



CHEM-ROOF 550

One-component Water-based Elastomeric Waterproofing Roof Coating

PRODUCT DESCRIPTION

CHEM-ROOF 550 is a one component, elastomeric roof coating based on acrylic co-polymer for the protection of roofing. The coating system cures on exposure to atmosphere and forms a seamless membrane, which provides excellent flexibility, durability and weather resistance.

FIELDS OF APPLICATION

CHEM-ROOF 550 elastomeric roof coating is designed for protection of roofing against ponded water and wind driven rain. It has excellent weather resistance, high elasticity and excellent adhesion over virtually all sound roofing substrates. Among its applications are:

- Roofing substrates such as concrete, cement mortar, wood and metal.
- Over terrazzo tiles, asbestos roofs and asphalt roof felts.
- Protective coating over spray applied polyurethane foam and other materials that degrade by UV light.
- Under tiled areas in bathrooms, toilets, kitchens, etc.

PRODUCT FEATURES

- One component, liquid, and cold applied.
- Waterproof and weather proof.
- Excellent adhesion to concrete, steel, asphalt and many other substrates.
- Protective and decorative coating.
- Easy to apply by paint brush, paint roller or airless spray.
- Allows the substrate to breath.
- Excellent flexibility; bridges hairline cracks and small holes, etc.
- Stable under UV rays.

PACKAGING

Product	Packaging
CHEM-ROOF 550	5 GAL (18.925 LITERS) PAIL

TECHNICAL DATA

Property	Value at 25°C	ASTM Method
Density, Lb/Gal (Kg/L)	11.2 (1.35)	D-1475
Bond Strength to concrete	Concrete Failure	D-4541 Method C
Bond Strength to steel, Psi (MPa)	80 (0.56)	C-321
Elongation	>400%	D-638
Solid Content by weight	67%	-
Drying Time @ 550 micron	1 hour	-
Firm Set @ 550 microns	24 hours	-
Recoat Interval	24-72 hours	-
Standard Color*	White	-

*Other colors are available also, call for details.

Coverage: 5 Gal (18.925 Liters) of CHEM-ROOF 550 covers approximately 250 ft² (23.20 m²) at 550 microns total thickness.

Compatibility: CHEM-ROOF 550 can be applied over virtually all sound roofing substrates such as old masonry/concrete, new masonry/concrete/brickwork, bare iron, steel, aluminum, galvanized iron, wood and asphalt. Also, it can be applied over spray applied polyurethane foam and other materials that may degrade under UV rays.

APPLICATION DATA

Surface Preparation: The substrate must be sound, dry, clean and free from dust, dirt and other contaminations such as oil, grease, etc. Any major damages in the concrete, tiled roofs, sheet metal roofs or timber roofs should be repaired prior to application. Hairline cracks and small holes can be ignored, as the thick membrane will bridge small imperfections of the substrate.

Cracked roofing or other structural joints prone to movement must be treated with a fiberglass reinforced polyester scrim. A heavy brushed coat of CHEM-ROOF 550 is applied and the fiberglass reinforced polyester scrim is pressed firmly into the wet coat, without being pushed into any wide gaps. The membrane is allowed to dry before being finished with another coat of CHEM-ROOF 550.

For porous surfaces such as old weathered cement-based plaster, it is recommended to apply CHEM-SEAL 30W clear acrylic sealer or CHEM-ROOF 550 diluted 50% by volume with potable water as a primer to prevent air entrapment and blow out.

Limitations:

Minimum substrate temperature	41°F (+5°C)
Application to wet/water logged substrate	Not recommended
Minimum adhesive strength of pretreated substrate	218 Psi (1.5 N/mm ²)
Secure the lid tight when the pail is not in use	

Mixing: stir the CHEM-ROOF 550 thoroughly until achieving a uniform consistency. Take the required quantity into the paint tray for application and secure the lid tight.

Priming:

On all **new masonry**, new concrete and other surfaces: Dilute CHEM-ROOF 550 up to 50% by volume with potable water. Mix thoroughly and apply to whole surfaces as a seal and prime coat.

On **old masonry**, old concrete and other surfaces:

Option 1: prime the surface with one coat of CHEM-SEAL 30W Sealer in accordance with product's technical data sheet instructions. CHEM-SEAL 30W sealer is a fast-drying clear sealer that seals pores to prevent spalling and pitting also it enhances

the adhesion strength of CHEM-ROOF 550 to concrete substrate.

Option 2: dilute CHEM-ROOF 550 up to 50% by volume with potable water. Mix thoroughly and apply first coat as a seal and prime coat.

On bare metals, nail heads, screws, etc.: primer should be used prior to applying finished coats of CHEM-ROOF 550. CHEM-SEAL 30W or diluted CHEM-ROOF 550 (50% by volume with potable water) can be used for this purpose

Allow primer to dry prior to application of any top coat. CHEM-ROOF 550 is ready to apply using good quality paint roller, brush or airless spray. First coat shall be applied on the primed substrate to achieve uniform, neat smooth coating.

The re-coat interval of 24 hours to 72 hours should be observed between each coat. Apply the final coat to achieve uniform, neat smooth coating and allow it to dry completely.

Curing: allow the applied coating to cure for a minimum of 3 days prior to subjecting it for foot traffic.

CLEANING

Tools, equipment, spray unit, etc. can be cleaned immediately using clean water.

STORAGE

The product can be stored for minimum of twelve months at temperature from +10°C (50°F) to +30°C (86°F) in its original and unopened packing.

TECHNICAL ASSISTANCE

Please contact International Chem-Crete Corporation for Technical Personnel.

WARRANTY

LIMITED WARRANTY: International Chem-Crete Inc. warrants that, at the time and place we make shipment, our materials will be of good quality and will conform to our published specifications in force on the date of acceptance of the order.

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