mix is obtained. Use a mixing paddle that does not entrap air into the mortar. Do not add any foreign liquids or powders to PROFINISH 989.

#### APPLICATION

Prior to the application of PROFINISH 989 dampen the substrate with clean water (except for wood substrates). Leave no remaining puddles. Once surface is prepared, apply the mixture by forcing the initial coat into the substrate with a trowel. Build the material to the desired thickness, not to exceed 1/2" (13 mm). Begin to finish immediately using a flat steel trowel.

For skim coat applications, prepare substrate as explained above. To apply mixture, use a smooth-edged trowel to level the surface area by forcing the mix into substrate voids and imperfections. Trowel at a 45 degree angle to the substrate surface to fill voids while removing excess material from the surface.

This product should not be over-troweled. Dip trowel in water frequently to make the finishing process easier; clean tools often.

PROFINISH 989 may be sanded after a hard set (usually within one hour under normal conditions).

#### EXPANSION JOINTS

For Ceramic Tile Expansion joints, saw cut joints, construction joints or structural cracks shall not be covered with Profinish 989. They should continue through the Profinish 989 and the subsequent flooring material. Provide expansion joints every 12 - 16 feet (3.6 - 4.9 m) exterior and 24 - 36 feet (7.3 - 11 m) interior in each direction. Provide expansion joints through the Profinish 989 at perimeter walls, dissimilar floors, curbs, columns, pipes etc. An architect or structural engineer must specify expansion joints and show location and details on drawings. Follow procedures EJ 171 in the TCA Handbook.

#### CURING

A cure time is obtained in 15 to 45 minutes, depending on ambient conditions. If the new floor coverings and bonding adhesives are affected by moisture, the PROFINISH 989 should be tested by a moisture meter prior to installation of subsequent flooring. Allow the ProFinish 989 to dry to an acceptable moisture level recommended by the manufacturers of the flooring materials and bonding adhesives. Always check moisture prior to installation of wood or resilient flooring materials.

#### CLEAN-UP

Water is all that is needed to remove uncured mortar.

#### COVERAGE

Coverage 350 to 450 sq. ft.  $(32.5 - 42 \text{ m}^2)$  of concrete surface can be skim coated with the 15 lb. (6.8 kg) unit.

#### WARRANTY

PROFINISH 989 is included in C-Cure's Five Year System Warranty. For terms and conditions see Warranty Document #WRTDS.

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PROFINISH 989 TECHNICAL DATA			
TEST			TYPICAL VALUES
A. Pot Life @ 70°F (21°C)		30 Minutes	
B. Initial Set @ 70°F (21°C)			15 Minutes
C. Final Set @ 70°F (21°C)			30 Minutes
D. Drying Time Before Floor Covering Installation		15 - 45 Minutes	
E. Compressi ASTM (	ve Strength :109	4 Hours 24 Hours 7 Days 28 Days	1700 psi (120 kg/cm²) 2000 psi (141 kg/cm²) 2600 psi (183 kg/cm²) 3200 psi (225 kg/cm²)
F. Flexural S	trength ASTM C348	4 Hours 24 Hours 7 Days 28 Days	270 psi (19 kg/cm²) 300 psi (21 kg/cm²) 400 psi (28 kg/cm²) 500 psi (35 kg/cm²)

G. Safety—CAUTION: May cause eye, skin or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for Silica dust. Contains Portland cement. If any cement or cement mixtures get into eye, flush immediately and repeatedly with water, and consult a physician promptly. Freshly mixed cement, mortar, concrete or grout may cause skin injury. Avoid contact with skin where possible and wash exposed skin areas promptly with water.

KEEP OUT OF REACH OF CHILDREN.

H. Storage Life—One year if kept dry in sealed bags.

#### **GUARANTEE**

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Materials & Methods Standards Association, Ceramic Tile Distributors Association.

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