





# GYPSUM FIBERBOARD LAMINATE

## PIR INSULATED ACOUSTIC & HIGH IMPACT BOARD

High performance, easy to install polyisocyanurate (PIR) insulation board with a vapour barrier, laminated to 12.5mm SE Gypsum fiberboard. Suitable for adhesive and mechanical fixing.

### **PRODUCT SIZES**

The board size is 2400mm x 1200mm (nominal), and the product is available in the following thicknesses:

| Insulation<br>Thickness<br>(mm) | R Value<br>(M2ĸ/w) | Approx<br>weight<br>(kg per<br>board) | Nominal<br>Overall<br>Thickness<br>(mm) |
|---------------------------------|--------------------|---------------------------------------|---|
| 20                              | 0.95               | 41.90                                 | 32.5                                    |
| 25                              | 1.17               | 42.36                                 | 37.5                                    |
| 30                              | 1.40               | 43.83                                 | 42.5                                    |
| 40                              | 1.86               | 44.66                                 | 52.5                                    |
| 50                              | 2.31               | 45.52                                 | 62.5                                    |
| 60                              | 2.76               | 46.38                                 | 72.5                                    |
| 70                              | 3.22               | 47.96                                 | 82.5                                    |
| 80                              | 3.67               | 48.11                                 | 92.5                                    |
| 90                              | 4.13               | 49.08                                 | 102.5                                   |
| 100                             | 4.58               | 49.95                                 | 112.5                                   |

# **KEY FEATURES**

- Suitable for use in roof and internal wall lining applications
- 12.5mm Square Edged
   Gypsum Fibreboard bonded to PIR
- Thermal conductivity of insulation 0.022 W/mk
- Board size: 2400mm x1200mm
- · Coverage per board: 2.88m²
- Time saving 2-in-1 solution to insulate and dry line walls or roofs at the same time
- Acoustic & high impact solution

#### **INSTALLATION & APPLICATION**

The following notes are for general guidance only; and your consideration should be given to the design requirements of the local and National Building Regulations to achieve the required thermal performance at the time of installation.

#### **HANDLING**

Care should be taken with regards to the manual handling of these products to avoid any strains. If necessary, a risk assessment should be conducted to comply with any site-specific conditions and requirements. Boards should be stored flat in dry conditions inside.

#### LIMITATIONS OF USAGE

Tekwarm Laminates are not designed for use in damp or continuously humid conditions and should always be secured with mechanical fixings in addition to any "dot and dab", or foam type adhesive system.

#### **FIRE**

Gypsum Fiberboard is designated as a material of limited combustibility (A2). Polyisocyanurate (PIR) insulation contains a flame-retardant additive. Consideration should be given to the provision of fire stops as necessary at the perimeters according to the requirements of the prevailing Building Regulations.

#### **OZONE DEPLETION POTENTIAL (ODP)**

Zero

#### **GLOBAL WARMING POTENTIAL**

<5

#### **HEALTH & SAFETY**

See separate data sheet

#### **INSTALLATION GUIDE**

The substrate for installation should be dry, free from debris, and be of suitable load bearing capability for the weight of the board(s) to be installed. Any framework or batten system being used for installation should be installed at a maximum of 600mm centres. The board edges

need to overlap any framework by a minimum of 20mm to ensure adequate support. Boards on walls should be installed with the long edges vertically with the joints between boards neatly butted to allow for either joint or skim finishing, board fixings should be at a maximum of 300mm centres.

Any cables or services must be installed within some form of conduit to ensure that they do not come into direct contact with the insulation, and the insulation should not be notched out to accommodate any of these services within the insulation, as this could be detrimental to the thermal performance.

Tekwarm Mechanical fixings (6 per board minimum) should always be used to secure the boards in addition

to any adhesive method that has been employed. These fixings should provide a minimum of 25mm embedment into the substrate and must be driven below the surface of the board to allow jointing and fine surface treatment finishing. Fixings should be a minimum of 10mm from any edge.

There should be a 5-10mm tolerance between the junction of both the ceiling & floor joints, which should be filled with a suitable flexible sealant prior to final finishes.

Boards can be cut using a Plasterboard Saw or sharp Utility Knife or power tool if being employed by a competent person. Holes for sockets etc. should be cut out prior to the installation of the board to the wall or roof that is being dry lined.

Where there is a requirement for the fixing of heavy items; these must be secured directly onto a framework that is installed behind the laminate board securely fixed to the substrate to ensure adequate support.

When the boards are to be secured to the underside of a roof, they should be installed horizontal at 90 degrees to the rafters, with noggins installed as necessary to support the ends of the boards. Fixings at 300mm centres across the board should be utilized.

Any decoration should be undertaken after the jointing or skim finishing has been undertaken in a timely fashion.