

DRYVIT LL EPS (GREY)

DS.EN.04.56.07.2

High performance thermally insulating expanded polystyrene rigid closed cell foam for receiving Dryvit base coat and finishes



PRODUCT DESCRIPTION

Dryvit Low Lambda (LL) expanded polystyrene (EPS) is manufactured to the requirements of BS EN 13163 from pre-foamed beads of polystyrene. These are fused together under pressure in a steam-heated mould to produce a lightweight cellular plastic with an enhanced thermal insulating performance to that of standard EPS (white). It is available as a Dryvit Square Edge board for use in Dryvit Outsulation and Drysulation direct fix External Wall Insulation (EWI) Systems, the Fedderlite Panel System or as Dryvit Grooved EPS board for use with the Outsulation Rail System.

PROPERTIES

• Density	Nominal 15 kg/m ³
• Length	± 3 mm or ± 0.6% whichever is greater
• Width	± 3 mm or ± 0.6% whichever is greater
• Thickness	± 2 mm
• Squareness	± 5 mm per 1000 mm
• Minimum strength @ 10% compression	70 kPa
• Nominal tensile strength	100 kN/m ²
• Thermal Conductivity @ 10°C	0.031 -0.032 W/mK
• Fire Class to BS EN 13501-1	Euroclass E

FEATURES & BENEFITS

FEATURE	BENEFIT
• Lightweight	Reduced imposed structural loads
• Thermally efficient	Excellent insulating properties
• Easy to work with	Can be readily shaped and formed
• BRE Green Guide rating A+	Low environmental impact over whole product life cycle
• Contains fire retardant	Reduced rate of flame spread

TYPICAL SUBSTRATES

- Concrete
- Brick
- Lightweight block or aerated autoclaved concrete
- Lightweight steel or timber framed structures using appropriate sheathing boards
- Sheathing boards - Cement particle board, cement fibre, timber, exterior gypsum, calcium silicate, magnesium oxide

USES

Dryvit LL EPS is used to provide insulation to the external walls of new construction and refurbishment projects when used as an integral part of the Dryvit Outsulation, Drysulation and Fedderlite range of External Wall Insulation systems.

PACKAGING

Dryvit Square Edge: 20 mm - 300 mm.
Dryvit Grooved: 50 mm - 250 mm.

Boards supplied in 10 mm increments. For pack size or thickness outside standard sizes, please contact Dryvit for information.

COVERAGE

Square Edge EPS - 1200 x 600 mm boards
0.72 m²/board (1.34 boards/m²).

Grooved EPS - 500 x 500 mm boards
0.25 m²/board (4 boards/m²).



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APPLICATION METHOD

Outsulation and Drysulation

Adhesive fixing - The specified Dryvit adhesive is applied to the back of the LL Square Edge insulation board, not to the substrate. The ribbon and dab method is usually used for fixing insulation to solid substrates with a ribbon around the entire perimeter and eight dabs placed on the interior area of the insulation board. The notched trowel method is usually used for fixing insulation to sheathing board and flat substrates and is created using a notched trowel to form adhesive beads running vertically when the insulation board is placed on the wall.

Mechanical fixing - As required to supplement adhesive fixing if the load bearing characteristics of the substrate are poor or the required wind load design cannot be achieved solely with adhesive. Dryvit approved fixings should be installed in accordance with instructions to the structural design engineers' approved fixing pattern.

Outsulation Rail

Specified when a drainage plane or drained cavity is required to allow passage of incidental moisture from light weight steel or timber frame structures (NHBC requirements) or to maintain the building line on a concrete or masonry substrate. Grooved EPS board can be interlocked between mechanically fastened rails shimmed from the substrate.

Mesh embedment - Common to all systems - prior to starting reinforcing mesh embedment, fill any gaps in the board joints with foam or insulation slivers, rasp any visible discolouration and irregularities or out-of-plane board joints to provide a uniform and smooth surface. All EPS dust and loose beads shall be removed prior to base coat application. Using a stainless steel trowel, apply the specified base coat on the entire surface of the insulation board to an area in a uniform thickness of 1.5 mm. Immediately place the reinforcing mesh against the wet base coat mixture and trowel from the centre to the edges avoiding wrinkles, until the mesh is fully embedded and not visible. Trowel smooth to a uniform thickness slightly more than the thickness of the reinforcing mesh. Allow this layer to take up until firm to the touch and then trowel a second tight coat over the first to fully cover the reinforcing mesh. The result should be such that the reinforcing mesh is approximately centred within the base coat thickness.

Fedderlite

Consult Dryvit UK.

Individual product data sheets and the relevant Dryvit System Application Instructions should be referred to for detailed guidance.

ENVIRONMENTAL

The Building Research Establishment (BRE) Green Guide to Specification, which is part of the BRE Environmental Assessment Method (BREAM) has assigned EPS an A+, the highest possible ranking for any insulation material. The expanding agent used in manufacturing contains no CFC's or HCFC's and EPS has an Ozone Depletion Potential (ODP) of zero and a low Global Warming Potential. EPS will not sustain mould growth and has no nutrient value to insects or vermin.

FIRE APPROVALS

Dryvit LL Square Edge EPS and Dryvit Grooved LL EPS board has been extensively tested as part of the Outsulation/Outsulation Plus/Drysulation/Outsulation Rail and Fedderlite Systems.

BS EN 13501-1

Spread of flame classification when tested as part of the Outsulation, Drysulation and Fedderlite Systems achieve B and C classifications dependent on the base coat and finish.

BS 8414-1 and 2

Conformant when tested as part of the Outsulation/Outsulation Plus/Outsulation Rail and Fedderlite Systems and classified in accordance with BR 135.

LPS 1581 and LPS 1582

Conformant when tested between 50-250 mm thickness as part of the Outsulation/Outsulation Plus/Outsulation Rail Systems.

Information contained in this product data sheet conforms to the standard detail recommendations and specifications for the installation of Dryvit UK Ltd. products as of the date of publication of this document and is presented in good faith. Dryvit UK Ltd. assumes no liability, expressed or implied, as to the architecture, engineering or workmanship of any project. To ensure that you are using the latest, most complete information, contact Dryvit UK Ltd.

STORAGE

Store in dry undercover conditions out of high winds and protect from sunlight. Dryvit LL EPS is combustible and should be stored away from highly flammable substances such as petrol or solvent paints. No smoking should be allowed in storage areas and product should not be exposed to flame or ignition sources.

HEALTH AND SAFETY

Refer to Application Instructions and the product Safety Data Sheet.

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