# **VERSATILE** HIGH-PERFORMANCE COATINGS

**Technical Installation Guide** 

# **PRODUCT DESCRIPTION:**

4800 Industrial floor epoxy is a 100% solids, clear and pigmented build-coat/topcoat epoxy that exhibits great chemical and wear resistance. 4800 is primarily used as a concrete floor topcoat in decorative, commercial and industrial applications requiring low odor installation and specific chemical resistance. 4800 can be used as a buildcoat in conjunction with a chemical resistant and UV resistant urethane or polyaspartic topcoat.

#### **COMPOSITION:**

Specialty propriety blend of 100 % solids epoxy, wetting agents, adhesion promoters and other additives.

#### **ADVANTAGES:**

- Low odor
- High gloss
- 100% solids, 2g/l VOC
- Good chemical resistance

# LIMITATIONS:

- Must be used with 4100 as a primer
- Will not bridge cracking
- Yellows under direct U.V. exposure and wavelength lighting including fluorescent.

# **COLORS:**

Clear and pigmented Slate Grey, Charcoal Grey, Whisper Grey, Cottonwood, Mocha, Black and White

COVERAGE RATES:			
	OVER CONCRETE SUBSTRATE		
1 <sup>ST</sup> COAT	200 FT <sup>2</sup> / GAL		
2 <sup>ND</sup> COAT	250 FT <sup>2</sup> / GAL		
OVER 1/4" Flakes			
1 <sup>ST</sup> COAT	200 FT <sup>2</sup> / GAL		
2 <sup>ND</sup> COAT	250 FT <sup>2</sup> / GAL		
	OVER 1/8" Flakes		
1 <sup>ST</sup> COAT	150 FT <sup>2</sup> / GAL		
2 <sup>ND</sup> COAT	200 FT <sup>2</sup> / GAL		
OVER 1/16" Flakes			
1 <sup>ST</sup> COAT	125 FT <sup>2</sup> / GAL		
2 <sup>ND</sup> COAT	175 FT <sup>2</sup> / GAL		

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TECHNICAL PROPERTIES:		
VOLUMETRIC MIX RATIO	2A:	1B
FINISH	Smooth H	ligh Gloss
VOLUMETRIC SOLIDS	99.	6%
VOC	4 g	g/L
POTLIFE (1.5 GAL MASS)	40 Mins @	75°F
WORKING TIME	45 Mins @ 75°F	
DRY TO TOUCH	9-12 Hours	@ 75°F
RECOAT WINDOW	12-24 Hours	
FULL CURE	5-7 Days	
SHORE D HARDNESS	ASTM	80
	D2240	
ADHESION	ACI 503R	350 PSI
TENSILE STRENGTH	ASTM D638	4800 PSI
FLEXURAL STRENGTH	ASTM D790	9800 PSI
COMPRESSIVE STRENGTH	ASTM D695	8700 PSI
ELONGATION	ASTMD638	5.4%
ABRASION	ASTM	41.2 mg
	D4060	lost
FLAMMABILITY	SELF-EXTING	IUISHING

CHEMICAL RESISTANCE:	
ACETONE	NO EFFECT
XYLENE	NO EFFECT
10% HCL	NO EFFECT
AMMONIA	NO EFFECT
DEGREASER	FAINT SPOTTING
LIQUID PLUMMER	FAINT SPOTTING
VINEGAR	FAINT SPOTTING
CLOROX	NO EFFECT
WINDEX	NO EFFECT
MOTOR OIL	NO EFFECT
GASOLINE	NO EFFECT
SKYDROL	NO EFFECT
HOT TIRE	NO EFFECT

PACKAGING:	
1.5 Gallon Kit	15 Gallon Kit

# STORAGE:

Store materials indoors between 50°F & 75°F

# SHELF LIFE:

One year from date of manufacture

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APPLICATION EQUIPMENT:	
Protective Clothing	18" Roller Frame
	SKU - 7012
Jiffy Mixing Paddle	18"x3/8" Nap Roller Cover
SKU – 7050	SKU — 7006-1
	18" Easy Squeegee
Slow Speed Drill	8-12 Mil SKU – 7090-K
Spike Shoes	3" Chip Brush
SKU – 7045-D	SKU 7001

SUBSTRATE REQUIREMENTS:	
CONCRETE:	Concrete must be structurally sound and free of all dirt, debris, and
	contaminants Concrete shall be porous and have a
PROFILE:	Concrete Surface Profile (CSP) level between 2 & 4
MOISTURE:	Substrate shall have Moisture Vapor Emission Rate (MVER) of 3lbs / 1000 ft <sup>2</sup> / 24 hr. or less
TEMPERATURE:	Ambient and substrate temps must be above 35°F and Relative Humidity should not exceed 65%

# SURFACE PREPARATION:

SURFACE FREFARATION.		
	<b>Perform Moisture Test</b> using Calcium Chloride concrete moisture test kit per ASTM F1869 1 test/1000 ft <sup>2</sup> is recommended.	
	<b>Patch</b> all depressions, divots and cracks using 4900 5-minute Crack Weld, 4930 Polyurea Crack & Spall Filler, or Divot Patch to reduce the ability to see the defect through the epoxy coating.	
	<b>Concrete</b> should be mechanically profiled and prepared to produce a Concrete Surface Profile (CSP) level between #2 & #4 according to the (ICRI) Guideline No.03732.	

PLEASE REVIEW SAFETY DATA SHEETS (SDS) & CHEMICAL SAFETY GUIDE FOR SAFETY AND PRECAUTIONS

# **ENVIRONMENTAL FACTORS:**

Working times are affected by environmental conditions. Large masses of mixed and/or heated material will have shorter pot-life. Keep material core temps between 50-75°F. In elevated temps consider icing buckets to reduce product temps and cold climates use pail warmers

4800 MIXING STEPS:	Pour pre-mixed A-Component and B-Component into a clean 5-gallon bucket (If mixing bulk kit be sure to follow specified 3A:1B ratio)
	Mix A & B Components using drill at slow speed for 2 to 3 minutes. Slowly add optional 41 Accelerators during this step.
	Transfer mix to new mixing vessel
	<b>Continue to mix</b> for an additional 30 seconds to ensure the components are thoroughly blended.

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# **4800 APPLICATION STEPS:**

COVERAGE RATES OVER CONCRETE SUBSTRATE:

1<sup>ST</sup> COAT 150-225 FT<sup>2</sup> / GAL @ 8-12 MILS WET FILM

2<sup>ND</sup> COAT 175-250 FT<sup>2</sup> / GAL @ 8-12 MILS WET FILM

# APPROXIMATE WORKING TIMES: 45 MIN @ 75°F

100 100	<b>Pour a band</b> of mixed material out onto the floor roughly 6-8" wide. Begin by cutting-in the concrete stem walls and around the edges with a chip brush or weenie roller. Always keeping a wet edge, do not work more than 15-20 min ahead of main body of the floor.
	<b>Begin spreading</b> with the Easy squeegee. Work material evenly to a film thickness of approx. 8-12 Mils.
11.	Perform a Single Backroll with the 3/8" nap roller on the entire surface by walking into the wet material wearing spike shoes and roll perpendicular to your first direction of application. Make sure to avoid ponding/puddles Cross rolling is not recommended.
STOP	Allow system to dry typically standard 12-24 hours (standard) at 75°F 2-6 hours (accelerated).

test the material for their application and conditions prior to using the product.

# **TEMPERATURE:**

The product was tested at ambient temperature (75°F -77°F). Results WILL vary when product is used at temperatures different from testing temperature. The pot life, gel time, and cure time is generally longer for colder temperature applications, and shorter for higher temperature applications. Physical properties are also impacted and dependent upon temperature.

# **SLIP RESISTANCE:**

OSHA and the American Disabilities Act (ADA) have now set enforceable standards for slip-resistance on pedestrian surfaces. The current coefficient of friction required by ADA is .6 on level surfaces and .8 on ramps. Versatile High-Performance Coatings recommend the use of angular slip resistant aggregate in all coatings or flooring systems that may be exposed to wet, oily, or greasy conditions. It is the contractor and end users' responsibility to provide a flooring system that meets current safety standards. Versatile High-Performance Coatings or its sales agents will not be responsible for injury incurred in a slip and fall accident

# WARRANTY:

Versatile High-Performance Coatings guarantees that this product is free from manufacturing defects and complies with our published specifications. If the buyer proves that the goods received do not conform to these specifications or were defectively manufactured, the buyer's remedies shall be limited to either the return of the goods and repayment of the purchase price or replacement of the defective material at the option of the seller. Versatile High-Performance Coatings (herein referred to as "seller") makes no warranty, expressed or implied, regarding the use of its products. Since use of this product is beyond the seller's control, the buyer assumes all risk of use. Seller's obligation shall be to replace material if found defective. Seller shall not be liable for any damage, injury, loss, direct or consequential, resulting from the use of its products. End user must determine if substrate is suitable for coating application before installing.

# **TECHNICAL SERVICES:**

Technical services can be obtained by contacting Versatile High-Performance Coatings directly at 214-807-6878.

# CLEAN-UP:

Immediately clean up splatter marks and tools with MEK or Acetone. Clean hands and exposed skin with mild soap and water, and/or citrus based hand cleaner.

# **DISCLAIMER:**

All information provided in this technical data sheet is based on laboratory data. It is the responsibility of the customer to

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