

# DURO-SHIELD™ SILICONE ROOF COATING

**DESCRIPTION:**

Duro-Shield™ Silicone Roof Coating is a silicone-based single-part roof coating that creates a barrier that is resistant to natural weathering, is durable, breathable, watertight and weatherproof. It is designed to seal and protect various substrates when applied per the Duro-Shield Silicone Roof Coating Installation Guide.

Duro-Shield Silicone Roof Coating is manufactured from durable inorganic silicone resins, reflective pigments and silane adhesion promoters.

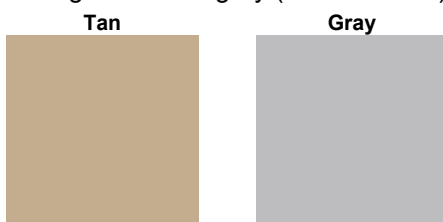
Duro-Shield Silicone Roof Coating can be used on the following roof substrates, after surface preparations have been completed:

- Single-ply membranes:
  - Aged Duro-Last® PVC (polyvinyl chloride)
  - Other aged PVCs
  - EPDM (ethylene propylene diene monomer)
  - TPO (thermoplastic polyolefin)
- Mineral and granule-surfaced built up (BUR) and modified bitumen
- Smooth-surfaced built up (BUR) and modified bitumen
- Spray-applied polyurethane foam
- Aged galvanized metal
- Concrete
- Wood

**ORDERING:**

Approximate coverage rate per gallon: 100 square feet at 16 wet mils. Refer to the Duro-Shield Silicone Roof Coating Installation Guide located on the Duro-Last website for specific application guidelines.

- 5-gallon pail white (Item #4195)
- 55-gallon drum white (Item #4196)
- 5-gallon pail tan (Item #4195B)
- 55-gallon drum tan (Item #4196B)
- 5-gallon pail gray (Item #4195G)
- 55-gallon drum gray (Item #4196G)



**CODES AND STANDARDS:**



**ENERGY EFFICIENCY:**

	Solar Reflectance ASTM C 1549		Thermal Emittance ASTM C 1371		Solar Reflective Index (SRI) LEED	
	Initial	3-yr	Initial	3-yr	Initial	3-yr
<b>White</b>	0.84	0.71	0.91	0.90	106	87
<b>Tan</b>	P <sup>1</sup>	P <sup>1</sup>	P <sup>1</sup>	P <sup>1</sup>	P <sup>1</sup>	P <sup>1</sup>
<b>Gray</b>	P <sup>1</sup>	P <sup>1</sup>	P <sup>1</sup>	P <sup>1</sup>	P <sup>1</sup>	P <sup>1</sup>

P<sup>1</sup> Results pending.

**STORAGE AND HANDLING**

- Store product tightly closed in a dry, cool and well-ventilated place.
- Keep out of direct sunlight.
- Shelf life is two years in an unopened container, from date of manufacture printed on product, when following these recommended storage procedures.

Example: 040218024

Date of Manufacture: 04/02/2018 Batch: 024

DURO-SHIELD SILICONE ROOF COATING PROPERTIES		
	Test Method	Results
Weight	ASTM D 1147	11.5 lb. / gallon
VOC Content	EPA 24	< 25 g/L
Flash Point	ASTM D 56	Not applicable
Cure	–	2 to 4 hours per coat
LIQUID PROPERTIES		
Viscosity	ASTM D 2196	27,494 cps
Solids by Volume	ASTM D 2697	98%
Solids by Weight	ASTM D 1644	97%
FILM PROPERTIES		
Tensile Properties at 73.4° F		
Elongation	ASTM D 2370/D 6694	169%
Tensile Strength		380 psi
Elongation (Accelerated Weathering – 1,000 hrs)		133%
Elongation (Accelerated Weathering – 5,000 hrs)		186%
Tensile Properties at 0° F		
Elongation	ASTM D 2370/D 6694	235%
Tensile Strength		478 psi
Elongation (Accelerated Weathering – 1,000 hrs)		190%
Elongation (Accelerated Weathering – 5,000 hrs)		196%
Permeance	ASTM E 96 Procedure B	8.7 perms
Accelerated Weathering – 5,000 hrs		Pass – no cracking or checking
Tear Resistance	ASTM D 624	29 lbf/in
Low Temperature Flexibility	ASTM D 522 Method B	Pass

**PRECAUTIONS:**

- 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.
- **Keep away from children.**

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

- **Only apply product when the surface and ambient temperatures are between 35° F (1° C) and 100° F (37° C). Do not apply product**

**when the ambient temperature is within 5° F of the dew point. Product should be stored between 50° F (10° C) and 80° F (26° C) for 24 hours prior to application.**

- Do **not** apply to concrete roofs that may be subject to vapor drive from conditioned spaces below.
  - Do **not** apply when rain, cold or nightfall are imminent.
  - Thinning the product is **not** allowed.
  - Open and partially full containers will skin over quickly. If this occurs, remove the skin and continue using the remaining product.
  - Use a brush, roller (1-inch nap, min.), or airless sprayer to apply. Best results are obtained when using an airless sprayer. 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.
- Substrate Preparation**
    - Repair the substrate by following *Substrate Preparation* instructions within the Duro-Shield Silicone Roof Coating Installation Guide.
  - Cleaning Procedures**
    - Apply to surfaces which are clean, dry and free of oil, mildew, grease or any other contaminants. Follow *Cleaning Procedures* within the Duro-Shield Silicone Roof Coating Installation Guide.
  - Seam Treatment**
    - Repair all horizontal and vertical seams by following *Seam Treatment* instructions within the Duro-Shield Silicone Roof Coating Installation Guide.
  - Priming**
    - Follow *Priming* instructions within the Duro-Shield Silicone Roof Coating Installation Guide.
  - Coating**
    - Stir until an even consistency is achieved. A slow-speed drill with mixer attachment is recommended.
    - 5, 10, 15 and 20-year material warranties are available. Follow *Coating* instructions within the Duro-Shield Silicone Roof Coating Installation Guide for specific application guidelines regarding each warranty.

**CLEANUP:**

- Uncured product may be removed with virgin mineral spirits. Do **not** use water.
- Application equipment should be cleaned immediately after use with virgin mineral spirits. Do **not** use water.