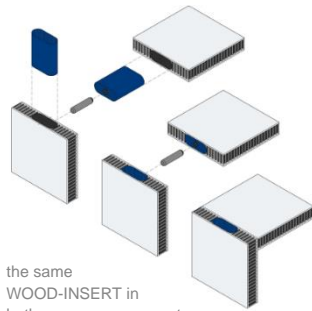


WOOD-INSERT

Wood-insert for lightweight construction elements in furniture construction and interior fittings

Invention

Scientists from the TH OWL have developed a wood or wood-based material insert for the partial reinforcement of panel-shaped lightweight construction elements in sandwich construction that can be inserted using conventional tools, hand tools, machines or machining centers. In the reinforced area, where WOOD-INSERT interlocks into the soft core of the lightweight construction element between the upper and lower surface, it creates conditions that even surpass classic wood-based materials. This is achieved by the insert, which is glued into the soft part on the front side, having approximately the same dimension as the distance between the face layers of the panel. The cut-out is chosen in such a way that both sandwich face layers are included in the adhesion and the WOOD-INSERT edge is flush with the narrow edge of each lightweight construction element when inserted. This means that the narrow edge coating is supported at the same time.



the same WOOD-INSERT in both carcass components

Fig.1 Carcass corner glued with wooden dowels

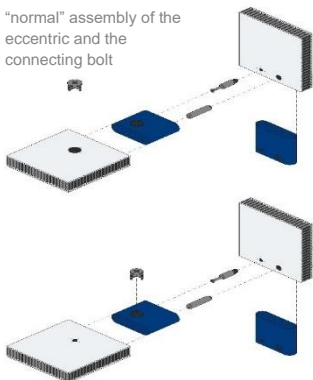


Fig. 2 Carcass corners assembled with connecting fitting and dry dowel, normal

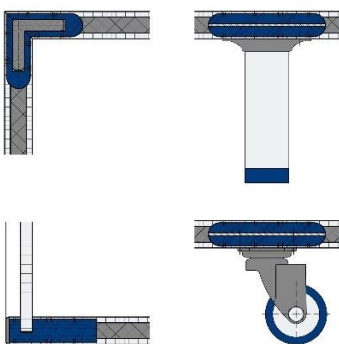


Fig. 3 Miter corner, rear panel connection

An invention of the TH OWL.

Competitive Advantages

- Wood/wood-based material insert for sandwich panels
- Interlocking adhesion bond without foreign materials
- Suitable for individually formatted panels
- Can be inserted directly into open narrow edges
- Suitable for glued constructions as well as for disassembled construction with fittings
- Different profiles and sizes possible

Technology Readiness Level

1 2 3 4 5 6 7 8 9

Experimental proof of concept

Industries

- Construction Industry
- Materials Industry

Ref. No.

5001

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Current Status

A patent application for WOOD-INSERT has been filed with the German Patent and Trade Mark Office. International patents are possible. The connecting element was able to demonstrate its advantages in practical tests. A multitude of data and prototypes are available.