Shock-Crete® Vertical

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	Cementitious urethane cove base mortar
Description	Cementitious cove base mortar that provides a durable finish for use with Shock-Crete flooring systems. Contains Polygiene® which has antimicrobial properties that protect it from degradation caused by microorganisms. Demonstrates excellent resistance to thermal shock, mechanical damage, and chemical attack.
Features	• Excellent chemical resistance • Withstands high mechanical stress • High abrasion resistance • Easy to clean and sterilize surface • Resistant to thermal shock • Resistant to steam cleaning • Ultra low VOC/odor • Suitable for use in USDA inspected facilities
Typical Uses	Provides a heavy duty, thermal shock resistant and hygienic seal at the joint between the floor and the wall. Can be used to enhance Shock-Crete or Steri-Series flooring systems.
Color	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)
Finish	Matte
Primer	Steri-Prime, Primer 67LV, a mixture of neat Shock-Crete resin or as recommended by your Dudick representative
Recommended Thickness	1/8-3/16” (3-5 mm)
Solid(s) Content	99.9% solids by volume As supplied 0.04 lb./gal. (5 g/L)
Coverage Rate	**Kit** 16 ft^2 (1.5 m^2)/ or 27 linear ft (14.6 m)/ at 4” (102 mm) high at 1/8” (3 mm) 11 ft^2 (1.0 m^2)/ or 22 linear ft (14.6 m)/ at 4” (102 mm) high at 3/16” (5 mm)
VOC Values	**As Supplied** : 0.04 lbs/gal (5 g/L)
Dry Temp. Resistance	Continuous: 220°F (104°C) Non-Continuous: 250°F (121°C)
Limitations	Shock-Crete Vertical 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.
Topcoats	Shock-Crete Topcoat, Shock-Crete TCUV, or as recommended by your Dudick representative

SUBSTRATES & SURFACE PREPARATION

Concrete or CMU	Concrete shall be designed, placed, cured, and prepared per NACE No. 6/SSPC-SP 13, latest edition. Concrete must be prepared mechanically to remove surface laitance. Oils, grease or other surface contaminants must be removed prior to surface preparation. Concrete must free of curing compounds or form release agents and must be abraded to a ICRI CSP 2-3 surface profile.

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	0.079 g loss
Adhesion (ASTM D4541)	400 psi / 2.8 MPa (100% concrete failure)
Bond Strength (ASTM D4541)	>300 psi (2 MPa)
Coefficient of Friction (ASTM D2047)	Exceeds ADA Recommendations
Coefficient of Thermal Expansion (ASTM C531)	1.1 x 10^{-5}in/in/°F1.1
Compressive Strength (ASTM C579)	8,000 psi (55 MPa)
Flexural Strength (ASTM C580)	2,900 psi (20 MPa)
Microbial / Fungal Inhibition (AATCC 147-193)	100%
Tensile Strength (ASTM C307)	1,450 psi (10 MPa)

MIXING & THINNING

Mixing	Pour component A into a suitably sized mixing vessel and add the pigment pack and mix using a slow speed drill and helical mixer for 20 seconds. Add component B. Mix for 30 seconds and then add the Shock-Crete Vertical aggregate while mixing. Ensure that all aggregate and resin have been 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). Pour mixture directly onto the substrate so it can be placed without delay. Scrape out any residual material from the mixing vessel and dispose of, before starting the next mix. Working time of the following mix could be reduced if residue from the pervious mix is not removed. S-30 smoothing liquid may aid in the reduction of tool marks and rough edges. Use cautiously however, too much can cause slumping. When possible, use common batch numbers for pigment packs on the same job help ensure color uniformity. Do not 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 and establish a mix an organized mixing station to avoid mistakes.
Working Time	15 minutes @ 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.

General	• Flexible cove trowel • Rigid steel radius trowel • Spoons or other preferred shaping tools

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.

- Margin trowel (required for cant cove)
- Short nap mini-rollers with frames
- Mineral Spirits, Xylene, or Oxsol 100 for use as a trowel lubricant

APPLICATION PROCEDURES

General

Prior to starting the job, the product should be stored between 60-80°F (16-27°C) to ensure adequate mixing, flow, and penetration of the product.

Application

The primer should still be tacky when applying Shock Crete Vertical. Immediately pour all mixed material in a ribbon, next to the wall. Re-prime if the primer reaches a tack free state before you apply Shock-Crete Vertical over it.
Place and smooth the material with the appropriate cove or margin trowel to create the desired radius or cant cove.
Use S-30 Smoothing Liquid, very minimally in a mist bottle to allow the trowel to glide smoothly over the mixture and remove any remaining trowel marks.

Use caution, oversaturation of trowel lubricant will cause slumping of the mixed material.

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.

CURING SCHEDULE

Surface Temp.	Light Traffic	Heavy Traffic	Final Cure
50°F (10°C)	14 Hours	36 Hours	7 Days
70°F (21°C)	8 Hours	16 Hours	5 Days
90°F (32°C)	5 Hours	10 Hours	2 Days

At lower temperatures the hardening time is longer. It is important there are no dry patches. Complete hardening takes 5-7 days. Carbocrete Cove coating should not be applied in thicker coats than specified because the cure (hardening) can be impaired.

CLEANUP & SAFETY

Cleanup

Clean tools immediately with Thinner S-10, 2, or 76.

Safety

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.

MAINTENANCE

General	Normal plant cleaning procedures may be employed after the Shock-Crete floor has been put in service. There are no effective restrictions on the method of cleaning employed. Shock-Crete products, when properly installed, will withstand water wash down at continuous sanitizing temperatures.

PACKAGING, HANDLING & STORAGE

Packaging	**Kit** Shock-Crete Vertical Part A - 1 x 0.33 gal (1.25 liters) Shock-Crete Vertical Part B - 1 x 0.25 gal (0.95 liters) Shock-Crete Vertical Filler Part - 1 x 26 lbs (11.8 kg) bag Pigment Pack - 1 x 1 lb (.45 kg) bag Yields approximately 1.8 mixed gallons
Shelf Life	12 months in unopened container
Storage Temperature & Humidity	50-90°F (10-32°C) Do not freeze.
Shipping Weight (Approximate)	Approx. 35 lbs (15.9 kg)
Flash Point (Setaflash)	Part A: >200°F (93°C) Part B: 351°F (177°C)

WARRANTY

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