

DESCRIPTION:

BH705M is a two-component elastomeric compound of asphalt and polymers formulated for mixing and spraying at ambient temperature. It cures (by an in situ chemical reaction) to a tough, abrasive-resistant film which shows almost 100% elastomeric recovery from mechanical stress.

COLOR:

Black only.

BASIC USE:

BH705M is used as a waterproof coating over insulation as an excellent barrier against weather and moisture vapor. It has excellent adhesion to insulation, metal, and other substrates and, due to its unusually low temperature properties, is ideal for use in extremely cold environments.

On concrete and masonry, 705M may be used as a moisture-vapor barrier coating above and below grade. It will protect metals and wood against corrosion by acids, alkalis, salts, and moisture.

705M is resistant to ultraviolet degradation from long term exposure to sunlight.

BH705M can also be used to cement pre-formed insulation to piping or vessels and to adhere blocks of insulation together. It is especially recommended where movement of insulation will be encountered.

LIMITATIONS:

It should not be used where it will be exposed to high concentrations of oil or organic solvents.

COMPOSITION & MATERIALS:

BH705M is a two-component elastomeric compound of asphalt and polymers.

Component 1, the base, consists of elastomeric-forming polymers with specially processed asphalt plasticizer, inert fiber, activators, and liquifying agents.

Component 2 consists of the curing agent and polymer extenders. It is available in one consistency grade.

PACKAGING:

The two components of 705M elastomeric sealant are packaged to simplify mixing in the field. The components come in two-part kits packaged for correct mixing. When the components are mixed, they are proportioned by weight. 705M comes in a 4 gallon kit.

INSTALLATION**PREPARATORY WORK:**

Surfaces to which 705M is to be applied should be dry and free of dust, loose rust, and scale. On steel, sand-blasting to gray metal is preferred where feasible.

MIXING OF COMPONENTS:

The viscosities of the two components are such that the contents of the Component 2 container can be readily poured into the Component 1 and easily mixed at product temperatures above 60°F. An electric or air driven mixer (600 RPM minimum generating vigorous vortex), having a 5-inch, or larger, blade is recommended to achieve mixing in 3-5 minutes. The mix ratio of Component 1 to Component 2 is 42:1 on a weight basis.

POT LIFE:

The pot life after mixing of 705M is 3 hours at 75°F, 1 hour at 90°F and 4-8 hours at 60°F. Cure time is 24 hours at 75°F, 12 hours at 90°F, and 48 hours at 60°F.

METHOD OF APPLICATION:

705M may be applied by brush or spray. A 0.031" reverse-a-clean airless spray tip is recommended for spraying 705M at about 2000 psi at 75°F. A 1/16" film can be applied on a vertical surface without sagging.

COVERAGE RATES:

Four gallons of 705M covers 100 square feet (2 gallons per 50 square feet) with a 1/16" film thickness on a vertical surface. Three gallons of 705M covers 100 square feet (1 gallon per 34 square feet) with a 3/64" film thickness. There is no film shrinkage. This is the minimum application rate recommended for most horizontal applications.

MAINTENANCE:

Blackhawk 705M elastomeric compound forms a tough, abrasion-resistant film. No maintenance should be needed. However, if mechanical damage should occur, it can be easily repaired by maintenance personnel. Areas to be repaired should be cleaned and all loose material stripped off. Coating edges to be repaired should be abraded or roughened to provide a fresh surface for the new film to adhere to. Edges of repair areas may be "feathered" to disguise patching.

TYPICAL PROPERTIES & PERFORMANCE:

Application Temperatures Range, °F	Lab Observation	60 to 90
Flash Point, Pensky Martens Closed Cup, °F Min.	ASTM-D93-79	100+
Solids, Weight % Min.	ASTM-D2823	70
Weight, lbs/gal (approx.)	ASTM-D71	7.6
Flow of Cured Film at 200°F	ASTM-D1851	None
Cracking or Disbonding of 1/16-inch Cured Film on Steel, 140°F to -60°F	FED-TT-C-520	None
Tensile Strength @ 74°F, PSI (1 Month Cure @ 74°F)	ASTM-D412	84
Elongation @ 74°F, % (1 Month Cure at 74°F)	ASTM-D412	127
Bond Strength (to steel), PSI (1 Month Cure @ 74°F)	ASTM-D412	31
Shear Strength: (1 month cure @ 74°F)		
Tensile, PSI	ASTM-C273	26
Compression, PSI	ASTM-C273	12
Moisture Vapor Transmission, Perm Inch	ASTM E-96, Method E	0.0048
Service Temperature Range, °F	Lab Observation	-80 to 200
Resistance to Abrasion by Sandblast	FED-TT-C-520	Excellent
Resistance to Oils, Greases, Solvents	FED-SS-S-00200d	Poor
Hydrostatic Pressure Testing	ASTM-C1306-05a	45 psi

ORDERING INFORMATION

For additional information, prices, or to place an order, please contact your ErgonArmor sales representative. If you do not know the name of your sales representative, call 877-98ARMOR.

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