



BLOKCOAT FR

Fiber Reinforced Cement Based Coating

1. Product Description

a. **Basic Use:** Blokcoat FR is a cementitious coating system enhanced with polypropylene fibers and proprietary polymers designed to decorate, waterproof and protect block, brick and concrete surfaces. Blokcoat FR may be used in both above grade and below grade applications. Blokcoat FR fills voids and smooths all surfaces to provide a decorative and textured finish.

b. **Features/Benefits:**

- Fiber reinforcement helps prevent cracking.
- Decorates surface while providing long term protection against water infiltration.
- May be used in both interior and exterior applications.
- Fibers and unique polymers provide excellent flexibility to cementitious coating allowing for minor movement capability.
- Does not contain solvents or other toxic compounds permitting use on home basement walls.
- Easy-to-use system does not require special tools, equipment or primers.
- Light reflective formulation brightens dark and poorly lighted areas.
- Excellent durability properties allow for use in freeze/thaw environments.
- Versatile formulation may be mixed from a thin coating to a thick plaster consistency.
- Chemically resistant to de-icers, solvents, harsh cleaning solutions and salt spray.

c. **Typical Applications:** Basement walls, concrete pipes, cisterns, elevator pits, tunnels, machine pits, concrete walls and structures.

d. **Limitations:** Do not apply when ambient and substrate temperatures are less than 40°F (4°C). Allow to cure for one week before exposing surface to hydrostatic pressure. Avoid eye contact and prolonged contact with skin. May cause irritation to sensitive skin.

e. **Composition:** Blokcoat FR is a cement-based coating blended with proprietary polymers and specially graded aggregates.

f. **Color/Appearance:** Blokcoat FR is available in concrete gray and light reflective.

2. Packaging

Blokcoat FR is available in two standard units:

<i>Unit</i>	<i>Shipping Wt.</i>
<i>50-lb. (22.7 Kg) bag</i>	<i>51 lbs. (23.1 Kg)</i>
<i>60-lb. (27.2 Kg) pail</i>	<i>63 lbs. (24.0 Kg)</i>

3. Estimating/Yield

The recommended application rates for Blokcoat FR are:

<i>1st Brush Coat</i>	<i>2nd Brush Coat</i>	<i>Trowel Consistency</i>
<i>15 lb. (6.8 Kg) per 100 sq. ft. (9.3 sq. m)</i>	<i>25 lb. (11.3 Kg) per 100 sq. ft. (9.3 sq. m)</i>	<i>125 lb. (56.7 Kg) per 100 sq. ft. (9.3 sq. m)</i>

Note: Acrylpave is recommended as the mixing liquid at a 1 to 1 ratio (water to latex) to provide additional bonding strength, increased durability and improved water tightness of Blokcoat FR.

4. Technical Data

a. **Compressive Strength:** ASTM C 109, 2 in. (50 mm) cubes.

<i>7 days</i>	<i>3,700 psi (25.5 MPa)</i>
<i>28 days</i>	<i>4,500 psi (31.0 MPa)</i>

b. **Flexural Strength:** ASTM C 78

<i>7 days</i>	<i>470 psi (3.2 MPa)</i>
<i>28 days</i>	<i>830 psi (5.7 MPa)</i>

c. **Tensile Strength:** ASTM C 190

<i>7 days</i>	<i>290 psi (2.0 MPa)</i>
<i>28 days</i>	<i>410 psi (2.8 MPa)</i>

5. Directions for Use

a. **Preparation:** The surface should be cleaned free of all dirt, dust, soot or free lime salts. Previous coatings, such as paint, white wash, curing compounds, or other unsound coatings must be completely removed by wire brushing, sand blasting or any other method that will restore the original porosity of the surface. Large cracks, spalled areas or disintegrating mortar joints should be repaired with a Metalcrete patching mortar before application of the Blokcoat FR.

b. **Mixing:** The following table shows the recommended amount of water to be mixed with 50 lbs. (22.7 Kg) of Blokcoat FR.

Water Addition per 50 lbs. (22.7 Kg)

<i>1st Brush Coat</i>	<i>2nd Brush Coat</i>	<i>Trowel Consistency</i>
<i>1.75 to 2.0 gal. (6.6 to 7.6 liter)</i>	<i>1.50 to 1.75 gal. (5.7 to 6.6 liter)</i>	<i>1.00 to 1.25 gal. (3.8 to 4.7 liter)</i>

Note: To provide additional water tightness and durability, use a 50:50 mix of Acrylpave and water as the mixing liquid.

A high torque power drill with a Metco Jiffy mixing paddle is recommended to assure uniform and complete mixing. Let stand for 5 minutes and mix again for two additional minutes.

c. **Application:** In order to secure uniform appearance and effective waterproofing, two coats of Blokcoat FR are essential. Application with a brush produces excellent results and is the preferred method. Use a stiff-bristled brush such as a fiber roof brush. Apply the mixture liberally to the surface and scrub it into the pores with a circular motion. Do not attempt to flow it on and smooth it out like conventional paint coatings. Work one wall at a time, avoiding direct sunshine if possible. First, soak the wall thoroughly with a garden hose. Then "re-wet" a small area immediately before applying Blokcoat FR. Always keep the wall as wet as possible. During application, stir the mixture occasionally to prevent settling. If the coating becomes too thick during application, small amounts of water and Acrylpave may be added carefully to maintain the desired consistency. Protect fresh applications from rapid drying due to sun or wind by wetting the surface thoroughly with a garden hose every 2 or 3 hours during the first day. Allow the first coat to harden at least

overnight. Apply the second coat anytime thereafter. Soak the surface thoroughly with clear water and proceed with application of the second coat in the same manner as described for the first coat. Trowel consistency Blokcoat FR should be applied at thickness up to 1/4 in. (6.4 mm).

d. **Pot Life/Working Time:** Blokcoat FR has a 2 hour pot life, but should be applied promptly after mixing.

e. **Clean Up:** Waterzall Concentrate and water may be used for cleaning tools and equipment.

f. **Maintenance:** Blokcoat FR surfaces should be cleaned with Waterzall Concentrate and water solution. Waterzall Concentrate may also be used at full strength to remove built-up deposits and stains.

6. Availability

Blokcoat FR is normally available immediately from your local distributor or it will be shipped within 5 working days upon receipt of order. Please contact your local Metalcrete representative or call Metalcrete directly for more information.

7. Warranty

Blokcoat FR is manufactured in strict accordance with the quality control standards of Metalcrete Industries. It is guaranteed to perform as indicated on this data sheet when applied by competent applicators.

8. Technical Service

Metalcrete technical service representatives are available to provide on-site assistance with a minimum three day notice.



Metalcrete Industries

4133 Payne Avenue • Cleveland, Ohio 44103
440-526-5600 • 800-526-5602 • FAX 440-526-5601