Rhino Linings®

DURATITE™ 1395

Data Sheet

DESCRIPTION: DuraTite® 1395 is a ready-to use, high solids, single component, moisture cure, fluid applied, VOC-compliant, silicone coating suitable for use in new and recoat applications. As a standalone product, DuraTite 1395 forms a breathable membrane that provides elemental protection for architectural surfaces such as vertical walls, masonry, concrete, metal, single ply membranes and sprayed-in-place urethane foam systems. DuraTite 1395 contains no restricted VOCs and is resistant to chemical attack and abrasion. DuraTite 1395 can be successfully installed in a wide range of ambient temperatures and humidity levels. It is not affected by ponding water; however roofing systems should be designed and built to ensure positive drainage.

TYPICAL USES:

- Coating over spray polyurethane foam (SPF), concrete, masonry, metal and single ply membranes
- Commercial and industrial roof coating

FEATURES & BENEFITS:

- Fast drying
- Low VOCs
- UL 790 Class A Rating over non-combustible deck
- UL 790 Class B Rating over combustible deck
- CRRC Rated. Meets ANSI/CRRC S100 Standards
- Energy Star® Certified Product
- FM approved per Approval Standard 4470
- Extends roof life
- Can be successfully installed in a wide range of ambient temperatures and humidity levels
- Can be applied with high pressure airless sprayer, brush or roller
- Florida Product Approval (FL21842)

CHEMICAL PROPERTIES:	Test	Result
Specific Gravity (grams/cc) @ 77°F (25°C)	ASTM D-792	1.28
Specific Weight (lbs/gal)		10.67 (1.277 kg/l)
Viscosity (cps) @ 77°F (25°C)		4500 – 6500
Solids by Volume	ASTM D-2697	95% ± 2
Solids by Weight	ASTM D-1644	95% ± 2
Volatile Organic Compounds (g/l)	EPA Method 24	< 50
Flash Point	ASTM D-92	290°F (143.3°C)
Shelf Life - Unopened Containers		12 months

REACTION TIME & COVERAGE:	Result		
Dry to Touch*	1 hour		
Recoat Time* (min – max)	1 – 24 hours		
Cure Time* @ 100°F (37.8°C) w/ 90%RH 40°F (4.4°C) w/ 20%RH	2 hours 8 hours		
Theoretical Coverage**	DFT	WFT	Application Rate
	20 mil	21 mil	1.3 gal per roof sq. (4.921 liter per 9.29 m^2)
	25 mil	26 mil	1.6 gal per roof sq. (6.06 liter per 9.29 m^2)
	30 mil	32 mil	2.0 gal per roof sq. (7.57 liter per 9.29 m^2)

*Dry and cure times are dependent upon mil thickness and temperature & relative humidity at the time of application. High temperatures and high relative humidity will accelerate the drying & curing process, while low temperatures and low relative humidity will slow the process. ** Actual coverage rates will be determined by substrate texture, roof conditions, and the skill and experience of the applicator.

TYPICAL PHYSICAL PROPERTIES:	Test	Result
Hardness (Shore A)	ASTM D-2240	50 ± 5
Tensile Strength (psi) @ 73°F (22.8°C): 0°F (-17.8°C):	ASTM D 412	486 ± 10 700 ± 10
Elongation (%) @ 73°F (22.8°C): 0°F (-17.8°C):	ASTM D 412	267% ± 10 282% ± 10
Tear Resistance (pli) Die C:	ASTM D-624	33.7 ± 5
Permeability (perms):	ASTM E-96	5.9
Weathering/UV Resistance (5,000 hrs):	ASTM D-6694	No degradation

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DURATITE® 1395 *(continued)*:

TYPICAL PHYSICAL PROPERTIES:	**Test**	**Result**
Reflectivity (bright white):	ASTM C-1549	.70 aged 3 yr
Emissivity (bright white):	ASTM C-1371	.90 aged 3 yr
SRI Value (bright white):		86 aged 3 yr

PROCESS TEMPERATURE AND ENVIRONMENT CONDITIONS: DuraTite 1395 can be spray-applied using approved equipment. The system settings required to achieve quality coating application will vary depending on environmental and substrate conditions. The following recommended parameters will help ensure optimum quality.

Do not apply when roof surface is below 50ºF (10°C) or if rain is expected within 1 hour of application. Application below recommended temperatures will extend cure time.

Equipment	Processing Pressure	Equipment Output	Transfer Pump
High pressure airless sprayer	3500 psi (at gun)	3.0 gallons per minute	Minimum 5:1 feed

Hose (do not use hose used for acrylics or water borne coatings)	**Spray Tip**
BUNA-N jacketed with 3/4" ID	Reversible self-cleaning, >0.030 orifice, 50° fan tip

Silicone Temperature	Ambient Temperature	Substrate Temperature	Humidity
>65°F (18.3°C)	50 – 115°F (10 – 43.3°C)	50 – 135°F (10 – 57.2°C)	<85% RH

PREPARATION: Any physical damage to the roof must be repaired prior to coating application. Roof surface must be clean, dry and free of any mildew, oil, grease, dirt, loosely adhered roofing materials, or other foreign contaminants that would prevent proper adhesion. Any such contaminants must be removed from the application surface via power washer, and/or broom using the appropriate detergents and/or bleach and then roof surface rinsed with clean water. After contaminants are removed, and roof surface has been rinsed, application surfaces must be checked for compatibility. Always perform a coating adhesion test before doing the entire roof. Be aware that a primer may be necessary to enhance adhesion.

MIXING INSTRUCTIONS: DO NOT THIN. Prior to use, thoroughly mix DuraTite 1395 with an air or electrically driven power mixer for a minimum of 5 minutes. Mixer speed should be set fast enough to uniformly mix the entire container but not so fast as to introduce air into the coating while mixing. For 5 gal pail use a minimum 3" mixing blade, for drums use a minimum 6" mixing blade. Previously opened containers, or containers that have been stored for an extended length of time, may develop a skin on top of the coating, which must be removed prior to mixing.

APPLICATION INSTRUCTIONS: The successful installation of DuraTite 1395 will depend on the equipment capabilities and settings, the temperature of the coating in the container, ambient temperature and RH%, substrate temperature and moisture content, substrate type and condition. DuraTite 1395 is a moisture cure product. Do not use hose that has been used for acrylics or other waterborne coatings as the liner absorbs moisture and initiates the silicone cure process. It is the responsibility of the applicator to take these factors into consideration prior to installation. If material appears thickened due storage at cold temperatures, store material for a sufficient length of time in a warm area prior to application to bring material temperature to 70°F. No thinning or reducing is necessary.

SPF should be coated within 24 hours after foam has been sprayed and additional coats of DuraTite 1395 should be applied as soon as previous coat is dry and cured to ensure full, uniform adhesion.

It is recommended that the edges, joints, and seams, in the roof be precoated. A natural bristle brush or a medium nap roller can be used for touch-up and edge work, or for small areas that are not practical for spray application. Avoid rapid rolling to minimize pinholes and bubbling.

DuraTite 1395 may be applied in two or three separate coats of contrasting colors, each applied perpendicular to the previous coat. Application of multiple coats ensures proper coverage, cure rate, and to provide a continuous, durable film without pinholes. Each coat should be applied as soon as previous coat is dry and cured to ensure full, uniform adhesion. Typical cure time is 2 – 8 hours per coat depending on ambient conditions. If any contamination of a thoroughly cured surface occurs, it must be washed with a chemical cleaner before applying subsequent coats. Coating must be extended beyond the substrate to create a self-terminating flashing.

For improved aesthetics and durability #11 roofing granules may be installed in the topcoat.

It is the responsibility of the building owner(s) to verify that your roofing contractor maintains proper credentials, insurance, and licenses and is properly trained to safely install roof coating products.

CLEAN-UP: DuraTite 1395 cures by reacting with moisture. If equipment doesn't have moisture lock hoses, fittings and seals and will sit for prolonged periods of time, flush equipment including the spray gun and hoses with VM&P Naphtha or mineral spirits. Equipment without moisture lock components will allow moisture to gradually form cured material causing increased operating pressure and restricted material flow.

NOT RECOMMENDED FOR: Do not use for continuous immersion service, in cryogenic tank or cold storage roofing applications without a vapor barrier, or directly over modified Bitumen, asphalt or coal tar built-up roofing systems without a sealer.

SUBSTRATES: Vertical walls, polyurethane foam, concrete, masonry, metal and single ply membrane. Some applications may require a primer. Contact Rhino Linings Rep with any questions.

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DURATITE® 1395 *(continued)*:

HOW SUPPLIED: Chemical is packaged in 55 gallon (208 L) drum filled to 50 gallons with net weight of 535 pounds (242.7 kg) or 5 gallon (18.9 L) pail with net weight of 45 pounds (20.4 kg).

DuraTite 1395 White Part #: DT1395WHITE
DuraTite 1395 Grey Part #: DT1395GREYy

COLOR OPTIONS: Standard colors: white and gray. All other colors are custom matched for the specific application. Allow up to 20 days for non-standard colors. Color chips or samples must be furnished for all custom colors and samples must be approved by customer prior to mass production.

STORAGE: DuraTite 1395 should be stored between 35 – 75°F (1.7 – 23.9°C) out of direct sunlight.

SAFETY PRECAUTIONS: Health Considerations - Consult the Rhino Linings® Safety Data Sheets (SDS)

This chemical system requires the use of proper safety equipment and procedures. Please follow the Rhino Linings® product SDS and Safety Manual for detailed information and handling guidelines.

For Your Protection: The information and recommendations in this publication are, to the best of our knowledge, reliable. Suggestions made concerning the products and their uses, applications, storage and handling are only the opinion of Rhino Linings Corporation. Users should conduct their own tests to determine the suitability of these products for their own particular purposes and of the storage and handling methods herein suggested. The toxicity and risk characteristics of products made by Rhino Linings Corporation will necessarily differ from the toxicity and risk characteristics developed when such products are used with other materials during a manufacturing process. The resulting risk characteristics should be determined and made known to ultimate end-users and processors.

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CLASSIFIED UL ENERGY STAR PARTNER CRRC COOL ROOF RATING COUNCIL RATED PRODUCT FM APPROVED FL# 21842

Rhino Linings®
PROTECTION NEVER LOOKED SO GOOD™

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