

## TECHNICAL DATA SHEET

### DESCRIPTION:

MRAP-FC provides a professional solution to concrete flooring issues. With its fast cure, low odor and viscosity properties it is ideal for treating new or existing floors where high moisture levels are present. Enjoy deeper penetration of the substrate providing superior adhesion as well as increased protection against future water drive throughs when compared with traditional epoxy products – all in one coat!

### RECOMMENDED USES:

Our product is the ideal choice for an expansive variety of applications. It offers unparalleled moisture-blocking capabilities, making it perfect for areas such as mechanical rooms, shop floors and pharmaceutical plants; Additionally our technology can be used under any coatings that show concrete contamination or underneath various floorings including carpet, wood and vinyl. Furthermore this multi-purpose solution provides enhanced protection in specialities areas like laboratories animal care facilities loading docks retail stores institution buildings multiple unit housing & more!

### ADVANTAGES:

This groundbreaking product provides unparalleled protection for concrete slabs as it boasts a 100% solid solution that is low VOC and odor, has vapor control capacity in high moisture or pH environments, serves as a one-coat inhibitor to stop excess moisture from seeping through the surface of your slab. Additionally, its excellent adhesion properties help keep any applied coating firmly anchored while boasting standard drying times. Finally this revolutionary answer incorporates insightfully designed viscosity levels tailored specifically to reach deeper into even the most difficult subsurface areas!

### SURFACE PREPARATION:

**CHECK FOR MOISTURE:** Before installing this floor-coating material, it is essential that the concrete substrate be completely dry. Moisture testing must occur to ensure Calcium chloride or "In-situ" Relative Humidity readings remain below a predetermined threshold for safe installation of BallistiX systems on concrete substrates.

**CHECK THE TEMPERATURE & HUMIDITY:** It's essential to check the temperature and humidity before proceeding with a coat. Floor temperatures should be in the range of 65–90°F (18–32°C), while humidities must remain below 95%. It is especially important not to apply coating until floor temps are at least 5o F above dew point!

**SURFACE PREPARATION:** To optimize performance, this product requires proper surface preparation. The substrate must feature the appropriate mechanical profile for the application (as stated in ASTM 4259–83), and be free from contaminants with no visible defects or moisture present.

**APPLICATION EQUIPMENT:** Equip yourself with the right tools to complete any project – a 3" disposable brush, low speed drill (450 rpm) equipped with a dynamic 3.5" jiffler blade and perfect-finish nap of around three eighths inches.

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### MIXING:

To create a uniform consistency, mix the two portions of your 3 gallon kit separately and at temperatures between 70°F – 80° F (20–25 °C). When both components are prepped, add Side B into Side A in a bucket sized for 3.5 gallons to amalgamate them thoroughly until no streaking is observed--thinning should be avoided here! Remember that precise measurements of each side will guarantee optimal product performance; trotting from one container to another during mixing is an effective way of guaranteeing complete combination. All you need now? Just 2 minutes and voila!

### APPLICATION:

After carefully blending all ingredients, expertly pour the mixture onto a flat surface. Use a squeegee to ensure its even distribution and use a wet-film thickness gauge to get your desired effect. To complete the look, utilize both back-rolling and cross rolling techniques before allowing it to dry for 4 hours minimum prior to any additional coats being applied.

### **TECHNICAL DATA**

<b>PACKAGING</b>	3 gallons
<b>COLOR</b>	Clear
<b>RECOMMENDED THICKNESS</b>	16 mils 100 ft <sup>2</sup> /gal
<b>SHELF LIFE</b>	Parts A and B: 12 months in original unopened factory sealed containers. Protect from freezing. Part C: 6 months in original unopened packaging. Store dry between 50-110°F (10-44°C).
<b>MIX RATIO</b>	Mix full units only
<b>POT LIFE</b>	35-40 minutes
<b>VOC (G/L)</b>	<5 g/l
<b>APPLICATION TEMPERATURE</b>	45°F (7°C) min. / 86°F (30°C) max.
<b>SERVICE TEMPERATURE</b>	-40°F (-40°C) min. / 248°F (120°C) max.

### **PROPERTIES**

@ 73°F (23°C) AND 50% R.H.

<b>DENSITY</b>	9.0 lb/ga
<b>VISUAL APPEARANCE</b>	High Gloss
<b>CURING DETAILS</b>	4h

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<b>THINNER RECOMMENDED</b>	Xylene
<b>SOFTENING POINT</b>	266°F (130°C)
<b>ABRASION RESISTANCE, ASTM D4060 TABER ABRASER CS-17 WHEEL / 1000G (2.2 LBS.) / 1000 CYCLES</b>	30 mg loss
<b>BOND STRENGTH, ASTM D4541</b>	> 1.9 MPA (275 psi) (substrate failure)
<b>COEFFICIENT OF THERMAL EXPANSION ASTM D696</b>	0.89x10 <sup>-5</sup> in/in/°F (1.6x10 <sup>-5</sup> mm/mm/°C)
<b>TENSILE STRENGTH D2370</b>	7500 psi
<b>WATER ABSORPTION ASTM C413</b>	<0.1%
<b>IMPACT RESISTANCE</b>	160 in/lb
<b>RESISTANCE TO MOLD GROWTH, ASTM D3273</b>	Rated 10 (highest resistance)
<b>RESISTANCE TO FUNGI GROWTH, ASTM G21</b>	Rated 0 (no growth)
<b>HARDNESS, SHORE D</b>	70-80
<b>FLOW</b>	325 mm (12.80 in)
<b>COEFFICIENT OF FRICTION, ASTM D2047</b>	0.7 smooth
<b>INDENTATION MIL-PRF-24613</b>	0%
<b>THERMAL COMPATIBILITY, ASTM C884</b>	Pass
<b>COMPRESSION ASTM S695</b>	10000 psi
<b>FLEXURAL STRENGTH ASTM C580</b>	16.2 MPa (2350 psi)

\* Times are approximate and will be affected by changing ambient conditions, especially changes in temperature and relative humidity.

\* The indicated mileage is calculated for flat surfaces. A porous or imperfect surface will require more material in order to cover the same mileage. \*

### HEALTH & SAFETY:

Components A, B, and C of this product contain toxic ingredients that may provoke serious health risks upon contact. In case of skin or eye contact with any part of this product it is recommended to wash thoroughly with water and soap for at least 15 minutes respectively. Inhalation and prolonged exposure can cause severe burns on body parts as well respiratory problems; in such circumstances fresh air should be provided immediately while removing contaminated clothes prior them being reused again after cleaning. For best precautionary measures always wear chemical resistant gloves alongside protective eyewear when using this strong sensitizer as vapors emitted from its use might be dangerous if inhaled without protection equipment like a NIOSH/MSHA approved breathing apparatus filtering organic vapors suitable ventilation must also be predicted beforehand.

### NOTICE:

BallistiX strives to provide the most accurate materials and information for our users. Our technology is only applicable in combination with specific material designated herein, so please verify suitability of this product prior to use.