Technical Data Product Information

CS 5000SB CornerCrete® PF Antimicrobial Flooring System
Slurry Matrix Polyurethane Flooring System

Description

CS 5000SB PF Anti-Microbial is a nominal 1/4” thick heavy duty hybrid polyurethane slurry matrix flooring system. CornerCrete® is ideal for food and chemical process areas, containment areas and industrial environments that require a moisture tolerant, durable and cleanable flooring system.

Colors

Available from Standard CornerCrete Color Chart.

Limitations

- Where floor temperatures are below 60°F or above 85°F during application contact CornerStone’s Technical Department.
- On a structurally unsound substrate.
- Keep materials at room temperature prior to application.
- Relatively short pot life.

Installation Procedures

SUBSTRATE PREPARATION

Prepare substrate by shot blasting, scarification or other mechanical means until an appropriate profile is evident. Remove all excess dust, curing agents and contaminants. Surface must be free of oils, water and chemicals.

ADVANTAGES | APPLICATIONS
--- | ---
- Coefficient of Expansion Similar to Concrete | - Food Processing Facilities
- Chemical Resistant | - Beverage Plants
- Skid Resistant | - Wineries
- Low Odor During Installation | - Wash Down Rooms
- Bacterial, Fungi, Mold & Algae Resistant | - Freezers
- Withstands High Moisture Vapor Transmission | - Chemical Process
- Withstands Thermal Cycling of -50 °F to 250°F | - Newly Poured Concrete
- Meets USDA Standards | - Loading Docks
- Phthalate Free | - Containment Areas
- Anti-Microbial Properties | - Refrigerated Spaces

CS 5000SB APPLICATION

1. Premix CornerCrete® liquids 1 & 2.
2. The CornerCrete® slurry matrix liquid components 1 & 2 are to be combined sequentially in a rotating mixer for about 1 minute- the inert mineral based part 3 powders are then added and further blended to achieve a fully homogenized “mortar” consistency .
3. Spread material with CornerStone recommended notch squeegee.
4. Broadcast aggregate to rejection.
5. Repeat steps 3 and 4 as required to achieve desired thickness.
7. Apply CS 5000 CornerCrete® PF Anti-Microbial Topcoat as final application.

Additional Topcoat Options: CS 2300CR

Chemical Resistance

Refer to the Chemical Resistance Guide for specific chemical resistance information or contact CornerStone’s Technical Department.

Cure Schedule

At an ambient temperature above 72°F, 1/4” CS 5000SB PF Anti-Microbial can support foot traffic within 8-10 hours, full usage after 12-16 hours. Usable pot life 15 minutes, initial join up time 20 minutes.

Maintenance

Regular cleaning and maintenance will prolong the life of all polymer flooring systems and enhance their appearance.

Safety

Avoid personal exposure. Refer to MSDS for additional safety information.
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Test Data

<table>
<thead>
<tr>
<th>PROPERTIES</th>
<th>TYPICAL RESULTS</th>
<th>TEST METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive Strength</td>
<td>8,225 psi</td>
<td>ASTM C-579</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>1,030 psi</td>
<td>ASTM C-307</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>2,375 psi</td>
<td>ASTM C-580</td>
</tr>
<tr>
<td>Bond Strength</td>
<td>456 psi (100% concrete failure)</td>
<td>ASTM D-4541</td>
</tr>
<tr>
<td>Adhesive Strength</td>
<td>Concrete failed cohesively</td>
<td>ASTM C-321/C-478</td>
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<tr>
<td>Density</td>
<td>2.5 lbs./s.f.</td>
<td>n/a</td>
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<tr>
<td>Hardness</td>
<td>85</td>
<td>ASTM D-2240 Shore D</td>
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<tr>
<td>Water Absorption</td>
<td>0.05%</td>
<td>ASTM C-413</td>
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<tr>
<td>Flexural Modulus of Elasticity</td>
<td>1.8X10⁵</td>
<td>ASTM C-580</td>
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<tr>
<td>Shrinkage</td>
<td>0.20%</td>
<td>ASTM C-531</td>
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<tr>
<td>Coefficient of Friction</td>
<td>0.6 - 0.75</td>
<td>ASTM D-2047</td>
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<tr>
<td>Impact Resistance</td>
<td>60 in/lbs 16ft/lbs no cracking or delamination</td>
<td>MIL D-3134</td>
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<tr>
<td>Abrasion Resistance</td>
<td>20-30 mg loss; CS-17 Wheel, 1,000 cycles</td>
<td>ASTM D-4060</td>
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<tr>
<td>Thermal Coefficient of Linear Expansion</td>
<td>6.12x10⁻⁶/°F</td>
<td>ASTM C-531</td>
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<tr>
<td>Anti Microbial Resistance</td>
<td>Passes</td>
<td>ASTM G-21</td>
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</table>

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