

# Epoxy.com Product #830

# Moisture Vapor Treatment

# DESCRIPTION

Epoxy.com Product #830 is a two component modified epoxy system designed to seal concrete and reduce moisture vapor transmission prior to applying finished flooring. Epoxy.com Product #830 has proven to reduce moisture vapor emissions and be resistant to damage from high alkalinity. Epoxy.com Product #830 is an environmentally friendly material containing no hydrocarbons or other solvents making it zero (0) VOC.

# ADVANTAGES

- Reduces moisture vapor transmission rate through concrete.
- Provides excellent resistance to highly alkaline conditions.
- Gives excellent bond to properly prepared concrete.
- Has convenient 2:1 mixing ratio.
- High physical properties.
- Can be rapidly surfaced with a variety of finished flooring materials.

### **CONSIDERATIONS**

- Substrate temperature must be a minimum of 55oF before, during and 72 hours after installation.
- Must have effective vapor barrier directly under substrate.
- For use only on properly prepared surfaces; must be free of dirt, waxes, curing agents and other foreign materials.
- Does not function as a crack reflective membrane.

## **TYPICAL USES**

- Epoxy.com Product #830 is designed as a negative side moisture vapor retarder to reduce moisture vapor transmission through concrete.
- Epoxy.com Product #830 can also be an effective primer for fast recoat under Epoxy.com flooring systems.

## COLOR

Translucent Red

# COMPOSITION

Epoxy.com Product #830 is a highly cross-linked, alkaline resistant epoxy composition.

# **TYPICAL PROPERTIES & PERFORMANCE DATA**

Tensile Strength -ASTM-D-638	10,400 psi
Tensile Elongation -ASTM-D-638	2 - 4%
Modulus of Elasticity -ASTM-D-638	2500 psi
Bond Strength to Concrete -ASTM-D-4541	400-500 psi 100% Concrete Failure
Permeability - ASTM E-96	1Coat (10-12 mils) - 0.09 Perms 2 Coats (20 mils total) - 0.04 Perms
Water Vapor Transmission -Grams/hr/sq. meter ASTM-E-96	1 coat - 0.023 2 coats - 0.012
Alkaline Resistance ASTM-D-1308	
7 day Immersion	10% Sodium Hydroxide - unaffected 50% Sodium Hydroxide - unaffected
14 day Immersion	10% Sodium Hydroxide - unaffected 50% Sodium Hydroxide - unaffected
Hardness Shore D - ASTM-D-2240	85
VOC	Zero
Water Absorption - ASTM-D-570	nil
Mix Ratio	2:1 by Volume
Pot Life	25-35 Minutes
Recoat Time	Minimum 4-6 Hrs Maximum 72 Hrs.

### APPLICATION

#### SURFACE PREPARATION

Surface preparation is the most critical portion of any successful resinous flooring system. All substrates must be properly prepared as outlined in Epoxy.com <u>Surface Preparation Guide</u>. Work must be performed by trained or experienced contractors or maintenance personnel.

Epoxy.com Product #830 is a moisture vapor suppressant for concrete substrates. Surface and air temperature must be a minimum of 55oF during installation and cure.

Concrete surface must be free of dirt, waxes, curing agents, any other foreign materials, and must be structurally sound. Surfaces should be vacuum shot blasted to "open" surface porosity or by diamond grinding with coarse stones. Surface profile must be a minimum CSP-4-CSP-5 profile according to International Concrete Repair Institute Guideline #03732.

Concrete surfaces should be tested for moisture transmission according to ASTM-F-2170 (Relative Humidity in Concrete Floor Slabs using in situ probes) and ASTM-F-1869 (Measuring Moisture Vapor Emission Rate of Concrete Subfloor using Anhydrous Calcium Chloride).

Epoxy.com Product #830 may be applied in a single coat of 12 mils (130 sq.ft. per gallon) when relative humidity readings are below 95% or MVT readings are below 8# per 1000 sq. ft./24 hrs. Higher readings require consultation with Epoxy.com Technical Services and may require a second coat of Epoxy.com Product #830 of 10 mils (160 sq. ft. per gallon).

Fill all cracks and non-moving joints with Epoxy.com Product #830. If material continues to disappear into the void, add fumed silica to get a gel consistency and "putty" into the void to completely seal. Detailing with Epoxy.com Product #32 membrane and glass mesh is done after the Epoxy.com Product #830 application.

#### **MIXING & SPREADING**

Stir resin and hardener separately prior to mixing. Mix ratio is 2 parts resin Part A to one part hardener Part B. Pour together and mix thoroughly for 60-90 seconds. Apply at the rate of 120-130 sq.ft./gal. Apply extra material to areas showing penetration and soaking into the concrete. All areas should show a uniform gloss and a uniform 12 mils minimum thickness.

Maximum recoat time for Epoxy.com Product #830 is 72 hours. It may be advantageous to prime with Epoxy.com Product #899 primer or a second coat of

Epoxy.com Product #830 at 200-250/sq. ft. and lightly broadcast 30 mesh silica to help achieve a good mechanical bond.

For areas showing moisture vapor greater than 8#/1000sq.ft/24 hours or humidity readings greater than 95% consult with Epoxy.com Technical Department.

#### FOR INDUSTRIAL USE ONLY KEEP AWAY FROM CHILDREN

For more information please contact:

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