

# Technical Data Sheet

## EcoCoolRoof® EX

DIVISION 7 FLUID-APPLIED WATERPROOFING

Urban Solution Korea Co., LTD.



The EcoCoolRoof® System permanently adheres to virtually any type of substrate and provides protection against harmful elements throughout the life of the roof. It is fully reinforced with stitch-bonded fabric for thickness reliability, tensile strength, and flexibility. It is highly UV resistant, chemical resistant, fire retardant, mold/algae resistant, and vapor permeable.

### PHYSICAL PROPERTIES

ECOCOOLROOF® EX	
Finish	Flat
Standard Colors	White
Volume Solids	56.69% (ASTM D2697)
Weight Solids	70.26% (ASTM D1644)
VOCs	< 40g/l
Density	11.7 lb/gal
Viscosity	Brookfield LVT: 40800 cPs (ASTM D2196)
	Stormer: 126.0 KU (ASTM D562)
Elongation	Initial @ 23°C: 293.62% (ASTM D2370)
	After 1000hrs @ 23°C: 139.41% (ASTM D2370)
Tensile Strength	268.08 psi (ASTM D2370)
Tear Resistance	80 lbf/in (ASTM D624)
Accelerated Weathering	1,000hrs No Cracking or Checking: Pass (ASTM D4798)
Low Temp Flexibility	1,000hrs @ -23°C No Cracking or Breaking: Pass (ASTM D522)
Adhesion	5.1 pli (ASTM D903/C794)
Permeance	45.40 perms (ASTM D1653)
Fungi Resistance	0 rating (ASTM G21)
Dry time/Full Cure	1-3 hours touch dry @ 21°C, 70% RH

For more specific information on the EcoCoolRoof® System, please refer to our Technical Data Sheet or Method Statements.

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### PRODUCT DESCRIPTION

The EcoCoolRoof® EX (Basecoat, Finishcoat) is a premium grade water-based Fluorinated CHMA-Acrylic Cool roof waterproofing system that meets or exceeds ASTM D-6083 standards and exemplifies "Cool Roof" breathable technology. The EcoCoolRoof System can be applied to various fully adhered existing substrates and to new roofing applications.

### RECOMMENDED USES

- ▶ New and Aged Concrete Roofs
- ▶ Waterproofing Metal Roofs
- ▶ Waterproofing Plywood Decks and Rigid Insulation Boards
- ▶ Over smooth built-up roofing and single-ply roofing (EPDM, Hypalon, Modified Bitumen, PVC, and TPO).
- ▶ Waterproofing Parapet and Exterior Walls
- ▶ Flashing applications

### GENERAL APPLICATION

For more specific information on surface preparation and application method, please refer to EcoCoolRoof® System Technical Data Sheet or Method Statements.

As a minimum: Surface must be clean of any laitance material, free of any dirt, grease, oils, chemicals, and particles that may cause adverse effects for maximum adhesion to the substrate. Clean by using compressed air, power sweeping, pressure washing, and in some cases power grinding may be required.

### EXECUTION

Use appropriate primer for the first coat on the substrate. Allow to dry. Reinforce areas susceptible to leaks. (roof perimeter, roof penetrations, corners, seams, transitions, bases of HVAC equipment etc.) using EcoCoolRoof® EX Basecoat and EcoRoof® Fabric.

Full fabric reinforcement: Apply EcoCoolRoof® EX Basecoat to the substrate 0.6 ~ 1.2 m<sup>2</sup>/L depending on substrate, and immediately embed EcoRoof® Fabric to wet EcoCoolRoof® EX Basecoat. Apply second coat of EcoCoolRoof® EX Basecoat and fully saturate EcoRoof® Fabric at a rate of 1.2 ~ 1.8 m<sup>2</sup>/L. Wet on wet application will be use for fabric reinforcement. Continue until applicable area is covered.

Allow to cure before application of EcoCoolRoof® EX Finishcoat.

### COVERAGE RATES

\*Coverage Rates may differ with site conditions and porosity of substrate.

#### THEORETICAL

##### EcoCoolRoof® EX Basecoat:

~ 1 m<sup>2</sup>/ Liter (205 ft<sup>2</sup> / 5 gal) 2 coats

##### EcoCoolRoof® EX Finishcoat:

~ 1.7 m<sup>2</sup>/Liter (350 ft<sup>2</sup> / 5 gal) 2 coats

##### EcoRoof® Fabric (1m x 100m):

~ 100 m<sup>2</sup> Per roll

Spraying is not recommended for Basecoat Applications. The finishcoat application can be applied using airless spray equipment.

### CLEAN UP

Thoroughly rinse with clean water

### PACKAGING & SHELF LIFE

EcoCoolRoof® is packaged and shipped in 18L pails (5 US gal) with a shelf life of 18 months when unopened and stored at max 49°C, min 1°C. Keep from freezing.

### SAFETY AND HANDLING

Please refer to the individual Material and Safety Data Sheet for information on handling of this material.

### LIMITATIONS AND PRECAUTIONS

EcoCoolRoof® EX should generally not be used for projects that requires a vapor barrier such as in cold storage tanks. EcoCoolRoof® EX is water based and will be subject to freezing when temperatures are below 0°C. Do not apply EcoCoolRoof® EX if rain, dew, snow, or if temperatures fall below 0°C. Furthermore, do not apply if any climatic conditions prevent full cure of the system during the recommended curing period.