

## SELECTION & SPECIFICATION DATA

<b>Generic Type</b>	Cementitious urethane flooring slurry
<b>Description</b>	Easy to apply highly functional slurry-broadcast base layer for use in cementitious urethane flooring systems (3/16-1/4" / 0.48-0.64 cm). Contains Polygiene <sup>®</sup> an antimicrobial additive based on silver ion nano technology. Demonstrates excellent resistance to thermal shock, mechanical damage, and chemical attack.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Unaffected by MVT (moisture vapor transmission)</li> <li>• Excellent chemical resistance</li> <li>• High abrasion resistance</li> <li>• Resistant to thermal shock</li> <li>• Withstands high mechanical stress</li> <li>• Easy to clean and sterilize surface</li> <li>• Resistant to steam cleaning</li> <li>• Non-tainting, non-dusting</li> <li>• Positive slip resistance</li> <li>• May be applied to "green" concrete</li> <li>• Ultra low VOC/odor</li> <li>• Suitable for use in USDA inspected facilities</li> </ul>
<b>Color</b>	Stocked Colors: Red (Q501), Mid Gray (Q703) Made to Order Colors: Cream (Q202), Tan (Q204), Khaki (Q205), Green (Q302), Safety Yellow (Q603) and Dark Gray (Q704)
<b>Finish</b>	Matte
<b>Primer</b>	Does not normally require a primer. Carbocrete FC or Carboseal 720 can be used for highly porous substrates.
<b>Typical Uses</b>	Ideal for wet processing zones such as food manufacturing, food preparation areas, and chemical processing plants.
<b>Recommended Thickness</b>	3/16-1/4" (0.48-0.635 cm)
<b>Coverage Rate</b>	24 ft <sup>2</sup> (2.2 m <sup>2</sup> ) / single pack unit at 3/16" (0.48 cm) (yielding 1/4"/0.64 cm finished floor) 18 ft <sup>2</sup> (1.7 m <sup>2</sup> ) / single pack unit at 1/4" (0.64 cm) (yielding 5/16"/0.79 cm finished floor)
<b>VOC Values</b>	As supplied 0.04 lbs/gal (5 g/L)
<b>Dry Temp. Resistance</b>	Continuous: 200°F (93°C) Non-Continuous: 250°F (121°C)
<b>Limitations</b>	Not resistant to ground water hydrostatic pressure Carbocrete SR may change color over time depending on exposure to UV light and heat. This does not compromise the product's chemical resistance or physical characteristics.
<b>Topcoats</b>	Carbocrete FC, Carbocrete FCUV, Carbocrete SR Sealer, Carboseal 985, Carboseal 705, or as recommended by Carboline

### SUBSTRATES & SURFACE PREPARATION

#### Concrete

Follow NACE 6/SSPC 13 guidelines. Concrete or screed substrate should be sound, free from laitance, dust, and other contamination with a minimum of 3,625 PSI compressive strength. The substrate should be dry and free from excess rising moisture. Abrade the surface to achieve an ICRI CSP 4-6 surface profile. Anchor grooves, at least ¼" (0.64cm) wide and ¼" (0.64cm) deep, must be cut at 6" (15.24cm) perimeter along all walls, edges, pillars, doors, drainage channels, grid drains and penetrative joints. All control joints must be honored. Anchor grooves must be cut on both sides of such joints. Welded joints and cracks in the concrete may be coated, but if movement occurs the coating will also crack. All residues must be removed to provide a dry, dust free open textured surface. The surface profile and levels should be appropriate for the system to be applied.

Contact Carboline for advice if there are impurities, such as oils etc., in the concrete.

### PERFORMANCE DATA

All test data was generated under laboratory conditions. Field testing results may vary.

Test Method	Results
Abrasion Resistance (ASTM D4060) CS-17 Wheel, 1,000 cycles	50 mg loss
Adhesion (ASTM D4541)	400 psi, 100% concrete failure
Coefficient of Friction (ASTM D20470)	Exceeds ADA recommendations
Coefficient of Thermal Expansion (ASTM C531)	$1.5 \times 10^{-5}$ in/in/°F
Compressive Strength (ASTM C579)	8,128 psi
Flexural Strength (ASTM C580)	2,900 psi
Impact Resistance	No visible damage or deterioration at minimum 160 in-lb
Modulus of Elasticity (ASTM C469)	$1.7 \times 10^5$
Tensile Strength (ASTM C307)	1,450 psi
Water Absorption	< 0.1%

The figures above are typical properties achieved in laboratory tests at 70 °F (21 °C) and at 50% Relative Humidity.

### MIXING & THINNING

#### Mixing

Pour Carbocrete Base A into suitably sized mixing vessel and add the pigment pack and mix using a slow speed drill and helical spinner for 20 seconds. Add Carbocrete Hardener B. Mix for 30 seconds and then add Carbocrete SR Filler while mixing. Ensure that all fillers and resins are scraped into the mix from the sides of the mixing vessel otherwise bubbles/blisters can develop in the applied floor. Continue mixing until a homogeneous mixture is obtained (1-2 minutes). Before the next mix, scrape out any residual material from the mixing vessel and dispose of before starting the next mix; otherwise the working time of the following mix could be reduced.

Use common batch numbers for pigment packs on the same job. This will help ensure color uniformity. Remember, never split batches/components. Incorrect mixing ratios or poor mixing can result in irregular hardening or variations in color, etc. There are often several types of products at a workplace. Sort the products separately to avoid mistakes. It is important that the material is kept warm, to maintain its fluidity. It is also necessary to warm up the filler component; otherwise it will act as a heat sink and cool down the mixture.

**Working Time** | 15 minutes at 70 °F (21 °C)

## APPLICATION EQUIPMENT GUIDELINES

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

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| <b>General</b> | <ul style="list-style-type: none"> <li>• Screed pin, cam or gauge rake with thickness adjustment</li> <li>• Finishing trowels</li> <li>• Porcupine, spike or loop rollers</li> </ul> |
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## APPLICATION PROCEDURES

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| <b>General</b>     | <p>Prior to starting the job, the product should be stored in such a way that the temperature is the same as the room temperature where the product is to be applied, i.e. between 60-80 °F (16-27 °C). This improves the mixing, flow, penetration and hardening of the product.</p>  |
| <b>Broadcast</b>   | <p>A full aggregate broadcast is required for proper curing and topcoat adhesion. Broadcast desired aggregate into wet material until rejection. After coating has reached walk-on cure time remove excess aggregate and apply desired topcoat.</p>  |
| <b>Application</b> | <p>The mixed product should be poured out evenly over the floor and then applied to the desired thickness with a pin or cam rake, a trowel is then used to remove the traces of the rake or joints between mixes. Loop-roll the material to aid leveling, air release, and to bring resinous material to the surface to accept broadcast media.</p> <p>At lower temperatures the hardening time is longer. It is important there are no dry patches. The surface will NOT be sufficiently hardened the same day to allow cove application. Coves should be applied the next day to avoid marks on the floor.</p> |

## APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	50°F (10°C)	50°F (10°C)	50°F (10°C)	0%
Maximum	90°F (32°C)	90°F (32°C)	90°F (32°C)	95%

The temperature of the substrate should be at least 50 °F (10 °C), although a temperature of 60-80 °F (16-27 °C) is recommended. The temperature of the substrate should not exceed the dew point by more than 5 °F (3 °C) during application and hardening.

## CURING SCHEDULE

Surface Temp.	Light Traffic	Heavy Traffic	Final Cure
50°F (10°C)	12 Hours	30 Hours	6 Days
70°F (21°C)	6 Hours	14 Hours	4 Days
90°F (32°C)	3 Hours	9 Hours	2 Days

Product can be walked on in 12 hours at 50 °F (10 °C), 6 hours at 70 °F (21 °C) or 4 hours at 90 °F (29 °C). Complete hardening takes 5-7 days at 50°F. Carbocrete SR should not be applied in thicker than specified because the cure (hardening) can be impaired.

## CLEANUP & SAFETY

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| <b>Cleanup</b> | <p>Clean tools immediately after use with acetone, MEK, or mineral spirits.</p>  |
| <b>Safety</b>  | <p>Read and follow all caution statements on this product data sheet and on the SDS for this product. Employ normal workmanlike safety precautions. Use adequate ventilation. Keep container closed when not in use.</p> |

### MAINTENANCE

<b>General</b>	Normal plant cleaning procedures may be employed after the Carbocrete floor has been put into service. There are no effective restrictions on the method of cleaning employed. Carbocrete products, when properly installed, will withstand water wash down at continuous sanitizing temperatures.
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### PACKAGING, HANDLING & STORAGE

<b>Packaging</b>	<b>Single Pack</b> Carbocrete Base A - 0.59 gal (2.2 liters) Carbocrete Hardener B - 0.48 gal (1.8 liters) Carbocrete SR Filler C - 36 lb (16.3 kg) bag Pigment Pack <b>Double Pack</b> Carbocrete Base A - 1.20 gal (4.5 liters) Carbocrete Hardener B - 0.98 gal (3.7 liters) Carbocrete SR Filler C - 2 x 36 lb (16.3 kg) bags Pigment Pack x 2
<b>Shelf Life</b>	12 months in unopened container
<b>Storage Temperature &amp; Humidity</b>	50-90 °F (10-32 °C) Do not freeze.
<b>Shipping Weight (Approximate)</b>	Single Pack - Approx. 48.5 lbs (22 kg) Double Pack - Approx. 87.5 lbs (39.7 kg)
<b>Flash Point (Setaflash)</b>	Part A: >200 °F (93 °C) Part B: 351 °F (177 °C)

### WARRANTY

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Carboline Company to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Carboline quality control. We assume no responsibility for coverage, performance, injuries or damages resulting from use. Carbolines sole obligation, if any, is to replace or refund the purchase price of the Carboline product(s) proven to be defective, at Carbolines option. Carboline shall not be liable for any loss or damage. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. All of the trademarks referenced above are the property of Carboline International Corporation unless otherwise indicated.