# **FloorTuff**<sup>TM</sup>

# Technical Information



# **One Product Flooring System Industrial Application**



# **PRODUCT DESCRIPTION**

JONES-BLAIR®/NEOGARD® has developed a one product easy to use system for protecting concrete floors. This two component, 100% solids epoxy, is formulated for use on damp as well as dry concrete. It can be used as a primer, patching resin, base coat, and topcoat... all in one.

# **IDEAL FOR**

- · High traffic conditions like main aisles
- · Corrosion resistant environments
- · Mechanical rooms
- Industrial kitchens
- · Floor patching
- · Maintaining floors
- · Clean rooms

### **ADVANTAGES**

- · One product system
- · Complies with VOC/VOS regulations
- · High physical and chemical resistant properties
- High gloss
- · Can be combined with several aggregates for slip resistance
- Easy to clean
- . Multiple Colors

# LIMITATIONS

- · Not recommended for exterior applications.
- Product may fail adhesion or fish eye if oil, silicones, form • release agents, or other types of contaminants are present during application.
- Do not apply if surface temperature is less than 50°F.

# **PACKAGING - 3 GAL KITS**

| Colors: | 70714        | Clear      | 70714-01     | White    |
|---------|--------------|------------|--------------|----------|
|         | 70714-02Gray |            | 70714-03 Tan |          |
|         | 70714-04     | .Dark Gray | 70714-05     | Tile Red |
|         | 70714-06     | .Green     | 70714-11     | Lt. Gray |
|         | 70714-16     | .Black     |              |          |

#### Catalyst: 70715

Mix Ratio: 2:1 (resin:catalyst) by volume

# **DELIVERY, STORAGE & HANDLING**

Materials shall be delivered in original sealed containers, clearly marked with supplier's name, brand name and type of material.

Recommended material storage temperature is 75°F (23.8°C). Handle products to avoid damage to container. Do not store for long periods in direct sunlight.

# **TECHNICAL DATA**

| Description                       | Test Method   | Result                                   |
|-----------------------------------|---------------|--|
| Compressive Strength              | ASTM D 695    | 25,300 psi                               |
| Tensile Strength                  | ASTM D 638    | 3,700 psi                                |
| Elongation @ Break                | ASTM D 638    | 25%                                      |
| Flexural Modulus                  | ASTM D 790    | 57,700 psi                               |
| Shore D Hardness                  | ASTM D 2240   | 78                                       |
| Adhesion                          | ASTM D 4541   | 350 psi                                  |
| Taber Abrasion<br>1000 rev., cs17 | ASTM D 4060   | 25 mg                                    |
| Fungus & Bacteria<br>Resistance   | Mil-F-52505   | No support of<br>growth under<br>TT-P-34 |
| Solids by Volume                  | Calculated    | 100% (mixed)                             |
| Solids by Weight                  | ASTM D 4209   | 100% (mixed)                             |
| Viscosity                         | ASTM D 2196   | 400 cps (mixed)                          |
| Flash Point                       | ASTM D 3278   | >200°F                                   |
| VOC                               | EPA method 24 | <5 g/L (mixed)                           |
| Shelf Life                        |               | 1 year                                   |
| Pot Life @ 75°F                   |               | 30 minutes                               |
| Thin Film Cure                    |               | 6 – 8 hours                              |
| Light Traffic Use                 |               | 12 hours                                 |
| Full Cure                         |               | 7 days                                   |
| Mix Ratio (Resin:Catalyst)        |               | 2:1 by volume                            |

# CHEMICAL RESISTANCE

| Rating Key    | Chemical              | Rating |
|---------------|-----------------------|--------|
| 0 - No Effect | Acetic Acid 10%       | 1      |
| 1 - Stains    | Ammonia 28%           | 0      |
| 2 - Blisters  | Blood                 | 0      |
|               | Brake Fluid           | 0-1    |
|               | Ethylene Glycol       | 0      |
|               | Isopropyl Alcohol     |        |
|               | Jet Fuel              |        |
|               | Ketchup               | 0      |
|               | Lactic Acid 85%       | 0-1    |
|               | Hydrochloric Acid 37% | 0      |
|               | Mineral Spirit        | 0      |
|               | Motor Oil             | 0      |
|               | Mustard               | 0      |
|               | Propylene Glycol      | 0      |
|               | Skydrol               | 1      |
|               | Sulfuric Acid 50%     |        |
|               | Urine                 | 0      |
|               | Vegetable Oil         | 0      |
|               | Vinegar               | 1      |
|               | Xylene                |        |

# EXAMINATION

#### Concrete

- Concrete must be structurally sound
- Check for contaminants
- · Look for curing compounds and form release agents
- Check with JONES-BLAIR<sup>®</sup>/NEOGARD<sup>®</sup> for more information or questions
- Floor temperature must be above 50°F (10°C) and rising
- Use degreaser detergent to remove surface oil, grease and dirt. Areas where oil or other contaminants penetrate deep into the concrete may require removal by mechanical methods.

# **Moisture Drive Issue**

- Concrete must be dry and needs to have a minimum of 28 days cure.
- Run calcium chloride test ASTM F1869-98. Readings must not exceed 3 lbs/1000 sf/24 hrs. <u>NOTE: Readings may</u> vary from day to day, so the result of testing will be accurate only at the time tested.

# **Patching & Cracks**

- Patching concrete in remedial applications is usually required. Fill voids to adjacent level with a mix of one part 70714/70715 and 4 parts oven-dry silica (40-60 mesh) by volume.
- Fill non-moving cracks with a mix of one part of 70714/70715 with two to three parts of fumed silica by volume.
- All patching and cracks shall be done after surface preparation.

# EXECUTION

#### Preparation

- Abrade/Etch concrete surface by a mechanical procedure or by using a dilution of water and Hydrochloric Acid 20° baume at a ratio of 2:1.
- Do not let acid dry on surface. Rinse thoroughly.
- Surface to achieve a profile similar to 50 grit sand paper.

#### **Pre-coated Concrete**

- Sand thoroughly with 50 grit paper and remove all residue.
- Scrub floor with water and degreaser detergent and rinse well with water prior to application of FloorTuff<sup>™</sup> System.

#### **Mixing Instructions**

- Read labels
- Follow mixing instructions
- Mix the color side of 70714 for three minutes before adding 70715 catalyst.
- Mixing ratio is 2 parts 70714 series to 1 part 70715 by volume.
- Mix material for three minutes
- Use a slow speed drill (600 rpm max.) and jiffy mixer.

# IMPROPER MIXING AND IMPROPER MIXING RATIOS CAN RESULT IN CURING PROBLEMS

# Application & Coverage Rates

- **PRIMER** Apply in one coat at a rate of 266 sf/gal to achieve a DFT of 6 mils. Primer should always be clear. After proper mixing, dip roller in the coating, apply and roll out excess. Apply in a uniform path trying not to overlap in excess with previous paths. After 3 or 4 paths, back roll the surface for uniform appearance and until you achieve proper thickness. Within 36 hours of application of primer, topcoat must be applied. If topcoat cannot be applied within 36 hours, lightly sand the entire surface to develop a profile. Remove imperfections and/or dust.
- **TOPCOAT** Apply one coat of clear or color topcoat at a rate of 160 sf/gal to achieve 10 mils DFT. After proper mixing, dip roller in the topcoat, apply and roll out excess. Apply in a uniform path trying not to overlap in excess with previous paths. After 3 or 4 paths, back roll the surface for uniform appearance or to achieve proper thickness.
- OPTIONAL COAT For custom color or UV stability, use Acrylithane HS2

# APPLICATION TOOLS

• Safety is first. Use protective clothing, safety glasses and post warning signs.

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