TopCrete 601

Stampable Overlay

DESCRIPTION • PaveCrete 601 is a single component, polymer modified, colored, cementicious topping for resurfacing and texturing exterior or interior concrete floors and hardscapes in thicknesses from featheredge to 25 mm.

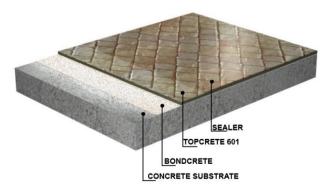
USES • TopCrete 601 is used as a hard-wearing overlay system on existing floors where texturing with stamping tools is desired. TopCrete 601 therefore eliminates the need to remove existing pavements, while providing an attractive and durable stamped concrete finish. TopCrete 601 is integrally colored and must be used with PaveCrete 300 Antique Release for achieving an antiqued look, or with PaveCrete 400 Liquid Release for a uniform color appearance, when texturing with stamping tools. TopCrete 601 may also be chemically stained for additional antiquing effects. A layer of BondCrete must first be applied to the surface before application of TopCrete 601. TopCrete 601 may be applied in thicknesses ranging from featheredge to 20 mm.

ADVANTAGES •

- ✓ Durable & long lasting.
- Eliminates the need to remove existing pavement.
- Gives old surfaces the highly decorative finish of natural paving materials.
- ✓ Integrally colored.
- ✓ Available in 40 standard colors.

COVERAGE • Coverage will vary depending on substrate surface profile, required depth of installation, surface finish and preparation method. Dominant coverage rate is approximately 1.4 square meters per 25 kg bag at 10 mm thicknesses.

SYSTEM DETAIL •



LIMITATIONS • *TopCrete 601* must be applied over structurally sound and non-moving surfaces. All joints in the existing substrate must be extended through the full depth of the *TopCrete 601* overlay by saw



cutting, allowing for the simultaneous expansion and contraction of the substrate and the *TopCrete 601* overlay. Cracks or joints in the existing substrate will reflect through the *TopCrete 601* overlay. A layer of *BondCrete* must first be applied to the surface prior to application of *TopCrete 601*. As in all flooring applications, the surface must be sealed for stain protection once the surface has cured for a minimum of 24 hours. If the *TopCrete 601* topping is to be chemically stained, it must be allowed to cure for a minimum of seven days.

TopCrete 601 was specifically designed and formulated to be textured with stamping tools; a smooth trowel finish is not recommended with TopCrete 601. A smooth trowel finish with TopCrete 601 is likely to experience surface cracking.

Do not apply in areas subject to negative hydrostatic pressure or metal-wheeled vehicular traffic.

Do not apply if ambient temperature is expected to drop below 7°C during installation or in the proceeding 48 hours, or if rain is expected in the proceeding 24 hour period after application. Do not mix or apply when ambient temperature is expected to exceed 40°C.

PHYSICAL PROPERTIES

Test	Result
Abrasion Resistance (EN 12808-2:2002) Regular Concrete TopCrete 601	854 mm³ 96 mm³
Compressive Strength (ASTM C 579, method A) @ 7 days	20.0 MPa
Tensile Strength (ASTM C 307) @ 7 days	2.6 MPa
Flexural Strength (ASTM C 580) @ 7 days	6.2 PMa
Impact Resistance (EN ISO 6272)	No sign of cracks to 1,500 mm height
Surface Hardness (BS EN 13892-6)	54 N/mmm ²

SURFACE PREPARATION • All bases must be fully cured, sufficiently rigid, and clean of any surface contamination such as oil, dirt, grease, coatings, curing compounds, and laitance that may prevent good suction. Dense, smooth surfaces, and those retaining excessive amount of form release agent can cause delamination from the base. Any painted or

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coated surfaces should be sandblasted, grinded, and/or pressure washed to remove existing coatings. Use of detergents or soap is not recommended as they may leave a film that can cause bonding failure.

Surrounding areas should be covered and protected from material spills and equipment contact. Rope off work area, remove surrounding vehicles, and close off to traffic.

Cracks should be corrected with a patching compound such as *PatchCrete 102 Crack Filler*. However, it should be noted that some cracks might be permanent moving cracks and could therefore cause reflective cracking in the *TopCrete 601* layer. Any surface imperfections or holes should be patched with *PatchCrete 101 Multi Purpose Patching Compound* and allowed to cure for a minimum of 24 hours; longer for more extensive patching.

Under all condition, a coat of *BondCrete* must first be applied to the substrate and allowed to dry thoroughly in order to unify the surface absorption and provide adequate surface areas for mechanical bonding. It is recommended to water the surface of the concrete prior to application of the *BondCrete* layer in order to prevent excessive drying; do not apply the *BondCrete* while water puddles are still present on the surface. *TopCrete 601* is then applied on top of a second *BondCrete* coat while it is still tacky and before it dries. Never apply the topping on a dry coating of *BondCrete*; application on a dried coating may lead to delamination of the overlay. Please refer to the relevant CCC technical data sheets for installation instructions.

For application on cementitious tiles and extensively patched concrete surfaces, it is recommended to embed fiberglass mesh between the two coats of BondCrete. Use high tensile strength fiberglass mesh such as ShieldCrete SD 160 g, ShieldCrete MD 145 g, InsuCrete Standard 160 g mesh, or equivalent high quality fiberglass mesh.

MIXING • Mixing should be done with a drill mounted jiffy-type mixer at low speeds. Always add clean potable water first. Mixing duration should last for at least four minutes to insure proper color and material dispersion within mix; never retemper. Approximate mixing ratio is 8 liters of water per 35 kg bag.

APPLICATION • Application temperatures should be between 5°C and 40°C. It is highly recommended to test a small area to ensure bonding ability and satisfaction of appearance before complete application. Apply a thin layer of *BondCrete* to the first dry coat of *BondCrete*. *TopCrete 601* must be applied on top of the *BondCrete* coat while it is still tacky. Never apply the topping on a dry coating of *BondCrete*; application on a dried coating may lead to delamination of the overlay.

TopCrete 601 can be applied in thicknesses ranging from featheredge to 25 mm. Minimum thickness will depend on the profile of the texturing mat design selected; a minimum of 3 mm in addition to the maximum stamping tool profile is required. Use a gauge rake spreader to place the material, then follow lightly with a Fresno. Do not over trowel, two to three passes should be sufficient. Do not attempt to smooth out the TopCrete 601 surface, the texturing mat will seamlessly transfer the finish required. All mixed material must be used immediately.

Once the *TopCrete 601* overlay has stiffened enough to support stamping operations, but is plastic enough to allow for texturing, the surface may be imprinted with texturing mats. Timing is critical for proper texturing of the surface; imprinting too early in the curing process of *TopCrete 601* will cause the tool to sink into the surface, while imprinting when the topping has hardened excessively will prevent the full details of the texturing tool to be transferred to the surface.

Texturing of *TopCrete 601* must be accompanied by the use of either PaveCrete 300 Antique Release or PaveCrete 400 Liquid Release, use of PaveCrete 300 in a contrasting color to that of the TopCrete 601 will produce natural looking antiquing effect. Please refer to the relevant CCC technical data sheets for more information. When PaveCrete 300 is used, the topping must be left to cure for at least 24 hours before the excess release agent is swept using a soft broom and the surface cleaned using a pressure washer; longer curing time would be required under cooler temperatures and more humid conditions. The surface should be allowed to fully dry before application of a sealer coat. Control joints may be saw-cut into the topping after it has been allowed to cure for at least 16 hours.

TopCrete 601 was designed to be finished with texturing tools. A smoothly trowelled finish is not recommended as the surface may experience cracking.

CURING • **Do not water cure.** *TopCrete 601* is self curing. Under hot and/or windy conditions, cover the in-place *TopCrete 601* with concrete curing paper after the imprinting operation. *TopCrete 601* may be gently walked on in about 16 hours after installation at 21°C, and the surface may be opened to light foot traffic at least 72 hours after installation. Area may be opened to regular traffic seven days after installation.

SEALING • Once the in-place *TopCrete 601* has been allowed to cure fully for a minimum of 48 hours, washed, and allowed to dry completely, a coating of *A-Z Super Seale, A-Z Ultra Sealer, ElastoCrete 212 Water Based PU Sealer,* or *A-Z Mega Sealer* must be applied to the surface for stain protection. Please refer to the relevant CCC technical data sheets for installation instruction. Sealed surfaces should be

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inspected periodically for traffic-worn areas and resealed as necessary.

CLEANING • Clean all tools and equipment promptly with clean water.

STORAGE & SHELF LIFE • Keep material covered and off the ground to prevent exposure to moisture. Store in a dry, covered area away from direct sunlight. Under recommended storage conditions and when stored in original unopened packaging, expected shelf life is 12 months from the date of purchase.

SAFETY PRECAUTIONS • KEEP OUT OF REACH OF CHIDREN. DO NOT TAKE INTERNALLY. CONTAINS CEMENT AND SILICA (QUARTZ). Portland cement and silica based products present health hazards. May cause delayed lung injury (silicosis). Irritating to eves and skin. Use in adequate ventilation and do not breath dust. Extremely fine material, always use a NIOSH/MSHA TC 21C approved dust mask when handling, especially during spray applications. Use neoprene gloves, safety goggles, and a dust mask when handling. FIRST AID: Eyes - Do not rub eyes, immediately flush with fresh water. Skin - Wash with soap and water. Inhalation - If experience difficulty breathing or if inhaled, move to fresh air. If symptoms persist, seek medical attention.

PACKAGING • 25 kg bags.

SUGGESTED SHORT FORM SPECIFICATIONS • All architectural concrete surfaces designated in the plans or specifications as having a stamped topping shall have CREATIVE CONCRETE CONCEPTS TopCrete 601™ installed in accordance with manufacturer technical data sheet and written instructions. The surface must be primed with CREATIVE CONCRETE CONCEPTS BondCrete™ applied in two coats in accordance with manufacturer technical data sheet and instructions. TopCrete 601™ base color shall be [select from CCC Standard Color Chart1, installed in conjunction with PaveCrete 300™ ANTIQUE RELEASE AGENT in color [select from CCC Standard Color Chart]. The toping shall be placed in [____] mm thickness on a structurally sound, rigid, clean, and level concrete surface free of cracks and with properly laid out joints. The topping shall be finished to a textured surface using [select from CCC Texturing Mats Guide] texturing tool as outlines in the manufacturer's data sheet and application instructions to achieve the desired finish. All finished surfaces must be sealed with CREATIVE CONCRETE CONCEPTS A-Z Ultra Sealer™, A-Z Super Sealer™, A-Z Mega Sealer™, or ElastoCrete 212™ in accordance with manufacturer technical data sheet and instructions. All products shall be manufactured by CREATIVE CONCRETE CONCEPTS, Sharjah, UAE and Amman, Jordan; info@tex-crete.com.