

# KROMOQUARTZ<sup>®</sup> SLD

## Series 3000

PAGE 1 of 4

### PRODUCT DESCRIPTION:

**KROMOQUARTZ SLD** is both a functional and decorative flooring system. Kromoquartz SLD is an overlayment system designed for use on new concrete floors or for resurfacing deteriorated, severely worn concrete floors. Formulated by blending 100% solids epoxy liquids (**EPOXAL 100WH**) with specially graded aggregates, **KROMOQUARTZ SLD** consists of a primer, a three-component mortar trowel-applied at 1/4" (6mm) thickness, a two-component solid colour grout coat and a two-component solid colour topcoat. This provides superior protection in industrial, institutional and commercial environments.

### PRODUCT FEATURES:

- Mechanically bonds to properly prepared concrete to form a hard, low maintenance overlayment able to withstand typical plant operations.
- Application by factory-approved contractors ensures guaranteed top quality installations.
- Quick curing epoxy technology coupled with expert installation results in minimal down time for areas receiving **KROMOQUARTZ SLD**.
- 100% solids epoxy formulation means this is an odourless product formulated without solvents thus reducing health and safety concerns.
- Slip-resistant textures available for added safety in wet areas.
- Available with integral covered bases which aid in housekeeping.
- Available in 12 standard colours as well as unlimited custom colours.
- Anti-microbial option: **KROMOQUARTZ SLD** can be formulated using anti-microbial additive for added bacteria and fungus resistance.

### TYPICAL USES:

- Overlayment for concrete floors in light, medium and heavy-duty industrial environments, (ie. production areas, lift truck aisles, shipping/receiving areas.)
- Sanitary environments subjected to constant cleaning. (ie. pharmaceutical plants, laboratories, clean rooms, washrooms, animal holding areas, commercial kitchens.)
- Repair of deteriorated and worn concrete floors.
- Secondary containment.

### PERFORMANCE DATA

Typical Performance After 7 Days Cure  
@25<sup>0</sup>C(77<sup>0</sup>F)

**COMPRESSIVE STRENGTH** 10,370 PSI  
(ASTM695-85)

**TENSILE STRENGTH** 2,000 PSI(ASTM C-307)

**FLEXURAL STRENGTH** 5,000  
(ASTM C-580)

**HARDNESS** 85 (SHORE D)

**ABRASION RESISTANCE** .033g  
(ASTM D4060-90)

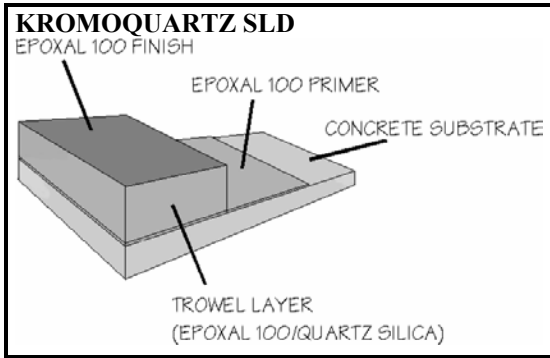
**MAR RESISTANCE** 1.0 Kg  
(ASTM D5178-91)

**BOND STRENGTH CONCRETE FAILURE** 100%

# KROMOQUARTZ® SLD

## Series 3000

PAGE 2 of 4



### SURFACE PREPARATION:

#### New Concrete Preparation:

All surfaces to be coated must be clean, dry and free of all contaminants. New concrete must be cured a minimum of 28 days with no more than 3% moisture content. Any curing or hardening compounds, form oils, release agents or laitance must be removed by means of mechanical abrasion. Shot blasting or diamond grinding are the recommended methods. These two means of mechanical abrasion will clean the surface and open the pores of the concrete to allow maximum penetration of the primer. Ensure the methods of mechanical abrasion are dust-free.

#### Existing Concrete Preparation:

Ensure all loose concrete is removed, using a scarifier, diamond grinder, bush hammer or other methods. Remove any contamination, including grease and oil using an industrial cleaner. (Consult your NPC representative for recommended cleaners) Prepare the entire floor by method of a shot blaster, or diamond grinder. Patch any uneven or damaged concrete using "NPC Epoxal 100 Patch" or consult your NPC representative for further instructions.

Existing coated surfaces must be intact and tightly bonded to substrate below. If stability of

existing coating is in question, test a small section and check for lifting. Hard or glossy surfaces must be abraded to improve adhesion performance. *NPC will not warrant the application of Epoxal coatings over an existing paint or urethane.*

#### Wood Preparation:

All wood surfaces to be coated must be clean, dry and free of all contaminants. The wood surface must be very rigid, with no possible movement. Fill any voids, or seams with NPC "Epoxal 100 Patch". The use of ¾ inch good one side plywood is recommended for most application over existing wood substrates.

#### INSTALLATION TOOLS:

- Epoxy Jiffy Mixer(Drill and Mixing Bit)
- Two-5 gallon Mortar Mixers
- Epoxy Mortar Screed Box
- 3"×12" Steel Trowels
- Epoxy Power Trowel

#### PRIMING:

**KROMOQUARTZ SLD** requires a primer to be applied prior to the mortar layer. In most cases, Epoxal 100WH serves as an excellent primer. If a low viscosity primer is required, use Epoxal 100 Primer. The recommended thickness of the primer for Kromoquartz SLD is 8mils. Mix primer as detailed in Epoxal 100WH Product Information.

#### MIXING:

The mortar layer of **KROMOQUARTZ SLD** is comprised of Epoxal 100WH and finely graded

# KROMOQUARTZ<sup>®</sup> SLD

## Series 3000

PAGE 3 of 4

silica aggregates. The epoxy liquid content needed for 35lbs. of silica is 2.4L. In a 1 gallon measuring pail, add 0.8L of Part B(Catalyst) into 1.6L of Part A(Resin). Mix with a jiffy mixer for one minute. Pour mixed liquids into the 5 Gal pail mixer, and begin mixing. Add the graded silica aggregates immediately and mix for one minute. When one minute is up, immediately pour the contents of the mixing pail out on the floor. Repeat this process for all additional mixes.

### APPLICATION:

**KROMOQUARTZ SLD can be applied by hand trowel and/or epoxy power trowel.**

- Step 1.* After the floor has been properly prepared to accept coating, apply one coat of primer to the entire area at a spread rate of 8 mils. If the application of the mortar layer is not going to be applied immediately, broadcast silica #16 into the wet primer. This will allow the mortar layer to bond very well to the primer if it cures.
- Step 2.* Mix the mortar layer according to instructions, and pour contents of the mixing pail into the screed box. Set the bar on the screed box to a height of 8mm. Once the material is trowelled, it will be a compacted 6mm or ¼”.
- Step 3.* Pull the screed box to spread the material.
- Step 4.* Using a steel trowel, compact the material to form a tight even surface. Do not compact the material to the edge closest to you. Leaving one inch of unpacked material at this edge will make blending the next pass of the screed box easier.
- Step 5.* If an integral cove base is required, glue a zinc cove strip at the specified height to every vertical surface in the area to receive **KROMOQUARTZ SLD**. Using a cove trowel, incorporate the base into the floor. Be sure not to leave ridges or lines on the cove base or the floor. They cannot be removed afterward.
- Step 6.* Keep your trowel clean by swiping it often with **NPC** “Trowel Thinner.” This will make working with the mortar easier. Check the thickness of the material at frequent intervals and ensure a level, smooth surface is produced.
- Step 7.* Once you are finished troweling the entire surface, allow the mortar to cure.
- Step 8.* When the mortar is cured (12-14hrs.) Grind the entire floor with abrasive stones to remove any imperfections. Sweep and vacuum all dust from the floor.
- Step 9.* Mix Epoxal 100WH and apply as per Epoxal 100WH Application instructions. This first coat over the mortar is referred to as a grout coat. Apply the grout coat at whatever spread rate is needed to fill any imperfections and create a sealed surface. This coat is usually 5-7 mils in thickness.
- Step 10.* Apply the topcoat to the surface within 24 hours after the grout coat is completed. The topcoat should be applied at a thickness of 9-11 mils.
- Step 11.* To achieve a textured finish, a third coat can be applied. Spread the mixed material at a thickness of 5-6 mils with a rubber squeegee and back roll with a saturated medium nap roller. Using a hopper blower, broadcast a small amount of graded silica sand over the

# KROMOQUARTZ<sup>®</sup> SLD

## Series 3000

---

PAGE 4 of 4

entire floor. Silica 530 will create a medium texture that is non-slip, and relatively easy to clean. Back roll the coating immediately to encapsulate the sand and to achieve a uniform textured surface.

**Note: Epoxal 100WH is the epoxy liquid most commonly used in this system, as a primer, trowel liquid, grout coat and topcoat. There are other products that can be used as well. Epoxal 100Primer and Epoxal 100DCP both make excellent primers. Epoxal 100TL is a low viscosity binder, while Epoxal 100FC is a quick curing resin that can be also be used as a trowel binder. Epoxal 100FC, Epoxal 100CR and Epoxal 100CC are all quality alternatives to substitute in place of Epoxal 100WH as a topcoat or trowel binder material.**

### **CURING:**

At a temperature of 22<sup>0</sup>C(72<sup>0</sup>F), Epoxal 100WH will be tack free within 10-12 hours. It will support light traffic at 24 hours and will reach full cure and chemical resistance in 7 days.

### **LIMITATIONS:**

- This product must be applied to a substrate with a minimum temperature of 16<sup>0</sup>C(61<sup>0</sup>F).
- This product will amber if it is under prolonged ultra violet light.
- This product is not recommended for areas that are exposed to severe thermal shock.
- Working time and cure times are very dependant on temperature.
- Maintain a constant temperature before and during application period, and until coating is cured.