

1. PRODUCT DESCRIPTION

A. COMPOSITION

Chem-Rez N is a seamless chemical and heat resistant novolac epoxy and pre-engineered flooring system. It has superior physical and mechanical properties vs. conventional epoxy floors, since it is formulated to produce a higher "cross-linking". Greater cross-linking creates a product that resists chemical attack from a very wide range of acids, alkalis and solvents. In addition, it sustains temperatures up to 250°F (120°C) and intermittent temperatures up to 350°F (178°C).

Chem-Rez N is applied by trowel and it is installed at thicknesses ranging from 3/16" (4.75mm) to 1/4" (6.3mm), depending upon service requirements (Consult Crossfield for recommendations).

Chem-Rez N is a novolac epoxy floor with an integral cove base of trench liner. It is manufactured in a wide selection of colors.

It is also available with a broadcast skid resistant topping using colored quartz semi-decorative aggregate finished with clear novolac epoxy groutcoat/lockcoat and topcoat or with a uniform size broadcast aggregate and pigmented novolac groutcoat/lockcoat and topcoat. It contains no hydrocarbon solvents, thus it meets all federal, state and local VOC regulations.

Clear groutcoats and topcoats usually have superior chemical and stain resistance to pigmented products. Clear and pigmented products should be tested in the concentration, temperature, and duration of exposure.

It is also available in an Antimicrobial Additive, which incorporates anti-microbial chemistry to control the growth of microorganisms (algae, bacteria, fungi, mold, mildew, yeast, etc.) on the floor surface.

It is often used in conjunction with Dex-O-Tex Wall-Glas to produce an integrated "cocoon effect" seamless floor and wall system.

B. TYPICAL USES

Chemical/Solvent Storage; Secondary Containment; Battery Storage; Plating Areas; Trenches; Chemical Spillage areas.

C. ADVANTAGES AND LIMITATIONS

ADVANTAGES

1. Monolithic, Seamless.
2. Available in textures from smooth to aggressive.
3. Superior chemical and heat resistance.
4. A waterproofing and crack isolation membrane can be installed prior to system application.
5. Installed only by Professional Factory Trained Dex-O-Tex Contractors.

LIMITATIONS

1. Discoloration may occur under UV exposure, use Dexotex Quik-Glaze where UV stability is required.
2. If sub-surface cracks, Chem-Rez N may reflect cracks to some degree.

3. Moisture vapor emission (MVER) in excess of 3 lbs/1000 sq/ft/per 24 hr period per ASTM F1869, or an rh in excess of 78% per ASTM F2170 may result in delamination, discoloration or improper curing without proper treatment prior to installation of the flooring system. Consult with Crossfield Products Corp. for specific recommendations.
4. Vapor control primers, sloping, smoothing or leveling compounds, crack repair or isolation, waterproof membranes or other supplementary items may be required for proper installation at an additional cost. Consult with Crossfield Products Corp. for specific recommendations.

2. TYPICAL PHYSICAL PROPERTIES at 75°F (24°C)

- A. **Compressive Strength** ASTM C579..... 10,000 psi
(Resin, Hardener and Aggregate) (738kg/cm²)
- B. **Compressive Strength** ASTM D695..... 12,000 psi
(Resin and Hardener) (907 kg/cm²)
- C. **Tensile Strength** ASTM C307 1,500 psi
(Resin, Hardener and Aggregate) (127 kg/cm²)
- D. **Tensile Strength** ASTM D638 4,400 psi
(Resin and Hardener) (310 kg/cm²)
- E. **Flexural Strength** ASTM C580 4,000 psi
(281 kg/cm²)
- F. **Indentation Characteristics**
(Steadily Applied Load) MIL-D-3134.....0.005"
Para. 4.7.4.2.1, 2000 lbs. on 1" steel ram (0.127 mm)
Imposed for 30 minutes over a concrete
substrate, indented.
- G. **Indentation Characteristics** MIL-D-3134, Para 4.7.3
(Impact Load).....0.011"
(2 lb .908 kg.) Indent from steel ball (0.28 mm)
dropped twice from 8 ft. height.
- H. **Adhesion** ASTM D4541>400 psi
(100% concrete failure)
- I. **Water Absorption** MIL-D-3134.....<1.0%
- J. **Abrasion Resistance** ASTM D4060 0.04 gr
(CS17, 1000gr load, Cycles)
- K. **Flammability**Self-Extinguishing
ASTM D635 Bonded to concrete
- L. **Skid Resistance** Varies depending upon surface texture
selected. See Crossfield for Skid Resistant Characteristics).
- M. **Microbial Resistance** ASTM G21Passes Rating 1
- N. **Chemical Resistance** (See Chemical Resistance Chart)

3. OVERVIEW OF INSTALLATION STEPS

- A. Prepare surfaces by shot blasting, power scarification, etc. to remove laitance, grease, curing agents and other foreign matter.
- B. Apply epoxy primecoat.
Trowel apply Chem-Rez N bodycoat to thickness as specified.
- C. Apply grout coat and Posi-Tred CR topcoat in color and profile as selected.
- D. Optional broadcast (colored quartz or uniform size) aggregate, groutcoat/lockcoat and topcoat.

System Description Sheet

Chem-Rez N Novolac Troweled Epoxy 3/16" to 1/4" Chemical and Heat Resistant Industrial Floor with Integral Cove Base

4. PRODUCT AVAILABILITY

Crossfield Products Corp. maintains offices and/or factories at all addresses listed below. Factory Trained Contractors are established in all major trading areas in the United States, Canada and various European, Latin American and Far East nations.

5. SKID RESISTANCE and CLEANABILITY

In general, the more aggressive the finished surface the greater the coefficient of friction and corresponding skid resistance, the more difficult to clean. The smoother the finished texture the easier the surface is to clean, but there is a loss of skid resistant properties.

6. CLEANING

Cleaning and disinfecting compounds and cleaning techniques can affect the color, gloss, texture and performance of the system. As a precautionary step, Crossfield recommends that the end-user test their cleaning and disinfecting compounds on a sample or on a small, out of the way finished area, utilizing the intended cleaning technique prior to cleaning the entire surface area. If no deleterious effects are observed, the procedure can be continued. If the cleaning and disinfecting compounds or cleaning techniques damage the system, modification of the cleaning material or techniques will be required. Contact your Representative for additional information.

7. SPECIFICATION ASSISTANCE

Consult Crossfield Products Corp. for specification assistance, detailing, etc. This consultation is highly recommended prior to specification.

8. CHEMICAL RESISTANCE

See Crossfield Products Corp's. Chemical Resistance Guidelines for chemical resistance of a product or system, as well as the types of test performed:

- ASTM C868 Standard Test Method for Chemical Resistance of Protective Lining.
- ASTM C267 Standard Test Method for Chemical Resistance of Mortars, Grouts, and Monolithic Surfacing and Polymer Concretes.
- ASTM D1308 Standard Test Method for Effect of Household Chemicals on Clear and Pigmented Organic Finishes.
- Crossfield Products Corp. Proprietary Testing.

Note: Chemical resistance is a functional test, usually limited to changes in weight or thickness measured in loss or gain and does not evaluate subject aesthetic issues. To determine aesthetic issues, Crossfield recommends testing the products or system in accordance with intended end use.

9. TESTING

The technical data contained herein is the result of tests made in Crossfield's laboratories or in independent laboratories using small scale equipment, following generally accepted trade practices. Although this information is believed to be true and accurate, the use of different equipment for testing under dissimilar conditions or the testing of samples produced under dissimilar conditions may develop substantially different results.

LIMITED WARRANTY

NO WARRANTY SHALL BE EFFECTIVE UNTIL THE TERMS AND CONDITIONS OF SALE SET FORTH IN CROSSFIELD PRODUCTS CORP. INVOICE ARE MET.

Crossfield Products Corp. warrants to the purchaser of its products that such products are free from manufacturing defect. Crossfield does not warrant or guarantee the workmanship performed by any person or firm installing its products. Crossfield's obligation under this warranty is limited solely to the original purchaser and solely to the remedy of replacement in kind of any product which Crossfield sold which may prove defective in manufacture within one year from date of installation, provided said product was stored correctly and installed within the product's shelf life, by the original purchaser and which Crossfield examination shall disclose to Crossfield's satisfaction to be thus defective.

IN NO EVENT SHALL CROSSFIELD PRODUCTS CORP. BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES. THIS WARRANTY IS EXPRESSLY GIVEN IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE AND ALL OTHER OBLIGATIONS OR LIABILITIES ON CROSSFIELD'S PART, AND WE NEITHER ASSUME NOR AUTHORIZE ANY PERSON OR PERSONS TO ASSUME FOR US ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF A CROSSFIELD PRODUCT. THIS WARRANTY SHALL NOT APPLY TO ANY OF CROSSFIELD'S PRODUCTS, WHICH HAVE BEEN SUBJECT TO ADULTERATION, ALTERATION, ABUSE OR MISUSE. CROSSFIELD PRODUCTS CORP. MAKES NO WARRANTY WHATSOEVER IN RESPECT TO ACCESSORIES, PARTS OR MATERIALS NOT SUPPLIED BY CROSSFIELD PRODUCTS CORP., WHICH ARE USED IN CONNECTION WITH ITS PRODUCTS. THE TERM "ORIGINAL PURCHASER" IN THIS WARRANTY MEANS THAT PERSON, CORPORATION OR ENTITY TO WHOM CROSSFIELD PRODUCTS CORP. SOLD ITS PRODUCT OR PRODUCTS. ANY ACTION TO ENFORCE ANY WARRANTY OR FOR BREACH OF CONTRACT OR ARISING OUT OF ANY CLAIM AGAINST CROSSFIELD PRODUCTS CORP. SHALL BE COMMENCED AND MAINTAINED ONLY IN A COURT OF COMPETENT JURISDICTION IN THE CONTINENTAL UNITED STATES OF AMERICA. THE PURCHASER ACCEPTS THESE TERMS AND CONDITIONS, AND HEREBY EXPRESSLY WAIVES ANY CLAIM TO ADDITIONAL DAMAGES.

CAUTION: ALWAYS KEEP OUT OF THE REACH OF CHILDREN.



DEX-O-TEX PRODUCT LINE Crossfield Products Corp.

West Coast Office
3000 E. Harcourt Street
Rancho Dominguez, CA
90221
310-886-9100
310-886-9119 fax

East Coast Office
140 Valley Road
Roselle Park, NJ
07204
908-245-2800
908-245-0659 fax

www.dexotex.com