



Iso-Flex® Barrier Coat 650-HD

PRODUCT DESCRIPTION

Iso-Flex Barrier Coat 650HD is a two-component, 100% solids epoxy coating that effectively reduces the moisture vapor emission rate from up to 25 lbs. per 1000 sq. ft. per 24 hrs. to below 3 lbs. per 1000 sq. ft. It is a low odor, low VOC vapor retarding coating.

BASIC USES

Iso-Flex Barrier Coat 650HD is used on concrete as a vapor retarder when excessive moisture vapor drive prohibits the application of surface coatings. Iso-Flex Barrier Coat 650HD can be applied to on grade or below grade concrete slabs, split slabs containing buried insulation or waterproofing membranes and concrete slabs over unvented metal pans. The Iso-Flex Barrier Coat 650HD is applied to concrete slabs that exhibit a moisture content of the surface greater than 3 percent, exceeds a moisture vapor drive test of 3 lbs/1000ft² (but no more than 25 lbs/1000ft²) over a 24hr period.(ASTM F1869) or has up to 100% relative humidity (ASTM F2170).

ADVANTAGES

- Low odor and low VOC.
- Single coat application.
- Permits the coating of high moisture content concrete slabs.
- Relatively fast dry times for quicker turnovers.
- Alkaline resistant.
- Treats new concrete after 10 days.

LIMITATIONS

- Application must be to a clean, surface dry, sound substrate.
- Retarding vapor release from a concrete slab that is subjected to freezing temperatures can lead to freeze/thaw deterioration of the slab
- Install between 50°F and 90°F.
- Does not seal cracks and joints.

PACKAGING

Available in 3 and 5 gallon units.

STANDARD COLORS

Clear

TECHNICAL DATA FROM LABORATORY TESTS

(Field Properties May Vary)

Property	Test Method	Test Results
VOC	—	>10 g/l
Weight per Gallon	ASTM D1475	9.3 lbs/gal
Solids, by weight	EPA – Method 24	99.5% ± 0.5
Hardness (Shore D)	ASTM D2240	80
Mixed viscosity	ASTM D2196 Brookfield RVT No.5 @ 20 RPM @ 75°F	990 cps
Flash Point	ASTM D56	>200°F
Cure Time	ASTM C920	8 hrs@70°F
Recoat Time		5-24 hours
Pot Life @ 77°F	—	20 minutes
Coverage rate	Varies with MVTR	100-150 sq ft/gal
Water Absorption	ASTM C413	<0.2%
Bond Strength	ASTM D4060	350 psi, concrete failure

INSTALLATION

Surface Preparation

Iso-Flex Barrier Coat 650HD should be applied to clean, dry or surface dry, sound concrete that meets concrete standards as defined in the American Concrete Institute Committee 201 Report “Guide to Durable Concrete”. Surfaces must be free of adhesives, coatings, curing compounds, sealers, efflorescence, dust, grease, oils and any other material that will interfere with the adhesion or cure of the Iso-Flex 650HD. Prepare surface by shot blasting to a concrete surface profile of 3 to 4. Grinding should be used only in areas inaccessible to shot blasting. Remove all surface dust.

The concrete surface to receive the Iso-Flex 650HD must be at least 5°F above the dew point temperature. Do not apply when the ambient relative humidity is above 95%.

Joints and Cracks

Non-moving joints and crack should be routed and cleaned. These conditions can be filled with a thickened Iso-Flex 650HD.

Moving joints must be thoroughly cleaned and edges must be primed with the Iso-Flex 650HD. Allow the Primer to cure prior to caulking.

Application

Mix and apply the Iso-Flex Barrier Coat 650HD, base resin and cure. Mix only full units and apply immediately.

Iso-Flex Barrier Coat 650HD may be applied by a notched squeegee and roller to the coverage rate as determined by the prior moisture vapor testing. If no testing was performed, apply at 100 sq ft/gal. Tools may be cleaned with water.

Coverage Rate

Coverage rate will depend on the WVT of the concrete slab:

<u>Vapor Rate</u> (ASTM F1869)	<u>Coverage Rate</u>
3-10 lbs/1000 ft ² /24 hrs.	150 ft ² /gal
10-15 lbs/1000 ft ² /24 hrs	125 ft ² /gal
15-25 lbs/1000 ft ² /24 hrs	100 ft ² /gal

<u>Relative Humidity</u> (ASTM F2170)	<u>Coverage Rate</u>
Up to 85%	150 ft ² /gal
85% to 90%	125 ft ² /gal
90% to 100%	100 ft ² /gal

The Iso-Flex 650HD must cure a minimum of 5 hrs (substrate temperature above 70°F) to a maximum time of 24 hrs prior to installing Iso-Flex Coating and Caulking materials. Other manufacturer's waterproofing and cementitious products must be tested for compatibility with the Iso-Flex 650HD.

PRECAUTION

Iso-Flex Barrier Coat 650HD is an epoxy/amine based product and must be used with adequate ventilation and personal protection. Refer to the Material Safety Data Sheet for detailed health and safety information prior to use.

WARRANTY

LymTal warrants that its products are manufactured free of defects and conform to the technical data listed. Under this warranty we will replace, at no charge, any material proven defective when applied in accordance with our written instructions for applications recommended by us as suitable for subject product. LymTal shall not be liable for any injury, loss or damage, direct or consequential, arising out of the use of the product.

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LymTal International, Inc.

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