

# POLYWOOL BOARD

## Glass Mineral Wool Insulation



### DESCRIPTION

POLYWOOL board is specifically designed to provide superior fire resistance, acoustical and thermal insulation properties when installed in glass, metal or in fabricated metal pans. POLYWOOL, the new generation of glass mineral wool has been engineered to provide the highest levels of thermal and acoustic performance for building occupants to achieve the level of indoor comfort deserved.

Made from almost 80% recycled glass and locally sourced raw materials, POLYWOOL range of glass mineral wool is perfectly in tune with sustainability and environmental concerns.

### FACTORY LAMINATED FACING

POLYWOOL board is available faced to meet specific project requirements. Products are available in a wide range of facing material, thicknesses, widths and lengths to suit application. Available with the following type of facings:

- Double Sided Foil (FSKF)
- Single Sided Foil (FKRP)

### THERMAL AND ACOUSTICAL SOLUTION

The extremely fine fibres create an enormous number of minute air spaces, making the insulation highly effective for sound absorption and thermal insulation properties.

### ADVANTAGES

**Optimal fibre diameter.** Optimal fibre diameter ranging from 4-5micron produces more air chamber which enables the insulation to provide a better and enhanced performance.

**Better fibre network.** Fine, longer and evenly distributed fibre network helps in creating better tensile strength allowing the insulation to demonstrate superior durability, flexibility and feeling much softer.

**Less dusty and less itchy.** Specifically engineered to produce a comfortable and less dusty insulation. The insulation creates a pleasant work experience by reducing the tingling feeling during installation.

**Absorbs Disturbing Sound.** Exceptional sound-absorbing properties. Eliminates unwanted boundary reflections and controls excessive room reverberation. NRC rating up to 1.0

**Mould Growth.** Does not encourage growth of mould, fungus, bacteria or rodents. Tested in accordance with ASTM C1338-08.

**Alkalinity.** pH 9.

**Corrosiveness.** Chemically inert. Will not cause or accelerate corrosion of steel, stainless steel, copper or aluminum due to its specifically inorganic and mineral composition. Tested in accordance with ASTM C665-12.

**Water Vapor Absorption.** Absorbs less than 5% by weight. Tested in accordance with ASTM C1104.

**Odor Emission.** Does not emit any unpleasant odor. Tested in accordance with ASTM C1304.

### APPLICATIONS

**Custom curtain wall construction.** Exterior curtain wall cavities – exceptionally well suited to curtain wall construction in terms of both installation and performance.

**Standard metal panel construction.** Field-installed between an interior liner and the outer metal panel using boards that are plain or faced with a factory-applied vapour retarder.

**New and retrofit construction.** Provides thermal and acoustical insulating values for exterior curtain wall cavities, parking structures, mechanical rooms, theaters, casinos and other construction applications.

**General construction.** A versatile insulation, it is also an ideal thermal barrier for masonry or concrete structures such as shopping centers, banks and other types of low-rise buildings. In masonry applications, the glass mineral wool boards faced with an FSK vapour retarder are installed between “Z” or hat channels applied directly to the masonry surface.

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### FIRE PROPERTIES

Tested in accordance with (core):

- B.S. 476: Part 6 Fire propagation
- B.S. 476: Part 7 Surface spread of flame
- ASTM E84

### ACOUSTICAL PERFORMANCE

Not only an effective thermal insulation, POLYWOOL board acts as a natural and effective sound barrier. POLYWOOL board is amongst the most effective acoustic insulation solutions when sound proofing is required. Please contact PGF Insulation representative for further information.

### THERMAL CONDUCTIVITY

Complies with ASTM C518 at 15°C mean temperature. Please refer to the table on products available for more information on the thermal conductivity and resistance values.

### AVAILABLE FORMS

Unfaced or Plain - unfaced boards are designed for thermal and acoustical insulation applications.

Faced with Foil - Faced boards can be used where a vapour barrier is needed. Available either in single sided or double sided FSK Foil.

### PRODUCT RANGE

Available in either semi rigid or rigid form.

Semi Rigid Board : EWR2532, EWR5048, EWR5032, EWR2548  
Rigid Board : EWR2564, EWR5064, EWR2580, EWR5080  
EWR2596, EWR5096

### PRODUCTS AVAILABLE

| POLYWOOL BOARD<br>(1.2m x 2.3) |        |          |
|--------------------------------|--------|----------|
| EWR 2532                       |        | EWR 5032 |
| Thickness (mm)                 | 25     | 50       |
| K-Value (m <sup>2</sup> K/W)   | 0.0320 | 0.0320   |
| R-Value (W/mK)                 | 0.78   | 1.56     |
| EWR 2548                       |        | EWR 5048 |
| Thickness (mm)                 | 25     | 50       |
| K-Value (m <sup>2</sup> K/W)   | 0.0300 | 0.0300   |
| R-Value (W/mK)                 | 0.83   | 1.66     |
| EWR 2564                       |        | EWR 5064 |
| Thickness (mm)                 | 25     | 50       |
| K-Value (m <sup>2</sup> K/W)   | 0.0300 | 0.0300   |
| R-Value (W/mK)                 | 0.83   | 1.66     |
| EWR 2580                       |        | EWR 5080 |
| Thickness (mm)                 | 25     | 50       |
| K-Value (m <sup>2</sup> K/W)   | 0.0300 | 0.0300   |
| R-Value (W/mK)                 | 0.83   | 1.66     |
| EWR 2596                       |        | EWR 5096 |
| Thickness (mm)                 | 25     | 50       |
| K-Value (m <sup>2</sup> K/W)   | 0.0300 | 0.0300   |
| R-Value (W/mK)                 | 0.83   | 1.66     |

Note:

Please contact PGF Insulation sales representative for custom sizes.

### SHORT FORM SPECIFICATION

All glass mineral wool insulation shown on drawings or specified herein shall be POLYWOOL BOARD EWR\_\_\_\_\_, with thickness of \_\_\_\_\_mm. Thermal resistance "R-Value" of the insulation shall be R \_\_\_\_\_. Factory laminated with \_\_\_\_\_.

Technical specifications as shown in this literature are intended to be used as general guidelines only. The physical and chemical properties of glass mineral wool insulation listed herein represent typical average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. The suitability of the product is not binding for special individual cases. Warranty and liability upon delivery shall be in accordance with our General Terms and Conditions. No responsibility is assumed for the correctness of this information. Version of 1<sup>st</sup> June 2017.

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