

Technical Specification

WF – EN13171 – T3 – CS(10Y)70 – TR2.5 – WS1.0 – MU5 – AF100

Description

Pavatherm Plus is a wood fibre board to EN 13171: Fibreboards for building constructions; Insulation material for thermal protection. The board does not contain any glue nor wood preservers.

Pavatherm Plus is a combination of Pavatherm and Isolair. Pavatherm effects good insulation properties and Isolair protects the board against moisture, rain and dust. Every board has 20 mm Isolair with t&g on top.

Pavatherm Plus is quality monitored by the FMPA Stuttgart.

Pavatherm Plus is an insulating fibreboard. It is used as underlay with additional insulation in roofs and as water resistant and wind tight layer in ventilated facades.

Boards are supplied in standard size of 1580 mm x 780 mm (thicknesses of 60, 80 and 100 mm). The edges of the Isolair - that is on top of the Pavatherm Plus boards - are endowed with tongue and groove. The tongue and groove edge effects a solid joint that can be placed between rafters/ studs.

Tests on the finished products are carried out to determine:

- Thickness
- Compression test at 10% compression
- Tensile Strength
- Thermal conductivity
- Water absorption
- Density

Delivery and site handling

The boards are delivered to site wrapped in cardboard. Each pack bears the manufacturer's trade name, the EN 13171 identification and CE sign, its properties according to EN 13171, the identification symbol of the quality monitoring FMPA Stuttgart of natureplus.

The product must be stored dry and flat at the site. The boards must be applied dry. Care must be taken to avoid contact with solvents and fresh wood preservers.

The boards must not be exposed to open flame or other ignition sources.

Design Data

General

Pavatherm Plus is effective in reducing the U value (thermal transmittance), in improving acoustic sound protection and summer heat protection (decrement delay). Pavatherm Plus guarantees an active breathing housing. Pavatherm Plus can be used in new and renovation buildings. Pavatherm Plus is used as underlay with additional insulation in roofs and as water resistant and wind tight layer in ventilated facades. Pavatherm Plus reduces energy losses through the rafters/ studs. Pavatherm Plus is water-resistant because of the top layer of Isolair.

Properties in relation to fire

The boards do not prejudice the fire resistance properties of the wall. When properly installed the boards will not add significantly to any existing fire hazard. The boards will not present a toxic hazard.

According to DIN 4102 Pavatherm Plus belongs to the material class B2. According to EN 13501-1 it belongs to material class E.

Moisture penetration

The board is water-resistant. Water cannot penetrate the board if correctly installed. According to EN 13171 Pavatherm Plus belongs to the hydrophobic class WS1.0. The short time moisture absorption is $<1.0 \text{ kg/m}^2$ to EN 1609.

Water vapour penetration

Pavatherm Plus is a fibreboard with a very low vapour resistance factor $\mu = 5$ (i.e. 25 MNs/gm). It is therefore no barrier for water vapour and it is diffusion open.

Thermal insulation

The λ_D value or k-value (thermal conductivity) of the boards when measured to EN 12667 is 0.044 W/mK at a density of 170 kg/m^3 .

Loadings

The compression resistance at 10% compression is 70 kPa. The fixing happens with ordinary screws.

Durability

The boards are not rot-proof. They are dimensionally stable and, when installed properly, will remain as insulating material for the life of the building in which they are incorporated.