Eco-FLB™



Product: Product – Eco-FLB is a solvent free, TDI free, single component, liquid applied. Water catalyzed, polyurethane elastomeric waterproofing base membrane.

Features:

Seamless	Elastomeric
Low Odor	Patching or Filling Concrete
Non-Gassing	Fast-Curing

TECHNICAL DATA		
Coverage Rate	50 ft² per gallon (4.65 m² per 3.78 litres)	
Volatile Organic Compound, VOC ASTM D2369-81	<55 g/L (<0.5 lb/gal)	
Ultimate Elongation (ASTM D412)	675 <u>+</u> 10%	
Tear Resistance, Die C (ASTM D624	250 pli <u>+</u> 25 pli, 44 <u>+</u> 5 kNm	
Total Solids, Weight (ASTM D-2369)	95 <u>+</u> 2%	
Total Solids, Volume (ASTM D-2697)	93 <u>±</u> 2%	
Water Absorption (ASTM D471)	0.05% by weight	
Shore A Hardness (ASTM D2240)	60 <u>+</u> 5	
Tensile Strength (ASTM D412)	1350 psi <u>+</u> 150 psi 9.3 <u>+</u> 1 MPa	

GENERAL PRODUCT INFORMATION		
STORAGE:	Materials should be stored indoors between 65°F (18°C) and 90°F (32°C).	
SHELF LIFE:	Six months from date of manufacture.	
PACKAGING OPTIONS / PART NUMBERS:	Eco-FLB Eco-FLB A = 9013353 (5 gallons) A = 9013354 (50 gallons) B = 9013670 (vial) B = 9013671 (1/2 pint)	
LIMITATIONS:	This product is applied as part of a system and requires a primer and topcoat. Concrete must exhibit 3000 psi minimum strength. Concrete surfaces to be coated must be free of loose particles, and shall be without ridges, projections, voids and concrete droppings that would be mechanically detrimental to coating application or function. New concrete must be cured for 28 days. Uncured materials are sensitive to heat and moisture.	

PLEASE SEE MATERIAL SAFETY DATA SHEET (MSDS) FOR HANDLING PROCEDURES. USE PRODUCT AS DIRECTED.

KEEP OUT OF THE REACH OF CHILDREN.

PRELIMINARY FLOOR INSPECTIONS

CHECK THE TEMPERATURE: Floor temperature and materials need to be above 40°F (4.4° C). **NOTE**: *Higher temperature application will yield shorter work times*.

CHECK THE CONCRETE: Concrete must be structurally sound and sloped for proper drainage. Tennant assumes no liability for substrate defects. If you suspect the concrete has been sealed or coated, call Tennant Company tech support for further instructions.

CHECK FOR MOISTURE: Concrete must be dry before application of this floor coating material. Concrete moisture testing must occur. Calcium chloride testing or in-situ relative humidity testing is recommended. Readings must be below 3 pounds per 1,000 ft² (1.5 kg per 92.9m²) over a 24-hour period on the calcium chloride test or below 75% relative internal concrete humidity. Test methods can be purchased at www.astm.org, see ASTM F1869 or F2170, respectively or follow manufacturer's instructions. If moisture issues are present, the use of Eco-MVS may be a consideration; see appropriate System Guide and/or call Tennant Company Technical Support for further instructions.

APPLICATION EQUIPMENT			
Protective clothing	18-24" 1/16" Notched rubber squeegee		
Spiked shoes	Roller assembly (18")		
Jiffy® mixer blade [Tennant Part #08643-5]	Medium (3/8") nap roller		
Slow speed drill (500 rpm or less)	Sand, (16-30 mesh) Aggregate*		
Paint (chip) Brushes	-		

*SAND SUPPLIERS:

Premier Silica - <u>www.premiersilica.com/index</u> AGSCO - <u>www.agsco.com/index.html</u> Abrasives, Inc. - <u>www.abrasivesinc.com/</u>

Smalley & Company - www.smalleyandcompany.com/default.aspx

ASSEMBLE EQUIPMENT: Due to the limited pot life of the material, all application equipment, etc. should be ready for immediate use. (Clean roller with tape to remove any residual lint.)

SURFACE PREPARATION

Eco-FLB must be applied over Eco-FLP™-E or Eco-FLP™-U. See appropriate Product Bulletin for details.

REPAIRS

See Eco-Flex System Guide for repair instructions.

APPLICATION - BASE COAT - ECO-FLB

COVERAGE RATE: 50 sq. ft. per gallon (4.65 m² per 3.78 litres).

PREMIX using a Jiffy® mixer blade and slow speed drill. (This is required for 5-gallon (18.9 litres) units. Roll or use a drum mixer to mix the 50-gallon units.)

MIX THOROUGHLY UNTIL A HOMOGENEOUS MIXTURE AND COLOR IS OBTAINED. Use care not to allow the entrapment of air into the mixture. Divide the 5 gallon pail into two 2-1/2 gallon units.

ADD 2-1/2 QUARTS OF WATER AND MIX until water disappears into coating. **NOTE:** Using warm water in the winter and cool water in the summer will help increase workability.

Catalyst can be added to Eco-FLB to decrease cure times. See guidelines below.

Over 85°F: none needed

70°F add 1/2 vial per 2-1/2 gallons

Do not use more than 2 vials per 2-1/2 gallons

If catalyst is used, first add the water to the Eco-FLB and then add the catalyst before starting to mix.

IMMEDIATELY POUR ALL OF THE MIXED MATERIAL onto the floor in a single bead.

PUSH THE 1/16" (1.60 mm) NOTCHED SQUEEGEE at an even speed with down pressure to spread the material.

START THE SECOND AND REMAINING PASSES by pushing material parallel to the first stroke. Hold the bead of material near the center of the bar and push at an even speed with slight down pressure. **NOTE:** The use of spiked shoes will allow freedom of movement on the wet floor. **CAUTION:** The surface will be slippery.

BACKROLL THE MATERIAL with a 3/8" (10 mm) nap roller for a smooth uniformed appearance. Backrolling is required to even out squeegee lap marks and the coating mil thickness.

ALLOW ECO-FLB TO THICKEN UNTIL IT CAN BE BROADCAST WITH 16/30 MESH SILICA SAND WITHOUT THE SAND SINKING INTO THE MEMBRANE. Time for thickening is dependent on atmospheric conditions but should be manipulated by using a combination of catalyst and water temperature to average approximately 45 min. The amount of sand used will vary. (Normal usage is 30 lbs per 100 sq. ft.)

WHEN THE ECO-FLB IS STIFF ENOUGH TO SUPPORT THE WEIGHT OF THE INSTALLER WITHOUT DAMAGING THE COATING OR WHEN COATING IS DRY (approximately 3-4 hours), remove loose aggregate.

At 70°F (21°C) and 50% relative humidity, allow coating to cure a minimum of 16 hours before proceeding to subsequent coats. To obtain proper adhesion between coats, it is imperative that recoating be done within 24 hours.

TECHNICAL SUPPORT

For any preparation or application questions, please call Tennant technical support at 800-228-4943, option 4 (US & Canada), 800-832-8935 (International).

DISPOSAL

Dispose of all excess material, packaging and other waste in accordance with federal, state and local regulations.

MAINTENANCE GUIDELINES

Allow floor coating to cure at least one week before cleaning by mechanical means (e.g., sweeper, scrubber, disc machine).

Care: Proper maintenance will increase the life and help maintain the appearance of your new Tennant floor coating. Sweep and scrub your new coating regularly, as dirt and dust are abrasive and can quickly dull the finish, decreasing the life of your coating. Remove spills quickly as certain chemicals may stain and could possibly permanently damage the finish.

Use soft nylon brushes or white pads on your new floor coating. Any brush more abrasive than a soft nylon or white pad can cause premature loss of gloss.

Detergent: Tennant has a full range of detergents--general purpose to heavy duty--for your cleaning needs. For assistance in determining which detergent is right for your facility or for additional technical information call: 800-228-4943, option 4 (US & Canada), 800-832-8935 (International).

Caution: Avoid scratching or gouging the surface. All floor coatings will scratch if heavy objects are dragged across the surface.

Do not drop heavy or pointed items on the floor as this may causing chipping or concrete popouts in the case of a weak cap.

Rubber burns from quick stops and starts can heat the coating to its softening temperature, causing permanent marking.

Repair: Repair gouges or scratches or chip outs as soon as possible to prevent moisture or chemical contamination.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

This warranty applies to all Specialty Surface Coatings, with the following exceptions: Eco-Hard-N-Seal™, Eco-EDP™ (Electrostatic Dissipative Primer), Eco-EDE™ (Electrostatic Dissipative Epoxy), and SDS™ (Static Dissipative System). These products have a separate warranty policy.

Tennant Company warrants its Specialty Surface Coatings to be free from defective manufacture, improper formulation, and defective ingredients. Warranty covers replacement of materials only.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

In no event shall Tennant or Seller be liable for any incidental, consequential, or special damages arising out of the use of Tennant Specialty Surface Coatings. THE ONLY REMEDY OF THE USER OR BUYER, AND THE ONLY LIABILITY OF TENNANT AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES, OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE) SHALL BE REPLACEMENT OF THE PRODUCT OR, AT THE ELECTION OF TENNANT OR SELLER, RETURN OF THE PURCHASE PRICE.

No representative of Tennant has authority to give any other warranty or assume other liability. The presence of a Tennant employee during the application of Tennant's Specialty Surface Coatings does not extend or alter the warranty or limitations in any manner whatsoever.