

# Aquaflex Roof Silicone

## Silicone Roof Coating

### PRODUCT DESCRIPTION

Aquaflex Roof Silicone is a ready-to-use, single component, solvent borne, moisture cure silicone roof coating which cures to form a seamless membrane when applied over the entire roof area. Aquaflex Roof Silicone offers the unique ability to extend the life cycle of new and existing roof systems, in addition to keeping the surface cool, providing protection from ultraviolet sun and other weather exposures.

### USES

- Protect and waterproof a variety of roof surfaces.
- Suitable for use on sprayed polyurethane foam, most metal roof systems, concrete, Thermoplastic and Thermoset single-ply membranes (primer may be required). Contact Polyglass Technical Services for clarification of unusual surfaces or project conditions.

### FEATURES AND BENEFITS

- Excellent resistance to weathering including: UV radiation, extreme temperatures, as well as rain, ice and snow.
- Extends the useful life of the roof.
- Aquaflex Roof Silicone can reduce energy costs by decreasing roof surface temperature.
- Offers high tensile strength and elongation.
- Fungal and algal resistant – even in high temperatures.

### TYPICAL PHYSICAL PROPERTIES

Test Property	Value	Procedure
Accelerated Weathering @ 8760 hr (pass/fail)	pass	ASTM G53
Permeance (perms)	5.9	ASTM E96 (procedure B)
Elongation (%)	250 +/- 25	ASTM D2370
Tensile Strength (psi)	475 +/- 25	ASTM D2370
Hardness (Shore A)	50 +/- 5	ASTM D2240
Viscosity - spray grade/bulk (cP)	5,000–8,000	Brookfield@ 4d/5 RPM/77°F
Viscosity - roller grade/pail (cP)	8,000–12,000	Brookfield@ 4d/5 RPM/77°F
Weight/gal (lb)	10.2	ASTM D2939
Solids Weight (%)	80 +/- 2	ASTM D1644
Solids Volume (%)	69 +/- 2	ASTM D2697
Temperature Stability Range (°F)	-80 to 350	
Tack-free time (hrs, subject to temp/humidity)	1–4	ASTM D3960
VOC (gm/l)	<250	Std Method
Flash Point (°F)	105	PMCC

### APPLICATION INSTRUCTIONS

#### Surface Preparation:

- All surfaces to receive coating must be clean, dry and free from any foreign matter such as dirt, oils, grease or other debris that could inhibit the adhesion capabilities of the newly installed products.
- Metal surfaces that display rusting or other oxidation, to be prepared with a grinder or wire brush as needed to remove surface contaminants.
- Existing roof systems to be visually inspected for conditions that may adversely affect adhesion of performance of newly installed products. Repair any visible deficiencies such as splitting, blistering, and buckling.
- Visually inspect all metal and non-metal flashings, edges, drains, valleys and through-roof penetrations and repair as needed by project conditions.
- Do not apply to wet or visibly damp surfaces, or surfaces previously covered with coal tar based products or Kynar® finishes.
- Concrete surfaces cured with wax/resin based compounds can inhibit adhesion.

#### Application:

- Stir well prior to application. Caution: Due To The Combustible Nature Of This Product, Do Not Use An Electric Mixer.
- Aquaflex Roof Silicone is recommended to be applied with high pressure sprayer for best appearance and coverage. It may also be applied by roller or brush applications.
- Apply Aquaflex Roof Silicone at 20 wet mils (1.25 gallon per 100 square feet) per coat. Typical application conditions require Aquaflex Roof Silicone be applied in two coats at 20 wet mils per coat. Consult Polyglass Technical Services for application rates for specific roof membranes and for job specific application specifications.
- Subsequent coats should be applied within 48 hours of prior applications to insure full and uniform adhesion. Coating must be evenly applied and pinhole-free. Before applying a subsequent coat of this product, the previous coat must be completely dry and cured. Apply second coat perpendicular to the first.
- Apply only when ambient temperatures are 50°F and rising. Cold weather could result in uneven application and improper curing of product. Do not apply if there is a threat of inclement weather within 4 hours of application. Drying time is dependent on temperature, humidity and film thickness.
- Do not thin product.
- Prior to using this product on new cap sheets (smooth or granulated), it is recommended to wait 30 days for weathering.



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### Application Equipment:

This product may be sprayed, brushed, or rolled. Due to the high viscosity of the material, a high-pressure airless paint pump capable of producing 5000 PSI should be used. The pump should have a minimum of 2.5 gallons per minute output and be fed by a 5:1 transfer pump to prevent cavitation. Always use components rated for pump pressure. Hoses should be BUNA-N jacketed for prevention of moisture contamination. Hoses should have a minimum I.D. of 3/4" and an adequate working pressure. The spray gun should be high pressure (5000 PSI) with reverse-a-clean spray tip, 0.029–0.035 and a 50° fan tip. Any filters on spray rig or gun should be removed. Filters are required when applying fine finishes but not for roof coatings.

**DO NOT USE** hose that has been used for Acrylics or other waterborne coatings as the liner absorbs moisture and initiates the silicone cure process.

### Storage and Cleaning:

- Product shelf life: 12 months from date of manufacture when stored between 35°F and 75°F.
- Do not store at temperatures greater than 120°F.
- Store 24 hours at room temperature prior to application.
- Observe normal safeguards for storing and handling of this product prior to and during application.
- Keep containers covered when not in use.
- Cleanup of spray equipment containing uncured material may be accomplished by flushing with VM&P Naphtha or mineral spirits. Aquaflex Roof Silicone cures by reacting with moisture and should not be left in spray guns, pump equipment and hoses for prolonged periods unless equipment contains moisture lock hoses, fittings and seals. Equipment without these components will transmit sufficient moisture vapor to gradually form cured material on hose walls and at unsealed connections potentially causing an increase in operating pressure and material flow restriction.

### Ponding Water:

The chemistry of silicone is not adversely affected by ponding water or prolonged rain exposure. Please be advised that good roofing practices, Building Codes and The National Roofing Contractors Association (NRCA) consider ponding water on any roof undesirable and recommend that all roof systems be designed and built to ensure positive drainage.

## WARNING

**Personal Protection** - Irritation may result from prolonged or repeated contact with skin.

Wear chemical resistant gloves, protective goggles and protective clothing, if needed.

**Eye Contact** - Flush eyes with water while lifting the upper and lower lids and seek medical advice.

**Odors and Mists** - Avoid breathing silicone odors and spray mists. Use an appropriate

MESA/NIOSH approved respirator when exposure can exceed recommended PEL.

Additional care must be taken to prevent roof top HVAC equipment from introducing silicone odors into interior areas during application.

**Waste Disposal** - Empty containers must be disposed of in accordance with local, state and federal regulations.

**For Professional Use Only** - Keep out of the reach of children.

This product is not recommended for interior use.

Installers should exercise caution during spray processes to avoid falls caused by stepping into slippery coating. Installers should read and understand all technical and informational literature on this product, including the SDS, prior to use of the product.

Refer to safety data sheet (SDS) for specific data and handling of our products.

All data furnished refers to standard production using manufacturing testing tolerances.

The product user, and not Polyglass, is responsible for determining the suitability and compatibility of our products for the user's intended use.

**For the most current product data and warranty information, visit [www.polyglass.us](http://www.polyglass.us)**

### PACKAGING

5.0 Gallon (18.9 Liters) Pail

### POLYGLASS U.S.A., INC. MANUFACTURING FACILITIES

- Fernley, NV
- Hazleton, PA
- Phoenix, AZ
- Waco, TX
- Winter Haven, FL

### CORPORATE HEADQUARTERS

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