AquArmor™ CERAMIC CARPET™

Decorative Flooring System

General Polymers AquArmor Ceramic Carpet Decorative Flooring Systems combines the historical advantages of epoxy quartz flooring with integral protection against loss of bond due to moisture vapor issues for slabs on grade.

1/8" - 3/16"

Advantages
- Withstands vapor emissions
- Aesthetically pleasing appearance
- Limitless color blend options
- Satin finish
- Durable, wear and slip resistant
- Chemical and stain resistant
- Acceptable for use in USDA inspected facilities
- No moisture testing needed

Uses
- Floors known or suspected vapor emission issues
- Commercial kitchens (areas where temperature will not exceed 170°F in service)
- Animal Care
- Clean rooms
- Pharmaceuticals
- Locker rooms, showers and restrooms
- Packaging and storage areas
- Laboratories

Limitations
- Base coat must be installed at a minimum of 1/8"
- Protect from freezing

Typical Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Pre-Blended Standard Colors</td>
</tr>
<tr>
<td></td>
<td>Custom Color Blends Available</td>
</tr>
<tr>
<td>Hardness @ 24 hours, Shore D</td>
<td>70/65</td>
</tr>
<tr>
<td>ASTM D 2240</td>
<td></td>
</tr>
<tr>
<td>Compressive Strength</td>
<td>12,000 psi</td>
</tr>
<tr>
<td>ASTM C 579</td>
<td></td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>2,500 psi</td>
</tr>
<tr>
<td>ASTM C 307</td>
<td>6,000 psi</td>
</tr>
<tr>
<td>Abrasion Resistance</td>
<td>70-90 mgs lost</td>
</tr>
<tr>
<td>ASTM D 4060, CS-17 Wheel, 1,000 cycles</td>
<td></td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>4,500 psi</td>
</tr>
<tr>
<td>ASTM C 580</td>
<td>10,000 psi</td>
</tr>
<tr>
<td>Adhesion</td>
<td>300 psi</td>
</tr>
<tr>
<td>ACI 503R</td>
<td>concrete failure</td>
</tr>
<tr>
<td>Flammability</td>
<td>Self-Extinguishing</td>
</tr>
<tr>
<td>MIL-D-3134J</td>
<td>over concrete</td>
</tr>
<tr>
<td>Resistance to Elevated</td>
<td>No slip or flow at required</td>
</tr>
<tr>
<td>Temperatures</td>
<td>temperature of 158°F</td>
</tr>
<tr>
<td>ASTM D 4060</td>
<td></td>
</tr>
</tbody>
</table>

ASTM D = Resin only
Installation

General Polymers materials shall only be installed by approved contractors. The following information is to be used as a guideline for the installation of the AquArmor CERAMIC CARPET Decorative Flooring System. Contact the Technical Service Department for assistance prior to application.

Surface Preparation — General

General Polymers systems can be applied to a variety of substrates, if the substrate is properly prepared. Preparation of surfaces other than concrete will depend on the type of substrate, such as wood, concrete block, quarry tile, etc. Should there be any questions regarding a specific substrate or condition, please contact the Technical Service Department prior to starting the project. Refer to Surface Preparation (Form G-1).

Surface Preparation — Concrete

Concrete surfaces shall be abrasive blasted to remove all surface contaminants and laitance. The prepared concrete shall have a surface profile depending upon system selected. Refer to Form G-1.

After initial preparation has occurred, inspect the concrete for bug holes, voids, fins and other imperfections. Protrusions shall be ground smooth while voids shall be filled with a system compatible filler. For recommendations, consult the Technical Service Department.

Temperature

Throughout the application process, substrate temperature should be 50°F – 90°F. Substrate temperature must be at least 5°F above the dew point. Applications on concrete substrate should occur while temperature is falling to lessen offgassing. The material should not be applied in direct sunlight, if possible. Protect material from freezing prior to installation.

Application Information — Surface Prep Profile CSP 4-6

<table>
<thead>
<tr>
<th>VOC MIXED</th>
<th>MATERIAL</th>
<th>MIX RATIO</th>
<th>THEORETICAL COVERAGE PER COAT CONCRETE</th>
<th>PACKAGING</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;50 g/L</td>
<td>Primer</td>
<td>3460 + 20% potable water</td>
<td>1:4</td>
<td>200-250 sq. ft. / gal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3460</td>
<td>1:4</td>
<td>100 sq. ft. / 2.5 gal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5150</td>
<td>1:4</td>
<td>27-30 lbs. / 2.5 gals</td>
</tr>
<tr>
<td></td>
<td>Slurry @ 1/8”</td>
<td>3460</td>
<td>1:4</td>
<td>.6 lbs / sq. ft.</td>
</tr>
<tr>
<td>0</td>
<td>1st Broadcast</td>
<td>5900F</td>
<td>To Excess</td>
<td>65-70 sq. ft. / unit</td>
</tr>
<tr>
<td>&lt;50 g/L</td>
<td>Bonding Coat</td>
<td>3561</td>
<td>4:1</td>
<td>125 sq. ft. / gal</td>
</tr>
<tr>
<td>0</td>
<td>2nd Broadcast</td>
<td>5900F</td>
<td>To Excess</td>
<td>.4 lbs / sq. ft.</td>
</tr>
<tr>
<td>&lt;100 g/L</td>
<td>Grout Coat</td>
<td>3746</td>
<td>2:1</td>
<td>250 sq. ft. / gal</td>
</tr>
</tbody>
</table>

For additional topcoat options consult the General Polymers Topcoat Selection Guide, or contact your Sherwin Williams representative.
**Primer**

**Mixing and Application**

1. Premix 3460B (hardener) using a low speed drill and Jiffy blade. Mix until uniform, exercising caution not to introduce air into the material.

2. Add 1 part 3460A (resin) to 4 parts 3460B (hardener) plus 20% potable water. Mix with low speed drill and Jiffy blade until uniform. To insure proper system cure and performance, strictly follow mix ratio recommendations.

3. 3460 may be applied via spray, roller or brush. Apply at 250 square feet per gallon to yield 6-8 mils WFT evenly with no puddles making sure of uniform coverage. Coverage will vary depending upon porosity of the substrate and surface texture.

4. Two applications of 3460 Primer may be necessary to adequately seal and fill the surface imperfections and protect against outgassing. This can be accomplished by applying two tight, flat squeegee coats (pushing not pulling) in opposite directions at 15-20 minutes apart.

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**Slurry Coat @ 1/8” / First Broadcast**

**Mixing and Application**

1. Premix 3460 Part B using a low speed drill and Jiffy blade. Mix until uniform, exercising caution not to introduce air into the material.

2. Add 1 part 3460A (resin) to 4 parts 3460B (hardener) by volume. Mix with low speed drill and Jiffy blade until uniform. Slowly add up to 27-30 lbs 5150 AquArmor S Aggregate per 2.5 gallons of mixed material. Mix with low speed drill and Jiffy blade and until uniform and no lumps remain. NOTE: Temperatures and environmental conditions may impact levelling. It is acceptable to reduce the aggregate loading up to 10% of the 5150 AquArmor S aggregate to improve levelling. Excess air movement across the surface should be avoided.

3. Immediately pour the mixed material onto the substrate and pull out using a 1/4” v-notched trowel or 1/4” red rubber squeegee.

4. Allow material to self-level, the surface should be lightly backrolled with a looped roller to help smooth. Use a spiny roller to aid in the release of air.

5. System must be broadcast with color quartz (5900) to build to 1/8” thickness.

6. Allow to cure 18 hours minimum before applying bonding coat. (Cure times vary depending on environmental conditions).

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**Bonding Coat / Second Broadcast**

**Mixing and Application**

1. Add 4 parts 3561A (resin) to 1 part 3561B (hardener) by volume. Mix with low speed drill and Jiffy blade for three minutes and until uniform.

2. Immediately pour the mixed material onto the substrate and pull out using a 1/4” v-notched squeegee and cross roll with a 3/8” nap roller at a spread rate of 65-70 square feet per gallon.

3. Allow material to self-level 10-15 minutes. Begin evenly seeding the 5900F into wet resin much the same as grass seed is spread. Granules may be spread by hand or mechanical blower but should be broadcast in such a way that the granules falls lightly into resin without causing the resin to move. Continue broadcasting to excess until the floor appears completely dry.

4. Allow to cure for 24 hours, sweep off excess granules with a clean, stiff bristled broom. Clean granules can be saved for future use. All imperfections such as high spots should be smoothed before the application of the seal coat.

NOTE: 5900F Granule distribution is critical to the success if the application. The decks finished appearance depends on the manner in which the granules have been applied. In grass seed like fashion, allow the granules to fall after being thrown upward and out. **DO NOT THROW DOWNWARD AT A SHARP ANGLE USING FORCE**.

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**Grout Coat**

**Mixing and Application**

1. Add 2 parts 3746A (resin) to 1 part 3746B (hardener) by volume. Mix with low speed drill and Jiffy mixer for three minutes and until uniform. To insure proper system cure and performance, strictly follow mix ratio recommendations.

2. Apply 3746 using flat trowel or 1/4” or 1/8” v-notched trowel and backroll with a 1/4” nap roller. Apply at a spread rate of 125 sq. ft. per gallon to yield 13 mils WFT, evenly, with no puddles making sure of uniform coverage. Take care not to puddle materials and insure even coverage.

3. Allow to cure 24 hours minimum before applying seal coat.

Note: Epoxy materials will appear to be cure and “dry to touch” prior to full chemical cross linking. Allow epoxy to cure for 2-3 days prior to exposure to water or other chemicals for best performance.

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**Seal Coat**

**Mixing and Application**

1. Add 2 parts 3746A (resin) to 1 part 3746B (hardener) by volume. Mix with low speed drill and Jiffy mixer for three minutes and until uniform. To insure proper system cure and performance, strictly follow mix ratio recommendations.

2. Apply 3746 using a flat trowel or flat squeegee and backroll with a 1/4” nap roller at 250 square foot per gallon evenly with no puddles making sure of uniform coverage. Take care not to puddle materials and insure even coverage.

3. Allow to cure 24 hours minimum before opening to traffic.

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**Cleanup**

Clean up mixing and application equipment immediately after use. Use toluene or xylene. Observe all fire and health precautions when handling or storing solvents.

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**Safety**

Refer to the MSDS sheet before use. Federal, state, local and particular plant safety guidelines must be followed during the handling and installation and cure of these materials. Safe and proper disposal of excess materials shall be done in accordance with applicable federal, state, and local codes.
Material Storage

Store materials in a temperature controlled environment (50ºF – 90ºF) and out of direct sunlight.

Keep resins, hardeners, and solvents separated from each other and away from sources of ignition. One year shelf life is expected for products stored between 50ºF – 90ºF.

Maintenance

Occasional inspection of the installed material and spot repair can prolong system life. For specific information, contact the Technical Service Department.

Disclaimer

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Consult www.generalpolymers.com to obtain the most recent Product Data information and Application instructions.

Warranty

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