# SX4 NEOTERRAZZO

POURED EPOXY TERRAZZO SYSTEM

## DESCRIPTION

An environmentally friendly material that is easily customizable and can be poured into different patterns and shapes to produce a smooth, uniformly textured surface for floors, walls, stairs, curbs, counter-tops, and even furniture.

## RECOMMENDED FOR

Creating seamless, heavy-duty terrazzo floors, countertops, slabs, etc.

## KEY FEATURES

- Excellent chemical resistance
- Excellent abrasion and impact resistance
- Durable surface that provides good scratch resistance
- Anti-bacterial surface.
- Contains recycled material
- Stain Resistant
- Leaves a seamless defect-free finish

## PHYSICAL PROPERTIES

| | | |
|---|---|---|
| **Solvent Type** | Solvent free | |
| **Finish Type** | Depending on aggregates added | Based on ASTM D523 |
| **Dry Film Thickness (after grinding and polishing/before grinding)** | • 6 mm/8 mm for aggregates sizes up to #1.<br>• 8 mm/10 mm for aggregates sizes up to #2<br>• 11 mm/13 mm for aggregates sizes up to #3<br>• 13 mm/15 mm for aggregates sizes up to #5<br>• 20 mm/22 mm for aggregates sizes up to #7 | |
| **Spreading Rate** | ~2.2Kg/sqm/mm, will also depend on type of aggregates used | |
| **Pot Life** | 30 minutes at 25°C | |
| **Open to light traffic** | After 24 hours at 25˚C | |
| **Ready for grinding** | After 48 hours at 25˚C | |
| **Full Cure** | 7 days | |
| **Adhesion** | > 9 N/mm2 (concrete failure) | Based on ASTM D4541 |
| **Density** | ~1.64 g/cm3 (3 components mixed), 4 components density will depend on aggregates density | |
| **Solids** | 100 % | |
| **Thermal resistance** | Up to 60°C | |
| **Fire resistance** | $B_{fl}$-S1 | Based on EN 13501-1 |
| **Elongation (A+B)** | 20% | |
| **Compressive strength** | >50 N/mm² | Based on EN 13892-2 |
| **Flexural strength** | >22 N/mm² | Based on EN 13892-2 |
| **Tensile strength** | > 11 N/mm² | Based on BS 6319 |
| **VOC** | < 5 g/L | as Per EPA Method 24 |
| **Bases** | W0, W1 and N – Tintable to all colors | |

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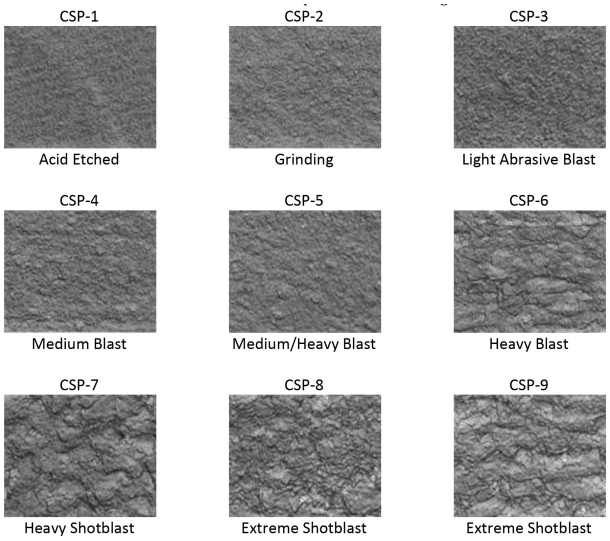
## CHEMICAL RESISTANCE / 24 HOUR OPEN SPOT TEST BASED ON ASTM D 1308-2

| | |
|---|---|
| **10% Hydrochloric Acid** | Decrease in gloss |
| **10% Sulfuric Acid** | Decrease in gloss |
| **10% NaOH** | No Effect |
| **Saturated Sugar Solution** | No Effect |
| **Saturated Salt Solution** | No Effect |
| **Ethanol** | Minor spot |
| **Motor Oil** | No Effect |
| **Gasoline** | No Effect |
| **Xylene** | Minor spot |
| **Isobutanol** | Minor spot |
| **Clorox** | No Effect |

## SURFACE PREPARATION

Recommended surface preparation should follow the guidelines of the International Concrete Repair Institute (ICRI). Key to the guidelines is ICRI's Concrete Surface Profile (CSP) classifications, a system of ten distinct textures ranging from CSP1 (nearly flat) to CSP10 (extremely rough).

| CONCRETE SURFACE PROFILE (CSP) CLASSIFICATIONS & RECOMMENDATIONS | |
|---|---|
|  | The CSP chart is used as a visual representation of desired concrete surface textures, roughness and general appearance. The guideline designates each CSP classification as a suitable base for specific coating types and thicknesses.<br>It also describes the method(s) or equipment typically used to achieve the texture according<br>to the CSP classification. |
| 0 to 75 microns | CSP1 |
| 100 to 3OO microns | CSP2 – CSP3 |
| 1000 to 3000 microns | CSP3 – CSP4 |
| Above 3000 microns | CSP3 – CSP4 – CSP5 |

**Laitance**
Laitance is the weak, milky layer of cement and sand that rise to the concrete surface as a result of premature finish or troweling. If a coating is applied directly to the laitance layer, the floor traffic will cause disbanding of the coat.

**Contaminations**
Old concrete floors can be contaminated by oil, grease, chemicals etc. Check the surface for dark patches that indicate contamination. Spray water on it to see if it absorbs the water. If water stays on the surface, then it indicates contamination, and must be removed by concrete cleaner or degreaser.

**Porous concrete**
The common procedure is to sand and apply a primer that penetrates the substrate well. In cases where a high performance is needed, it is possible to shot-blast or scarify.

**Polished concrete and non-porous construction materials**
It is essential to apply proper primers. For high-performance systems such as those applied in hygienic areas, shot blasting, scarifying or grinding is necessary.

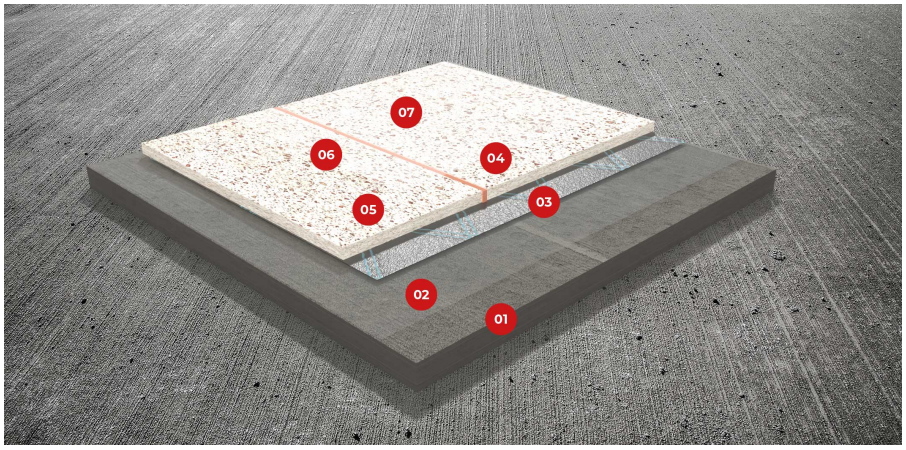
**Well-attached old paint**
Should be sanded in order to ensure good adhesion.

**Badly-attached old paint**
Remains of badly-attached, old materials must be removed as these can cause detachment.

**Damp**
Surfaces that have problems with dampness require a system that permit vapor permeability. If they don't comply with these requirements, there will be an increased risk that the flooring will blister or detach.

## APPLICATION METHOD

**NOTICE**
Installing NeoTerrazzo equires a specialized skill set; therefore, it is recommended to hire a qualified and experienced contractor to work on a terrazzo floor. The following information is to be used as guidline for the installation of SX4 NeoTerrazzo system.

| NEOTERRAZZO SYSTEM | |
|---|---|
|  | 01 . CONCRETE SLAB<br>02. SOLVENT-FREE PRIMER<br>03. PU FLEX CRACK SUPRESSION MEBRANE (OPTIONAL)<br>04. DIVIDER STRIP<br>05. SX4 NEOTERRAZZO® MATRIX<br>06. SX40 PORE FILLER<br>07. FLOOR SEALER PROTECTION |

**CONCRETE PREPARATION AND MOISTURE TESTING**

- Old concrete should either shot blast or grind the floor to open the concrete for proper adhesion and remove any contamination before applying the primer system.
- Freshly poured concrete should be allowed a minimum of 28 days to cure.

- Moisture vapor transmission tests should be performed.The threshold is commonly between 75% to 80% relative humidity. Once reading complies to standard, installers can begin work on preparing the concrete for epoxy terrazzo. Otherwise, a moisture mitigation system may be required.
- Cracks and other defects in the substrates must be filled and repaired with the adequate product.

Notice: Preparation of surfaces other than concrete, will vary based on the type of substrate. Contact our technical service department for assistance.

**CRACK SUPRESSION MEMBRANE**
In case of presence of substrate movement, the use of a crack suppression membrane might be required.

**DIVIDER STRIP AND FLOOR LAYOUT**
Depending on floor layout and details installers might create saw cuts and expansion areas, and install divider strips over the concrete surface. The main function of divider strips is to provide an indication of color changes or to control expansion joints.

**MATRIX DESIGN AND AGGREGATES CHOICE:**

Colortek® has a wide variety of aggregates that can be combined with any of our epoxy coatings colors, including:

- Marble, Granite, and Mother of Pearl.
- Recycled Glass Chips and Synthetics.
- Recycled Chips for green flooring and LEED credits

Chips are graded by number according to size, in conformity with industry standards adopted by the marble producers, allowing you for a quick and easy sample production process.

The final NeoTerrazzo Matrix can be customized by varying the ratios of its components – base (A), hardener (B), filler (C), as well as the size, type, and density of the aggregates (D).

**POUR IN PLACE:** Mix first the resin and the quartz components of Colortek SX4 NeoTerrazzo for a few minutes, then add the hardener then the aggregates. When all the components of a terrazzo floor are mixed well, the batch is emptied to a wheelbarrow and transported to be poured in place. Installers will continuously mix components until the section is filled or a new color is needed.

**TROWELING:** When SX4 NeoTerrazzo is poured in place, installers will use a hand trowel to spread the product evenly between the divider strips, followed with a power trowel to help close up the floor and tighten up the aggregate. This process concludes when the area is enclosed by the divider strip.

**GRINDING:** Grinding Colortek SX4 NeoTerrazzo involves transitioning from a rough to a smooth surface ( after allowing 48 hours for curing). Depending on the hardness of the aggregate, a 40 or 80 grit diamond is used to grind the floor. Installers slowly push and pull the electric grinder in a side-to-side motion until the floor exposes the divider strip and aggregate.

**GROUTING:** Once grinding is complete, installers will clean the floor with fresh water and a scrubber and allow the floor to completely dry. The grouting process fills any pinholes or voids left from grinding. Small amounts of Colortek SX40 NeoTerrazzo Pore Filler are tightly worked into the pinholes before installers begin polishing the terrazzo floor. Refer to SX 40 TDS for mixing and application instructions.

**POLISHING:** Polishing Colortek NeoTerrazzo is similar to the rough grinding stage; however, is performed wet and not dry. Using 80 grit carborundum stones or 100 grit resin pads, installers will remove the excess SX40 NeoTerrazzo Pore Sealer. Slurry is formed and later vacuumed. This stage is repeated with a higher grit up to 3000 to achieve the desired gloss of the floor.

**EDGES:** In areas where a machine won't reach, installers can polish off the corners and edges using hand held grinders or specialized edge machine. Once this is completed, the terrazzo floor is cleaned and ready to be sealed.

**CLEANING:** Before the sealer is applied, Colortek NeoTerrazzo must be cleaned. Installers should remove all slurry from the surface and clean the floor with fresh water and pH neutral detergent using an electric scrubber. Floor is rinsed, water vacuumed, and left to dry completely.

**PROTECTION:** Sealing Colortek NeoTerrazo adds protection during the material's lifecycle. When a floor completely dries, installers will apply Colorterk Floor Sealer or Polylock to cover all areas of the terrazzo floor. Installers apply the first coat and leaves it to dry before applying the second coat. After sealing is complete, Colortek NeoTerrazzo floors can soon be walked on.

# SX4 NEOTERRAZZO
POURED EPOXY TERRAZZO SYSTEM

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| STAGE | PRODUCT | DESCRIPTION |
|---|---|---|
| **02. Floor preparation** | - SX9 HumiGuard | Prevention and elimination of moisture problems in the substrate. |
| | - Fill and Flex | An mastic base, offering the advantages of epoxy hardness and polyurethane flexibility. |
| | - SX2 FillWell | For referencing contraction (saw cuts), isolation and cold joints. |
| **03. Optional Crack Supression Membrane** | - PU Flex + Fiber Mesh | Prevention of substrate cracks transferring through to the finish floor system due to horizontal movement. |
| **04. Divider Strip** | - Aluminum, Brass, or Zinc Strip | Enhance design flexibility and functionality, separate colors and reference construction joints to preserve structural integrity. |
| **05. Matrix & Aggregates** | - SX4 NeoTerrazzo | Binds the chips and strips in place and serves as the canvas of a floor's design. Custom tinting provides endless color options from which to choose. |
| | Marble, Granite, Mother of Pearl, Recycled Glass Chips and Synthetics, Recycled Chips, etc | Available in numerous colors and sizes. They provide terrazzo chip and texture and increase design possibilities. |
| | - 314 Terrazzo Concrete | Quite thicker and heavier than epoxy terrazzo, ideal for outdoor usage in patios, swimming pools, walkways, etc. |
| **06. Pore Filling** | - SX40 Pore Filler | Fill minor holes and seal surface after grinding. |
| **07. Protection** | - Floor Sealer or Polylock.<br>- *Use PL1 in submerged conditions.* | Sealing porous and non-porous flooring. |

## PACK SIZE

| | WHITE | W1 | N | QUARTZ | HARDENER | AGGREGATES |
|---|---|---|---|---|---|---|
| 1 US Drum (kg) | 9.96 | 9.16 | 8.28 | 18.76 | 4.24 | 25 |
| Test pack | 0.36 | 0.33 | 0.3 | 0.67 | 0.15 | 1.79 |

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## SHELF LIFE
24 months from the date of production.

## STORAGE AND HANDLING
Care should be taken to avoid spillage. Product should be stored in a dry area and protected 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 experience difficulty 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 Xylene. Do not empty product into drains or watercourses. Wash hands after use in warm soapy water.

## 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 9001:2015, Certificate LB18/234269.
The information submitted in this manual is correct to the best of our knowledge & experience. No liability whatsoever can be accepted on the basis of the information supplied herein.