PRODUCT USAGE

Enverge® EasySeal .5® is a spray-applied, two component, open cell polyurethane foam insulation used to insulate and seal in walls, attics, ceilings, crawlspaces (ventilated in low humidity environments), ducts, and interior applications.

SAFETY

PERSONAL PROTECTIVE EQUIPMENT (PPE)

SKIN - Wear gloves, coveralls, apron and boots as necessary to prevent contact of liquid components or partially-cured spray foam with skin. When handling liquid components, gloves should be made of nitrile, neoprene, butyl, or PVC.

EYES - Protect eyes while handling liquid components or spraying with safety goggles or safety goggles combined with a face shield. During spray application, eye protection may be provided by a full-face or hood respirator.

RESPIRATION - Contractors engaged in the application of Enverge spray foam must have a written respiratory protection program for employees handling or applying Enverge spray foam materials. Depending on the situation, respiratory protection may include dust masks, air-purifying respirators (APR), powered air-purifying respirators (PAPR), or supplied-air respirators (SAR).

VENTILATION - Provide ventilation and other engineering controls to exhaust vapors from work areas and to protect building occupants and other workers on site.

HANDLING OF LIQUID COMPONENTS

Applicatiors should use engineered controls and proper PPE before handling liquid components. Use caution in removing bungs from 55-gallon drums. Loosen ¾-inch bung and let gas escape before completely removing. In case of chemical contact with eyes, flush with water for at least 15 minutes and get medical attention. For further information refer to "Working with MDI and Polymeric MDI: What You Should Know," Reference No. AX 205, published by Alliance for the Polyurethanes Industry, 1300 Wilson Boulevard, Arlington, VA 22209, www.polyurethane.org.



START UP & APPLICATION PROCEDURES

AMBIENT CONDITIONS

For best results, ambient air should be less than 85% relative humidity and not within 5°F (-15°C) of dew point.

APPROVED SUBSTRATES

Approved for application to gypsum, wood, concrete, metal, and masonry.

SUBSTRATE REQUIREMENTS

Prior to installation, all substrates must be secure, dry, and free of foreign materials, oil, grease, rust, or other contaminants. Check substrates with Moisture Detection Paperstrips (MDP) for metal or a mositure meter for wood to verify dryness. Primers should be used where necessary. Mask off all areas not to receive spray foam with masking tape and plastic sheeting. Recommended substrate temperatures are 50°F to 120°F (10°C to 49°C). Temperatures colder than what are recommended can result in the foam cracking and popping off of the substrate. For quicker removal of excess spray foam use a release agent on stud facing.

MIXING

Mix at high speed for 10 minutes before flushing or purging lines. No further mixing required.

DRUM TEMPERATURE REQUIREMENTS

Drum temperature for application should be between 70°F to 100°F (21°C to 38°C). For optimal performance a drum temperature of 95°F (35°C) is recommended.

SPRAY RIG & DRUM PREP

If this installation requires changing the spray rig system from a closed cell product to an open cell product **OR** an open cell to a closed cell, flush B-side (resin) with soapy water to remove the product first. Then flush the water in the system out with the new open cell product. Remember to flush the entire B-resin side including recirc lines, proportioner, and spray hose. For additional information flushing visit **EnvergeSprayFoam.com/documents.**

In order for the drum to be ready for use, the drum must be in a temperature range where your proportioner can reach required spray temperatures.

PLEASE REFERENCE THE EQUIPMENT SETTINGS AND TEMPERATURE SETTINGS EXAMPLE ON THE NEXT PAGE FOR PROPER APPLICATION TEMPERATURES.



START UP & APPLICATION PROCEDURES (CONT.)

EQUIPMENT SETTINGS

Pre-Heaters - Iso (A)	105°F to 145°F (41°C to 63°C)
Pre-Heaters - Poly (B)	105°F to 145°F (41°C to 63°C)
Hose Heat	105°F to 145°F (41°C to 63°C)
Recommended Spray Pressure	1,000 to 1,400 psi (dynamic)
Shelf Life	A Side: 12 mo. B Side: 6 mo.

*The values in the Equipment Settings chart show initial optimum settings. Actual operating temperatures vary as ambient air, humidity, moisture, and substrate temperatures vary. Extreme conditions will affect the adhesion, cured physical properties, and yield of the foam. Applicator must make adjustments depending on conditions.

TEMPERATURE SETTING EXAMPLE

If your drum temperature is 80°F (27°C) and you have a rig with a delta T of 50°F (10°C), your max spray temperature can only be 130°F (54°C). With this information it is important to know the delta T of your proportioner and drum temperature to achieve the proper spray temperature.

APPLICATION DEPTHS

Enverge EasySeal .5 spray foam should be applied at a minimum thickness of 2.5" to 3.5". For substrates with sensitivity to heat, including plastic or metal, tests should be done to understand the effect of the spray foam exotherm on the material. In some cases, applying flash coat first is recommended to prevent any adverse effects on the substrates.

OVERSPRAY & LEAK PREVENTION

Inform the owner or builder of the need to take preventive measures that will prevent property damage due to potential overspray. Explain the precautionary measures you'll take to protect windows, doors, floors, HVAC equipment, vents or other equipment. Take preventative measures to isolate HVAC equipment, especially in retrofit applications.

It is highly recommended to lay down polyethylene film underneath the trailer and hoses to prevent damage in the event of hose rupture.



AFTER APPLICATION

INSPECT APPLICATION

Look for good cell structure and adhesion. Remove any unreacted chemical from wall due to pressure imbalances while triggering spray gun. Look for a consistent skin surface of the foam and be sure product is curing.

CLEAN UP

Clean off all overspray and overfill from the interior stud facings. Where stud cavities have been overfilled, shave off the foam face to provide a surface flush with the stud for drywall installation. Remove all masking materials.

RE-ENTRY & OCCUPANCY

EasySeal .5 spray foam reacts and cures within seconds of application. Re-entry can occur 1 hour after application with proper ventilation. Occupancy times will vary depending on factors including ventilation. Typically, when ventilating you need 10 air exchanges per hour for a 24 hour period following the conclusion of spray application and occupancy may occur at that time.

CODES CONSIDERATIONS

15 MINUTE THERMAL BARRIER

Federal, state, and local building codes vary. All require that spray-applied polyurethane foam insulation be covered with an approved 15-minute fire rated thermal barrier. One typically approved material is 1/2-inch gypsum wallboard (sheetrock) applied over the spray polyurethane foam insulation. However, always check with local officials for recommendations and approvals.

IGNITION BARRIER

Prescribed ignition barriers are permitted by model building codes (including the International Residential Code and the International Building Code) in lieu of thermal barriers in attics and crawlspaces where access is limited to the service of utilities. Enverge EasySeal .5 has been tested in accordance with large scale simulated construction. Therefore when Enverge EasySeal .5 is applied in attics and crawlspaces with limited access, per the building code, the prescriptive ignition barrier may be omitted. Other limitations may apply, depending on specific project circumstances. Review the limitations in IAPMO Evaluation Report No. 0492 and DRJ TER 1911-06 before installing without a thermal barrier or prescriptive ignition barrier.

FOLLOW THE MAUFACTURER GUIDELINES WHEN APPLYING THERMAL AND IGNITION BARRIER COATINGS



