

Description

NEOCEMENT is an innovative system especially engineered for wall and floor cement seamless finishes. It consists of premium quality tri-component multipurpose decorative topping designed for resurfacing existing or degraded floorings, giving them the look and feel of new concrete. Neocement can also be colored and stained to achieve completely customizable and unique decorative effects on a multitude of surfaces such as concrete, wood, metal, marble, granite, ceramic tiles and even glass, providing interior designers with a wide array of bespoke and modern finishes options such as:

- Concrete wall and floor finishes, which allows the design to extend from the floor to the walls and even ceilings.
- Degraded surfaces restoration, allowing for cost reduction by eliminating the need to deal with waste removal.
- Light concrete furniture by applying Neocement on furniture built from wood and metal.
- Bespoke finishes, using stencils to create custom art and graphics integrally in the floor finish.

Recommended For

Neocement is suitable for **Interior & exterior applications on both horizontal and vertical surfaces** in locations such as kitchens, bathrooms, shower box, or even as coatings for bathtubs. When properly installed, Neocement produces superior adhesion with high abrasion resistances and flexural properties that are unrivalled by other cement base coatings or concrete overlays, making it highly suitable for high traffic areas.

Key Features

- Self-crosslinking resin
- High strength with impact and abrasion resistance
- Antistatic and fire resistance
- Moisture vapor permeable and excellent water resistance
- Protects against penetration of water, chlorides & CO₂
- Superior adhesion properties
- Flexible flooring
- Low VOC Technology
- Seamless flooring option
- Extends lifecycle appearance of concrete
- Extensive choice of colors, textures and patterns

Physical Properties

Solvent Type	Waterborne
Finish Type	Mid-sheen polished finish
Working Life	3 hours at 25°C 80% relative humidity
Open to Traffic	In 24 hours for light traffic but it is advisable for full cure to be achieved (a minimum of 72 hours)
Full Cure	Full cure in 72 hours depending on weather conditions and ambient temperature
Spreading Rate	2 sq./ kg/ coat – Depending on surface conditions and application technique Minimum recommended number of coats: 2
Average Dry Time	Touch dry in 1 hour based on ASTM D 1640
Full Cure	Full cure in 72 hours depending on weather conditions and ambient temperature
Dry Film Thickness	0.4-0.7 mm depending on application technique
Density (3 components mixed)	1.76 g/cm ³
Solids	Approximately 70%
Viscosity	55,000 – 65,000 cP (spindle 7/ Speed 10) based on ASTM D2196
Bases	200/00
Colors	Neocement is available in 42 concrete shades ranging from grey to white. Custom colors can be matched to the Smartmatch, RAL and NCS color charts upon request.

Test Results

Average Dry Time	ASTM D 1640	Touch dry in 1 hour
Indoor Air Quality	UNI EN ISO 16000-9:2006	A+
Adhesion	ASTM D4541	>2 MPa, exceeds FeRFA limits for excellent flooring adhesion
Water Vapor Permeability	BS2782	203 g/m ² in 24 hours
Water Absorption	DIN 52617	0,076 kg/m ² X h _{0,5}
Surface Hardness	ASTM 2240	Shore D >75
Operating temperatures	0°C to +100°C at 0-100% relative humidity (when coated with 100 microns WFT Colortek Polylock)	
Resistance To Impact	ASTM D2794	Intact after collision (>1.4m For 1kg ball / >0.7m for 2kg ball)
Chemical Resistance	ASTM D 3260 & ASTM D 1308	No alteration or reduction of Shore
Slip Resistance	ASTM C1028	SRV >70 (R12)
Thermal Resistance	ASTM E1530-11	λ =0,46 (W/mK)
Fire Reaction	UNE-EN ISO 1716:2011 UNE-EN ISO 9239-1:2011	A2 _{fl} -s1
Abrasion Resistance	STM D4060	500 cycles/mil with 1 Kg load using CS-17

Surface Preparation

All surfaces must be cured, clean, dry, and free from dirt, dust, rust, stains, grease, oil, mildew, wax, efflorescence, bond-breakers and other contaminants. Remove all loose, peeling, or chalky paint by sanding, scraping, or any other appropriate methods. Repair all cracks, holes, and other surface imperfections with a suitable patching material. Repaired surfaces should then be sanded smooth, dusted clean and primed with a suitable Colortek primer.

New plaster or masonry surfaces must be allowed to cure (28 days) before applying base coat. Cured plaster should be hard, have a slight sheen and maximum pH of 10; soft, porous or powdery plaster indicates improper cure. Knife off any protrusions and prime the plaster before and after applying patching compound. Poured or pre-cast concrete with a very smooth surface should be etched or abraded to promote adhesion, after removing all form release agents and curing compounds. Remove any powder or loose particles.

Application Conditions

Neocement is to be applied to a surface with less than 10% MVTR (Moisture Vapor Transmission Rate) or less than 90% RH (Relative Humidity). Temperature should be 5°C to 35 °C to ensure correct application.

Application Method

- Apply Colortek SX0 Primewell or SX9 Humiguard to consolidate the surface if the substrate is friable or chalky.
- Apply Neofiller Base Coat (refer to systems table) and sand the surface with a 40 grid and remove the dust.
- Apply Neocement in 2 coats; (Mix 3 components until obtaining a pasty mortar with good sag resistance and let surface dry between coats).
- Once the second coat has dried, sand the surface with a 150 or 220 grid and remove the dust.
- Apply the desired protective topcoat depending on intended use of the surface and location (see table).

Note 1: Apply Neocement in small strokes of 30 to 50 cm and avoid edges drying in large areas to avoid marks.

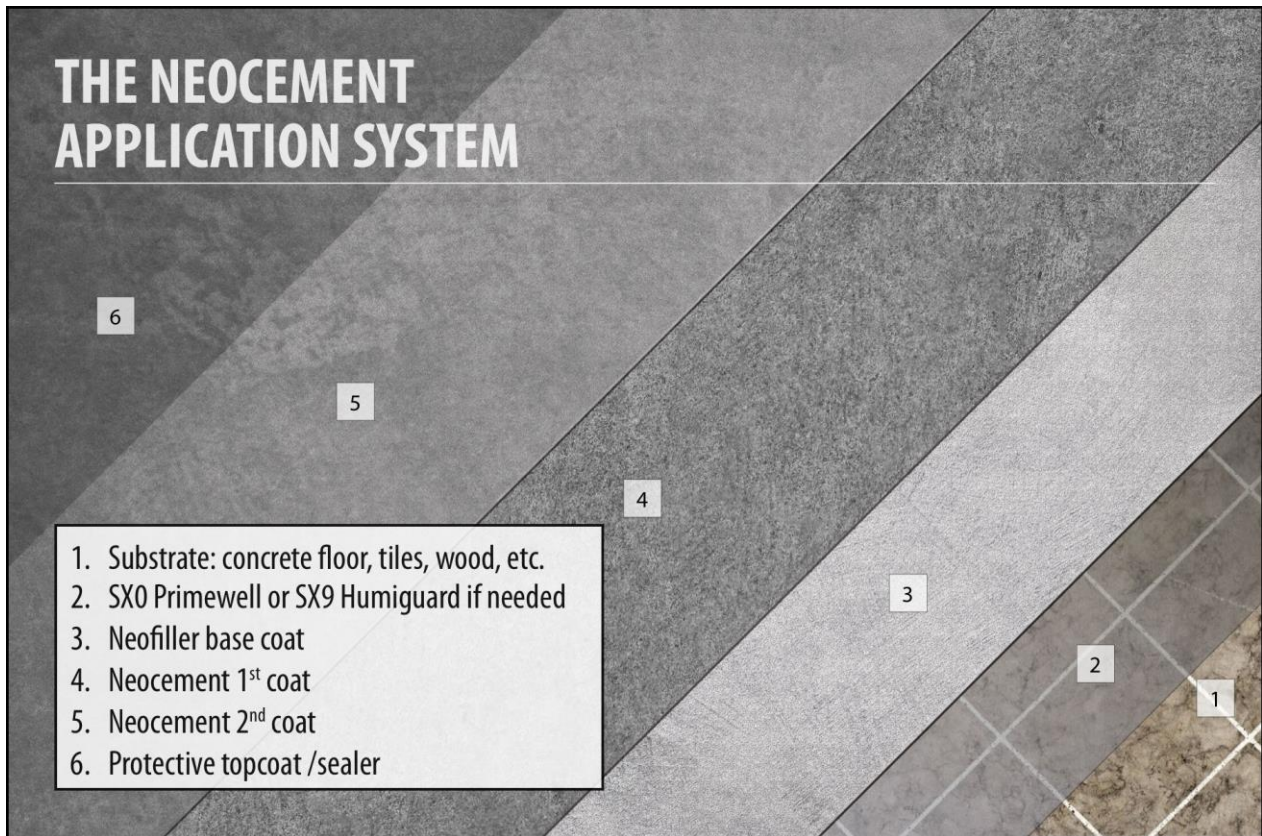
Note 2: When applying on ceramic tiles, it is important to remove or block the joint tiles with Colortek SX2. Ceramic tiles joints are traditionally filled with cement-based tiling grout which is prone to letting humidity pass and the Epoxy based SX2 grout will prevent the ghosting effect.

Note 3: When applying on Terrazzo, we recommend the application of an additional coat of Neofiller. Terrazzo tiles come in a wide variety and differ greatly in their material composition with some highly prone to humidity permeability. Neofiller being a highly efficient humidity blocker, the additional coat will help in preventing surfacing humidity.

Note 4: When applying Neocement® it is important to apply it flush to the wall and to create a virtual skirting that impedes water filtration underneath the decorative coat by applying the protective sealer up to 3 cm vertically.

SYSTEM BUILD-UP BEST PRACTICE

THE NEOCEMENT APPLICATION SYSTEM



1. Substrate: concrete floor, tiles, wood, etc.
2. SX0 Primewell or SX9 Humiguard if needed
3. Neofiller base coat
4. Neocement 1st coat
5. Neocement 2nd coat
6. Protective topcoat / sealer

PROTECTIVE TOP COAT SELECTION

CONDITIONS		VERTICAL SURFACE	HORIZONTAL LIGHT TRAFFIC (RESIDENTIAL)	HORIZONTAL MEDIUM TRAFFIC (COMMERCIAL)	HORIZONTAL HIGH TRAFFIC (INDUSTRIAL)
INTERIOR	Dry conditions	Colortek Wax, Aqua Wax, Colortek 4005, Polylock	NeoShield Polylock	Polylock	Neofiller 3 coats + Polylock
	Humid conditions	Polylock (2 coats)	Polylock (2 coats)	Polylock (2 coats)	Neofiller 3 coats + Polylock (2 coats)
	Submerged conditions	Colortek PL1 (2 coats)*	Colortek PL1 (2 coats)*	Colortek PL1 (2 coats)*	Neofiller 3 coats + Colortek PL1 (2 coats)*
EXTERIOR	Dry conditions	Colortek 4005, Polylock	Polylock (2 coats)	Polylock (2 coats)	Neofiller 3 coats + Polylock
	Humid conditions	Polylock (2 coats)	Polylock (2 coats)	Polylock (2 coats)	Neofiller 3 coats + Polylock (2 coats)
	Submerged conditions	Neofiller 3 coats + Colortek PL1 (2 coats)*	Neofiller 3 coats + Colortek PL1 (2 coats)*	Neofiller 3 coats + Colortek PL1 (2 coats)*	Neofiller 3 coats + Colortek PL1 (2 coats)*

* Colortek PL1 has a glossy finish. If a flat finish is required, use Colortek PL1 Low Gloss instead.

Pack Sizes

	Paste	Resin	Filler
1 Drum	14 Kg	2.8 Kg	8.3 Kg
1 Gallon	2.33 Kg	0.47 Kg	1.38 Kg

Mixing Instructions

1. Tint paste with desired color
2. Once pasted tinted, add resin in paste – Mix with drill until reaching a homogenous paste.
3. Finally add the filler to the mix and drill until reaching a homogenous paste.

Shelf Life

24 months from the date of production.

Storage and Handling

Care should be taken to avoid spillage. Store in a dry area. Protect from freezing. Extreme temperatures may cause paint to become unusable. For example: freezing and thawing may cause paint to gel, and high heat may cause solid skin to form.

Safety

Use under well ventilated conditions. Do not breathe or inhale spray mist or sanding dust. Avoid skin contact; spillage on the skin should immediately be removed with suitable cleanser, soap and water. In case of eye contact, flush immediately with water for at least 15 minutes and seek medical attention immediately. If you have trouble breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical attention immediately.

Cleaning

Remove as much leftover product as possible from the application equipment before cleaning. Clean equipment immediately after use with warm soapy water and rinse thoroughly. Do not empty product into drains or watercourses.

Technical Assistance

Available through your local COLORTEK® Design Center or through your COLORTEK PAINTS® authorized distributor. For the location of the retailer nearest you, email us at info@colortek.eu or check our website www.colortek.eu.

Disclaimer

Product batches are subject to stringent quality control checks in conformity with ISO 9001:2008, Certificate CH12/1128.

The information submitted in this manual is correct to the best of our knowledge & experience. No liability whatsoever can be accepted based on the information supplied herein.