



EC
ELEMENTAL
COATINGS



Ice-Lite

Anti-Icing Solution

ICE-LITE

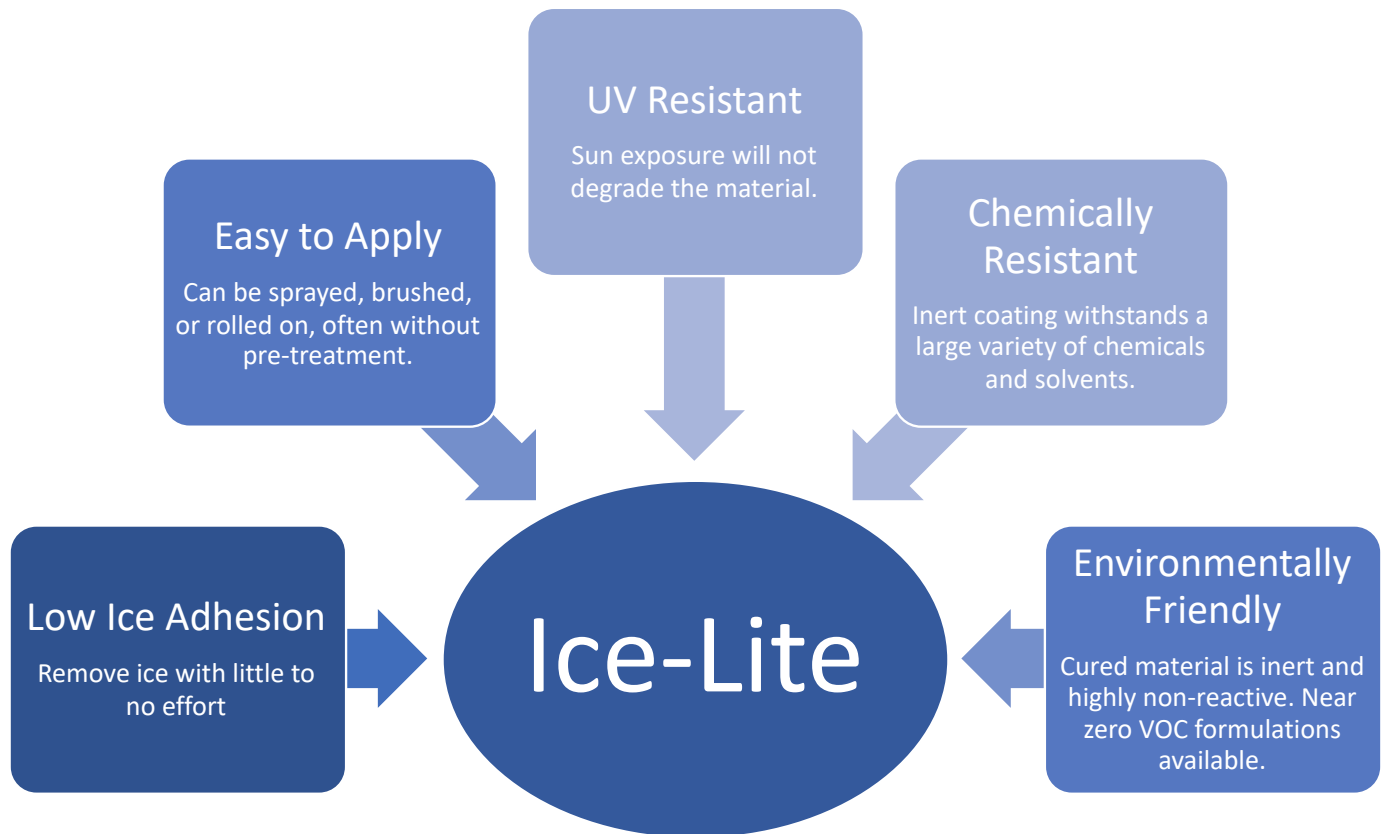
Ice-Lite is a solvent-based anti-icing coating, available in both silicone rubber and polyurethane formulations.

Ice-Lite reduces the ability of ice to stick to surfaces while maintaining exceptional durability under severe environmental conditions. This product helps minimize ice accumulation on a variety of different surfaces, including metals, wood, glass, concrete, and plastics. While it does not prevent ice buildup entirely, it does make it much easier to remove ice that does accumulate.

Ice-Lite offers the best ice shedding performance of any coating currently available.

KEY FEATURES

Ice-Lite comes in multiple formulations and is fully customizable to meet your unique requirements. Each formulation offers high durability, low ice adhesion, chemical and UV resistance, weatherability, and much more.



ICE-LITE FORMULATIONS

A coating of Ice-Lite on select materials creates an ice-repellent surface that is stable under high shear flows and high temperatures while exhibiting non-sticking characteristics. Our two main formulations offer protection on surfaces ranging from residential porches to aircraft wings.

Ice-Lite Silicone-Based Series

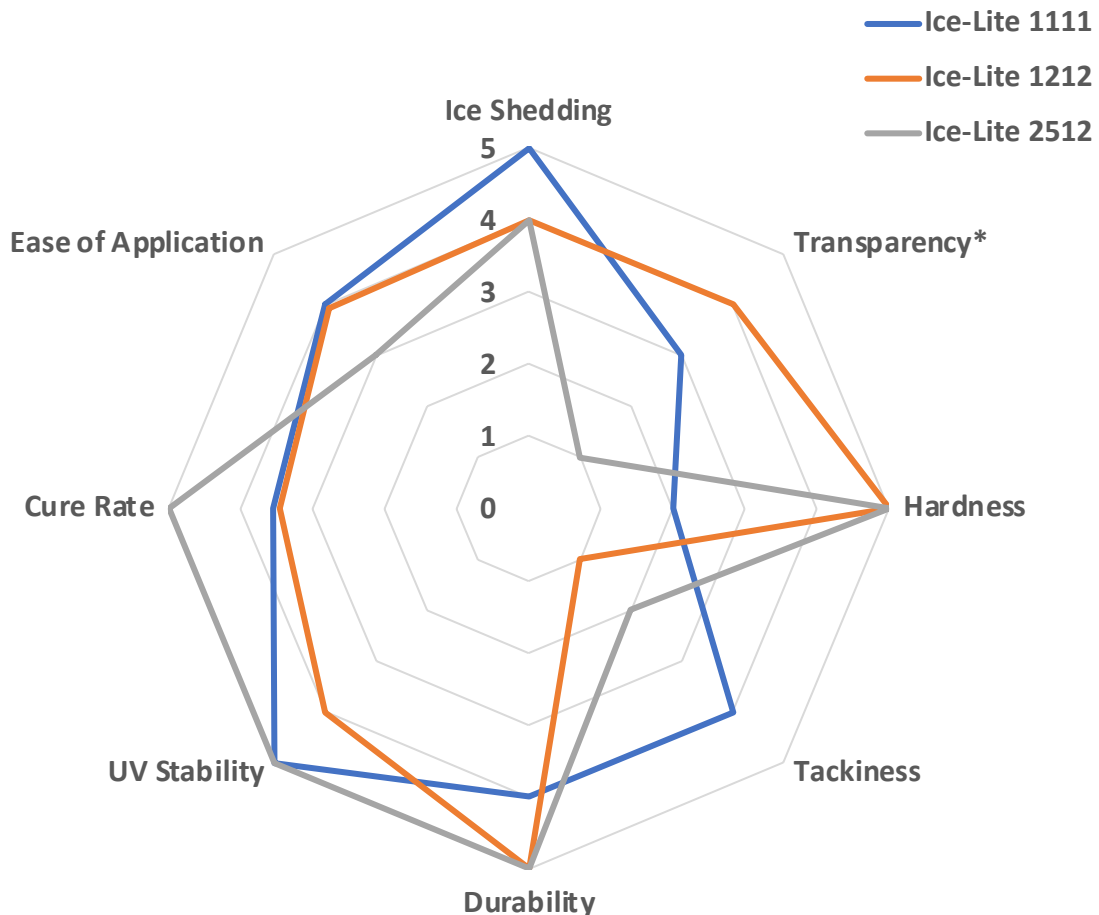
Our silicone-based formulation comes in a 1K system and offers the best defense against ice adhesion in general applications.

Ice-Lite Polyurethane-Based Series

Our polyurethane-based formulation offers the best defense against ice adhesion in harsh environments. They come in both 1K and 2K systems.



ICE-LITE PROPERTIES



*Transparency value represents the clear version of the Ice-Lite series. Additional standard colors include white, gray, and black. Custom colors available upon request.

HOW IT WORKS

State-of-the-art physics stand behind the Ice-Lite series of coatings. Utilizing a concept known as ‘stress localization’, our coatings make ice very “uncomfortable” on the surface, making it much easier to remove than it otherwise would be.

We expose our coatings to extremely harsh tests, and have successfully passed a number of ASTM specifications, including the following:

- ASTM D3359
- ASTM D4060
- ASTM D522
- ASTM D2247
- ASTM D5402
- ASTM D6905

INDUSTRIAL APPLICATIONS

In addition to the superior ice-shedding performance of the Ice-Lite Series, its high mechanical durability makes it the ideal solution for a number of applications.



AEROSPACE



ENERGY



TRANSPORTATION



MARINE



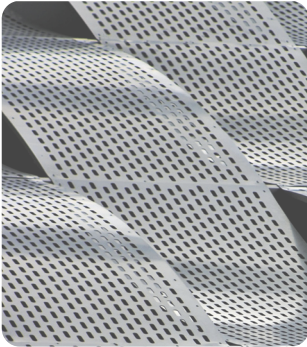
SAFETY



CONSUMER

ICE-LITE ANTI-ICING PERFORMANCE

The Ice-Lite Series offers a significant reduction in ice adhesion for a variety of material types to best suit your anti-icing needs.



METALS

Up to **5X** in ice reduction

Recommended Application:
Requires surface prep and appropriate primer.



WOOD

Up to **10X** in ice reduction

Recommended Application:
Apply to clean and dry surface.



GLASS

Up to **5X** in ice reduction

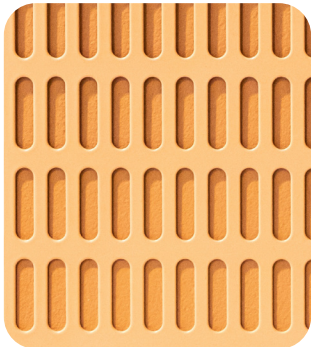
Recommended Application:
Primer required for Ice-Lite 1000.



CONCRETE

Up to **10X** in ice reduction

Recommended Application:
Apply to clean and dry surface.



PLASTICS

Up to **3X** in ice reduction

Recommended Application:
Requires surface prep and appropriate primer.



COMPOSITES

Up to **3X** in ice reduction

Recommended Application:
Requires surface prep and appropriate primer.

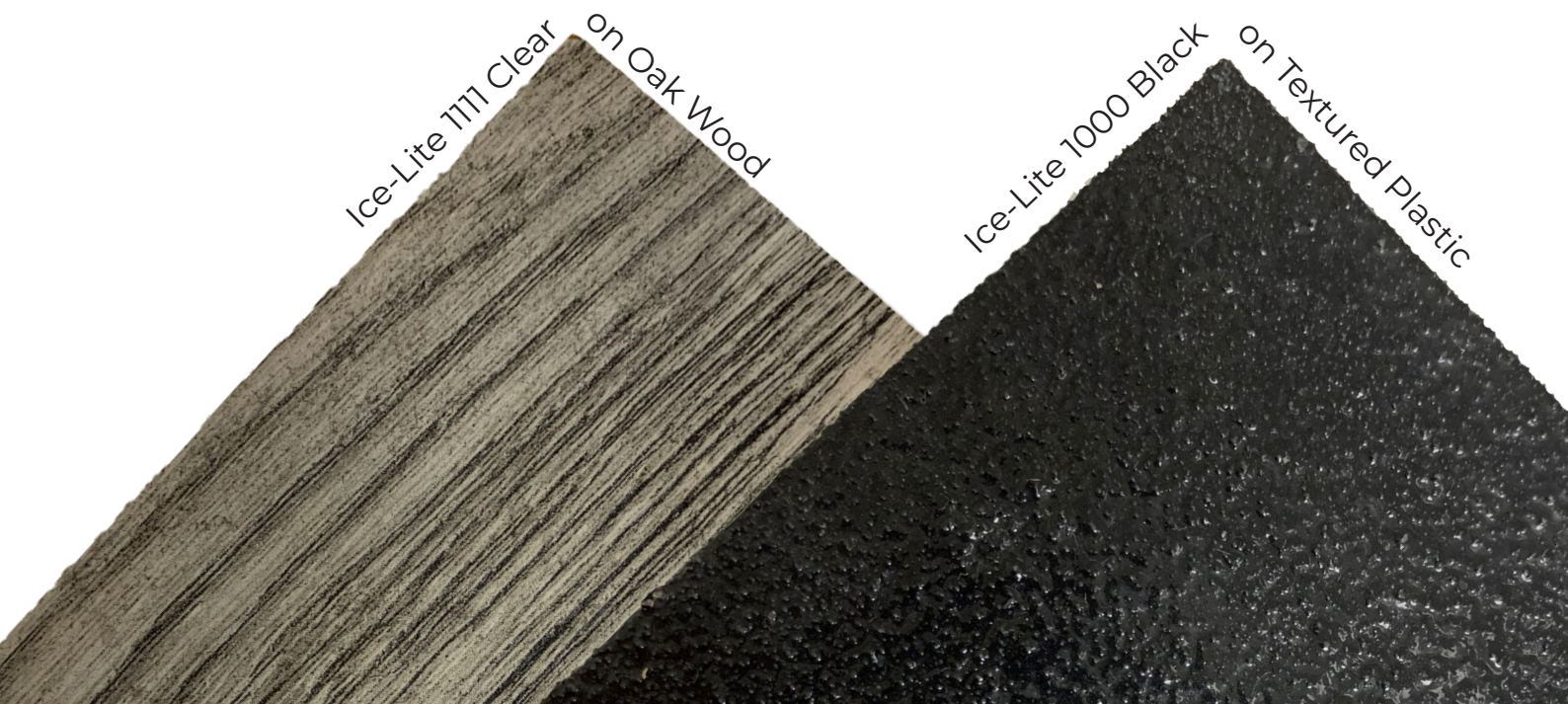
ICE-LITE: UNCURED LIQUID SPECIFICATIONS

Specification	Ice-Lite Silicone-Based 1K Series	Ice-Lite Polyurethane-Based 1K Series	Ice-Lite Polyurethane-Based 2K Series
Product Name	Ice-Lite 1111	Ice-Lite 1212	Ice-Lite 2512
Density	0.8 g/cm ³	0.9-0.975 g/cm ³	1.05 g/cm ³
Viscosity	238 cP (17°C)	233-368 cP (20°C)	410 cP (21°C)
Flash point	-20°C	30-32°C	25°C
VOC	400 g/L	288-390 g/L	357 g/L
Weight Solid	50 wt%	60-68 wt%	64 wt%
Key Characteristics			
Chemical Type	Silicone Paint	Polyurethane Paint	Polyurethane Paint
Appearance	Viscous Liquid	Viscous Liquid	Viscous Liquid
Odor	Mild Odor	Mild Odor	Mild Odor
Color	Clear or Black	Clear or White	White
Initial Cure Time	3 hr	3 hr	3 hr
Full Cure Time	72 hr	72 hr	72 hr



ICE-LITE: CURED SOLID PROPERTIES

Specification	Ice-Lite 1111 1K Series	Ice-Lite 1212 1K Series	Ice-Lite 2512 2K Series
Hardness (Shore A)	30	>98	>98
Cross-Hatch (ASTM D3359)	4B	5B	5B
Taber Abrasion (ASTM D4060)			
CS-10, 5000 Cycles	2.5 mg	1 mg	< 1 mg
H-18, 1000 Cycles	1 mg	1 mg	< 1 mg
Optical Transparency	80% (Ice-Lite 1111T)	Up to 95%	60% (Ice-Lite 2512T)
Key Characteristics			
Weathering Resistance	Excellent	Very Good	Excellent
UV Resistance	Excellent	Very Good	Excellent
Solvent Resistance	Excellent	Good	Excellent
Chemical Stability	Excellent	Good	Excellent
Alcohol Resistance	Excellent	Excellent	Excellent
Primers	DOWSIL	Epoxy-based	Epoxy-based
Strippers	Digesil Gel	PS-3010 Neutral Peroxide Activated Paint Remover	PS-3010 Neutral Peroxide Activated Paint Remover





Elemental Coatings, LLC
www.elementalcoatings.com

5000 Gulf Freeway
Bldg 5, Rm 119
Houston, TX 77023

info@elementalcoatings.com
(832) 303-7034

