



# PRODUCT TECHNICAL DATA SHEET

## EPOXY BLOCK FILL

Advanced Coating Systems

### HIGH PERFORMANCE EPOXY MASTIC LEVELING MATERIAL

#### GENERAL PRODUCT DESCRIPTION

Epoxy Block Fill is an advanced high performance, two-component epoxy mastic that can be used to flatten a surface. Epoxy Block Fill can be used on both horizontal and vertical surfaces, such as filling in cinder block walls. Epoxy Block Fill resists sagging on vertical surfaces and provides a smoother surface for applying a coating over it. Epoxy Block Fill can also be used as a scratch coat to fill in damaged concrete, prior to installing a coating system over it. Do not apply Epoxy Block Fill direct to concrete without first applying a primer. It can be applied between 1/16" and 1/8". Silica sand can be added to the mix for additional thickness and textured surface. Epoxy Block Fill is not intended to be used as a top coat.

#### ADVANTAGES:

- 100% Solids , V.O.C. = 0
- Vertical and Horizontal Application
- Seamless System
- Essentially Odorless
- 4 Times Harder than Standard Concrete
- Chemical Resistant

#### PRODUCT DATA

Volumetric Ratio:	2 to 1
Solids:	100%
Application Temperature:	65-90°F and 5° Above the Dew Point.
Thinning:	Not Required
Pot Life:	15-20 Minutes
Working Time:	15-20 Minutes
Cure Time:	8 Hours (Walking) 24 Hours (Traffic)
Critical Recoat Time:	24 Hours
Shelf Life:	12 Months
Usda Food And Beverage:	Meets Requirements

Cure time, pot life, and working time are based on a slab temperature of 70-75 F°, and will change accordingly as temperature changes.

#### PACKAGING

Epoxy Block Fill is available in 2 different kit sizes:

	Part A	Part B
3 Gallon Kit	2 gal.	1 gal.
15 Gallon Kit	10 gal.	5 gal.

#### APPLICATIONS

- Cinder Block Walls
- Bug Holes and Divots
- Concrete Cracks
- Loading Docks
- Ramps
- Trench and Sumps
- Secondary Containment

#### PHYSICAL PROPERTIES

PROPERTY	VALUE	REFERENCE
Compressive Strength	11,500 psi	ASTM C 579
Flexural Strength	4,100 psi	ASTM D 790
Tensile Strength	2,100 psi	ASTM D 307
Bond to Concrete	350 psi concrete fails at this point	ASTM D 4541
Taber Abrasion	Loss/1000 Cycles = 25 mg	ASTM D 4060 CS 17 Wheels
Water Absorption	.10% maximum	ASTM D 413
Linear Shrinkage	.01% maximum	ASTM C 531
Flammability	1.2 cm/min	ASTM D 635
Impact Resistance	16 ft. lb. - no failure	Mil-D-3134H
Coefficient of Friction	6 minimum	ASTM D 2047
Hardness, Shore D	84	ASTM D 2240
Porosity on unglazed finish	00	NACE Stand TM-01-74

#### MIXING

The Mix Ratio of Epoxy Block Fill is 2 to 1. That is, 2 parts of A - resin, to 1 Part of B - hardener. Mix the following with a drill and jiffy mixer.

1. Premix 1 gallon of Part A in a 5-gal mixing bucket for 45-60 seconds until uniform.
2. Add 2 quarts of Part B and mix for 1 minute. Be sure to uniformly mix all of the Part A and B together by scraping the sides and blending in all of the material.
3. Apply the material immediately as it will have a shorter pot life in mass.

## PRODUCT LIMITATION

Always read ONYX PRODUCT LIMITATION GUIDELINES document prior to installation as the content below is only partial information.

Ground level concrete slabs emit moisture vapor. The allowable vapor emissions for concrete is 3 lbs. per 1,000 Sq Ft over a 24 hour period. If vapor is above this level, then blistering and delamination of the coating may occur. A calcium chloride test, in accordance with ASTM F1869 Standards, should be performed to determine the concrete vapor level. If the vapor levels exceed the 3 lb. limit, a concrete vapor control system should be used before applying any coating system. Please contact the ONYX technical department for approved systems.

Coating systems are susceptible to cracking if the concrete moves or separates below the coating. Hence, joint and crack treatment should be reviewed prior to the coating application. As a general rule, control joints (saw cuts) and random cracks should be saw cut or chased first, then filled with the appropriate patch material. Construction joints (2 slabs which meet and hence move) should be treated. After the coating has been applied and cured, saw cut through the coating over construction joints.

## SURFACE PREPARATION

Before the coating is applied, the concrete must be:

- Clean – Contaminants Removed
- Profiled – Surface Mechanically Prepared
- Sound – Cracks Repaired

Mechanical methods are required for preparing concrete prior to coating application. Shot-blasting, diamond grinding, scarifying, and scabbling are all acceptable methods. The concrete profile should be between a CSP 6 - CSP 9.

## APPLICATION PROCESS

Always add an epoxy primer to install Epoxy Block Fill. Depending on the type of surface, the condition of the surface, and the overall application, apply Epoxy Block Fill with flat squeegee, trowel, putty knife, or rubber float. Press firmly into cracks and cavities to ensure good adhesion with the selected tool. If required, sand or grind smooth after the material has cured.

## OPTIONAL TOP COAT

Epoxy Top Coat may be used over the Block Fill for optimal color stability. Sand any imperfections and clean dust off the surface (e.g., tack rag) prior to installing top coat. Epoxy Build Coat may be used over the Block Fill as a broadcast coat/overlayment if a thicker floor or textured surface is desired. If the Epoxy Block Fill is to have another coating system installed over, stay within the critical recoat time (24 hours) to avoid having to mechanically prepare surface.

## CLEANUP

Epoxy Block Fill while in a liquid state may be cleaned up with water and degreaser. Otherwise a strong solvent may be required while Epoxy Block Fill is setting up.

## WARRANTY

ONYX Concrete Coatings products are warranted for one year after date of manufacture. Please refer to the ONYX Limited Material Warranty for additional clarification. Refer to the ONYX General Product Limitation Guidelines

## SAFETY

Consult Epoxy Block Fill safety data sheet. Avoid Epoxy Block Fill contact with eyes and skin. Some individuals may be allergic to epoxy. Always wear protective eyewear, clothing, and gloves. Safety always comes first.

## MAINTENANCE

Refer to the ONYX Maintenance and Cleaning Guidelines.