

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
THERMAL CONDUCTIVITY (AGED)	BS EN 14315-1: 2013	0.027 AT 125MM
WATER VAPOUR RESISTANCE	BS EN 12086: 2013	62 (U)
WATER ABSORPTION	BS EN 1609: 2013	0.41 KG.M2
MECHANICAL RESISTANCE & STABILITY	BS EN 14315-1: 2013	78 (KPA)
DIMENSIONAL STABILITY, 70°C & 90- 100% RH	BS EN 1604: 2013	< 9% CHANGE
DIMENSIONAL STABILITY -20°C	BS EN 1604: 2013	<2% CHANGE
REACTION TO FIRE	BS476: PART 7	CLASS 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 read 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 and a BS476 Part 7 Class 1

- **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

A COMPONENT - 12 MONTHS | B COMPONENT - 6 MONTHS

Store drums at 50°F to 70°F (10°C to 21°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.

MATERIAL TEMPERATURE

1. Storage recommendations for maximum shelf life:

- Temperature 50°F to 70°F (10°C to 21°C)
- Humidity <85% do not allow material to freeze.

2. Store material at 60°F to 80°F (15°C to 32°C) for 48 hours prior to application of the product.

SERVICE TEMPERATURES

Enverge NexSeal LE spray foam insulation is designed to be used in ambient temperatures from -40°F (-40°C) and 180°F, 220°F (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 Datasheets prior to working with Enverge NexSeal LE spray foam liquid components. During application respiratory protection is required for the applicator and bystanders or helpers. For more information consult Safety Datasheets, www.thermofoam.co.uk or request a copy.

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 may need to be separated from the interior of the building by an approved thermal barrier. In habitable spaces, it is important to check with building regulations and building insurers to assess the required fire rating before undertaking a project.

VAPOUR RETARDER

Enverge NexSeal LE meets the requirement of one perm or less for a Class II vapour retarder per the International Code Council and ASHRAE when installed at 1.6" (40.6 mm) in depth. An assessment of the risk of interstitial condensation for the specific construction must be carried out in accordance with BS EN ISO 13788: 2012 using a declared water vapour resistance factor (u) of 62. To limit the risk of interstitial condensation, buildings must be designed and constructed in accordance with the relevant parts of BS 5250: 2021. An air and vapour (AVCL) may be required.

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: ENERGYSTAR 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:

Pre Consumer:

Post Industrial:

Rapidly Renewable Content:

Manufacturing Location:

Low emitting insulation by CA Section 01350

Recycled Content: 9.2%

Recycled Content: 0%

5.2% by ASTM D-6886

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.