

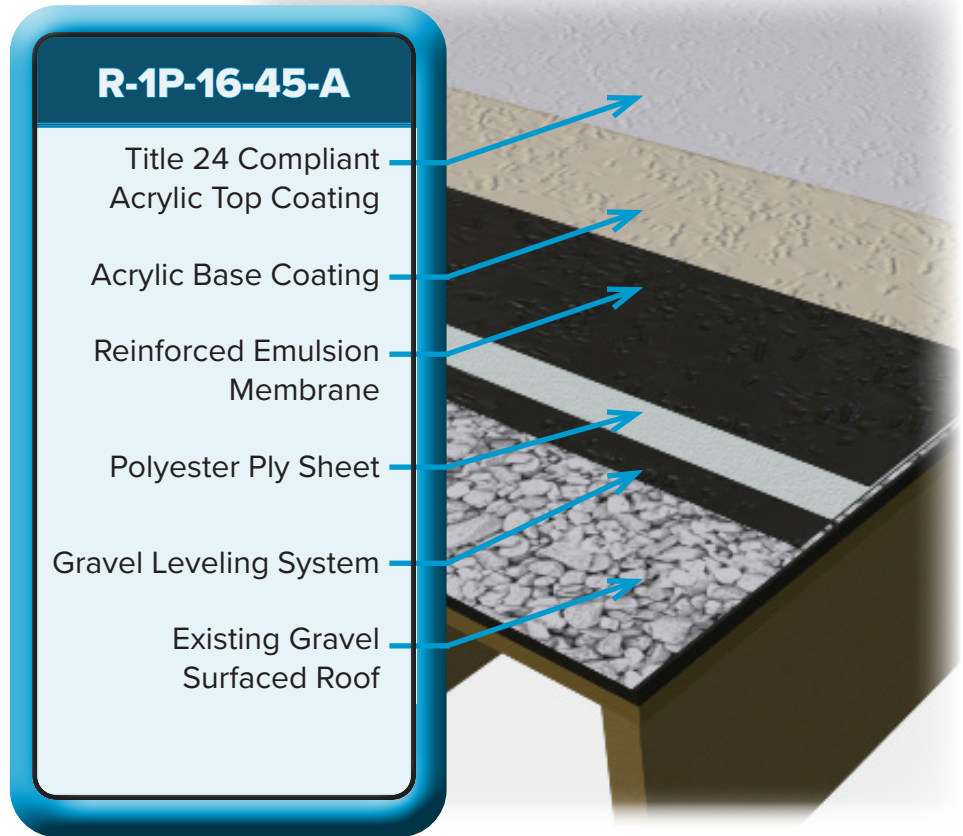
WEATHERWELD™

ROOFING MADE SIMPLE

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

✓ **Recovery**

✓ **Non-Insulated**



WeatherWeld R-1P-16-45-A is a completely seamless roof system designed for installation over existing gravel surfaced built-up-roofs.

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 Asphalt emulsion, sprayed along with intertwined fiberglass creates a virtually impenetrable membrane.

MATERIALS

Interply Sheet:	Embedded
• Base Sheet:	1 Layer - Polyester Fabric Reinforcement
Reinforced Membrane:	Spray Applied
• Emulsion:	45 Gal. - WeatherWeld Asphalt Emulsion
• Fiberglass:	16 Lbs. - WeatherWeld Fiberglass Roving
Reflective Roof Coating:	Spray Applied
• Base Coat	1.5 Gal. WeatherWeld Base Coat
• Top Coat	1.5 Gal. WeatherWeld Title 24 Top Coat
or	
• Aluminum Coating:	2 Gal. WeatherWeld Aluminum Coating
Accessory Products:	
• 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
Performance		
Weight Per Square:	2.23 Lbs (1.01 Kg)	
Thickness:	375 mil (9.5mm) DFT	
Tensile Strength:	600 psi (4136 kN/m ²)	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
Reflectivity - CA Title 24*		
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>		

WeatherWeld - A Division of Liquiform Technologies Inc.

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OVERVIEW

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

1. Prepare surfaces, seams, walls, flashings, drains, and penetrations.
2. Install 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.

GRAVEL RECOVERY SYSTEM

- Polyester Leveling System: Where existing gravel exceeds 1/2 inch (13mm) in diameter, apply one layer of polyester ply embedded in emulsion at rate of 15 gal. of undiluted emulsion per 100 sq. ft (6.1 L/m²).
 1. Both polyester ply and emulsion must be thoroughly saturated, creating a solid surface.
 2. Extend polyester leveling system to cover the entire embedded gravel roof area.
- Flood Coat: Where existing gravel is less than 1/2 inch (13mm) in diameter, apply a flood coat of emulsion at rate of 15 gal. of undiluted emulsion per 100 sq. ft (6.1 L/m²).

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/m²).
 2. Fiberglass Roving: 16 lb. per 100 square feet (0.78 Kg/m²).
- **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/m²).
 2. Acrylic Top Coating: Apply Reflective Top Coating at 1 1/2 gal. per 100 square feet (0.6 L/m²).
- or**
3. (Alternate) Aluminum Coating: Apply Reflective Coating at 2 gal. per 100 square feet (0.8 L/m²).

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.