

DURATITE Temporary Roof System DTR 100 & DTR 300

DuraTite® Temporary Roof System is a reactive silicate based solution that provides temporary roof for concrete deck structures. The combination of solutions, when applied, penetrate into concrete and reacts to form a protective gel barrier. This gel creates a sub-surface barrier against the ingress of water.

The DuraTite Temporary Roof System is made up of just 2 components. **DTR100** which is spray applied to the concrete surface and **DTR300** Activator which is then spray applied to activate the **DTR100**.

Key Features

Up to 6 months of protection from water penetration.

- Minimal labor for application.
- 100% trafficable within 8 hours of application.
- No change to surface of concrete.
- DOES NOT need to be removed for application of permanent roof system.

PRODUCT PROPERTIES

- Colorless, clear to slightly opaque, odorless, soapy feel
- Non-toxic & Biodegradable
- Percent non volatile solids 26.55%
- Specific gravity at 77°F (25°C) : 1.2
- Flash point - no true flash - boils at 214°F (101°C)
- Auto-ignition temperature - N/A Non-explosive
- Viscosity - 14.3 centipoise or 0.1172 Stokes
- Hazardous chemicals - Sodium Silicate (modified)
- pH 11.51

LIMITATIONS

DuraTite Temporary Roof System is not suitable for sealing volatile cracks as a result of structural defects or caused by mechanical damage.

The product is NOT suitable for sealing where segregation and voids are likely such as construction joints, pour joints, gaps in the structure or gaps around penetrations.



APPLICATION

Basic Requirements

DuraTite Temporary Roof System must be applied to a clean and dry concrete surface, at least 7 days old. If the surface is not clean, it is recommended you use the following ACR® products. Chemical cleaning may require multiple applications and the use of different products to achieve complete cleaning. Certain types of cleaning equipment may improve performance and speed of application when applying chemical cleaners, contact the Technical Department for a list of approved equipment and cleaning methods.

ACR Concrete & Masonry Cleaner
ACR Concrete & Masonry Etch
ACR Emulsifying Cleaner

Contact the Technical Department for help and directions for which cleaning product will provide the best result for a clean surface.

Do not apply where concrete when surface temperatures are below +40°F (+4°C) or above +100°F (+35°C). Use an infrared thermometer through out the application to ensure surface temperatures are within range.

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PERFORMANCE TIMELINE

DuraTite Temporary Roof System utilizes a enzymatically modified sodium silicate gel-forming technology to stop water penetration. DuraTite Temporary Roof System penetrates into the concrete to create a barrier, stopping the water from within the concrete rather than on the surface. The chemical reaction is catalytic in nature and requires between 3 – 5 days for the products to reach full water stopping capabilities. Full waterproofing should not be expected until complete gel formation has been achieved.

NOTE: The surface will continue to accept water, so a flood test will be required to determine if full waterproofing has been achieved.

APPLICATION METHOD

1. Locate all cracks and flood with DTR100 Seal-er. Once all cracks have been sufficiently treated, spray the solution to the remaining area at the rate of between 180-220 square feet per gallon (4-6 square meters per liter).
2. Once the surface becomes dry to the touch, but not more than 5 hours after application, spray DTR300 Activator at the rate of 65 square feet per gallon to the already treated areas.

APPLICATION RATES

DTR100: 1 gallon per 180-200 square feet (1 liter to 5 square meters) on average.

DTR300: 1 gallon per 65 square feet (1 liter to 1.5 square meters) on average.

NOTE: Can vary depending on substrate absorption, which varies depending on the age of concrete and original density.

STORAGE AND SHELF LIFE

No known limit to shelf life. Keep container sealed and avoid prolonged exposure to direct sunlight. Always agitate drum or container before use. These methods should be practiced while in shipping, stored, and on-site.



DuraTite DTR100 & DTR300

TESTING

The NSF/ANSI 61 is a set of national standards that relates to water treatment and establishes stringent requirements for all equipment and products that come in contact with either potable (drinking) water or products that support the production of potable water.

DuraTite Temporary Roof System has been UL Certified NSF/ANSI 61.

TESTING STANDARDS

- ASTM E514 Water penetration
- ASTM D1644 Non volatile Content
- NSF 61 Potable Water Certification
- ASTM C1568-08 Wind Uplift Approval
- ASTM C1202 Chloride Ion Resistance
- ASTM C39 Compressive Strength
- TAS 112 Permeability
- ASTM E108 Non combustible surface
- ASTM C-42 Compressive & Flexure Strength
- ASTM-C-666 Freeze/Thaw
- ASTM D-3960 Zero VOC's
- ASSHTO T-38 Moisture Vapor Transmission

PRECAUTIONS

Protect glass, wood and painted surfaces, terracotta and glass-glazed tiles, marble and travertine from over spray.

PACKAGING

DuraTite Temporary Roof Systems comes in the following sizes;

- 5 gallon (20 Liter) pails
- 55 gallon (200 Liter) pails

WARRANTY & SYSTEMS

The following warranties are available when using DuraTite Temporary Roof System :

DuraTite 1-Year Limited Liability Material Warranty

Project must be registered with the Technical Department to ensure validation of the Limited Material Warranty.

WARNINGS



DANGER! TOXIC IF SWALLOWED

This product contains Sodium Silicate and may be harmful if swallowed. Wash hands, face and any exposed skin thoroughly after handling. Keep container tightly closed. Do not eat, drink or smoke when using this product.

IF SWALLOWED: Immediately call a POISON CONTROL CENTER, doctor/physician. Rinse mouth.

See Safety Data Sheet for further details regarding safe use of this product. Safety Data Sheets for any Alchemco product may be obtained by contacting Alchemco, 3532 Mayland Court, Henrico, VA 23233. 800-610-2895 or emailing technical@alchemco.com or calling CHEMTREC 800-424-9300 (US) 703-741-5970 (International)