

Product Description

3004 is a closed-cell polyurethane roofing foam applied by spray. It cures into a continuous, monolithic surface that resists water and stops air movement through the roof assembly, and it insulates as it seals. Because the foam is sprayed in place, a 3004 roof self-flashes around penetrations and curbs with no seams and no mechanical fasteners. The system is formulated with a low global warming potential (GWP) blowing agent.

Product Data

Physical Property	Typical Value	Test Method
R-Value	6.2 @ 1"	ASTM C 518
Core Density	2.7-2.9 pcf	Brookfield
Water Vapor Permeance	<1.0 perms @ 1.25"	ASTM E 96
Air Permeance at 1" (L/sm ²)	<0.02	ASTM E 2178
Tensile Strength	90-110 psi	ASTM D 1623
Dimensional Stability	<6%	ASTM D 2126
Flame Spread @ 4"	<75	ASTM E 84
Smoke Development	<450	ASTM E 84
Closed Cell Content (%)	>90	ASTM D 6226

Liquid Properties At 77°F

	A-Side (ISO)	B-Side (Resin)
Specific Gravity	1.23	1.18
Viscosity	250 +/- 50	200-500

Suggested Storage and Product Shelf Life

Keep material between 50°F and 80°F.

Shelf life is 6 months from the date of manufacture in unopened containers.

Leave container seals intact until the material is ready to use.

Store drums cool and dry, out of direct sunlight.

General Product Information

Product Packaging: 55 Gallon drum

Product Color: Yellow. Color is not UV stable and will discolor with sun exposure.

Maintenance

Keeping spray equipment maintained is essential to consistent results. Poorly maintained equipment produces poor foam.

Follow the maintenance schedule published by your equipment manufacturer.

Contact SESCO for guidance on storing equipment long term.

Substrate Preparation

Confirming that the substrate is suitable rests with the building owner, the owner's designated representative, the contractor, and the inspector. Uneven decks and unusual site conditions may call for preparation steps beyond what is described here; call SESCO Technical Support at 812.776.6251 before you proceed. Remove dust, dirt, paint, and loose material from every surface before applying any SESCO product. For preparation detail beyond this sheet, refer to the SESCO Roofing Products Guide Specification or to SPFA guidelines.

Wood

Confirm the wood is dry and keep it protected from contamination. Call SESCO Technical Support if moisture content is above 19%. Water or oil on the surface can cause poor adhesion or excessive foaming. Pack large gaps with backer rod or a suitable filler.

Steel & Other Materials

Verifying adhesion and suitability by field test is the contractor's or end user's responsibility. Blasting or priming is not always required. Contact SESCO Technical Support for guidance on a specific substrate.

Concrete

Concrete must be structurally sound, clean, and cured a minimum of 28 days before foam is applied. Pack large gaps with backer rod or a suitable filler. Blasting or priming may not be required. Verifying adhesion and suitability is the contractor's or end user's responsibility. Contact SESCO Technical Support for guidance.

Previously Applied Foam

Remove existing foam and other polymer coatings wherever it is practical to do so. Where material is left in place, spray only after the contractor has verified adhesion and compatibility and the building owner or the owner's representative has approved the approach.

Processing Parameters

Preconditioning	1. Bring material to 70–80°F before spraying. Cold material thickens and can cavitate the pump.
Mixing	2. Do not mix.
Pressure Settings	3. Apply with a high-pressure, plural-component proportioner rated for a minimum of 1,000 psi dynamic pressure. 4. Static pressure is typically set between 1,250 and 1,550 psi.
Temperature Settings	5. Primary and hose heaters typically run between 110°F and 135°F. Run the higher end of that range in cold months and the lower end in warm months.

Application

- Clean surfaces as described under Substrate Prep.
- Hold substrate temperature between 50°F and 180°F. Flashing is recommended at the low end of that range.
- Flush material through the lines and gun before spraying the working surface, particularly when changing from another system.
- Build to the specified thickness in passes of at least 0.5 inch and no more than 1.5 inch. Pass lines, roof penetrations, and tapered areas are the exception.
- Do not spray over a wet surface.
- Shoot a test patch first and confirm that the material sprays, cures, and hardens correctly.
- Watch the foam as it goes down. If anything looks wrong, stop spraying and check the substrate, the equipment, the gun, & material before continuing.