



REMR MATERIAL DATA SHEET CM-SE-1.72

BMC 75

1. NAME

BMC 75

2. MANUFACTURER

ProSoCo, Inc.
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Kansas City, KS 66117
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3. DESCRIPTION

BMC 75 is a masonry coating composed of a blend of silicone resins that gives excellent ultraviolet stability, moisture resistance, and exceptional breathability. It is a pigmented, water-base coating for exterior and interior surfaces. The coating is available in white and 15 other colors.

4. USES AND LIMITATIONS

Uses: Use as a coating for masonry or concrete where high water vapor transmission is needed.

Limitations: The coating should not be applied at temperatures below 40 °F. Do not apply to metals. It is not suitable for application over some resin paints. The coating should be applied only aboveground. The coating should be stored in sealed containers and kept away from extreme heat. Protect the material from freezing.

5. MANUFACTURER'S TECHNICAL DATA

The manufacturer lists the following advantages for BMC 75:

- Better UV stability.
- Longer life.
- Meets VOC requirements.
- Excellent coverage.
- Superior color retention.
- Superior salt-spray resistance.
- Good adhesion.
- Excellent water-vapor transmission.
- Ideal for interior surfaces.
- Compatible with BMC Blok-it.
- Resists mildew and algae.

Technical Information:

Percent solids by weight: 55.6%
Percent solids by volume: 37.7%
Percent pigment by weight: 40.8%
Weight per gallon: 11.70 lb
Flash point: None
Drying time: 45 min to touch and 24 hr to recoat

Test Results

Test Method	Exposure	Results
QUV Accelerated Weathering Test (ASTM G 53)	1.003 hr	E 0.72
Accelerated Weathering Test - Federal Test Method 141, Carbon ARC	600 hr	E 1.14
Salt-Spray Resistance (ASTM B 117)	504 hr	No change
Humidity Resistance (ASTM D 2247)	504 hr	No change
Water-Vapor Transmission (ASTM E 96)	--	75%*
Adhesion by Tape Test (ASTM D 3359)	--	No peeling

* Percentage reflects the amount of water that passes through the treated sample versus the untreated one (100 percent).

6. MANUFACTURER'S GUIDANCE FOR APPLICATION

Preparatory work: Glazed or gloss surfaces should be roughened or abraded, and chalky surfaces should be cleaned prior to application. All surfaces need to be clean and sound. Efflorescence and moisture-related strains should be cleaned from the surface using the appropriate Sure Klean cleaner. All algae or mildew should be removed for good performance of the coating.

Equipment: Material can be applied by brush, roller, or airless spray, depending on the size of the area and the substrate. Spray applications must always be back-rolled to ensure a proper adhesion and good coating performance.

Thinning: BMC 75 may appear unusually thick when first opened. Stir vigorously to reduce false body. When applying by brush or roller, the first coat should be thinned up to 10 percent with water. The second coat should be thinned up to 5 percent. Airless spray application of BMC 75 may require thinning the concentrated coating with as much as 20-percent fresh water, depending upon the surface and drying conditions and equipment requirements.

Application: When applying BMC 75 on untreated surfaces, prime the surface first. Consult your ProSoCo representative for the most appropriate BMC primer, and read the corresponding product data sheet and label before proceeding. Apply BMC

prime according to label instructions, allowing it to dry overnight. BMC 75 may be used over BMC Blok-it. Surfaces must be dry and absorbent prior to application. Allow the first application to dry 24 hr before application of the second coat. Protect from rain for at least 6 hr or until the coating is thoroughly dry. After the coating has dried completely (48 hr), BMC 75 needs no special maintenance.

Recommended coverage: Apply two coats, 7 mils wet for the first coat and 5 mils wet for the second coat or approximately 5 mils dry (250 to 300 ft/gal/coat). Coverage rates noted are theoretical. When adjusting coverage, allow for texture and profile of the substrate, adjusting downward for surface profile.

Clean up: Equipment used for application of the material should be cleaned with warm water and a mild detergent. If the coating is thoroughly dried, the use of the solvent paint thinners may assist in removal.

7. CORPS OF ENGINEERS' EVALUATION

Percent solids (ASTM D 1644, Method A): 57.2%

Water permeability of coating

Two tests were used to determine the water permeability of the coating. Test specimens were prepared by coating hollow concrete masonry

units (CMU) having a density of 85.03 lb/ft and a water absorption of 16.7 percent when tested according to ASTM C 140.

Inverted funnel method (WES)

One side of a CMU was coated with the material. After the coating had cured for at least 7 days, a funnel having a 5-in. (0.127-m) diameter opening was placed over the coated side, and the edges of the funnel were sealed with a heavy bead of silicone caulk. Once the silicone caulk had hardened, the funnel was filled with water, and the amount of water passing through the coating was measured.

The CMU was first coated with primer Blok-it. After the primer had dried, two coats of BMC 75 were applied waiting 24 hr between coats. The total application rate was 125 ft/gal.

Water permeability: 0.7 L/m²/24 hr

Wind-driven rain test (ASTM E 514) modified

The test specimen was constructed by building a small wall from six of the CMUs having an area of approximately 5.3 ft. One face of the wall was then coated with the material under test. The test chamber used measured 20 by 28 in. The rate of application of water and the pressure were those specified in ASTM E 514.

No visible water was observed on the backside or within the CMU after 24 hr of testing. The application of the coating was the same as for the inverted funnel method.

Accelerated weathering ASTM G 53

Test specimens were prepared by coating mortar prisms with the material. The specimens were tested for 2,000 hr using a time cycle of 4 hr of ultraviolet light and 4 hr of ultraviolet light and 4 hr of condensation.

No blistering, peeling, checking, or color change was observed after testing.

Water-vapor transmission ASTM D 1653

Coating thickness: 0.009

Test method: Method A (Wet Cup)
Test condition: 73 °F and 50% relative humidity
Test results: 103 perms

8. ENVIRONMENTAL CONSIDERATIONS

Reasonable caution should guide the preparation, repair, and cleanup phases of sealant activities involving potentially hazardous and toxic chemicals substances. Manufacturers' recommendations to protect occupational health and environmental quality should be carefully followed. Material safety data sheets should be obtained from the manufacturers of such materials. In cases where the effects of a chemical substance on occupational health or environmental quality are unknown, chemical substances should be treated as potentially hazardous toxic materials.

9. AVAILABILITY AND COST

Information concerning the availability and cost of BMC 75 can be obtained by writing the manufacturer at the address given in item 2 or calling 913-281-2700.

10. TECHNICAL SERVICES

Information on technical services can be obtained by writing the manufacturer at the address in item 2 or by calling 913-281-2700.