

## PRODUCT USAGE

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

## PHYSICAL PROPERTIES

Property	Test Method	Value
APPARENT DENSITY	ASTM D-1622	2 LBS/FT <sup>3</sup> (NOMINAL)
R-VALUE (AGED)	ASTM C-518	7.2 R/IN
COMPRESSIVE STRENGTH	ASTM D-1621	NOM. 25 LBS/IN <sup>2</sup>
TENSILE STRENGTH	ASTM D-1623	NOM. 50 LBS/IN <sup>2</sup>
CLOSED CELL CONTENT	ASTM D-6226	> 90% (VOL.)
WATER ABSORPTION	ASTM D-2842	< 2%
WATER VAPOR PERMEANCE	ASTM E-96	< 2 PERM-INCHES
FUNGI RESISTANCE	ASTM C-1338	NO GROWTH
FLAME SPREAD INDEX	ASTM E-84	< 25
SMOKE DEVELOPED INDEX	ASTM E-84	< 450
DIMENSIONAL STABILITY, -20°F	ASTM D-2126	< 5% CHANGE
DIMENSIONAL STABILITY, +200°F	ASTM D-2126	< 10% CHANGE
DIMENSIONAL STABILITY, +158°F & 100%RH	ASTM D-2126	< 10% CHANGE
IGNITION BARRIER	ICC ES AC377 APPENDIX X	PASS NO COATING
THERMAL BARRIER	NFPA 286	PASS DC315 89 FT <sup>2</sup> /GAL 1 NOBURN PLUS THB 114 FT <sup>2</sup> /
GLOBAL WARMING POTENTIAL	ASHRAE STANDARD 34	1

\*Calculated from 3.5" thick sample.

These values are typical. However values will vary and should not be considered part of the product specifications. It is imperative that the trained applicator <sup>read</sup> and understand this technical data sheet and SDS to process the material correctly and understand environmental and equipment limitations.

## SURFACE BURNING CHARACTERISTICS

Enverge NexSeal LE spray foam is an ASTM E-84 (NFPA 255, UL723) class 1 (class A) spray foam insulation.

- **Flame Spread Index: <25**
- **Smoke Developed Index: <450**
- **Thickness: 4"**

These numerical flame spread values are not a true reflection of how this or any material will perform in actual fire conditions.

## STORAGE AND SHELF LIFE

Store drums at 50°F to 80°F (10°C to 27°C) for optimal shelf life. Excessively high temperatures may reduce shelf life. Cold or very hot chemicals can cause pump cavitation and, therefore, incorrect metering. Store material at 70°F to 90°F for 48 hours prior to application of the product.

**A COMPONENT - 12 MONTHS**

**B COMPONENT - 6 MONTHS**

## MATERIAL TEMPERATURE

1. Storage recommendations for maximum shelf life:

- 70°F to 90°F (21°C to 32°C)
- Humidity <85% do not allow material to freeze.

2. For best results, the resin and iso components should be at 80°F (27°C) prior to use.

## SERVICE TEMPERATURES

Enverge NexSeal LE spray foam insulation is designed to be used in ambient temperatures from -40°F to 180°F, 220°F (-40°C to 82°C, 104°C) intermittent. It is strongly recommended that test sprays be conducted before installation for use in extreme temperatures.

## SAFETY AND HANDLING INFORMATION

It is critical to read and become familiar with the safety data sheets prior to working with Enverge NexSeal LE spray foam liquid components. During application, respiratory protection is required for the applicator, assistant, or bystanders. For more information consult safety data sheets, [www.EnvergeSprayFoam.com](http://www.EnvergeSprayFoam.com) or [www.spraypolyurethane.org](http://www.spraypolyurethane.org)

## INDOOR AIR QUALITY

Enverge NexSeal LE is a low VOC emitting material in compliance with the California Department of Public Health (CDPH) standard 01350. This program demands strict certification criteria and considers safety factors to account for sensitive individuals (such as children and the elderly), and ensures that a product is acceptable for use in environments such as schools and healthcare facilities. It is referenced by both the Collaborative for High Performance Schools (CHPS) and the Leadership in Energy and Environmental Design (LEED) Building Rating System.

## THERMAL BARRIERS

Enverge NexSeal LE spray foam must be separated from the interior of the building (occupied space) by an approved 15 minute thermal barrier such as 0.5” inch gypsum board or other equivalent material. Exceptions for the thermal barrier are allowed; for example, sprayfoam application in attics and crawlspaces with limited access. Consult local building codes for requirements and restrictions.

## VAPOR RETARDER

Enverge NexSeal LE meets the requirement of one perm or less to qualify as a Class III vapor retarder, per the International Code Council and ASHRAE when installed at 2” (50.8 mm) in depth.

## LEED® POINT CONTRIBUTIONS

New construction	Homes	Schools
EA CREDIT 1: OPTIMIZE ENERGY PERFORMANCE	EA CREDIT 1.1: PERFORMANCE OF ENERGY STAR HOMES (OR EA 2-10 PATHWAY)	EA CREDIT PREREQUISITE 2: MINIMUM ENERGY PERFORMANCE
MR CREDIT 2: CONSTRUCTION WASTE MANAGEMENT	EA CREDIT 2.1: BASIC INSULATION	EA CREDIT 1: OPTIMIZE ENERGY PERFORMANCE
MR CREDIT 5: REGIONAL MATERIALS	EA CREDIT 3: AIR INFILTRATION	MR CREDIT 5: REGIONAL MATERIALS
IEQ CREDIT 7.1: THERMAL COMFORT	EA CREDITS 5.1 & 5.2: HEATING & COOLING DISTRIBUTION SYSTEM	IEQ CREDIT 4: LOW EMITTING MATERIALS
ID CREDIT 1: INNOVATION IN DESIGN	MR CREDIT 2.2: ENVIRONMENTALLY PREFERABLE PRODUCTS	IEQ CREDIT 7.1: THERMAL COMFORT - DESIGN
	MR CREDIT 3.2: CONSTRUCTION WASTE REDUCTION	IEQ CREDIT 9: ENHANCED ACOUSTICAL PERFORMANCE
	EQ CREDIT 1: ENERGYSSTAR WITH INDOOR AIR PACKAGE PATHWAY	IEQ CREDIT 10: MOLD PREVENTION
	EQ CREDIT 10: GARAGE POLLUTANT PROTECTION	ID CREDIT 1: INNOVATION IN DESIGN

## LEED® INFORMATION

VOC Compliance:	Low emitting insulation by CA Section 01350
Pre Consumer:	Recycled Content: 9.2%
Post Industrial:	Recycled Content: 0%
Rapidly Renewable Content:	5.2% by ASTM D-6886
Manufacturing Location:	Spring, TX

NOTE: LEED® is a registered trademark of the U.S. Green Building Council



The descriptions, data, designs, and information contained herein are presented in good faith and believed to be accurate. This information is provided for guidance ONLY. Many factors will affect the processing or application of Enverge products. It is necessary that you make tests to determine ultimate suitability for Enverge products for your particular application. No warranties of any kind, either expressed or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding products described, data, or designs presented. In no case shall the descriptions, information, data, or designs provided be considered a part of our terms and conditions of sale. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. You expressly agree to release Holcim Solutions and Products US, LLC from liability in tort or contract based on the technical information provided. All such information is accepted at your own risk.