



# DURO-SHIELD® SILICONE ROOF COATING

## INSTALLATION GUIDE

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## INTRODUCTION

Created by Duro-Last®, the Duro-Shield® Silicone Roof Coating Installation Guide outlines the installation process for projects requiring warranties. Refer to [Warranty Requirements](#) for further information.

Each installation of Duro-Shield products should comply with the instructions, material descriptions, and other information provided herein.

## GENERAL INFORMATION

- Roof substrate preparation is the responsibility of the CONTRACTOR.
- **Duro-Shield warranties do not cover ponding water areas.**  
**All substrate deflections must be corrected prior to installation of Duro-Shield products.**
- Do **not** apply Duro-Shield products when weather conditions are unfavorable or inclement.
- Do **not** begin work with Duro-Shield silicone products until all preliminary work has been completed or until unsatisfactory conditions have been corrected.
- Do **not** apply Duro-Shield silicone products, including all Duro-Shield silicone primers and silicone roof coatings, to unacceptable substrates. This includes ballasted single-ply systems.
- Protect any surfaces that should **not** receive Duro-Shield products.
- Contractor must perform a moisture test prior to installation. These tests may include infrared, core cuts, or similar methods. It is the tester's responsibility to repair all destructive testing locations.
- The substrate must be clean, dry, and free of any foreign objects prior to application of Duro-Shield silicone products.
- All applications require adhesion testing as described in the [TESTING](#) section of this guide.
- Refer to Safety Data Sheets ("SDS") and Product Data Sheets ("PDS") for product-specific information and instructions. SDS and PDS can be found under the Duro-Shield Coatings category on the [Duro-Last website](#).

## SILICONE GENERAL PRECAUTIONS

Refer to product-specific instructions below for additional precautions.

- **KEEP AWAY FROM CHILDREN.**
- **WARNING: MAY BE EXTREMELY FLAMMABLE** – Keep away from heat/sparks/open flames/hot surfaces. Do not smoke while installing. Refer to SDS and PDS for further information.
- Do **not** swallow or consume.
- Do **not** use under water or below grade.
- Do **not** use water or reclaimed solvents for cleaning silicone products.
- Apply **only** when the surface and ambient temperatures are between 40° – 100° F (4° – 38° C). Product should be stored between 50° – 90° F (10° – 32° C) for 24 hours prior to installation.
- Use **only** in well-ventilated areas and avoid breathing vapors.
- Read all applicable SDS and PDS prior to using.  
SDS and PDS can be found under the Duro-Shield Coatings category on the [Duro-Last website](#).
- Wear proper personal protective equipment, such as gloves and eye protection, per the individual product SDS.
- Keep containers closed when not in use.
- Duro-Shield silicone products are moisture curing. Low ambient humidity will result in longer dry times.

# PRO TIPS

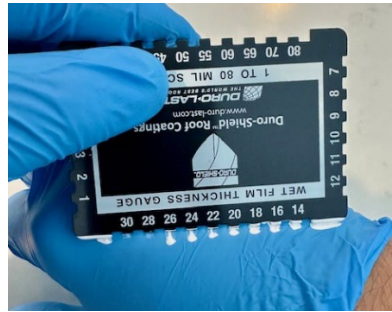
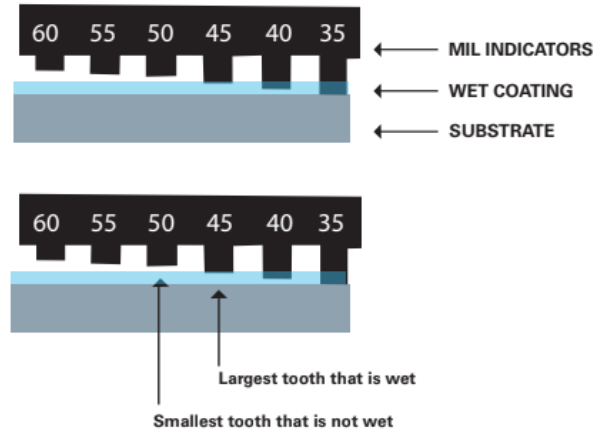
## Tool

## Advice

### Mil Gauge for Wet Film Thickness (WFT)



- Place the gauge into the wet coating with the desired gauge flat against the substrate.
- After the gauge is removed from the substrate, observe the mil value of the largest tooth that is wet and the smallest tooth that is not wet. The WFT lies between these two values.



### Coating Wet Film Spread Rate (WFSR) with Color-Coded, Notched Squeegee



|  |   |
|--|---|
|  | <b>15-20 WFT MILS</b><br>WFSR: 80-106 FT <sup>2</sup> / GAL |
|  | <b>25-30 WFT MILS</b><br>WFSR: 53-64 FT <sup>2</sup> / GAL  |
|  | <b>40-45 WFT MILS</b><br>WFSR: 36-40 FT <sup>2</sup> / GAL  |

# TESTING

## GENERAL

- Adhesion testing provides a standardized method for evaluating the adhesion of Duro-Shield roof coatings to eligible substrates. Consult Duro-Shield PDS, SDS, and supplemental technical documentation available under the Duro-Shield Coatings category on the [Duro-Last website](#).
- The contractor is responsible for determining substrate suitability **prior** to installing any Duro-Shield silicone products.
- A project-specific Adhesion Kit can be requested from the Coatings Team.
  - Products in Kits:
    - Chip brush
    - Polyester Fabric Strip(s)
    - Paint Stir
    - Can Opener
    - Gloves
    - Fish Scale
    - Scotch-Brite® pad
    - 1 Quart (946.4 mL) containers: 4 max
      - Multi-purpose Primer (TPO Primer)
      - Silicone Coating (Bright White)
      - Universal 2-Part Epoxy Primer
      - Acrylic Coating (Brilliant White)
      - Acrylic Primer
- Perform testing as both unprimed and primed. Refer to the Silicone Adhesion Primer Requirements table for specific primer recommendations.
- It is recommended that contractors consult with the Coatings Team about adhesion test results.



| TEST METHOD                     |   |
|---------------------------------|---|
| FIELD PEEL ADHESION             |   |
| <b>General Information</b>      | <ul style="list-style-type: none"> <li>Testing is recommended prior to bidding</li> <li>Testing is <b>required</b> for warranty projects that include labor</li> <li>Conduct 4 tests for every 10,000 ft<sup>2</sup>, and another test for each additional 10,000 ft<sup>2</sup> <ul style="list-style-type: none"> <li>Select adhesion testing in degraded areas based on factors that may affect adhesion:                   <ul style="list-style-type: none"> <li>Any combination of UV, exhaust fumes, or chemical and/or biological exposure</li> <li>Aged existing membrane</li> <li>Repair areas</li> </ul> </li> </ul> </li> <li>Test patches must be labeled and photographed for retained records</li> </ul>   |
| <b>Overview</b>                 | <ul style="list-style-type: none"> <li>Procedures follow ASTM D903 "180° Peel Adhesion"</li> <li>Primers and enamels may also be evaluated by a similar test called ASTM D3359 "Tape Adhesion"</li> </ul>   |
| <b>Preparation</b>              | <ol style="list-style-type: none"> <li>Make a mock-up of the intended system.           <ol style="list-style-type: none"> <li>Adhesion tests must be conducted with the exact proposed coating system, including a primer, if required.</li> </ol> </li> <li>Duplicate any mechanical substrate preparation.</li> <li>Simulate cleaning and pressure washing.           <ol style="list-style-type: none"> <li>Clean a 12- x 12-inch (305- x 305-mm) area with a Scotch-Brite pad or equivalent</li> <li>Apply an approved solution to clean heavily soiled areas, if necessary</li> </ol> </li> <li>Apply an approved primer or Duro-Shield Bleed Block as required.</li> </ol>   |
| <b>Dry Adhesion Test Method</b> | <p>Testing should be completed in the same atmospheric conditions as Duro-Shield silicone products will be installed.</p> <ol style="list-style-type: none"> <li>Brush apply the Duro-Shield coating over a 2- x 6-inch (52- x 152-mm) area, at a rate of 100 ft<sup>2</sup>/gal (2.5 m<sup>2</sup>/L) to yield 16 wet mils (0.41 mm).</li> <li>While coating is still wet, embed 6-inches (152 mm) of a 1- x 12-inch (25- x 305-mm) strip of Polyester Fabric Strip into the test patch, leaving the other dry 6 inches (152 mm) extending past the test patch.</li> <li>Apply an additional 16 wet mils (0.41 mm) of coating to fully encapsulate the embedded 6-inch (152-mm) fabric.</li> <li>Allow the test patch to cure.           <ul style="list-style-type: none"> <li><b>Warm weather:</b> 1 day may be sufficient</li> <li><b>Cold weather:</b> 5 days may be required</li> </ul> </li> </ol> |

# TEST METHOD: FIELD PEEL ADHESION (CONTINUED)

## Quantitative Evaluation (Best Practice)

## Qualitative Evaluation

- Once Duro-Shield coating has cured:
  1. Attach the exposed fabric to the end of an appropriate fish scale.
  2. Pull the fabric at a 180° angle, flat against the substrate, back through the test area.
  3. Pull steadily and evenly, with gradually increasing force, until the fabric begins to dislodge from the coating.
  4. Resume pulling until 50% of fabric has peeled from the coating, and record this measurement.
  5. Again, resume pulling until the fabric is removed from the coating to ensure consistent cohesion.

- Testing results must pass both of the following:
  1. A minimum 2 lbf (8.9 N) of pull resistance must be achieved before fabric tape is removed from the coating.
  2. In addition to achieving the desired pull resistance, a test is deemed successful when the base layer of coating remains attached to the substrate after the fabric is removed. There should be less than 30% of original surface visibility.

- If the adhesion test FAILS, contact a coatings technical services representative for assistance.

**NOTE: NO WORK will be performed until test results indicate appropriate adhesion.**

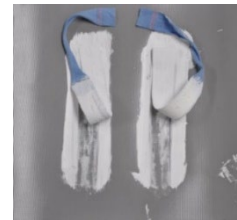
## MATERIAL AND LABOR WARRANTED APPLICATION:

- Test results must be recorded in the Pre-Sales Consultation available in the [Duro-Last Portal](#) or contact the Coatings Team at [DuroLast-CoatingsWarranty@amrize.com](mailto:DuroLast-CoatingsWarranty@amrize.com)

**Good (Pass):** 70% or greater cohesion (2 lbf (8.9 N) or greater)



**Fair (Failure):** 50 – 69% cohesion (1 – 2 lbf (4.4 – 8.9 N))



**Poor (Failure):** 10 – 49% cohesion (1 lbf. (4.4 N) or greater)



**Fail:** Less than 10% cohesion (Less than 1 lbf (4.4 N))



180° Fish Scale Tester

# SUBSTRATE PREPARATION

## GENERAL

Inspect each substrate and prepare or repair any of the following issues as described.

| METAL SUBSTRATES                                 |  |
|--|--|
| Issue  | Repair   |
| <b>Rust</b>                                      | <ul style="list-style-type: none"> <li>Severely damaged or rusted seams must be replaced.</li> <li>Metal panels that have holes must be replaced.</li> <li>Structurally sound metal panels with moderate to extensive oxidation should be cleaned and/or lightly abraded to remove loose surface rust and treated with an approved primer.</li> <li><b>The entire roof surface must have no more than 20% rust.</b></li> </ul> |
| <b>Fasteners</b>                                 | <ul style="list-style-type: none"> <li><u>All</u> loose, deteriorated, rusted, or missing fasteners must be retightened, secured, or replaced, as necessary.</li> <li><u>All</u> stripped fasteners must be replaced with new, larger grommet-head fasteners.</li> <li><u>All</u> exposed fasteners must be encapsulated (refer to <a href="#">SEAM TREATMENT</a>).</li> </ul>   |
| <b>Gaps</b>                                      | <ul style="list-style-type: none"> <li>For gaps less than 1/8 inch (3 mm), seal with a Single-Course Treatment (refer to <a href="#">SEAM TREATMENT</a>).</li> <li>For gaps greater than 1/8 inch (3 mm), install backer rod, and seal with a Three-Course Treatment. Refer to PDS for product-specific instructions.</li> </ul>   |
| <b>End Laps</b>                                  | <ul style="list-style-type: none"> <li>End laps must be treated with a Three-Course Treatment (refer to <a href="#">SEAM TREATMENT</a>).</li> </ul>  |
| <b>Side Laps</b>                                 | <ul style="list-style-type: none"> <li>Side laps must be treated with a Single-Course Treatment (refer to <a href="#">SEAM TREATMENT</a>).</li> </ul>  |
| <b>Recommended Primer</b><br>(Repair areas only) | <ul style="list-style-type: none"> <li>Duro-Shield Universal 2-Part Epoxy Primer</li> <li>Duro-Shield Multi-Purpose Primer (LVOC)</li> <li>Duro-Shield Silicone Roof Primer: TPO</li> </ul>  |

NOTE: Adhesion tests are required on all materials after repairs are completed.  
Refer to [TESTING](#) for appropriate adhesion test methods.

| NON-METAL SUBSTRATES   |  |
|--|--|
| Substrate  | Repair   |
| <b>PVC</b><br>(Polyvinyl Chloride)   | <ul style="list-style-type: none"> <li>Areas where membrane is torn/cracked/buckled/scrim-exposed must be repaired using the same type of single-ply products.</li> <li>Repair/replace defective or damaged edge attachments, flashings or terminations as recommended by the membrane manufacturer.</li> <li>Repair/replace any damaged or defective pitch pan filler, sealants, or caulk, as recommended by the product manufacturer.</li> <li>Wet insulation must be removed and replaced.</li> <li><b>Recommended:</b> <ul style="list-style-type: none"> <li>Duro-Shield Universal 2-Part Epoxy Primer</li> <li>Duro-Shield Multi-Purpose Primer (LVOC)</li> </ul> </li> </ul>  |
| <b>EPDM</b><br>(Ethylene Propylene Diene Monomer)  |  |
| <b>TPO</b><br>(Thermoplastic Polyolefin)   | <ul style="list-style-type: none"> <li>Areas where TPO is torn/cracked/buckled/scrim-exposed must be repaired using approved products.</li> <li>Wet insulation must be removed and replaced.</li> <li><b>REQUIRED:</b> <ul style="list-style-type: none"> <li>Duro-Shield Multi-Purpose Primer (LVOC)</li> </ul> </li> </ul>   |
| <b>Mineral &amp; Granule-Surfaced BUR or Mod Bit (SBS &amp; APP), With or Without Cap Sheet</b><br><br><u>OR</u><br><br><b>Smooth-Surfaced BUR or Mod Bit (SBS &amp; APP), With or Without Cap Sheet</b> | <ul style="list-style-type: none"> <li>Areas where built-up roofing ("BUR") or modified bitumen ("mod bit") are blistered, buckled, and/or otherwise damaged, must be removed and repaired using an approved product.</li> <li>New BUR or mod bit repair materials must be allowed at least 30 days to weather before applying.</li> <li>Only torch-applied or heat-fused granule-surfaced APP membrane may be used for repairs to the asphalt roofing substrate prior to installation of the Duro-Shield coating, regardless of the existing asphalt membrane type.</li> <li>Do not use new SBS, smooth APP, or self-adhering membranes.</li> <li>Do not use asphalt mastics or cold adhesives as part of remedial roof repairs.</li> <li>Areas where BUR or mod bit have significantly cracked (gaps 1/8 inch (3 mm) or greater) must be repaired using the Three-Course Treatment described in this guide.</li> <li>All areas repaired with new granule-surfaced APP membrane must be coated with two applications of Duro-Shield Bleed Block prior to the installation of the Duro-Shield coating.</li> <li><b>REQUIRED:</b> <ul style="list-style-type: none"> <li>Duro-Shield Bleed Block</li> </ul> </li> </ul> |
| <b>Concrete</b>  | <ul style="list-style-type: none"> <li>For gaps less than 1/8 inch (3 mm), seal with a recommended product.</li> <li>Areas where concrete has significant cracks (1/8 inch (3 mm) or greater) must be repaired using the Three-Course Treatment described in this guide.</li> <li><b>Recommended:</b> <ul style="list-style-type: none"> <li>Duro-Shield Universal 2-Part Epoxy Primer</li> </ul> </li> </ul>  |
| <b>Sprayed Polyurethane Foam ("SPUF")</b>  | <ul style="list-style-type: none"> <li>Areas where polyurethane foam is blistered, buckled, and/or otherwise damaged, must be removed and repaired using approved products.</li> <li>Wet polyurethane foam must be removed and replaced.</li> </ul>  |

NOTE: Adhesion tests are required on all materials after repairs are completed.  
Refer to [TESTING](#) for appropriate adhesion test methods.



**CLEANING – ALL SUBSTRATES**

1. Complete all repairs prior to cleaning.
2. Use a stiff-bristle push broom to remove all dirt, dust, loose and flaking particles, grease, oil, laitance, and other contaminants, or materials that may interfere with proper adhesion.
3. Wash-off containment should be in place, when required.
  - Follow all applicable codes for containment during the cleaning process.
4. Kill and remove any living organisms such as algae, mold, or fungus with [Wash Safe Roof Wash](#).
  - Ensure that the substrate will not be adversely affected by the chosen treatment.
5. Wet the surface with a pressure washer (3,000 psi (20.7 MPa), maximum).
  - Do not damage or inject water into the substrate during washing.
  - EPDM and heavily soiled roofs may require extra force to wash, and may require additional passes to ensure adequate cleaning.
6. Apply [Duro-Shield Roof Wash: Concentrated Cleaner](#) and allow cleaner to stand for 10 – 15 minutes, applying light mist as needed to prevent drying.
7. During wash, work product away from, and then back toward, drains throughout the process.
8. If necessary, utilize continuous misting to prevent cleaner from drying prior to completion.
9. Rinse well to remove cleaner, working product away from, and then back toward, drains throughout the process.
10. **Allow surface to dry completely. Drying times may vary based on environmental conditions and substrate properties.**



## APPROVED PRIMER APPLICATION

Prime the **entire surface** with approved Duro-Shield primer, if necessary.

Primer requirements are based on adhesion test results, unless required in the table below.

NOTE: Refer to [TESTING](#) for appropriate adhesion test methods.

| SILICONE ADHESION PRIMER GUIDELINES   |   |
|---|---|
| SUBSTRATES  | APPROVED PRIMERS  |
| PVC   | Duro-Shield Multi-Purpose Primer (LVOC) or Universal 2-Part Epoxy |
| TPO   | <b>PRIMER REQUIRED: Multi-Purpose Primer (LVOC)</b>               |
| EPDM  | Duro-Shield Multi-Purpose Primer (LVOC) or Universal 2-Part Epoxy |
| APP Mod Bit, Smooth BUR,<br>With or Without Cap Sheet   | <b>BLEED BLOCK REQUIRED + Universal 2-Part Epoxy</b>              |
| Aged SBS Mod Bit<br>With or Without Cap Sheet   | <b>BLEED BLOCK REQUIRED + Universal 2-Part Epoxy</b>              |
| Galvanized Steel  | Duro-Shield Multi-Purpose Primer (LVOC) or Universal 2-Part Epoxy |
| Galvalume®  | Duro-Shield Multi-Purpose Primer (LVOC) or Universal 2-Part Epoxy |
| Aluminum  | Duro-Shield Multi-Purpose Primer (LVOC) or Universal 2-Part Epoxy |
| Plywood   | Universal 2-Part Epoxy  |
| Aged Concrete and Concrete Block  | Universal 2-Part Epoxy  |
| SPUF  | PRIMER NOT REQUIRED   |
| Previously Coated Silicone  | <b>DO NOT PRIME</b>   |
| Refer to Warranty and Coverage Requirements table for eligibility requirements<br>Refer to individual PDS for further installation and application details<br>• PDS can be found under the Duro-Shield Coatings category on the <a href="#">Duro-Last website</a> |   |

## UNIVERSAL 2-PART EPOXY PRIMER

- Application instructions:
  - Mix Part A and Part B, separately, for 3 – 5 minutes.
  - Pour **Part B** into a clean, empty pail. Add Part A to Part B. Part A will sink.
  - Using a slow-speed drill with mixer attachment, stir combined Part B and Part A until even consistency is achieved.
- Apply at the following approximate coverage rates:
 

|  |  |   |
|--|--|---|
| <b>Metal</b>   | 300 ft <sup>2</sup> /gal (7.4 m <sup>2</sup> /L)                   | <b>DFT: 2 – 3 mils (0.05 – 0.08 mm)</b> |
| <b>Single-Ply</b>  | 500 ft <sup>2</sup> /gal (3.7 m <sup>2</sup> /L)                   | <b>DFT: 1 – 2 mils (0.03 – 0.05 mm)</b> |
| <b>Smooth Mod Bit and BUR</b><br>with or without cap sheet   | <u>2 coats</u> 250 ft <sup>2</sup> /gal (6.1 m <sup>2</sup> /L)    | <b>DFT: 2 – 3 mils (0.05 – 0.08 mm)</b> |
| <b>Granular Mod Bit and BUR</b><br>with or without cap sheet | <u>2 coats</u> at 200 ft <sup>2</sup> /gal (4.9 m <sup>2</sup> /L) | <b>DFT: 3 – 4 mils (0.08 – 0.10 mm)</b> |
- Allow to dry for at least 6 hours.

## DURO-SHIELD MULTI-PURPOSE PRIMER (LVOC)

- Application instructions:
  - Using a slow-speed drill with mixer attachment, stir until an even consistency is achieved.
- Apply at the following approximate coverage rate:
 

|                       |  |   |
|-----------------------|--|---|
| <b>All Substrates</b> | 200 – 250 ft <sup>2</sup> /gal (4.9 – 6.1 m <sup>2</sup> /L) | <b>WFT: 6 – 8 mils (0.15 – 0.20 mm)</b> |
|-----------------------|--|---|
- Allow to dry for at least 2 hours, until a slightly tacky film state is achieved.

## DURO-SHIELD BLEED BLOCK

- Application instructions:
  - Using a slow-speed drill with mixer attachment, stir until an even consistency is achieved.
- Apply at the following approximate coverage rate:
 

|                        |  |                              |
|------------------------|--|------------------------------|
| <b>All Substrates:</b> | 100 ft <sup>2</sup> /gal (4.9 – 6.1 m <sup>2</sup> /L) | <b>DFT: 6 mils (0.15 mm)</b> |
|------------------------|--|------------------------------|
- Allow to dry for at least 4 hours.

## SEAM TREATMENT

Duro-Shield silicone reinforcement treatments are divided into three categories: Single-Course, Three-Course, and Screw Heads. Refer to the Seam Treatment by Substrate table for substrate requirements.

| SEAM TREATMENT PROCEDURES |   |
|---------------------------|---|
| SINGLE-COURSE             |   |
| PROPERTIES                | Single-Course products contain a fiber additive for increased strength and durability   |
| APPROVED PRODUCTS         | <ul style="list-style-type: none"> <li>Duro-Shield Silicone Reinforced Sealant – Solvent-free</li> <li>Duro-Shield Reinforced Roof Repair (R3) – Solvent-based</li> </ul>   |
| METHOD                    | <ul style="list-style-type: none"> <li>Seal with one coat of approved product               <ul style="list-style-type: none"> <li>4-inch wide, 64 wet mils (75 LF/Gal (6.04 m/L))</li> </ul> </li> </ul>   |
| THREE-COURSE              |   |
| PROPERTIES                | Three-Course reinforcement provides the best option for strength and durability   |
| APPROVED PRODUCTS         | <ul style="list-style-type: none"> <li>Duro-Shield Brush-Grade Sealant – Solvent-free</li> <li>Duro-Shield Silicone Roof Coating – Solvent-free</li> </ul>  |
| METHOD                    | <ol style="list-style-type: none"> <li>Seal with a base coat of approved product               <ul style="list-style-type: none"> <li>6-inch wide, 24 wet mils (50 – 65 LF/Gal (4.03 – 5.23 m/L))</li> </ul> </li> <li>Immediately embed a layer of Polyester Reinforcement Fabric centered within the base coat               <ul style="list-style-type: none"> <li>4-inches wide</li> </ul> </li> <li>Encapsulate fabric with a top coat of approved product               <ul style="list-style-type: none"> <li>6-inch wide, 24 wet mils (50 – 65 LF/Gal (4.03 – 5.23 m/L))</li> </ul> </li> </ol> |
| SCREW HEADS               |   |
| PROPERTIES                | Completely encapsulates screw heads to eliminate voids and air pockets  |
| APPROVED PRODUCTS         | <ul style="list-style-type: none"> <li>Duro-Shield Brush-Grade Sealant – Solvent-free</li> <li>Duro-Shield Silicone Reinforced Sealant – Solvent-free</li> <li>Duro-Shield R3 – Solvent-based</li> </ul>  |
| METHOD                    | <ol style="list-style-type: none"> <li>Seal each individual fastener with a "Hershey Kiss"-sized application of approved product               <ul style="list-style-type: none"> <li>Approximate application rate: 150 – 175 screw heads per gallon</li> </ul> </li> </ol>   |

| SEAM TREATMENT BY SUBSTRATE                             |                    |             |
|---|--------------------|-------------|
| Treat Seams as Needed for 5-Year Material Only Warranty |                    |             |
| BUR AND MOD BIT, WITH OR WITHOUT CAP SHEET              |                    |             |
| WARRANTY TERM   | TRANSITIONAL SEAMS | FIELD SEAMS |
| 10-Year   | 3-Course           | 1-Course    |
| 15-Year   | 3-Course           | 3-Course    |
| 20-Year   | 3-Course           | 3-Course    |
| PVC, TPO, EPDM  |                    |             |
|   | TRANSITIONAL SEAMS | FIELD SEAMS |
| 10-Year   | 1-Course           | 1-Course    |
| 15-Year   | 3-Course           | 1-Course    |
| 20-Year   | 3-Course           | 3-Course    |
| METAL AND STANDING SEAM                                 |                    |             |
| ALL EXPOSED FASTENERS COMPLETELY ENCAPSULATED           |                    |             |
|   | SIDE LAPS          | END LAPS    |
| 10-Year   | 1-Course           | 3-Course    |
| 15-Year   | 1-Course           | 3-Course    |
| 20-Year   | 1-Course           | 3-Course    |
| SPUF  |                    |             |
| NO SEAMS SHOULD BE PRESENT                              |                    |             |

Refer to [Coating Requirement By Warranty Term](#) table for required application rates.

# ROOF COATING APPLICATION

## GENERAL

Install Duro-Shield Silicone Roof Coating once all of the instructions above have been completed.

- 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.
- Do **not** thin this product.
- Only apply product when the surface and ambient temperatures are between 35° – 100° F (1° – 38° C).  
**Product should be stored between 50° – 80° F (10° – 27° C) for 24 hours prior to application.**
- If building will be occupied during application and/or curing, HVAC systems should be turned off until sealant has sufficiently cured.
- Apply using the following methods:
  - Spray: Use a pressure pot or an airless sprayer to apply (Recommended).
    - 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.
  - Brush: Nylon brush
  - Roller: A solvent-resistant, short nap (3/4-inch (19-mm) minimum) roller

## COATING APPLICATION

1. Stir until an even consistency is achieved. A slow-speed drill with mixer attachment is recommended.
2. Coat all surfaces including expansion joint covers and flashings.
3. The length of the desired warranty will determine the required mil thickness per application. Refer to [Coating Requirement By Warranty Term](#) table for required application rates.
4. Allow to dry completely.
5. Allow to cure 24 – 48 hours, depending on temperature and humidity, before suitable for light foot traffic.

## CLEANUP

- Uncured product may be removed with virgin mineral spirits.  
**DO NOT USE WATER OR RECLAIMED SOLVENTS.**
- 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.** Follow spray equipment manufacturer's guidelines on cleanup and maintenance of spray equipment.

## WARRANTY REQUIREMENTS

Refer to the Duro-Shield Silicone Coating Calculator on the [Duro-Last Portal](#) for assistance in calculating quantities and pricing.

### MATERIAL AND LABOR WARRANTY PROCEDURE

- 5-year, 10-year, 15-year, and 20-year MATERIAL ONLY warranties are available.
- A "Pre-Sales Consultation" form must be completed at the jobsite by the contractor and a DL Sales Representative.
- Approved projects will receive:
  - Unique Project Identifier number
  - Project specifications
  - Steps for completing a successful warranty project
- In-progress photos and documentation showing repairs, washing, priming, and detail work (where required), will need to be submitted when completing an "Inspection Request" form.
  - Inspection is **not** required for a material-only warranty.
- Once approved, the Quality Assurance ("QA") team will schedule a Duro-Last Technical Representative and the contractor to repair, if necessary, and inspect the completed project.
- Upon successful inspection, the QA team will issue a warranty to the contractor and the building owner.
- Contact the Coatings Team at [DuroLast-CoatingsWarranty@amrize.com](mailto:DuroLast-CoatingsWarranty@amrize.com) for additional Material & Labor warranty specifications.
  - Substrate preparation may be required prior to coating. Refer to [SUBSTRATE PREPARATION](#) for additional information.
  - Primer is required for TPO, rust, and BUR or Mod Bit substrates (with or without cap sheet). Refer to [APPROVED PRIMER APPLICATION](#) page for further information. All other substrate primer requirements based on adhesion testing.

| COATING REQUIREMENT BY WARRANTY TERM* **  |   |   |  |  |
|---|---|---|--|--|
| PVC, TPO, EPDM, BUR or MOD BIT (WITH or WITHOUT CAP SHEET), SPUF, METAL, CONCRETE, and SILICONE RE-COAT |   |   |  |  |
| TERM  | APPLICATION RATE  |   | WET FILM THICKNESS (WFT)                     | DRY FILM THICKNESS (DFT)                     |
|   | SMOOTH  | ROUGH   |  |  |
| 5-Year Silicone<br>Material Only  | 1 Coat<br>1 Gal/100 ft <sup>2</sup><br>(0.4 L/m <sup>2</sup> )                        | 1 Coat<br>1.5 Gal/100 ft <sup>2</sup><br>(0.6 L/m <sup>2</sup> )  | 16 MILS<br>(0.41 mm)                         | 15 MILS<br>(0.38 mm)                         |
| 10-Year Silicone  | 1 Coat<br>1.5 Gal/100 ft <sup>2</sup><br>(0.6 L/m <sup>2</sup> )                      | 1 Coat<br>2 Gal/100 ft <sup>2</sup><br>(0.8 L/m <sup>2</sup> )    | 24 MILS<br>(0.61 mm)                         | 23 MILS<br>(0.58 mm)                         |
| 15-Year Silicone  | 1 Coat<br>2 Gal/100 ft <sup>2</sup><br>(0.8 L/m <sup>2</sup> )                        | 1 Coat<br>1.25 Gal/100 ft <sup>2</sup><br>(0.5 L/m <sup>2</sup> ) | 32 MILS<br>(0.81 mm)                         | 30 MILS<br>(0.76 mm)                         |
| 20-Year Silicone  | <b>2 Coats</b><br>1.25 Gal/100 ft <sup>2</sup><br>(0.5 L/m <sup>2</sup> )<br>Per Coat |   | <b>2 COATS</b><br>40 MILS TOTAL<br>(1.02 mm) | <b>2 COATS</b><br>38 MILS TOTAL<br>(0.97 mm) |

\*Refer to [SEAM TREATMENT PROCEDURES](#) for single-course and three-course procedures.

\*\*Refer to [SEAM TREATMENT BY SUBSTRATE](#) for further instructions.