



Raw Core Materials



FSC® license code: FSC-C011773, PEFC/04-32-0828

All advantages in detail

### **Product advantages**

## Bending strength Processors benefit from a high bending strength in all panel directions that ensures a high material yield, optimum cut-to-size and prevents any incorrect "static use". Standard OSB panels have a significantly reduced bending strength perpendicular to the grain, whereas LivingBoard shows constantly high levels in all panel directions. Bending strength perpendicular to the grain in N/mm<sup>2</sup> LivingBoard P5 / LivingBoard face contiprotect P5 OSB/3 in accordance icc. to EN 300

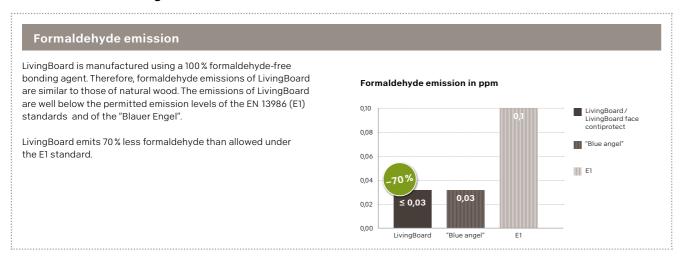
Thickness [mm]

# Thickness swelling Due to the moisture-resistant PU gluing and optimized chip geometry of LivingBoard, its thickness swelling is considerably lower than that of standard OSB. In LivingBoard P5, thickness swelling is 33 % lower than in OSB/3 in line with EN 300. Thickness swelling, as a percentage LivingBoard P5 / LivingBoard face contiprotect P5 OSB/3 in accordance acc. to EN 300 OSB/4 in accordance acc. to EN 300

Thickness [mm]

#### **Environmental advantages**

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Further information and technical data at www.pfleiderer.com

#### Lower VOC emissions than standard OSB

LivingBoard consists of 90 % low-resin spruce and a 100 % formaldehyde-free bonding agent; its low VOC emissions fulfill the stringent requirements of the German AgBB scheme (VOC test report, EPH). This results in an improved air quality. Similar products (in particular OSB) are generally made from 100% pine rich in resin and therefore emit much more VOC.

#### More resource-saving than standard OSB

Contrary to standard OSB, which is generally made from uncrushed roundwood, sawmill by- products like slabs, edgings and offcuts from PEFC<sup>™</sup>- or FSC<sup>®</sup>- certified forests are used in the manufacture of LivingBoard. In this way, the resource wood is fully used without having to fell green trees.

#### **Advantages for processors**

#### Roof boarding

- Suited for large areas
- Contrary to rough boarding, no bulging of panels, post-drying and rattling noises occur in the application of LivingBoard

#### Tried-and-tested products for safe usage

LivingBoard has been used in the construction of more than 460,000 housing units since its launch in 1978.

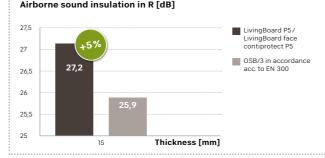
#### Isotropic stress grades

LivingBoard is suited for non-directional use. Due to its optimised chip geometry, LivingBoard offers constant mechanical properties in all panel directions.

### Airborne sound insulation

On account of its higher and uniform raw density compared with standard OSB panels, LivingBoard offers a considerably better airborne sound insulation.

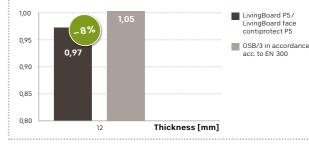
#### Airborne sound insulation in R [dB]



## **Charring rate**

Due to the uniform structure and evenly distributed high raw density of LivingBoard, it has a lower charring rate than standard OSB and thus offers much more safety in case of fire.

#### Charring rate in mm/min



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# THE ADVANTAGES AT A GLANCE

- 80% higher bending strength perpendicular to the grain than standard OSB/3
- Formaldehyde emissions 70 % below the legal E1 threshold
- Thickness-swelling reduced by 33% compared with standard OSB
- Charring rate 8% lower than standard OSB
- Airborne sound insulation 5% lower than standard OSB
- Lower VOC emissions than standard OSB
- Uniform and high airtightness due to high board density and homogeneous density distribution
- Unlike standard OSB, LivingBoard is suitable for non-directional use
- More resource-saving than standard OSB
- Tried-and-tested quality since 1978
- Suitable as building material for roofing, including slate roofs



# NATURAL AND SUSTAINABLE: LIVINGBOARD

#### No use of recycled wood

In the manufacture of LivingBoard products, we do not use any recycled material, in order to provide a building material that is as natural as possible. In the production of LivingBoard, sawmill by-products such as slabs, edgings, offcuts etc. as well as thinnings are used.

#### Sustainable building

As ecological awareness is growing, more and more building projects are established with a focus on sustainability. It is in this segment that Pfleiderer can make an essential contribution – LivingBoard. The future of timber construction lies, among others, in urban areas. Refurbishment projects and infill-development using timber products create a healthy living urban environment. Wood is the ideal material for conversions, extensions and enlargements of buildings and ensures effective insulation. Sustainable buildings can be certified under LEED, BREAM and similar systems in the green building sector. As a particularly sustainable material, LivingBoard can make a major contribution to a project

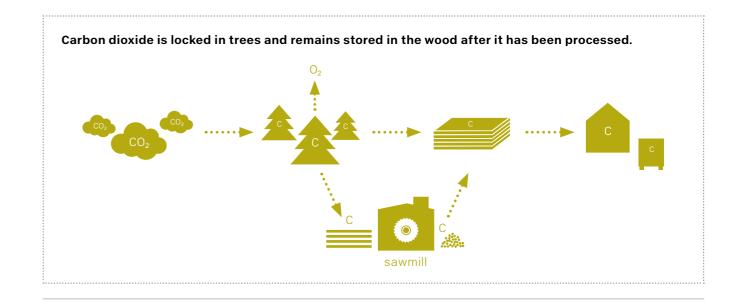
to be certified as sustainable. Thus, it is the perfect, environmentally sound building material.

#### CO<sub>2</sub> storage

Sustainability begins with the choice of our most important raw material – wood. To maintain this natural and renewable resource, we consistently support the principle of sustainable forestry. LivingBoard is made of wood that originates from sustainably managed forests. Carbon dioxide from the atmosphere locked in trees remains stored in the wood after it has been processed. Processed wood can be recycled creating a closed CO<sub>2</sub> cycle for climate and environmental protection.

#### Positive CO<sub>2</sub> balance

As compared with mineral building products, such as gypsum products, LivingBoard can store CO<sub>2</sub>. Less energy is used in the production of LivingBoard, and, contrary to mineral building products, Living Board can be recovered as material and thermally recycled after use.







For all countries except UK:

#### **SAMPLE SERVICE**

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Our General Terms and Conditions can be found on our Internet website: www.pfleiderer.com

Pfleiderer employs wood from certified sustainable forest management.



