Bid No. 21-10

Structural Repairs and Maintenance at the Autopark at The Fashion District

Addendum Three

To: See Email Distribution List
From: Mary Wheeler
Manager of Contract Administration
Date: April 14, 2021
No Pages: 3 plus Exhibit A and Exhibit B

This addendum is issued on April 14, 2021 prior to the bid due date to add, delete, modify, clarify and/or to respond to questions submitted by prospective bidders regarding the work included in the above referenced solicitation.

CHANGES, CLARIFICATIONS AND ADDITIONS TO THE BID PACKAGE

1. Additions to Section 09 90 00
   • Master Protect C350 – Master Builders Solutions, Inc.
   • Sikagard 670W – Sika

2. Change to the response from Addendum #1, Question #3:
   
   Question: Regarding the apprenticeship certification, is that for every trade as well, or is that just for the general contractor?

   Original Response: The requirement is for the prime bidder. However, the bidder can participate either directly or through its subcontractor.

   Revised Response: The requirement is for the prime bidder and all subcontractors.

MATERIAL SUBSTITUTION REQUESTS

1. Traffic Coating Substitution: Mapefloor Heavy Duty Vehicular System:
   a. Mapefloor PU Primer
   b. Mapefloor PU 400FC
   c. Mapefloor Finish 415NA
   d. Mapefloor Finish 450

   Response: This is an acceptable substitution.

2. Work Item A2 (PUMA) substitution – Mapefloor Extreme Vehicular Fast Cure System
   a. Primer SN Fast
   b. Mapefloor PU400 FC
   c. Planiseal Traffic Coat FS

   Response: This is not an acceptable substitution.
3. Joint Sealants Substitution:
   a. Mapeflex P2SL (2 component)
   b. Mapeflex PU50 SL (one component)
   c. Mapeflex P2NS (2 component)
   d. Mapeflex PU40 (one component)
   Response: This is an acceptable substitution.

4. Painting and Coating 09 90 00 – 1 Substitution:
   a. Elastocolor Coat
   b. Elastocolor Flex
   c. Elastocolor Primer WB (if needed)
   d. Elastocolor Primer AR (if needed)
   Response: This is an acceptable substitution.

5. Detail 1/53.2 (Adhesive Anchor) and Detail 9/3.2 (Adhesive Anchor)
   a. Planibond AE (Fast)
   Response: Planibond AE is not an acceptable substitution.

6. Regarding section Section 00 41 00 - 2.2.1 – W.I.# A2, please consider the Neogard PUMA system and or equal to the specified systems. Data Sheets are attached as Exhibit A.
   Response: Neogard PUMA System is an acceptable substitution.

QUESTIONS

1. Question: Spec section 09 90 00 2.03: All three systems A,B, and C are for concrete. We assume that system A has to be applied at the facade? (WI A1) Please confirm.
   Response: Correct, System A to be applied at the facade.

2. Question: It appears that both, the top and the bottom of the parapet walls, as well as the inside of the little cutouts, and the front and two sides of all exterior columns are painted the same color. Please confirm that this is the scope of work for WI A1.
   Response: All areas that are currently painted/coated on the exterior parapet walls, columns, and spandrels are to be coated as part of work item A1.

3. Question: Spec section 00 41 00 2.2.2.C: The work at the ramps has to be done in off-hours, 5pm-6am. However, we are only aloud to make noise until 8pm. That leaves us exactly 3 hours for demolition work per night. This would make this a very long and expensive undertaking. Is there any way this work could be scheduled differently?
   Response: Not at this time. Note the extended OFF Hours within the same Section 00 41 00 2.2.2.C for weekends.

4. Question: Work item 7.1, Tee-beam clean and re-caulk joints: Are these all tee-tee joints on all levels other than the roof? Concrete topping slab at ramps repairs at ramps (WI 2.4).
   Response: Reference Section 00 41 00 2.2.2.G; all tee-tee joints to be included with the exception of 8th floor and partial 7th floor where existing traffic membrane is to remain.

5. Question: Currently the concrete at the ramps is grooved or raked. Please clarify what finish you want to see on these ramps. With a grooved finish, the traffic coating application will be much more difficult and require more material than with a broom finish?
Response: Both ramps to have a broom finish.

6. Question: Work item 7.2 Tee-beam clean and re-caulk joints (roof). The bid quantity for this item is 1,500 LF. There are far more joints on the roof than that. Please confirm that only select joints will be re-caulked.
Response: Tee-beam clean and re-caulk joints at the roof, is limited to those areas specified on the plans for repair.

7. Question: Work item 9, painted traffic markings. Please provide a spec section for this work.
Response: See section 32 17 23.13 “Painted Pavement Markings”.

8. Question: Work item 9, painted traffic markings. The traffic markings have been painted several times. Please confirm that we are not to paint over existing, but to remove all existing markings entirely and paint new.
Response: Most areas of the painted traffic markings is located where traffic coating is to be removed and replaced. Other areas, shall remove the old pavement markings prior to re-painting.

9. Question: Can you please provide a section view of detail 9/S3.2
Response: See sketch SSK-1, attached as Exhibit B.

10. Question: Traffic coating system: The 55 mils coating system 12 mils primer, 32mils basecoat, and 11 mils top coat is very unusual. Normally the primer is very thin, basecoat, intermediate coat, and top coat to add up to 55 mils. As long as we will provide the specified warranty, can we change the application if we meet the 55 mils total system thickness? Even the manufacturers that you have specified don't apply the material this way.
Response: Yes – provided that the specified warranty is met with the total thickness of 55 mils is applied.

11. Question: Please consider Neogard Autogard HD at 55 mils an or equal to the specified systems.
Response: Neogard Autogard HD at 55 mils is an acceptable ‘or equal’ system.

END OF ADDENDUM THREE
Vehicular Traffic Coatings
Proven Waterproofing & Chloride Intrusion Protection
Seamless Protection For Vehicular Traffic Surfaces

Maintain the structural integrity and appearance of your investments with traffic coatings and prolong the lifecycle of your structure while reducing cost over time with proper maintenance.

Our Neogard®’s surface applied seamless vehicular traffic coating systems provide waterproofing and chloride intrusion protection for concrete structures making them ideal for parking decks, stadiums and high-traffic pedestrian applications; where weather can impact the integrity of your structure.

Neogard’s line of surface applied seamless Auto-Gard® Systems offer a solution for a variety of application needs.

Designed to protect reinforced concrete parking structures, Auto-Gard provides a seamless, durable, skid-resistant membrane, preventing ingress of moisture and chloride intrusion that lead to premature deterioration.

### Performance Properties & Benefits

| Seamless & Fully Adhered | Monolithic surface
|                        | Protects concrete and rebar from moisture and chloride intrusion
| Surface Applied | Easy to identify maintenance issues for damage repair
| Waterproof | Provides a moisture barrier
|                        | Leak protection
|                        | Reduces structure’s lifecycle cost
| Elastomeric | Accommodates thermal expansion and contraction
|                        | Bridges cracks
|                        | Leak protection
| Sustainable | Systems can be renewed rather than replaced
|                        | Reduces structure’s lifecycle cost
| Embedded Aggregate | Slip resistant surface
| Environmentally Friendly | Low odor
|                        | Fast cure
| Aesthetically Pleasing | Available in a variety of colors
|                        | Multiple attractive textures & finishes available

### LEED Credits

LEED promotes a whole-building approach to sustainability by recognizing performance in seven key areas of human and environmental health.

Credits Available for Neogard Systems:

- Low-Emitting Materials – Paints & Coatings (IEQc4.2)
- Rapidly Renewable Materials (MRc6)
- Heat Island Effect – Non-roof (SSc7.1)
- Regional Materials (MRc5)
- Recycled Content (MRc4)
Auto-Gard
Coating system for vehicular traffic areas. Available in several standard colors. Typically used on parking decks.

Auto-Gard E
An epoxy/urethane hybrid system for heavy traffic applications.

Auto-Gard T & FC T
Vehicular system with an integral aggregate top coat. Provides consistent texture and protects against silicosis. Available in standard (T) or fast cure (FC).

Auto-Gard FC
Low odor and fast curing allows for vehicular traffic 24-36 hours after installation. Allows quick installation of full coating system and is compatible with the most stringent VOC regulations. Ideal for work in or near occupied buildings where odor may be an issue.

RTS PUMA/PMMA
A tough, durable system with PUMA membrane requires no reinforcement. Ideal for the toughest of applications and those requiring quick turnaround. Can be opened to vehicular traffic one hour after top coat installation even in cold temperatures.
Neogard, A part of Hempel, manufactures high-performance coatings specified and used for structures across the globe for over 60 years. Neogard’s coating systems protect the building envelope through vehicular and pedestrian traffic coatings, protective roof coatings, seamless flooring and elastomeric wall coatings.

You can find Neogard coatings in Major Stadiums and Arenas, Office Buildings, Universities, Hospitals, Hotels and Casinos, Airports and Hangers, Government Facilities, Manufacturing Plants and more.

About Hempel

As a world-leading supplier of trusted coating solutions, Hempel is a global company with strong values, working with customers in the protective, marine, decorative, container and yacht industries. Hempel factories, R&D centers and stock points are established in every region.

Across the globe, Hempel’s coatings protect surfaces, structures and equipment. They extend asset lifetimes, reduce maintenance costs and make homes and workplaces safer and more colorful. Hempel was founded in Copenhagen, Denmark in 1915. It is proudly owned by the Hempel Foundation, which ensures a solid economic base for the Hempel Group and supports cultural, social, humanitarian and scientific purposes around the world.

Hempel (USA) Inc
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Dallas, TX 75235
Tel: +1 (214) 353-1600

neogard.com
NEOGARD
CONSTRUCTION COATINGS

VEHICULAR & PEDESTRIAN DECKS

HIGH PERFORMANCE COLOR CARD

Colors shown may vary from actual product mixtures. Where color matching is critical, an applied sample is recommended.

Minimum order quantities are required for custom colors. Custom colors are available at an additional cost.

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<thead>
<tr>
<th>Color</th>
<th>ALIPHATIC*</th>
<th>STANDARD</th>
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</thead>
<tbody>
<tr>
<td>LIGHT GRAY</td>
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<tr>
<td>GRAY</td>
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<td>X</td>
</tr>
<tr>
<td>CHARCOAL</td>
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<td>X</td>
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<tr>
<td>TAN</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>DARK MAPLE</td>
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<td>X</td>
</tr>
</tbody>
</table>

*Aliphatic Coatings are used for superior color retention and weathering. Aliphatic top coats are available in the following product lines, 7470 series, FC7530 series, FC7540 series and FC7545 series.

2729 Empire Central
Dallas, TX 75235
214-353-1600
Fax: 214-353-1766
www.neogard.com
PART 1 GENERAL

1.1 SUMMARY

A. Provide labor, materials, equipment and supervision necessary to install a fluid-applied moisture mitigation system and vehicular traffic coating system as outlined in this specification to new or existing concrete surfaces.

B. The manufacturer's application instructions for each product used are considered part of this specification and should be followed at all times.

C. Related Sections:
   1. Section 03 30 00 - Cast-in-Place Concrete
   2. Section 03 40 00 - Precast Concrete
   3. Section 07 90 00 - Joint Protection

1.2 SYSTEM DESCRIPTION

A. AUTO-GARD® FC shall be a complete system of compatible materials supplied or approved by NEOGARD® to create a seamless waterproof membrane.

B. AUTO-GARD® FC shall be designated for application on the specific type of deck indicated on the drawings.

1.3 SUBMITTALS

A. Product Data: Submit NEOGARD® product literature and installation instructions.

B. Project Reference List: Submit list of projects as required by this specification.

C. Samples: Submit samples of specified vehicular traffic coating system. Samples shall be construed as examples of finished color and texture of the system only.

D. Applicator Approval: Submit letter from manufacturer stating applicator is approved to install the vehicular traffic coating system.

E. Warranty: Submit copy of manufacturer's 5 year material and labor warranty.

1.4 QUALITY ASSURANCE

A. Supplier Qualifications: AUTO-GARD® FC, as supplied by NEOGARD®, is approved for use on this project.

B. Applicator Qualifications: Applicators shall be approved to install specified system.

C. Requirement of Regulatory Agencies: Materials used in the vehicular traffic coating system shall meet existing Federal, State and local VOC regulations.

1.5 DELIVERY, STORAGE AND HANDLING

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

B. Storage and Handling: Recommended material storage temperature is 75°F. Handle products to avoid damage to container. Do not store for long periods in direct sunlight.

1.6 PROJECT CONDITIONS

A. Environmental Conditions:
   1. Do not proceed with application of materials when deck temperature is less than 40°F.
2. Proceed with work only when existing and forecasted weather conditions will permit the application to be performed in accordance with the manufacturer’s recommendations.
3. Do not apply materials unless surface to receive coating is clean and dry.

1.7 WARRANTY
A. Five year material and labor warranty signed by Manufacturer and Contractor.

PART 2 PRODUCTS

2.1 MANUFACTURER
A. NEOGARD® Division of JONES-BLAIR® Company, 2728 Empire Central, Dallas, TX  75235, Toll Free (800) 321-6588, Fax (214) 357-7532, www.neogard.com.

2.2 MATERIALS
A. Vehicular Traffic Coating Material:
   1. Primer: 7797/7798 Urethane Primer.
   2. Flashing Tape: 86218 flashing tape having a minimum thickness of 30 mils.
   3. Aggregate: 7992U (12/20 mesh) silica (quartz) sand or other aggregate approved by NEOGARD®.
   4. Elastomeric Base Coat: FC7500/FC7960 polyurethane coating.
   5. Elastomeric Wear Coat: FC7510/FC7961 polyurethane coating.
   7. Sealant: 70991 or other polyurethane sealant approved by NEOGARD®.

2.3 MATERIAL PERFORMANCE CRITERIA
A. Typical physical properties of cured vehicular traffic coating system used on this project are:

<table>
<thead>
<tr>
<th>PHYSICAL PROPERTIES</th>
<th>TEST METHOD</th>
<th>BASE COAT</th>
<th>TOPCOAT</th>
</tr>
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<tbody>
<tr>
<td>Tensile Strength</td>
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<td>1,500 psi</td>
<td>2,000psi</td>
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<tr>
<td>Elongation</td>
<td>ASTM D412</td>
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<td>75%</td>
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<tr>
<td>Permanent Set</td>
<td>ASTM D412</td>
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<td>&lt;10%</td>
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<tr>
<td>Tear Resistance</td>
<td>ASTM D1004</td>
<td>150 pli</td>
<td>155 pli</td>
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<tr>
<td>Water Resistance</td>
<td>ASTM D471</td>
<td>1% @ 7 days</td>
<td>&lt;2% @ 7 days</td>
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<tr>
<td>MVT @ 20 mils</td>
<td>ASTM E96</td>
<td>5 English</td>
<td>0.4 English</td>
</tr>
<tr>
<td>Taber Abrasion (cs17), max</td>
<td>ASTM D4060</td>
<td>5 mg/1,000 rev</td>
<td>30 mg/1,000 rev</td>
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<td>ASTM D2240</td>
<td>74-79</td>
<td>80-90</td>
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<tr>
<td>Adhesion</td>
<td>ASTM D4541</td>
<td>400 psi</td>
<td>400 psi</td>
</tr>
<tr>
<td>Thermal Shock</td>
<td>Alternate Heat/Cold</td>
<td>No Loss of Adhesion</td>
<td>No Loss of Adhesion</td>
</tr>
</tbody>
</table>

“Standard Specifications for High Solids Content, Cold- Applied Elastomeric Waterproofing Membrane with Integral Wearing Surface”

<table>
<thead>
<tr>
<th>TEST METHOD</th>
<th>BASE COAT</th>
<th>TOPCOAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM C957</td>
<td>System Exceeds Requirements</td>
<td></td>
</tr>
</tbody>
</table>
2.4 ACCESSORIES

A. Miscellaneous materials such as cleaning agents, adhesives, reinforcing fabric, backer rod, deck drains, etc. shall be a composite part of the deck system and shall be compatible with the specified vehicular traffic coatings.

PART 3 EXECUTION

3.1 EXAMINATION

A. Concrete: 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.
   2. That the concrete was cured for a minimum of 28 days. (Minimum of 4,000 psi compressive strength). Water-cured treatment of concrete is preferred. The use of concrete curing agents, if any, shall be of the sodium silicate base only; others require written approval by NEOGARD®.
   3. That the concrete was finished by a power or hand steel trowel followed by soft hair broom to obtain light texture or “sidewalk” finish.
   4. That damaged areas of the concrete deck be restored to match adjacent areas. Use 100% solids epoxy and sand for filling and leveling.

3.2 PREPARATION

A. Surface Preparation:
   1. 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.
   2. Shot Blasting: Required surface preparation method for remedial construction, is also the preferred method for new construction. Mechanically prepare surface by shot blasting to industry standard surface texture (ICRI's CSP4-5) without causing additional surface defects in deck surface. Shot blasting does not remove deep penetrating oils, grease, tar or asphalt stains. Proper cleaning procedures should be followed to insure proper bonding of the deck coating.
   3. Cracks and Cold Joints: Visible hairline cracks (up to 1/16" in width) in concrete and cold joints shall be cleaned, primed as required and treated with thoroughly mixed FC7500/FC7960 polyurethane coating material a minimum distance of 2" on each side of crack to yield a total thickness of 30 dry mils. Large cracks (over 1/16" in width) shall be routed and sealed with 70991 sealant. Sealant shall be applied to inside area of crack only, not applied to deck surface. Detail sealed cracks with thoroughly mixed FC7500/FC7960 polyurethane coating material a distance of 2" on each side of crack to yield a total thickness of 30 dry mils.
   4. Control Joints: Seal secondary control joints with 70991 sealant. Sealant shall be applied to inside area of joint only, not applied to deck surface. Detail sealed joints with thoroughly mixed FC7500/FC7960 polyurethane coating material a distance of 2" on each side of joint to yield a total thickness of 30 dry mils.
   5. Flashing Tape: Install 86218 flashing tape where indicated on the drawings and/or where required by the manufacturer prior to the application of elastomeric coating.
   6. Surface Condition: Surface shall be clean and dry prior to coating.

3.3 APPLICATION

A. Seed and Lock Method:
   1. Primer: Apply 7797/7798 Primer at a rate of 275 SF/gal to all concrete surfaces in strict accordance with procedures outlined by NEOGARD®. Within 24 hours of application of primer, base coat must be applied. If base coat cannot be applied within 24 hours, reprime.
   2. Base Coat: Thoroughly mix FC7500/FC7960 polyurethane coating material and apply at a rate of 80 SF/gal to deck surfaces in strict accordance with procedures outlined by NEOGARD®. Extend base coat over cracks and control joints which have received treatment.
   3. Wearing Surface Coat: Thoroughly mix FC7510/FC7961 polyurethane coating material and apply at a rate of 114 SF/gal in strict accordance with procedures outlined by NEOGARD® and immediately broadcast aggregate, evenly distributed, into wet coating at the rate of 18-25 pounds per 100 square feet.
   4. Aliphatic Topcoat: When dry, remove excess aggregate and recoat surface with thoroughly mixed FC7540/FC7964 polyurethane coating material at a rate of 90 SF/gallon in strict accordance with procedures.
outlined by NEOGARD®. Total system coating thickness averages 52 dry mils exclusive of primer and aggregate.

*Note to specification writer: Thickness values of cured film are averages and can vary due to finish of surface.

3.4 CLEANING
A. Remove debris resulting from completion of coating operation from the project site.

3.5 PROTECTION
A. After completion of application, do not allow traffic on coated surfaces for a period of at least 24 - 36 hours at 75°F. and 50% R.H., or until completely cured.

END OF SECTION
Description: 7797/7798 (Hempel 254J9/946JB) is a two-component, high solids, low odor urethane primer.

Recommended use: 7797/7798 is applied to surfaces to promote adhesion of standard and fast-cure elastomeric coatings. It may also be applied over existing coatings.

Certificates/approvals: LEED: BDc4, IDc4

Availability: Available in North America. Not included in Group Assortment; other regions must confirm.

Colors and packaging:

<table>
<thead>
<tr>
<th>7797 (254J900000)</th>
<th>Amber</th>
</tr>
</thead>
<tbody>
<tr>
<td>7798 (946JB00000)</td>
<td>Neutral</td>
</tr>
</tbody>
</table>

| 3-gallon kit |

Physical constants:

- Weight/Gal (mixed): 8.99 lbs/gal (ASTM D1475)
- Weight Solids (mixed): 91% (ASTM D5201)
- Volume Solids (mixed): 91% (ASTM D562)
- Viscosity (mixed): 160 cps (ASTM D5201)
- VOC (mixed): 0.01 g/L (ASTM D5201)
- Adhesion to Concrete: 500 psi (ASTM D4541)
- Adhesion to 70613, 70630: Meets requirements (ASTM D903)
- Adhesion to 7430, FC7510/FC7961, FC7520/FC7962, FC7530/FC7963, FC7540/FC7964: ≥400 psi (ASTM D7234)

The above tested results are typical values. Individual lots may vary up to 10% from the typical value. Further technical information can be found at www.neogard.com.

Application details:

Version, mixed product: 254JB
Base 254J9 : Curing Agent 946JB

Mixing ratio: 2 : 1 by volume

Mixing instructions: Pre-mix base for 3–5 minutes before adding curing agent. Mix for a minimum of 5 minutes before applying. Jiffy Mixer paddle recommended.

Application method: Roller, brush, or spray (contact Neogard for spray equipment information)

Recommended application rate: 300–500 sq ft/gallon

Thinner (max.vol.): Do not thin

Pot life: 30 minutes at 77°F (25°C)

Cleaning of tools: HEMPEL'S THINNER 08080 (xylene)

Safety: Handle with care. Before and during use, observe all safety labels on packaging and paint containers, consult Neogard Safety Data Sheets and follow all local or national safety regulations. Use with adequate ventilation.


Application conditions: Substrate temperature must be ≥40°F (4°C) and <110°F (32°C).

Subsequent coat: According to Neogard Guide Specifications.

Storage temperature: 75°F (23°C)

Remarks: Apply coating within 24 hours of primer application. Not recommended for constant immersion. Not compatible with asphaltic compounds. For on-grade applications, substrates constructed over unvented metal decks or between-slab applications, contact the Neogard Technical Service Department.
Product Data Sheet
7797/7798 — Urethane Primer
254JB: Base 254J9 : Curing Agent 946JB

Note: 7797/7798 is for professional use only.

Issued by: Hempel (USA) – 245JB

This Product Data Sheet supersedes those previously issued.

Manufacturer warrants that the physical properties of the product reported above will meet the standards and deviations of the associated ASTM test method.

MANUFACTURER HEREBY EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY AND/OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. Buyer must make its own determination of the suitability of any product for its use, whether such product is used alone or in combination with other materials. To the extent this or any of Manufacturer’s products is proven to be defective, Buyer’s sole remedy shall be limited to the replacement of such defective product, exclusive of any costs of labor. MANUFACTURER SHALL NOT BE LIABLE OR OBLIGATED FOR ANY LOSS OR CONSEQUENTIAL OR OTHER DAMAGE INCURRED DIRECTLY OR INDIRECTLY BY BUYER OR ANY OTHER PERSON OR ENTITY THAT ARISES IN ANY WAY IN RELATION TO THIS OR ANY OF MANUFACTURER’S OTHER PRODUCTS. Nothing contained herein shall be construed to constitute inducement or recommendation to practice any invention covered by any patent without authority of the owner of the patent. No Applicator is or should be viewed as an employee or agent of Manufacturer. 7797-7798-PDS ksk 03032020.docx

Neogard®, a part of Hempel
2728 Empire Central - Dallas, Texas 75235 - Phone (214) 353-1600 - Fax (214) 357-7532 - www.neogard.com

Issued: March 2020
Description: FC7500/FC7960 (Hempel 45067/95077) is a two-component, fast-cure polyurethane base coat.

Recommended use: As a waterproofing membrane for pedestrian and vehicular traffic bearing surfaces, where fast turnaround time and/or solvent free materials are required. Suitable areas include parking garages, stadiums, balconies, plaza decks, walkways, rooftop recreation areas, and mechanical rooms.

Features: Meets South Coast Air Quality Management District (SCAQMD) VOC requirements.

Certificates/approvals: LEED: MRc5, IEQc4.2, BDc4, IDc4
UL: TGFU.R6034
Miami-Dade: NOA No.: 14-0902.10
City of Los Angeles: RR# 25702

Availability: Available in North America. Not included in Group Assortment; other regions must confirm.

Colors and packaging:

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<th>Product Code</th>
<th>Color</th>
<th>Pack Size</th>
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<tr>
<td>FC7960 (9507700000)</td>
<td>NA</td>
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Physical constants:

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<tr>
<th>Property</th>
<th>Value</th>
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<td>Permanent Set</td>
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</tr>
<tr>
<td>Shelf Life</td>
<td>1 year</td>
</tr>
<tr>
<td>Fire Resistance (Spread of Flame)</td>
<td>Class A as part of a system</td>
</tr>
</tbody>
</table>

The above tested results are typical values. Individual lots may vary up to 10% from the typical value. Further technical information can be found at www.neogard.com.

Application details:

**Version, mixed product** 45063
Mixing ratio: Base 45067 : Curing Agent 95077
9 : 1 by volume
Mixing instructions: Pre-mix base for 3–5 minutes before adding curing agent. Mix for a minimum of 5 minutes before applying. Jiffy Mixer paddle recommended.
Application method: Roller or squeegee
Thinner (max.vol.): 7055 Odorless Reducer (086JB1L001) (10%)
Pot life: 20–30 minutes at 75°F/23°C
Cleaning of tools: Hempel’s Thinner 08080 (xylene)
## Safety
Handle with care. Use with adequate ventilation. Before and during use, observe all safety labels on packaging and paint containers, consult Neogard Safety Data Sheets and follow all local or national safety regulations.

## Application conditions
Substrate temperature must be between 40°F/4°C and 110°F/32°C.

## Preceding coat
According to Neogard Guide Specifications.

## Subsequent coat
According to Neogard Guide Specifications.

## Storage temperature
Store in a cool area to ensure full shelf life. Recommended temperature: 75°F/23°C.

## Remarks
Not intended for use as a topcoat. Maximum time for UV exposure: 5 days. Not recommended for constant immersion. Not compatible with asphaltic compounds. For on-grade applications, substrates constructed over unvented metal decks or between-slab applications, contact Neogard Technical Service.

---

**Note:** FC7500/FC7960 is for professional use only.

**Issued by:** Hempel (USA) – 45063

This Product Data Sheet supersedes those previously issued.

Manufacturer warrants that the physical properties of the product reported above will meet the standards and deviations of the associated ASTM test method. MANUFACTURER HEREBY EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY AND/OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. Buyer must make its own determination of the suitability of any product for its use, whether such product is used alone or in combination with other materials. To the extent this or any of Manufacturer's products is proven to be defective, Buyer's sole remedy shall be limited to the replacement of such defective product, exclusive of any costs of labor. MANUFACTURER SHALL NOT BE LIABLE OR OBLIGATED FOR ANY LOSS OR CONSEQUENTIAL OR OTHER DAMAGE INCURRED DIRECTLY OR INDIRECTLY BY BUYER OR ANY OTHER PERSON OR ENTITY THAT ARISES IN ANY WAY IN RELATION TO THIS OR ANY OF MANUFACTURER'S OTHER PRODUCTS. Nothing contained herein shall be construed to constitute inducement or recommendation to practice any invention covered by any patent without authority of the owner of the patent. No Applicator is or should be viewed as an employee or agent of Manufacturer. FC7500-FC7960-PDS ksk 03262020.docx

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2728 Empire Central - Dallas, Texas 75235 - Phone (214) 353-1600 - Fax (214) 357-7532 - www.neogard.com

**Issued:** March 2020
**Description:**

FC7510/FC7961 (Hempel 47PJ9) is a two-component, fast-cure aromatic polyurethane.

**Recommended use:**

As a waterproofing membrane for pedestrian and vehicular traffic bearing surfaces, where fast turnaround time and/or solvent free materials are required. Suitable areas include parking garages, stadiums, balconies, plaza decks, walkways, rooftop recreation areas, and mechanical rooms.

**Features:**

Meets South Coast Air Quality Management District (SCAQMD) VOC requirements.

**Certificates/approvals:**

LEED: MRc5, IEQc4.2, BDc4, IDc4
UL: TGFU.R6034
Miami-Dade: NOA No.: 14-0902.10

**Availability:**

Available in North America. Not included in Group Assortment; other regions must confirm.

**Colors and packaging:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Color</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC7510 (47PJ916650)</td>
<td>Gray</td>
<td>3-gallon</td>
</tr>
<tr>
<td>FC7510-03 (47PJ923820)</td>
<td>Tan</td>
<td>3-gallon</td>
</tr>
<tr>
<td>FC7510-11 (47PJ916660)</td>
<td>Light Gray</td>
<td>3-gallon</td>
</tr>
<tr>
<td>FC7510-41 (47PJ916680)</td>
<td>Charcoal Gray</td>
<td>3-gallon</td>
</tr>
<tr>
<td>FC7961 (948JB00000)</td>
<td>NA</td>
<td>1-gallon</td>
</tr>
</tbody>
</table>

Some standard colors and/or packaging may have extended lead times and/or minimum quantities. Contact Neogard for additional colors.

**Physical constants:**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Strength</td>
<td>2,200 psi</td>
<td>ASTM D412</td>
</tr>
<tr>
<td>Elongation</td>
<td>80%</td>
<td>ASTM D412</td>
</tr>
<tr>
<td>Permanent Set</td>
<td>&lt;10%</td>
<td>ASTM D412</td>
</tr>
<tr>
<td>Tear Resistance</td>
<td>165 pli</td>
<td>ASTM D1004</td>
</tr>
<tr>
<td>Water Resistance</td>
<td>&lt;1% at 7 days</td>
<td>ASTM D471</td>
</tr>
<tr>
<td>MVT at 20 mils</td>
<td>0.4 English Perm</td>
<td>ASTM E96</td>
</tr>
<tr>
<td>Taber Abrasion</td>
<td>55 mg/1,000 CS-17</td>
<td>ASTM D4060</td>
</tr>
<tr>
<td>Shore A</td>
<td>84–90</td>
<td>ASTM D2240</td>
</tr>
<tr>
<td>Adhesion to:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70714/70715</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7760/7761</td>
<td>400 psi</td>
<td>ASTM D4541</td>
</tr>
<tr>
<td>7780/7781</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FC7500/FC7960</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight/Gal (mixed)</td>
<td>11.5 lbs/gal</td>
<td>ASTM D1475</td>
</tr>
<tr>
<td>Weight Solids (mixed)</td>
<td>99% at 12 hours</td>
<td>ASTM C1250</td>
</tr>
<tr>
<td>Volume Solids (mixed)</td>
<td>98%</td>
<td>Calculated</td>
</tr>
<tr>
<td>VOC (mixed)</td>
<td>&lt;22 g/L</td>
<td>EPA Method 24</td>
</tr>
<tr>
<td>Viscosity (mixed)</td>
<td>900cps</td>
<td>ASTM D2196</td>
</tr>
<tr>
<td>Flash Point</td>
<td>205°F</td>
<td>ASTM D3278</td>
</tr>
<tr>
<td>Fire Resistance (Spread of Flame)</td>
<td>Class A as part of a system</td>
<td>ASTM E108/UL 790</td>
</tr>
<tr>
<td>Cure to Recoat at 75°F (24°C), 50% relative humidity</td>
<td>5–6 hours</td>
<td></td>
</tr>
</tbody>
</table>

The above tested results are typical values. Individual lots may vary up to 10% from the typical value. Further technical information can be found at www.neogard.com.
Application details:

Version, mixed product: 47PJB
Mixing ratio: Base 47PJ9 : Curing Agent 948JB
Mixing instructions: Pre-mix base for 3–5 minutes before adding curing agent. Mix for a minimum of 5 minutes before applying. Jiffy Mixer paddle recommended.
Application method: Roller or squeegee
Thinner (max.vol.): 7055 Odorless Reducer (086JB1L001) (10%)
Pot life: 35–55 minutes at 75°F (23°C)
Cleaning of tools: Hempel’s Thinner 08080 (xylene)

Safety: Handle with care. Use with adequate ventilation. Before and during use, observe all safety labels on packaging and paint containers, consult Neogard Safety Data Sheets and follow all local or national safety regulations.

Application conditions: Substrate temperature must be between 40°F (4°C) and 110°F (32°C).
Subsequent coat: According to Neogard Guide Specifications.
Storage temperature: Store in a cool area to ensure full shelf life. Recommended temperature: 75°F (23°C).
Remarks: For interior or covered areas only. Not intended for UV exposure. Maximum time for UV exposure: 5 days. Not recommended for constant immersion. Not compatible with asphaltic compounds. For on-grade applications, substrates constructed over unvented metal decks or between-slab applications, contact Neogard Technical Service.

Note: FC7510/FC7961 is for professional use only.

Issued by: Hempel (USA) – 47PJB

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2728 Empire Central - Dallas, Texas 75235 - Phone (214) 353-1600 - Fax (214) 357-7532 - www.neogard.com

Issued: March 2020
Product Data Sheet

FC7540/FC7964 — Fast-Cure Aliphatic Urethane Topcoat
47QJB: Base 47QJ9 : Curing Agent 949JB

Description:

FC7540/FC7964 (Hempel 47QJB) is a two-component, aliphatic, high solids, fast-cure polyurethane topcoat.

Recommended use:

As a waterproofing membrane for pedestrian and vehicular traffic bearing surfaces, where fast turnaround time and/or solvent free-materials are required. Suitable areas include parking garages, stadiums, balconies, plaza decks, walkways, rooftop recreation areas, and mechanical rooms.

Features:

Available in a tint base; custom colors can be produced in small amounts. Meets South Coast Air Quality Management District (SCAQMD) VOC requirements.

Certificates/approvals:

LEED: MRc5, IEQc4.2, SSsc7.1, BDc4, IDc4
Miami-Dade: NOA No.: 14-0902.10, NOA No. 15-0616.03

Availability:

Available in North America. Not included in Group Assortment; other regions must confirm.

Colors and packaging:

<table>
<thead>
<tr>
<th>Code</th>
<th>Color</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC7540</td>
<td>Gray</td>
<td>4- and 2-gallon</td>
</tr>
<tr>
<td>FC7540-03</td>
<td>Tan</td>
<td>2-gallon</td>
</tr>
<tr>
<td>FC7540-11</td>
<td>Light Gray</td>
<td>4- and 2-gallon</td>
</tr>
<tr>
<td>FC7540-041</td>
<td>Charcoal</td>
<td>4- and 2-gallon</td>
</tr>
<tr>
<td>FC7540-058</td>
<td>Dark Maple</td>
<td>2-gallon</td>
</tr>
<tr>
<td>FC7540-00</td>
<td>(Tint Base, special order only)</td>
<td></td>
</tr>
<tr>
<td>FC7964</td>
<td>Clear</td>
<td>2- and 1-gallon</td>
</tr>
</tbody>
</table>

Some standard colors and/or packaging may have extended lead times and/or minimum quantities. Contact Neogard for additional colors.

Physical constants:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Strength</td>
<td>2,000 psi</td>
<td>ASTM D412</td>
</tr>
<tr>
<td>Elongation</td>
<td>130%</td>
<td>ASTM D412</td>
</tr>
<tr>
<td>Permanent Set</td>
<td>&lt;10%</td>
<td>ASTM D412</td>
</tr>
<tr>
<td>Tear Resistance</td>
<td>155 pli</td>
<td>ASTM D1004</td>
</tr>
<tr>
<td>Water Resistance</td>
<td>&lt;2% at 7 days</td>
<td>ASTM D471</td>
</tr>
<tr>
<td>MVT at 20 mils</td>
<td>1.0 English Perm</td>
<td>ASTM E96</td>
</tr>
<tr>
<td>Taber Abrasion</td>
<td>95 mg/1,000 cs17</td>
<td>ASTM D4060</td>
</tr>
<tr>
<td>Shore A</td>
<td>80–90</td>
<td>ASTM D2240</td>
</tr>
</tbody>
</table>

Adhesion to:

70714/70715
7780/7781
FC7510/FC7961
FC7500/FC7960
FC7540/FC7964
70410
7430

400 psi

ASTM D4541

Weight/Gallon (mixed) | 11.1 lbs/gal | ASTM D1475 |
Weight Solids (mixed) | 91% at 12 hours | ASTM C1250 |
Volume Solids (mixed) | 89% | Calculated |
VOC (mixed) | <99.5 g/L | EPA Method 24 |
Viscosity (mixed) | 1,200 cps | ASTM D2196 |
Flash Point, FC7540 | 275°F (135°C) | ASTM D3278 |
Flash Point, FC7964 | 135°F (57°F) | ASTM D3278 |
Cure to Recoat at 75°F (24°C), 50% relative humidity | 3–4 hours |

The above tested results are typical values. Individual lots may vary up to 10% from the typical value. Further technical information can be found at www.neogard.com.
Application details:

**Version, mixed product**: 47QJB
**Mixing ratio**: Base 47QJ9 : Curing Agent 949JB 2 : 1 by volume
**Mixing instructions**: Pre-mix base for 3–5 minutes before adding curing agent. Mix for a minimum of 5 minutes before applying. Jiffy Mixer paddle recommended.
**Application method**: Roller or squeegee
**Thinner (max.vol.)**: 7055 Odorless Reducer (086JB1L001) (10%)
**Pot life**: 120 minutes at 75°F (23°C)
**Cleaning of tools**: Hempel’s Thinner 08080 (xylene)

**Safety**: Handle with care. Use with adequate ventilation. Before and during use, observe all safety labels on packaging and paint containers, consult Neogard Safety Data Sheets and follow all local or national safety regulations.

**Application conditions**: Substrate temperature must be between 40°F (4°C) and 110°F (43°C).

**Preceding coat**: According to Neogard Guide Specifications.

**Storage temperature**: Store in a cool area to ensure full shelf life. Recommended temperature: 75°F (23°C).

**Remarks**: Not recommended for constant immersion. Not compatible with asphaltic compounds. For on-grade applications, substrates constructed over unvented metal decks or between-slab applications, contact Neogard Technical Service.

**Note**: FC7540/FC7964 is for professional use only.

**Issued by**: Hempel (USA) – 47QJB

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Issued: March 2020  Page: 2/2
This detail is utilized in the specification and design of surface applied waterproofing, in both new and retrofit applications. It is provided to show a generally recommended procedure for dealing with the condition shown. It will not and cannot provide a specific solution for every condition likely to be encountered in field application. Where field conditions differ, the use of applicable portions of the detail shown or its adaptation by an experienced and conscientious applicator should result in a quality project.
TYPICAL DECK FLASHING

- ELASTOMERIC COATING
- STRUCTURAL SLAB (MONOLITHIC POUR)
- FLASHING TAPE
- CANT
- STRUCTURAL SLAB (SEPARATE POUR)
- URETHANE SEALANT

TYPICAL DECK FLASHING
VERTICAL PROJECTION

RAIL POST
ELASTOMERIC COATING
URETHANE SEALANT

POST EMBEDDED IN CONCRETE OR THREAD-TYPE SLEEVE ANCHORAGE

4" RECOMMENDED
Addendum #3
Exhibit B

HSS SEAT REPAIR DETAIL

SCALE: NOT TO SCALE

1 HSS-1

EMBEDDED STEEL TUBE

EXTG CONC COL

(5) 1/2" Ø 316 S/S
THREADED ROD W/
HILTI HIT-RE 500 K3
(OR APPROVED EQUAL)

12"

HSS5x5x3/8"

2"

q"

q"

q"

q"

q"

1/2" Ø (S/S)

EXTG CONC GIRDER

OVERSIZED ACCESS HOLES

Brian D. McGlade, PE
Pennsylvania PE #34227

PROJECT NAME:
Auto Park at the Fashion District
Philadelphia Parking Authority
44 North 9th Street
Philadelphia, PA 19106