DESCRIPTION
Novolac 32 is a novolac epoxy resin system with an optional slip-resistant texture coat. It has superior chemical resistance to a wide range of acids, alkali, and other aggressive chemicals, and is resistant to thermal shock. Meets U.S.D.A. requirements for incidental food contact.

USES
- Food processing
- Animal research
- Chemical rooms
- Freezers

ADVANTAGES
- Superior chemical resistance
- Withstands thermal shock

LIMITATIONS
- System should be allowed to cure for a minimum of 7 days before floor is subjected to chemical exposure/spills

INSTALLATION
The following information is to be used as a guideline for installing the Novolac 32 system. For complete application instructions, please see the NEOGARD® Flooring Systems Application Manual.

FIELD SAMPLE
1. Install a field sample of at least 100 square feet at the project site or pre-selected area as agreed to by owner's representative, applicator and manufacturer.
2. Apply material in accordance with manufacturer's written application instructions.
3. Field sample will be standard for judging color and texture on remainder of project.
4. Maintain field sample during construction for workmanship comparison.
5. Do not alter, move, or destroy field sample until work is completed and approved by Owner’s representative.

PRODUCT DATA

<table>
<thead>
<tr>
<th>Description</th>
<th>Test Method</th>
<th>70704/70705</th>
<th>70714/70715</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive Strength</td>
<td>ASTM D695</td>
<td>10,000 psi</td>
<td>25,300 psi</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>ASTM D638</td>
<td>8,500 psi</td>
<td>3,700 psi</td>
</tr>
<tr>
<td>Elongation @ Break</td>
<td>ASTM D638</td>
<td>6%</td>
<td>25%</td>
</tr>
</tbody>
</table>

MATERIAL LIST
- Crack and Joint Filler: 70718/70719 flexible epoxy.
- Sealant: 70995, 70991 or other polyurethane sealant approved by NEOGARD®.
- Texture: 86500 Neogrip spheres.
- Primer: 70714/70715 clear epoxy.
- Base Coat: 70704/70705 pigmented Novolac epoxy.
- Topcoat: 70704/70705 pigmented Novolac epoxy.
- Optional Texture Coat: 70704/70705 clear or pigmented epoxy.

COLORS AND PACKAGING

<table>
<thead>
<tr>
<th>Product</th>
<th>Color</th>
<th>Packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>70714/70715</td>
<td>Clear</td>
<td>15- and 3-gallon kits</td>
</tr>
<tr>
<td>70704-02/70705</td>
<td>Gray</td>
<td>4-gallon kit</td>
</tr>
<tr>
<td>70704-05/70705</td>
<td>Red</td>
<td>4-gallon kit</td>
</tr>
<tr>
<td>70704-00/70705</td>
<td>Clear (Special Order)</td>
<td>4-gallon kit</td>
</tr>
<tr>
<td>86500 Neogrip Spheres</td>
<td>Clear</td>
<td>50 pound bag</td>
</tr>
</tbody>
</table>

PROJECT CONDITIONS
- Read and follow the Safety Data Sheet (SDS) and container labels for detailed health and safety information.
- Do not proceed with application of materials when substrate temperature is less than 60°F (15°C), if precipitation is imminent, or to a damp, unclean or frosty surface. It is recommended to maintain a minimum substrate temperature of 60°F (15°C) for a minimum of 48 hours before, during and after installation, or until cured. Special precautions are to be taken when ambient and/or substrate temperatures are approaching, at, or above 100°F (37°C).
- Coordinate flooring work with other trades. Applicator shall have sole right of access to the specified area for the time needed to complete the application and allow the flooring system to cure adequately.
- Protect adjacent surfaces from damage resulting from installation of the system. If necessary, mask and/or cover adjacent surfaces, fixtures, equipment, etc. by suitable means.
- Provide adequate ventilation.
- Provide a suitable work station to mix coating materials.
- Maintain work area in a neat and orderly condition, removing empty containers, rags and trash daily from the site.

EXAMINATION

Verify that the work done under other sections meets the following requirements:

1. That the concrete deck surface is free of ridges and sharp projections, sound and dry.
2. That the concrete was cured for a minimum of 28 days. (Minimum of 3,500 psi compressive strength). The use of concrete curing agents, if any, shall be of the sodium silicate base only; others require written approval by NEOGARD®.
3. That damaged areas of the concrete substrate be restored to match adjacent areas. Use 70714/70715 epoxy and oven-dry silica aggregate approved by NEOGARD® for filling and leveling at a ratio of one part epoxy mixed with four parts aggregate by volume.
4. That due to hydrostatic, capillary and moisture vapor pressure, substrates in contact with ground must have a properly installed, effective vapor barrier. Moisture vapor emission of concrete not to exceed 3 lbs/100 sq. ft./24 hrs, when tested by the quantitative calcium chloride test method (ASTM F1869). Relative Humidity is not to exceed 75% when tested by In-situ Probe Test (ASTM F2170).

SUBSTRATE PREPARATION

Cleaning

- Surfaces contaminated with oil or grease shall be vigorously scrubbed with a power broom and a strong non-sudsing detergent. Thoroughly wash, clean, and dry. Areas where oil or other contaminants penetrate deep into the concrete may require removal by mechanical methods. Do not apply materials unless surface is clean and dry.

Shot-Blasting

- Shot-blasting is the preferred method to remove laitance from concrete surfaces. Proper care and procedure should be taken to leave the concrete surface as unopened as possible. Shot-blasting is also preferred over sandblasting to remove an unacceptable curing compound. Mechanically prepare surface by shot-blasting to industry standard surface texture (ICRI CSP3–CSP4) without causing additional surface defects in deck surface. See photos below. Note: Shot-blasting does not remove deep penetrating oils, grease, tar or asphalt stains.
- Proper cleaning procedures should be followed to ensure proper bonding of the flooring system.
- Shot-blasting provides a proper profile for mechanical bond.

**Caution: Do not over shot-blast the substrate.** An improper or aggressive shot-blast can create an over porous concrete surface, which can cause blisters or bubbles during application of the flooring system.

Scarification

- Scarifying is a recommended preparation method for removal of existing coatings, oils, grease, sealers and other contaminants that resist removal by shot-blasting or acid etching.
- Scarifying a concrete substrate will provide a proper profile for maximum adhesion of the flooring system to the concrete substrate.
- Aggressive scarification can result in blistering problems during the application of the flooring system.

Grinding

- This is an alternative method for the removal of laitance from the concrete surface and is the preferred method for thin film applications.
- Diamond pads or discs with 24–36 grit can be used in combination with slow speed grinders.
- Vacuum to thoroughly remove all dust and debris from grinding.
- Must provide a 50 grit sandpaper texture.

Concrete Patching


Cracks

- After shot-blasting, fill all non-moving cracks with 70714/70715 epoxy, mixed with P1934 fumed silica to form a paste. The mix ratio is one part 70714/70715 epoxy to 3 parts P1934 fumed silica by volume.

Control and Cold Joints

- Fill control and cold joints flush with 70718/70719 flexible epoxy @ 3/4” depth. Use proper size closed cell backer rod to control joint depth.

Expansion and Isolation Joints

- Expansion and isolation joints =/<1” in width shall be sealed with 70991 single component or 70995 two component polyurethane sealant. Sealant shall be applied to inside of joint only, not to floor surface. Preparation and treatment of joints >1” in width is beyond the scope of this Application Manual; an expansion joint manufacturer should be consulted for those applications.

APPLICATION

Factors That Affect Dry Film Thickness: Volume of solids, thinning, surface profile, application technique and equipment, overspray, squeegee, brush and roller wet out, container residue, spills and other waste are among the many factors that affect the amount of wet coating required to yield proper dry film thickness. To ensure that specified dry film thickness is achieved, use a wet mil gauge to verify actual thickness of wet coating applied, adjusting as needed for those factors which directly affect the dry film build.

1. Primer: Mix 70714/70715 clear epoxy at a ratio of 2:1 by volume for three minutes. Apply at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. Allow to cure until tack free (8–9 hours @ 75°F, 23°C).
2. Base Coat: Mix 70704/70705 pigmented Novolac epoxy at a ratio of 3:2 by volume for three minutes. Apply at a rate of 100 sf/gal (16 wet mils) to yield 16 dry mils. Allow to cure until tack free (8 to 9 hours @ 75°F, 23°C).
3. Topcoat: Mix 70704/70705 pigmented Novolac epoxy at a ratio of 3:2 by volume for three minutes. Apply at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. If applying Optional Texture Coat, allow Topcoat to cure until tack free (8 to 9 hours @ 75°F, 23°C).

4. Optional Texture Coat: For limited slip resistance apply a third coat of 70704/70705 pigmented Novolac epoxy. Add 20 ounces by volume of Neogrip spheres to 5 gallons of 70704. Mix for 3 minutes then add 70705 hardener and mix for an additional 3 minutes. Apply at a rate of 400 sf/gal (4 wet mils) to yield 4 dry mils. **Note:** Installing the Optional Texture Coat thicker than 4 wet mils will cause the Neogrip spheres to sink into the 70704/70705 Novolac epoxy coating, thus eliminating the desired slip-resistant texture.

**CLEAN UP**

- Remove debris resulting from completion of coating operation from the project site.
- Refer to the Preventive Maintenance Manual for NEOGARD® Floor Coating Systems for typical cleaning methods.

**STORAGE AND HANDLING**

Storage and Handling: Recommended material storage temperature is 75°F (23°C). Handle products to prevent damage to container. All materials shall be stored in compliance with local fire and safety requirements. Do not store at high temperatures or in direct sunlight.

**HEALTH AND SAFETY**

Before using this product, carefully read the SDS and container labels for detailed health and safety information. This product is intended for industrial use by properly trained professional applicators only.

**PROTECTION**

After completion of application, allow system to cure for 24 hours at 75°F (23°C) before allowing foot traffic, 48 hours before allowing heavy load.

**SUMMARY APPLICATION TABLE**

<table>
<thead>
<tr>
<th>Coat</th>
<th>Product</th>
<th>Color</th>
<th>Mix Ratio</th>
<th>Coverage Rate</th>
<th>Mils WFT/DFT</th>
<th>Recoat Window @ 75°F (24°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Primer</td>
<td>70714/70715</td>
<td>Clear</td>
<td>2:1</td>
<td>200 sf/gal</td>
<td>8 WFT/8 DFT</td>
</tr>
<tr>
<td>2</td>
<td>Base Coat</td>
<td>70704/70705</td>
<td>Pigmented</td>
<td>3:2</td>
<td>100 sf/gal</td>
<td>16 WFT/16 DFT</td>
</tr>
<tr>
<td>3</td>
<td>Topcoat</td>
<td>70704/70705</td>
<td>Pigmented</td>
<td>3:2</td>
<td>200 sf/gal</td>
<td>8 WFT/8 DFT</td>
</tr>
<tr>
<td>4</td>
<td>Optional Texture Coat</td>
<td>70704/70705</td>
<td>Pigmented</td>
<td>3:2</td>
<td>400 sf/gal</td>
<td>4 WFT/4 DFT</td>
</tr>
</tbody>
</table>

**SYSTEM ISOMETRIC**

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## Project Information

**Job Name:** 

**System Installed:** 

**Area:** 

**Address:** 

**City:** 

**State:** 

**Zip:** 

<table>
<thead>
<tr>
<th>Primer (Gals)</th>
<th>Base Coat (Gals)</th>
<th>Topcoat (Gals)</th>
<th>Optional Texture Coat (Gals)</th>
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**Product Number:**  

**Quantity:**  

**Batch Numbers:**  

### Occurrence Keys:

1. Change Order  
2. Preparation  
3. Primer  
4. Base Coat  
5. Topcoat  
6. Optional Granule Coat

<table>
<thead>
<tr>
<th>Date</th>
<th>Occurrence</th>
<th>Temp F</th>
<th>R.H.</th>
<th>Description (Describe Occurrence such as area coated, change order, etc.)</th>
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<tbody>
<tr>
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