

# **0.4 LX SHIELD** Ultra-Low Density Spray Foam

**0.4 LX SHIELD** can achieve an Ultra-Low Density of 0.4 lb/ft<sup>3</sup>, which translates directly to increased yield. 0.4 LX SHIELD has revolutionary expansion and long-range application, making it the foam that every applicator loves.

## HIGH PERFORMANCE:

- Ultra-Low Density
- Revolutionary Expansion
- Long-Range Application
- EXCEPTIONAL CONTRACTOR VALUE:
  - Increased job efficiency
  - Elimination of ladders
  - Easier to train new sprayers

<b>TYPICAL PHYSICAL PROPERTIES*:</b> Core Density (nominal, lb/ft <sup>3</sup> ) Dimensional Stability (%) Tensile Strength (psi) Closed Cell, content (%) Air Leakage at 3.5" (L/s/m <sup>2</sup> )	<b>PROCEDURE</b> D-1622 D-2126 D-1623 D-2856 E-283	<b>VALUES</b> 0.4 <15 minimum 3 psi <90% <0.02
RELATIVE INSULATION VALUES (aged):		
R-value at 1"	3.7	
R-value per inch at $\geq 3.5$ "	3.6	
THERMAL AND IGNITION BARRIERS Ignition Barrier:		
DC 315 (wet mils)	АС377-Арр Х	4
Flame Seal FS 1B (wet mils)	АС377-Арр Х	6
Thermal Barrier:		
DC 315 (wet mils)	NFPA 286	14
<b>HANDLING PROPERTIES at 77°F (25°C):</b> Viscosity, cps Specific Gravity	<b>A SIDE (ISO)</b> 250±50 1.23	<b>B SIDE (RESIN)</b> 400±50 1.06

## RECOMMENDED PROCESSING INFORMATION (ADDITIONAL DETAILS ON BACK):

Dispensing Ratio	1:1
Hose Heaters	115-160° F (46-71° C)
Primary Heaters (A&B)	115-160° F (46-71° C)
Dynamic Pressure (A&B)	1000 psi minimum
Static Pressure (A&B)	1300-1600 psi minimum

## MIXING (ADDITIONAL DETAILS ON BACK):

- Mix B-side (resin) on high speed for 20 minutes before application and continue mixing throughout application.
- Mixing of A-side (iso) is not required.

## RECOMMENDED STORAGE AND SHELF LIFE (ADDITIONAL DETAILS ON BACK):

- Storage temperatures 40-100°F (4-38° C). See back for preconditioning of material.
- 6 month shelf life from date of manufacture (unopened containers).
- Keep container tightly sealed.
- Store out of direct sunlight, in a cool dry place, avoid freezing.

## APPROVALS/ COMPLIANCE: CCRR-1051 IBC\_IRC\_IFCC: 2009\_201

- IBC, IRC, IECC: 2009, 2012, 2015 (AC377)
- For use in residential (IRC) and commercial (IBC) construction
- Class 1— ASTM E-84
- IRC/IBC Section 316.6/2603.10 Ignition barrier not required in unvented attics.
- 1 hour reentry time for new residential construction, natural ventilation (Commercial/retrofit construction, 12 hours)

0.4 LX SHIELD has been tested by a third party laboratory (Intertek Testing Services NA, Inc.) and evaluated by Priest and Associates Fire Consultants, LLC.



## PACKAGING:

55 Gallon Drum

## FINISHED PRODUCT COLOR:

White to off-white (UV exposure will cause discoloration, discoloration by itself is not a sign of product damage)

## **BLOWING AGENT:**

100% Water Blown

## LEED INFORMATION:

- O.4 LX SHIELD has a minimum of 20.1% total renewable/recycle content
- 2.2% pre-consumer recycled
- 2.9% post-consumer recycled
- 15.0% rapidly renewable



\*Properties achieved in a lab environment at 77°F. Field conditions may cause variation in properties.



Xtreme Seal 36 Finnel Dr., Unit 3-5 Weymouth, MA 02188 508-933-1894 info@xtremesealfoam.com



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## PREPARATION OF SUBSTRATES

Providing the proper substrate is the responsibility of the owner, the owner's appointed representative, the contractor, and/or inspector. The following are manufacturer's recommendations. However, other preparation techniques may be required given unique/specialized application circumstances. Contact Xtreme Seal for technical questions: 508-933-1894.

It is recommended to remove dust, dirt, oil, paint, and alternative polymers from all surfaces prior to applying Xtreme Seal products.

See Xtreme Seal specifications or SPFA guidelines for further details on substrate prep.

#### WOOD

- Ensure wood is relatively dry and protect surfaces from contamination.
- Water or oil present may cause poor adhesion or excessive foaming.
- Fill large voids with appropriate backer rods or appropriate fillers.
  If additional information is required, contact an Xtreme Seal representative for more details.

#### STEEL & OTHER METALS

• It is the responsibility of the contractor/end user to determine proper adhesion and suitability through field testing. Blasting and/or priming is not always required. If additional information is required, contact an Xtreme Seal representative for more details.

#### CONCRETE

- If applying foam to concrete, the concrete surface should be structurally sound, clean, and dry/cured (typically 28 days).
- Fill large voids with appropriate backer rods or appropriate fillers.
- Blasting and/or priming is not always required. It is the responsibility of the contractor/end user to determine proper adhesion and suitability. If additional information is required, contact an Xtreme Seal representative for more details.

#### PREVIOUSLY APPLIED FOAM or OTHER POLYMERS

 As practical, remove previously applied foam and other polymer products. Application of product over existing materials should be performed only after adhesion/compatibility is verified by the contractor and accepted by the building owner or owner's appointed representative.

#### WIRING & PLUMBING:

- 0.4 XL SHIELD is fully compatible with CPVC piping systems (Paschal Engineering Study for the SPFA).
- 0.4 XL SHIELD is compatible with typical electrical wiring coverings.

## PROCESSING

- It is recommended to precondition material to 90°F prior to application. Material may thicken at lower temperatures which can cavitate pumps.
- 2. Use an electric driven drum mixer (Fusion Fluid HD or equivalent) in the center bung of drum. Ensure that the mixer lid is securely attached.
- 3. It is recommended to use three folding blades in the following

arrangement: 8" blade at the top (set four inches down from the top of the shaft), 6" blade positioned in the middle, and an 6" blade at the bottom.

- 4. Mix B-Side (Resin) for 20 minutes prior to application. Open the drum and visually verify the material has been thoroughly mixed. If not, keep mixing for another 5 minutes or until the top layer of separation has been thoroughly blended into the resin.
- 5. Continually mix B-Side (Resin) while applying material.
- 6. Mixing of A-Side (Iso) is not required.
- 7. Product should be sprayed with a high pressure pluralcomponent proportioner capable of a minimum of 1000 psi dynamic pressure and a maximum pressure differential of 200psi between resin and isocyanate.
- 8. Static pressure is typically set between 1300-1600 psi. Dynamic pressure typically operates at approximately 1000-1300 psi.
- Primary heaters and hose heaters are typically set between 115 -160°F. Higher temperatures are utilized in winter months, lower temperatures are utilized in summer months.
- 10. Proper application temperature setting is the responsibility of the end user. Equipment temperature varies and can be dependent on equipment, hose length, elevation, ambient temperature, substrate temperature humidity, and other factors. If additional information is required contact an Xtreme Seal representative for more details.

## APPLICATION

- 1. Clean surfaces according to "Preparation of Substrates" section.
- 2. If priming, follow manufacturer recommendations. Ensure primer is adequately cured prior to application.
- 3. It is the contractor's responsibility to determine if ambient and substrate temperatures are conducive for spraying foam.
- 4. When changing between products, flush an adequate amount of material through the lines/gun prior to spraying desired surface. Flush amount will be dependent on prior system used. If additional information is required, contact an Xtreme Seal representative for more details.
- 5. Before application, test material to ensure that material sprays, cures, and hardens properly.
- 6. Always hold the spray gun perpendicular to the surface being sprayed.
- 7. Inspect applied material intermittently to ensure no problems exist. If problems are detected, discontinue application and inspect all substrates, equipment, gun, and liquid material for problem source(s).
- 8. 0.4 XL SHIELD can fill an entire wall cavity in a single zipping motion by appliying foam right up the middle of the cavity.
- 9. 0.4 XL SHIELD can be applied with Long-Range Application that enables you to spray an 8" lift from up to 15 feet away.

## **CLEANING AND MAINTENANCE**

1. Spray equipment must be maintained in proper operating condition. Failure to adequately maintain spray equipment may result in poor product performance. Refer to your equipment manufacturer's maintenance procedures for more details.

The product will meet the written liquid

2. Contact Xtreme Seal for long-term equipment storage recommendations.



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component specifications as indicated on the technical data sheet published at the time of the purchase. The entirety of Xtreme Seal's responsibility is limited only to the cost of the Xtreme Seal material. The foregoing constitutes Xtreme Seal's sole obligation with respect to damages, whether direct, incidental or consequential, resulting from the use or performance of the product. Safety is the responsibility of the owner, the owner's appointed representative, the contractor, and/or inspector. Become familiar with local, state, and federal regulations regarding chemical health, safety, and handling. For more information consult the product SDS, contact the SPFA (www.sprayfoam.org) or the ACC (www.spraypolyurethane.org).

The information herein is believed to be reliable; however, unknown risks may be present. Xtreme Seal makes no warranty, expressed

or implied, concerning this product's merchantability or fitness for any particular use.