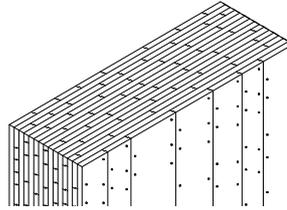


**Massiv**  
speichernd  
warm

**Holz**  
ökologisch  
gesund

**Mauer**  
homogen  
einfach



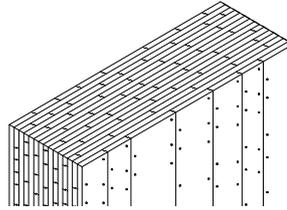
## TECHNICAL DATA PROFIL-HOLZ-ELEMENTE PHE

- Material:** coniferous timber boards, sorted in width, technically dried 15% +/- and 23mm thick
- Dimensions:** component height of 7,5 cm to a maximum of 25 cm  
Component width of 4,2 cm to a maximum of 120 cm (depending on the lamella)  
Component length of 4 m up to 12 m continuously adjustable
- Element:** Dried side pieces are brought together into a continuous strand by a Finger jointing station which is integrated in the plan and the pieces are profiled on one side (later bottom side). Afterwards this "endless" profiled board is then shortened to the desired length. The individual layers of board are stacked one on top of the other, compressed and joined together by aluminium groove pins.
- construction :** Through the possibility to allow large span distances is suitable for multistory buildings, administration- and industrial construction or in the sector of agricultural buildings. Further multi-use options are public building like sport halls, schools and nursery schools. The profile wood elements can be become visible and thus represent the ideal supplement to the solid-wood wall MHM®.
- Wood protection:** The technical drying process of the raw boards is 8 hours at 65°C, which is replacing the chemical procedure of wood protection.
- Joins:** Aluminium groove pins according (ETA approval ETA-13/0801)
- Swelling and Shrinkage:** Referring to the wood moisture content of +/- 1% the wood lamella shrinks respectively swells in longitude (length of the element) 0,01 % and in radial direction (width of the element) 0,16%. Due to the fact that the wood elements are not glued, each single lamella can work within itself. Therefore, the widths of the elements are remaining very constant. However, during the assembly works, it has to be ensured, that there is enough airing and protection against humidity (rain).
- Gross density:** about 480 kg/m<sup>3</sup> at 12% wood moisture content
- Thermal conductivity:**  $\lambda = 0.13 \text{ W/(m}\cdot\text{K)}$
- Wind tightness:** The profile wood elements are due to their construction not in the position of producing sufficient air/wind tightness. If the profile wood elements are used as outer shell or are projecting partially through, complementary measures have to be taken with regard to air/wind tightness.

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**Sound insulation:** Excellent acoustic sound insulation through solid wood construction. In order to obtain higher sound insulation values, additional measures have to be taken especially within the floor area.

**Reverberation Time:** Through the structured surface the profile wood elements are reducing reverberation time so that the room acoustic is improving.