# Technical Data Guide





# MasterTop® VB 240FS

Fast setting, moisture vapor barrier system for use with resinous floor coatings

#### YIELD

Approximately 80 ft²/gallon (2 m²/L) depending upon porosity of the substrate

#### **PACKAGING**

10 Gallon (38 L) Kit Part A: 5 gallons (19 L) (Resin) Part B: 5 gallons (19 L) (Hardener)

100 Gallon (378 L) Kit

<u>Part A:</u> 50 gallons (189 L) (Resin)

<u>Part B:</u> 50 gallons (189 L) (Hardener)

# COLOR

Dries clear

# SHELF LIFE

2 years when properly stored

#### STORAGE

Store in unopened containers at 60 – 80 °F in clean, dry conditions. Protect from freezing and keep away from heat.

### VOC CONTENT

0 g/L less water and exempt solvents when components are mixed and applied per Master Builders Solutions instructions

#### DESCRIPTION

MasterTop VB 240FS is a fast setting, 100% solids epoxy moisture mitigation system for use with resinous flooring systems. MasterTop VB 240FS reduces the permeance of moisture vapor through concrete substrates to levels that are acceptable for the installation of resinous floor coatings. It is compatible with most flooring adhesives, cementitious underlayments, carpet applications and vinyl composition tile. MasterTop VB240FS can also be used to consolidate lightweight concrete substrates to provide the strength required to allow for floor covering installations. When used in conjunction with Master Builders Solutions seamless flooring systems including MasterTop MMA and epoxy systems, MasterTop VB 240FS helps provide a durable, sanitary flooring solution that can be customized to meet the specific needs of each facility.

#### PRODUCT HIGHLIGHTS

- Rapid curing, minimizes facility down time
- Compatible with MasterTop Flooring Systems, enables customized, durable solutions
- One coat application helps reduce labor required
- 1:1 mix ratio by volume simplifies application
- 100% solids formulation, environmentally friendly
- Can be applied to 7-day-old concrete for faster job completion
- Can be applied to concrete with high alkalinity (pH of 13-14), provides greater flexibility for new construction projects

#### **APPLICATIONS**

- Where vapor drive of porous concrete surfaces needs to be controlled
- Concrete floors and slabs with a compressive strength of at least 2500 psi
- Where moisture vapor transmission of substrate falls between 3 lbs and 15 lbs per 1000 ft<sup>2</sup> over 24 hours using calcium chloride test per ASTM F 1869
- Where the relative humidity of the concrete substrate is between 75% and up to 99% per ASTM F 2170 or F 2420 according to the type of application listed on the chart below:

# **TYPICAL PROPERTIES**

RH LEVEL	UP TO 97%	99%
NEW CONSTRUCTION		
Elevated Slab		•
Slab On Grade*		•
Below Grade Slab*	•	
EXISTING CONSTRUCTION		
Elevated Slab	•	
Slab On Grade	•	
Below Grade Slab	•	



#### **HOW TO APPLY**

SURFACE PREPARATION

- 1. Ensure that floors are structurally sound and cured a minimum of 7 days.
- 2.Follow the ACI Committee 201 Report "Guide to Durable Concrete" to ensure the concrete substrate meets the industry standards prior to installation. Remove all contaminants such as dirt, oil, paint, wax, grease, bitumens, and forming, curing, and release agents, efflorescence, or other foreign matter.
- 3. Repair concrete and install joint sealants and fillers as necessary. Use rapidly hydrating patching materials such as Master Builders Solutions's MasterEmaco® T 1060 or MasterEmaco T 1061.
- 4.Mechanical surface profiling is the preferred floor preparation method for both new and existing floors. It is the only acceptable preparation method where warranties are issued. Acid etching is not recommended. Mechanically profile the floor to an ICRI CSP 3 minimum / 4 maximum (refer to ICRI Guideline 310.2).
- 5.After mechanically profiling, measure MVT (moisture vapor transmission) using a calcium chloride test in accordance with ASTM F 1869, or a relative humidity test in accordance with ASTM F2170 or F2420.
- 6. If the moisture vapor transmission tests show that a rate of 3 lb/1000 ft² in 24 hours or a relative humidity of 75% is exceeded, MasterTop VB 240FS should be installed prior to the installation of moisture sensitive resinous flooring systems.

# MIXING

- 1. MasterTop VB 240FS should be mixed at a 1:1 mix ratio by volume for the Part A (resin component) and Part B (hardener component). Mix Part A and B together using a slow speed drill (300-500 rpm) and paddle for 2 – 3 minutes until the mixture is homogeneous.
- 2. Pour the entire mixture onto the properly prepared concrete surface immediately after mixing. Leaving the material in the pail will significantly reduce the pot life and will cause the temperature of the material to rise.

3. Because of the quick cure rate of this product, do not mix more kits than can be applied within the pot life of 15 – 25 minutes at 75 °F (24 °C). Elevated temperatures will decrease the pot life.

## **APPLICATION**

- 1. The ambient and surface temperature must be between 50 and 85 °F (10 – 30°C) at the time of application. Ambient relative humidity should not exceed 80% at the time of application. Temperatures and relative humidity should not rise above this value during application or while the material is curing.
- 2. Spread the mixture onto the substrate with a V notched squeegee at a rate of up to 80 ft² / gallon (2 m²/L). Back roll at right angles using a 3/8" (9.5 mm) nap roller.
- 3. Apply the second batch immediately behind the first, ensuring a continuous application. Distribute the product evenly across the entire substrate at the recommended coverage rate. Take care to ensure that no areas are missed.
- Allow MasterTop VB 240FS to become tack free (approximately 4 hours under normal conditions) before applying another floor coating)
- Note: In the very rare occurrence that an oily or waxy residue appears on the MasterTop VB 240FS surface after the material has cured, the residue must be removed with clean water or a dilute vinegar solution prior to applying any additional flooring installation materials.
- The resinous floor coating should be installed over MasterTop VB 240FS within 24 hours.
- 6. When installing the Master Builders
  Solutions flooring system over MasterTop
  VB 240FS, follow all installation instructions
  listed on the technical data guide for
  the system being installed. Primers for
  MasterTop SRS (MMA) applications must
  include the MasterTop SRS 103IN additive.
  For use of MasterTop VB 240FS with
  Ucrete, please consult Master Builders
  Solutions Technical Services for installation
  recommendations.

#### **CLEAN UP**

Clean tools and equipment with xylene immediately after using. Wash hands and skin with soap or industrial hand cleaner, not with solvent. Cured material must be removed mechanically.

#### FOR BEST PERFORMANCE

- Precondition all components to 70 °F (21 °C) for 24 hours before using.
- MasterTop VB 240FS should not be used as a final wear surface.
- Primers for MasterTop SRS (MMA) applications must include the MasterTop SRS 103IN additive.
- Do not use as a moisture vapor barrier over gypsum based underlayments.
- Make certain the most current versions of product data sheet and SDS are being used; visit www.master-builders-solutions.com/ en-us to verify the most current versions.
- Proper application is the responsibility of the user. Field visits by Master Builders Solutions personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.
- MasterTop VB 240FS does not prevent failures due to:
- Delamination as a result of previously applied curing compounds or penetrating sealers such as silicates that prevent proper adhesion of MasterTop VB 240FS to the concrete substrate
- Alkaline silica reaction (ASR) conditions or organic hydrocarbon materials that affect adhesion
- Cohesive failure within the concrete substrate that cause MasterTop VB 240FS to delaminate

# **HEALTH, SAFETY AND ENVIRONMENTAL**

Health, Safety and Environmental Read, understand and follow all Safety Data Sheets and product label information for this product prior to use. The SDS can be obtained by visiting www.masterbuilders-solutions.com/en-us, e-mailing your request to mbsbscst@mbcc-group. com or calling 1(800)433-9517. Use only as directed. IN CASE OF EMERGENCY: Call CHEMTEL +1 (800) 255-3924 or if outside the US or Canada, +1 (813) 248-0585.

## LIMITED WARRANTY NOTICE

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