

# 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) (priming required)
- Mineral and granule-surfaced built up (BUR) and modified bitumen (priming required)
- Smooth-surfaced built up (BUR) and modified bitumen (priming required)
- Spray-applied polyurethane foam
- Aged galvanized metal (priming required)
- Galvalume® metal
- Kynar® metal
- Vinyl-coated 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)

Tan



Gray



## CODES AND STANDARDS:



## ENERGY EFFICIENCY:

	CRRC ID	Solar Reflectance ASTM C 1549		Thermal Emittance ASTM C 1371		Solar Reflective Index (SRI) LEED	
		Initial	3-yr	Initial	3-yr	Initial	3-yr
White	0610-0021	0.79	0.68	0.90	0.90	99	83
Tan	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>
Gray	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>

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	10.3 lb. / gallon
VOC Content	EPA 24	3.97%
Flash Point	ASTM D 56	Not applicable
Cure	–	2 to 4 hours per coat
LIQUID PROPERTIES		
Viscosity	ASTM D 2196	47,400 cps
Solids by Volume	ASTM D 2697	94%
Solids by Weight	ASTM D 1644	96%
FILM PROPERTIES		
Tensile Properties at 73.4° F		
Elongation	ASTM D 2370/D 6694	207%
Tensile Strength		294 psi
Elongation (Accelerated Weathering – 1,000 hrs)		TBD
Elongation (Accelerated Weathering – 5,000 hrs)		TBD
Tensile Properties at 0° F		
Elongation	ASTM D 2370/D 6694	266%
Tensile Strength		366 psi
Elongation (Accelerated Weathering – 1,000 hrs)		TBD
Elongation (Accelerated Weathering – 5,000 hrs)		TBD
Permeance	ASTM E 96 Procedure B	5.3 perms
Accelerated Weathering – 5,000 hrs		TBD
Tear Resistance	ASTM D 624	22 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.

**2. Substrate Preparation**

- Repair the substrate by following *Substrate Preparation* instructions within the Duro-Shield Silicone Roof Coating Installation Guide.

**3. 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.

**4. Seam Treatment**

- Repair all horizontal and vertical seams by following *Seam Treatment* instructions within the Duro-Shield Silicone Roof Coating Installation Guide.

**5. Priming**

- Follow *Priming* instructions within the Duro-Shield Silicone Roof Coating Installation Guide.

**6. 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.