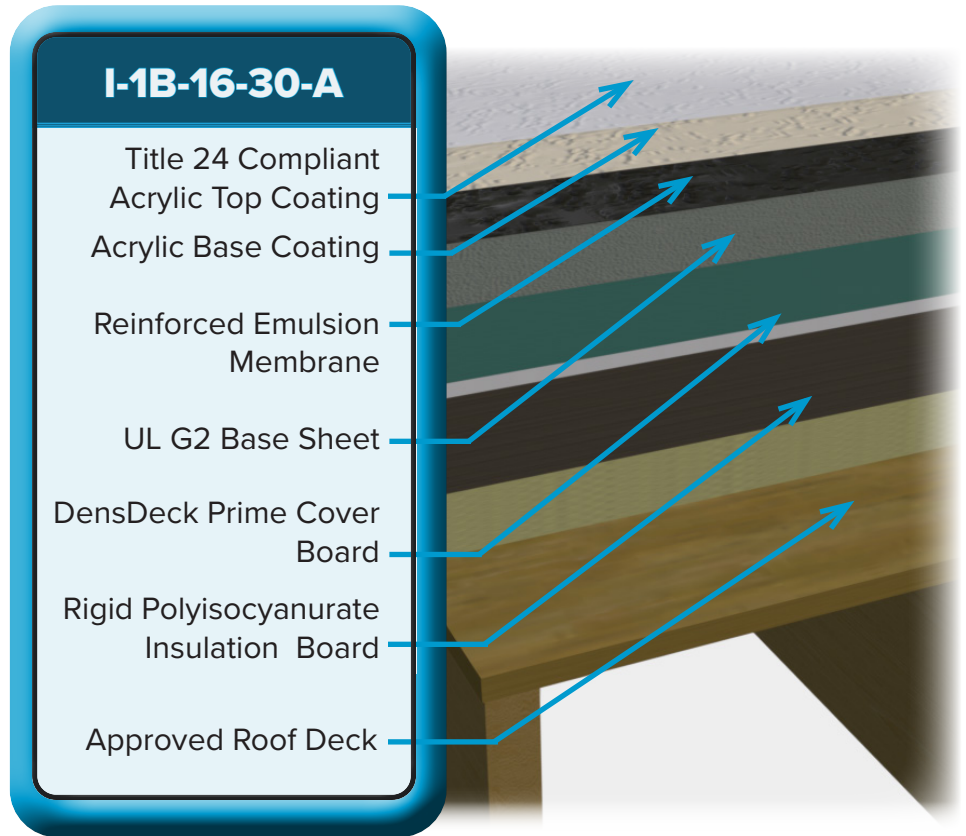


# WEATHERWELD™

## ROOFING MADE SIMPLE

- ✓ **40 Year NDL Warranty**
- ✓ **CA Title 24 Compliant**
- ✓ **Seamless Membrane**
- ✓ **Patented Technology**
- ✓ **UL Class A**

- ✓ **Replacement**
- ✓ **New Construction**
- ✓ **Insulated**



**WeatherWeld I-1B-16-30-A** is a completely seamless insulated roof system designed for installation over all approved roof deck types, or to recover and enhance existing approved roof systems.

**WeatherWeld** is engineered to be the strongest roof system on the market.

**WeatherWeld** combines the longest lasting and strongest materials in the world with a patented 3D printer to create a seamless membrane designed to last for generations.

**WeatherWeld** water based emulsion, sprayed with intertwined fiberglass creates a virtually impenetrable membrane.

### MATERIALS

<b>Insulation/Cover Board:</b>	Adhered or Fastened
• Insulation:	Polyisocyanurate - R Value as Required
• Cover Board:	1/2" DensDeck Prime ( <i>Adhered</i> )
<b>Base/Anchor Sheet:</b>	Adhered
• Base Sheet:	1 Layer - UL G2, Fiberglass Reinforced
<b>Reinforced Membrane:</b>	Spray Applied
• Emulsion:	30 Gal. - WeatherWeld Asphalt Emulsion
• Fiberglass:	16 Lbs. - WeatherWeld Fiberglass Roving
<b>Reflective Roof Coating:</b>	Spray Applied
• Base Coat	1.5 Gal. WeatherWeld Base Coat
• Top Coat	1.5 Gal. WeatherWeld Title 24 Top Coat
<b>or</b>	
• Aluminum Coating:	2 Gal. WeatherWeld Aluminum Coating
<b>Accessory Products:</b>	
• Self Adhering Membrane:	WeatherWeld SA Membrane
• Asphalt Primer:	ASTM D312 Water Based Asphalt Primer
<i>Coverage rates listed are per 100 square feet of applied membrane.</i>	

### SYSTEM PROPERTIES

Property	Value	Standard
<b>Performance</b>		
Weight Per Square:	2.2 Lbs (1.0 Kg)**	
Thickness:	350 mil (9mm) DFT	
Tensile Strength:	600 psi (4136 kN/m <sup>2</sup> )	ASTM D2370
Elongation:	10%	ASTM D4830
Puncture Resistance:	700 Lbs.	ASTM D4830
Water Absorption:	1% Maximum (by Weight)	ASTM D570
Fire Rating:	UL Class A Assembly	ASTM E84
<b>Reflectivity - CA Title 24*</b>		
SRI:	104 / 93 after 3 Years	As Calculated
Solar Reflectance:	0.83 / 0.75 after 3 Years	ASTM C1549
Thermal Emittance:	0.88 / 0.92 after 3 Years	ASTM C1371
<i>*Based upon application with WeatherWeld Cool Roof Coating</i>		
<i>** Roof membrane weight. Contact WeatherWeld for total system weight including insulation and coverboard.</i>		

**WeatherWeld - A Division of Liquiform Technologies Inc.**

9757 7th St. #803 Rancho Cucamonga, CA 91730 | (888) 440-3224 | info@weatherweld.com | (888) 440-3224

### OVERVIEW

Installation of the WeatherWeld system is a simple 5 step process:

1. Prepare surfaces, seams, walls, flashings, drains, and penetrations.
2. Install Insulation and G2 base sheet.
3. Spray apply WeatherWeld reinforced membrane.
4. Spray apply reflective acrylic coating system.
5. Install flashings and roof accessories.

**Contact WeatherWeld representative for final inspection.**

### PREPARATION

- Prior to installation, ensure that adhesion testing was conducted in accordance with WeatherWeld adhesion testing procedures to verify a minimum adhesion strength of four (4) pounds per linear inch (pli) to the applicable substrates. When calculating material requirements for a particular project, consideration must be given to applicator variance and surface texture.
- Confirm local water run-off ordinances and restrictions prior to cleaning roof.
- Pressure wash all surfaces receiving WeatherWeld to remove all dust, dirt, debris and other foreign contaminants.
- If the roof surface becomes contaminated with dirt, dust, or other particles at any time during the application of the WeatherWeld system, cleaning measures must be taken to restore the surface to a suitable condition.
- Ensure roof is dry prior to application.

### INSULATION INSTALLATION

- Install insulation in accordance with the insulation manufacturers requirements.
- Depending on deck type, insulation may be mechanically attached or adhered.
- Attach insulation with a fastening or adhesive pattern capable of achieving a 45 psf (FM 1-90) wind uplift rating.
- Enhance insulation attachment at perimeter and corner zones in accordance with ASCE 7-16.

### BASE SHEET INSTALLATION

- Install mineral-surfaced cap sheet inverted, lapping 2" on side laps and 4" at end laps using approved fasteners.
- Install base sheet, lapping 2" on center and 4" at end laps using approved fasteners.
- Installation pattern must meet FM 1-90 wind uplift requirements.

### WEATHERWELD SEAMLESS ROOFING APPLICATION

- Apply one layer of the composite roofing at the following ratio:
  1. Asphalt Emulsion: 30 gal. per 100 square feet (12.2 L/m<sup>2</sup>).
  2. Fiberglass Roving: 16 lb. per 100 square feet (0.78 Kg/m<sup>2</sup>).
- **DO NOT DILUTE.** No water or filler material may be added to the emulsion to thin or extend pot life.
- Fiberglass must be disbursed from the applicator in varying intertwined lengths, up to 24 inches (610mm).
- Thoroughly mix fiberglass and emulsion prior to application on roof surface.
- Loose strands must be brushed by hand, removed or filled with emulsion to create a solid surface.
- Upon completion, no area may be less than 250 mil dry film thickness (DFT).
- Install additional material at all roof flashings, 500 mils (DFT) of WeatherWeld composite installed, extending 24" in each direction prior to completion of the project.
- Areas where application exceeds 500 mils wet, such as base flashings and penetrations, brush by hand to prevent surface crazing.

### REFLECTIVE COATING INSTALLATION

- Prior to coating application, wash the roof surface with water.
  - Do not continue until all surfaces have thoroughly dried, confirmed by a reading of zero on a calibrated moisture meter.
    1. Acrylic Base Coating: Apply Base Coating at 1 1/2 gal. per 100 square feet (0.6 L/m<sup>2</sup>).
    2. Acrylic Top Coating: Apply Reflective Top Coating at 1 1/2 gal. per 100 square feet (0.6 L/m<sup>2</sup>).
- or**
3. (Alternate) Aluminum Coating: Apply Reflective Coating at 2 gal. per 100 square feet (0.8 L/m<sup>2</sup>).

### FLASHINGS

- All flashings must have 500 mils DFT of WeatherWeld Composite installed extending 24" in each direction.
- The following items are required to be in watertight condition for a WeatherWeld warranty to be issued for the project:
  1. Drains and Scuppers.
  2. Sheetmetal Copings and Counter-Flashings.
  3. Perimeter and Edge Flashings.
  4. Equipment Platforms and Sheetmetal Pans.

5. Expansion Joints.
6. Sheetmetal Ducts and Seals.
7. Electrical Enclosures and Conduits.
8. Transition Flashings.
9. Any other item that may affect the watertightness of the Roof.

### ROOF ACCESSORIES (INSTALLED AFTER COATING SYSTEM)

- Walkway Pads or Non-Slip Walking Surface
- Polymer Pipe Supports, Storm Collars on Pipes, Drain Rings and Screens
- Coping Caps and Flashings
- Access Hatches and Ladders

### INSPECTION

- Inspect entire roof area and touch-up deficient areas with WeatherWeld or reflective coating as necessary to ensure complete and uniform coverage. Special attention should be given to critical areas of roof, including roof penetrations, transitions, existing membrane seams, flashings, and drains.

### LIMITATIONS

- These are general guidelines for application of the WeatherWeld Seamless Roof System. The material requirements may vary depending on the specific job requirements. If unusual conditions exist, contact your local WeatherWeld Representative.
- WeatherWeld Seamless Roof Systems must be applied to structurally sound substrates and properly prepared surfaces. All surfaces must be clean and dry before application of coatings. WeatherWeld Seamless Roof Systems must not be applied over wet insulation or roofing materials. Failure of the substrate does not constitute failure of the WeatherWeld coating or system.
- WeatherWeld Seamless Roof Systems are designed for use on roofs with positive drainage.
  1. Do not begin when rain or other conditions such as fog or heavy dew are possible within a 48-hour period.
  2. Surfaces must be at least 6° F (3° C) above the dew point, and rising. Surfaces must be clean before application of product. Care must be taken to ensure that debris accumulation after original cleaning does not interfere with any stage of application. If either condition occurs, additional cleaning may be required.
  3. Drying time is affected by numerous factors, including temperature, direct sunlight, relative humidity, air movement, thickness, etc. Higher temperature and/or humidity will result in faster cure times. Lower temperature and/or humidity may extend cure times.
  4. Deviations from these application guidelines and specific material requirements may adversely affect the roofing system performance and are strictly prohibited.
  5. Applicator must comply with all applicable local, state, and federal regulations if asbestos, lead-based paint or other hazardous materials are encountered.

### WEATHER RESTRICTIONS

- Do not attempt application if ice, snow, moisture, or dew is present. Ambient temperature must be 50°F (10°C) and rising through the day. Restrict application when overnight temperature drops below 40°F (4.4°C). Cooler temperatures will negatively impact the properties of the system. Contact your WeatherWeld Representative for proper cold weather applications.
- Do not attempt application if moisture or dew is present. Ambient temperature must be less than 110°F (43°C). Contact WeatherWeld Representative for proper hot weather application

### STORAGE

- WeatherWeld should be stored in a shaded ventilated area under a tarp. Do not store in direct sunlight. Storage temperature must range from 60-80°F (15°C to 26°C). Indoor ventilated storage is recommended when ambient temperature is below 60°F (15°C) or above 80°F (26°C).

### WARRANTY

- 40-year Warranty: a written leak free guarantee that covers against roof leaks for 40 years.
- Owner responsible for ensuring roof drains stay clear, and facilitating WeatherWeld roof inspections.

### REQUIRED EQUIPMENT

- Graco 1017 roof pump with 500' 1" SAE hydraulic hose.
- Towable air compressor
- 500 feet of 1/2 inch air hose.
- Emulsion tanker (delivered to jobsite).
- WeatherWeld 3D roof printer (rented from WeatherWeld on a per job basis).
- Pressure washer.
- Water hose and water source (enough length to wrap around building).
- Wet mil gauge.
- General Personal Protection Equipment (PPE).
- General carpentry, roofing and sheet metal tools.