

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:

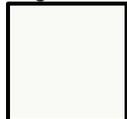
Refer to **INSTALLATION** sections 3.b. and 3.c.

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**
 - a. 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.

 - a. Stir until an even consistency is achieved. A slow-speed drill with mixer attachment is recommended.
 - b. **Smooth Surfaces:** Apply at a rate of 1.5 gal/100 ft² (0.6 L/m²) 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.
 - c. **Granulated/Rough Surfaces:** Apply at a rate of 2 gal/100 ft² (0.8 L/m²) 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.
 - d. **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:

