TECHNICAL DATA SHEET

RIO-CRETE SP

Slope and Patch Polyurethane Concrete

TECHNOLOG DESCRIPTION

RIO flooring represents the next generation of industrial and commercial flooring technology. RIO provides user friendly products with minimal environmental impact. Many of our high performance components are USDA certified as a biobased product and available in environmentally friendly packaging to reduce nonrecyclable waste.

PRODUCT DESCRIPTION

RIO-CRETE SP SP is a sloping material typically installed at 1/2 - 3" in thickness. RIO-CRETE SP SP is extremely tough and withstands thermal shock, impact, abrasion and chemical exposure. RIO-CRETE SP SP is formulated with a natural additive to be resistant to Fungi Growth per the industry standard ASTM G- 21.

TYPICAL PROPERTIES AT 70°F

Compressive Strength (ASTM C-579)	7,800 psi
Tensile Strength (ASTM C-307)	975 psi
Flexural Strength (ASTM C-580)	1,900 psi
Bond Strength (ASTM D-4541)	100% Concrete
Impact Strength, in/lbs (ASTM D-4226)	Failure
VOC	160 in-lb
Resistance to Fungi Growth (ASTM G-21)	5 gm/l
	Passes, Rating of 1

The data shown above reflects typical results based on laboratory testing under controlled conditions. Variations from the data shown may result. Test methods are modified where applicable.

INSTALLATION DATA

Application Temperature,	40-85°F
ambient Application	50-80°F
Temperature, material Shelf Life	6 months
Pot Life, @ 77°F	15 minutes
Traffic, @ 77°F	Light: 12 hours / Full:
Fully Cured, @ 77°F	hours 7 days

Refer to RIO-CRETE SP Application Guide for additional installation information

IMPORTANT INFORMATION

1. RIO-CRETE SP SP is not color stable, expect color change over time.
2. RIO-CRETE SP flooring should not be installed on wet concrete.
3. Floors should be sloped to drain to prevent standing water or chemicals.
4. Spills should be removed as soon as possible to prevent a slipping hazard.
5. Confirm product performance in specific chemical environment prior to use.
6. Prepare substrate according to "Surface Preparation" portion of this document.
7. Follow detailed instructions in the "RIO-CRETE SP Application Guide"
8. Always use protective clothing consistent with OSHA regulations during use.
9. Refer to Safety Data Sheet for detailed safety precautions.
10. For industrial/commercial use. Installation by trained personnel only.

BENEFITS

- Impact resistant
- Low odor, fast installation, fast cure
- Excellent corrosion & chemical resistance
- High temperature resistant to 250 F
- Thermal shock resistant; steam cleanable
- Resistant to moisture vapor transmission (MVT)
- Anti-slip surface, meets ADA recommendations
- Resistant to fungi growth per ASTM G-21

RECOMMENDED USES

- Food & beverage processing facilities
- Chemical process facilities
- Pharmaceutical facilities
- Pulp and paper mills
- Wet processing & packaging areas
- Commercial Kitchens
- Freezers and coolers
- Battery charging areas
- Truck unloading areas

GENERIC DESCRIPTION

Polyurethane Concrete

TYPICAL APPLICATION ½-3"

Trowel/Screed Applied

AVAILABLE COLORS

Neutral

PACKAGING & COVERAGE

Premeasured Part A, Premeasured Part

B 1 SF 30 Filler Bag

1 40 lb Sand Mix Bag

.60 cuft/unit

SURFACE PREPARATION

Concrete: Apply only to properly prepared clean, dry and sound concrete substrates that are free of all coatings, sealers, curing compounds, oils, greases or any other contaminants.

- *New concrete should ideally be cured for a minimum of 14 days to reduce possible shrinkage cracking in the concrete. RIO-CRETE SP can be installed after 7 days or when concrete reaches a minimum 3,500 psi compressive strength which will allow for proper surface preparation, however, early curing movement, shrinkage or cracking that may occur in the concrete will be reflected through the final RIO-CRETE SP flooring.*
- *Concrete that has been contaminated with chemicals or other foreign matter must be neutralized or removed.*
- *Remove any laitance or weak surface layers including broom finish surface.*
- *Concrete should have a minimum surface tensile strength of at least 300 PSI per ASTM D-4541.*
- *Surface profile shall be CSP-5 or greater meeting ICRI (International Concrete Repair Institute) standard guideline #03732 for coating concrete, producing a profile equal to 40-grit sandpaper or coarser. Prepare surface by mechanical means to achieve this desired profile.*
- *All concrete surface irregularities, cracks, expansion joints, control joints and terminations should be properly addressed and prepared prior to application of the flooring. Moving joints and cracks will reflect through the final installed RIO-CRETE SP flooring.*

INSTALLATION STEPS

IMPORTANT – Follow the detailed application instructions and the safety instructions listed on the product Safety Data Sheets (SDS) copies available upon request. The following installation summary is for reference only and should not be relied upon as all inclusive. RIO-CRETE SP systems should only be installed by trained persons experienced in polyurethane concrete flooring applications.

1. To prevent lifting or delamination, keyways (minimum 5/16" wide x 5/16" deep) must be cut at all terminations, joints, columns, doorways, and drains. See RIO-CRETE SP construction detail drawings.
2. Clean sand and dust from prepared concrete where the floor is to be installed.
3. RIO-CRETE Cove Base material can be used to install a cove and/or base as required. The cove/base can be installed before or after the installation of the RIO-CRETE SP SP depending on the specification and or the desired result. The RIO-CRETE can be used to create a simple cant cove as well.
4. It is very important to utilize a proper mixer and paddle to ensure a complete mix and to reduce the risk of introducing excessive air into the mixture. RIO recommends the use of a MAN-U-FAB M-61 (1 HP) mixer with a 10 gallon pail and TR4-10 mixing arm. (www.mixall.com)
5. With the mixer running, pour ½ Gallon Part A into the mixing pail.
6. Add ½ Gallon Part B, mix another 15 seconds.
7. Gradually add all contents of a bag of RIO-CRETE SF 30 filler into the liquid mixture and blend thoroughly until all particles are wetted out, normally about two minutes.
8. Continue with addition of 40 lb sand blend until fully mixed.
9. Immediately after mixing (within 3 minutes), spread the mixed RIO-CRETE SP SP onto the floor at a thickness slightly greater than the desired finish, using a screed and hand trowel.
10. Trowel the surface lightly, using a steel finish trowel to smooth the surface. Finish trowel strokes should all be in the same direction. Do not over overwork the mortar.
11. Lay abutting edges within 10 minutes to ensure a clean edge. A “wet edge” installation is imperative during large placements to avoid lines and ridges in the finished floor.

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Part of the Crú Performance Coatings Family
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