

# DURO-SHIELD® SILICONE ROOF COATING

## DESCRIPTION:

Duro-Shield® Silicone is a high-adhesion, solvent-free, single-component, elastomeric, moisture-curing silicone coating that does not require a primer over most substrates. It creates a barrier that is resistant to natural weathering, is durable, breathable, watertight and weatherproof.

Ideal for use as a coating system over:

- Single-ply membranes:
  - Duro-Last® PVC (polyvinyl chloride)
  - Other PVCs
  - EPDM (ethylene propylene diene monomer)
  - TPO (thermoplastic polyolefin)
 (priming required)
- Mineral and granule-surfaced built up (BUR) and modified bitumen  
(priming required to prevent migration of oils)
- Smooth-surfaced built up (BUR) and modified bitumen  
(priming required to prevent migration of oils)
- Spray-applied polyurethane foam
- Elastomeric coatings (priming required)
- Galvanized metal (priming required)
- Galvalume® metal
- Kynar® metal
- Vinyl-coated metal
- Concrete
- Wood

Note: All substrates require adhesion testing. If adhesion testing fails, then priming is required.

## ORDERING:

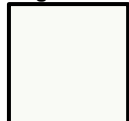
Coverage rates:

Refer to **INSTALLATION** sections 3.b. and 3.c.

Refer to the Duro-Shield Silicone Roof Coating Installation Guide located on the Duro-Last website for specific application guidelines.

- 5-gal (18.9 L) bright white (Item #419505)
  - 55-gal (208.2 L) bright white (Item #419555)
  - 5-gal (18.9 L) tan (Item #419505T)\*
  - 55-gal (208.2 L) tan (Item #419555T)\*
  - 5-gal (18.9 L) dark gray (Item #419505G)\*
  - 55-gal (208.2 L) dark gray (Item #419555G)\*
- \* Do not use colored coatings over asphaltic substrates.

Bright White



Tan



Dark Gray



COOL ROOF RATING COUNCIL (CRRC)							
	CRRC ID	Solar Reflectance ASTM C1549		Thermal Emittance ASTM C1371		Solar Reflective Index (SRI) LEED	
		Initial	3-yr	Initial	3-yr	Initial	3-yr
Bright White	Pending	0.87	0.69	0.89	0.90	110	84

## STORAGE AND HANDLING:

- Store product tightly closed in a dry, cool and well-ventilated place.
- Keep out of direct sunlight.

## SHELF LIFE:

- Shelf life is two years in an unopened container stored between 0° – 80° F (-17° – 26° C), from date of manufacture printed on product, when following these recommended storage procedures.

Example: W24A0001

Date of Manufacture: January, 2024 Batch: 0001

W = finished product

24 = last two digits of the year

A = month the product was made in

(A = Jan, B=Feb, C=Mar, D=Apr, E=May, F=Jun, G=Jul, H=Aug, J=Sep, K=Oct, L=Nov, M=Dec)

0001 = Sequential batch scheduled for that month

DURO-SHIELD SILICONE ROOF COATING PROPERTIES		
	Test Method	Results
Weight		10.6 lb/gal (1.27 kg/L)
Solids by Volume	ASTM D2697	95%
Solids by Weight	ASTM D1644	96%
VOC Content	EPA 24	< 50 g/L (< 0.4 lb/gal)
Flash Point	ASTM D3278	178° F (81° C)
Tensile Strength at 73° F (22.8° C)	ASTM D2370	275 psi (1,896 kPa)
Elongation at 73° F (22.8° C)	ASTM D2370	196%
Tensile Strength at 0° F (-17.8° C)	ASTM D2370	275 psi (1,896 kPa)
Elongation at 0° F (-17.8° C)	ASTM D2370	196%
Tear Resistance (Die C)	ASTM D624	24 lbf/in (2.7 Nm)
Wet Adhesion	ASTM D6694 Requirement 2.0 min	
Spray-applied Polyurethane Foam	ASTM C794/D903	PASS
Acrylic Coating		
Galvanized Metal with E5320 Primer		
BUR with E5320 Primer		
EPDM with E5320 Primer		
PVC with E5320 Primer		
Water Swelling, Mass %	ASTM D471	0%
Permeance (20 mil DET)	ASTM E96	6.4 perms

**PRECAUTIONS:**

- **KEEP AWAY FROM CHILDREN.**
- Read Safety Data Sheets (SDS) prior to using. SDS can be found on the Duro-Last website.
- Wear proper personal protective equipment, such as gloves and eye protection, per the SDS.
- Use only in well-ventilated areas and avoid breathing vapors.
- Keep container closed when not in use.
- Do not expose closed containers to extreme heat.

**INSTALLATION:****1. General**

- Only apply product when the surface and ambient temperatures are between 33° – 120° F (1° – 48.9° C). Product should be stored above 65° F (18.3° C) for 24 hours prior to application.
- Application rate is job-specific and product shortage may occur due to application method,

applicator speed, overspray, surface profile, and wind. Additional product may be required to achieve desired film thickness.

- Do not apply when rain, cold or nightfall are expected within one hour.
- Thinning is not recommended under normal conditions.
- For applications where the building will be occupied during application and/or curing times, the HVAC in the vicinity should be turned off during application and remain off until the coating has cured.
- Use a brush, medium-nap roller, or airless sprayer to apply. Care should be taken when using an airless sprayer to apply Duro-Shield silicone products. Wind-blown over-spray may damage property adjacent to the project site.

**2. Substrate Preparation, Cleaning Procedures, Seam Treatment and Priming Prior to Coating**

- Refer to the Duro-Shield Silicone Roof Coating Installation Guide.

**3. Coating**

The following Dry Film Thicknesses (DFT) are for a 10-year material-only warranty. Refer to the Duro-Shield Roof Coating Installation Guide for additional warranty guidelines.

- Stir until an even consistency is achieved. A slow-speed drill with mixer attachment is recommended.
- Smooth Surfaces:** Apply at a rate of 1.5 gal/100 ft<sup>2</sup> (0.6 L/m<sup>2</sup>) to achieve a minimum of 22 mils (0.56 mm) DFT. Coat all surfaces including expansion joint covers and flashings. Extra product is required at all edges and penetrations.
- Granulated/Rough Surfaces:** Apply at a rate of 2 gal/100 ft<sup>2</sup> (0.8 L/m<sup>2</sup>) to achieve a minimum of 22 mils (0.56 mm) DFT. Coat all surfaces including expansion joint covers and flashings. Extra product is required at all edges and penetrations in addition to the overall increased application related to overall substrate roughness.
- Dry Time:** Allow to cure 24 – 48 hours, depending on temperature and humidity, before suitable for light foot traffic.

**CLEANUP:**

- Clean application tools and equipment with virgin mineral spirits. Recirculate through lines and gun until residual coating is removed. **DO NOT USE WATER OR RECLAIMED SOLVENTS.**

**CODES AND STANDARDS:**