EnviroSeal by Quadrant

CC

TECH DATA SHEET

EnviroSeal® CC is a two-component, closed-cell spray polyurethane foam (ccSPF) insulation system with a medium-density formulation designed to meet AC-377 Appendix X requirements. EnvirsoSeal CC is available in standard and winter grades. Refer to the Application section of this guide for additional information.

HANDLING AND STORAGE

Exercise caution when removing bungs from containers, as the contents may be under pressure. Always loosen the small bung first to allow any built-up gas to escape before fully removing. Minimize exposure to vapors and avoid prolonged inhalation. Additional information is available in the AX-119 publication by the Polyurethanes Industry.

Storage

Unopened resin (B-side) has a shelf life of six (6) months from the date of manufacture when stored in original containers at temperatures between 50°F and 80°F in a dry, well-ventilated area.

To preserve product quality;

- Do not expose to direct sunlight
- Avoid placing drums directly on cold concrete floors

Product Change-Over

Mixing incompatible resin types can cause cross-contamination. It is the applicator's responsibility to follow proper procedures to prevent resin contamination. When switching the "B" side (resin), especially closed cell to open cell, it is crucial to fully drain the supply hoses, recirculation lines, and drum pumps.

APPLICATION

Equipment

It is the applicator's responsibility to have a complete understanding of all equipment specifications, technical requirements, and safe operating procedures related to spray polyurethane foam application.

EnviroSeal polyurethane foam should be applied using commercial-grade spray equipment specifically designed for this purpose by a qualified professional applicator. For optimal performance, 3:1 transfer pumps are recommended (or 2:1 at a minimum), used with an internal mix type spray foam gun.

These are the recommended settings. Actual settings may vary throughout application based on equipment, substrate, and ambient temperatures. Equipment must be able to maintain all ratios and settings.

Equipment Settings

Pre-Heaters: (A) Component - ISO	105°F – 140°F
Pre-Heaters: (B) Component -	105°F – 140°F
Resin	105°F – 140°F
Hose Heat	1,000 – 1,500 psi - Dynamic
Fluid Pressure	1:1 By Volume
Mixing Ratio	10 – 15 Lbs./Minute (i.e.
Recommended Mix Chamber/	01-GRACO AR4242)

Mixing Requirements

Resin (B Side)	DO NOT MIX

Project Conditions

It is the applicator's responsibility to ensure that the spray polyurethane foam system is applied within its recommended parameters. For optimal performance, the recommended substrate temperature during application is between 50°F and 120°F when using EnviroSeal CC standard grade. EnviroSeal CC Winter substrate application temperature range is between 10°F - 75°F.

Application Parameters

Storage Temperature	50°F – 80°F
In Use Temperature	70°F – 80°F
Ambient Air Temperature	10°F – 120°F*
Substrate Temperature	Standard: 50°F – 125°F*
	Winter: 10°F – 75°F*
Moisture Content of Substrate	Less Than 19%
Maximum Lift Per Pass	Not to Exceed 3"

* For temperatures below this range refer to the Cold Weather section on page 2

Processing Requirements

All material must be a minimum of 70°F before dispensing.

EnviroSeal CC adheres to a variety of construction materials, including but not limited to wood, masonry, concrete, and metal. All surfaces must be clean, dry, and free of dew or frost before spraying. Metallic surfaces must be free of oil, grease, mill scale, rust, or other contaminants to ensure proper adhesion.

Avoid spraying into or under rising foam, as this can lead to elongated cell structures, which may cause dimensional stability issues, shrinkage, or cracking. As with all spray polyurethane foam (SPF) systems, improper application techniques should be avoided.

Recommended Maximum Pass Thicknesses

Ambient Temperature	Maximum Pass†
10°F- 85°F	3”
>85°F	3”

†On dual passes when the ambient temperature is >85°F, allow the first pass to cool to 100°F before applying the second pass.

Any foam that is improperly applied or off-ratio must be completely removed and replaced with properly installed spray polyurethane foam.

Moisture
Polyurethane foam should not be applied on surfaces which are wet or have been affected by rain, condensation, dew, or frost. The substrate moisture content should not exceed 19%. Any foam applied to substrates with moisture content exceeding 19% must be completely removed. The substrate must be allowed to dry before reapplication.

Cold Weather
In cold weather conditions (below 40˚F), applications require adjustments to material temperatures and application techniques. Use of additional barrel warming or other methods of keeping the drums warm is vital. Additionally, warming the substrate using thinner lifts and/or picture framing stud cavities can improve adhesion. Use of EnviroSeal CC Winter should be used when ambient and surface temperatures are consistently below 50˚F.

Ventilation
It is the contractor’s responsibility to ensure that mechanical ventilation is provided during and after the application of spray foam. Minimum ventilation during application is 0.3ACH. For 1-hour trade re-entry or 24-hour homeowner re-occupancy, 10ACH is required. For more detailed guidance, refer to the “Guidance on Ventilation During Installation of Interior Applications of High-Pressure Spray Polyurethane Foam” published by the American Chemistry Council, Spray Foam Coalition.

Exposure to Heat
It is the contractor’s responsibility to ensure that the foam maintains separation from heat emitting surfaces. The maximum in-service temperature is 180˚F and the material should be kept a minimum of 3” from these surfaces. Any cutting, brazing, or other work with an open flame or sparks should be kept clear of the foam.

Exposed Foam
Sprayed polyurethane foam surfaces must be protected from direct UV exposure. Closed cell foam should not be left in direct sunlight or be subjected to UV exposure for more than 180-days. Prolonged exposure to sunlight will cause discoloration of the foam.

For further application information, consult a Quadrant Performance Materials Technical Representative.

SAFETY

Personal Protective Equipment (PPE)
The process of spraying polyurethane foam creates atomized material. Inhalation and direct exposure to these fine droplets must be avoided.

Applicators should wear appropriate Personal Protective Equipment (PPE) as recommended by the Center for the Polyurethanes Industry (CPI) for high-pressure spray foam applications. Required precautions include but are not limited to the use of a full-face mask or hood with a fresh air supply; coveralls/suits to protect skin and clothing; and appropriate gloves for handling wet and dry materials as well as cleaning products. For additional information on PPE visit www.spraypolyurethane.org.

In the event of a spill or material splashing on a worker keep all PPE in place while removing any garments/outerwear which has been compromised. Only after the compromised items have been moved aside, remove the PPE from the worker, move to fresh air, and assess. If breathing becomes irregular immediately call 9-1-1 and administer First Aid. If the eyes are affected, thoroughly flush the affected eye(s) with clean water and assess. If the material is ingested, do NOT induce vomiting and seek medical help immediately.

Environmental Precautions
If the product causes environmental contamination, notify the appropriate authorities. Prevent material from entering sewers, surface water, or groundwater systems.

Spills
In the event of a spill, it is the contractor’s responsibility to act quickly to minimize the spill and contain the material. Activities include restricting access to the area allowing only authorized personnel in proper PPE; contain the spill using absorbent materials (kitty litter or similar); properly clean-up the spill and place the waste in a suitable container for proper disposal; label the waste materials accordingly following all local, state, and federal guidelines.

TECHNICAL ASSISTANCE
For additional support, contact Quadrant Performance Materials Technical Services or Product Engineering Departments at 972-542-0072.

DISCLAIMER
The technical and processing information in this document serves as a general guideline. Always refer to the Safety Data Sheet (SDS) and product label before use.

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