

Processing instructions, Transport & storage instructions

EGGER Decorative Lightweight Boards EGGER Raw Lightweight Boards



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Product description

EGGER Lightweight Boards are composite boards consisting of layers of wood-based materials that enclose a lightweight cardboard honeycomb core. Thanks to their low weight and high bending strength, they offer many design and construction possibilities in dry furniture and interior design. EGGER Decorative Lightweight Boards are laminated (according to EN14322) and available in the decor and texture combinations of the Decorative collection.

Processing options

Innovative products raise questions about processing. For this reason, we have compiled some processing instructions here.



Cutting to size

When cutting EGGER Lightweight Boards to size on horizontal sawing machines with pressure beams and pushers with clamps, the pressure exerted by the clamps must be reduced. As an alternative, additional supports should be used to distribute the pressure more evenly in the area of the clamps.

The maximum compressive rigidity of EGGER lightweight boards is 0.15 N/mm² (1.5 kg/cm²).

Chips occasionally fall into the honeycomb core during cutting. These should be removed before edging the boards.

Drilling and milling

EGGER Lightweight Boards can be drilled and milled in the same way as conventional wood-based panels.



Edging

The majority of EGGER Lightweight Boards can be edged without an additional substructure. Boards with a 3 and 4 mm top layer up to a thickness of approx. 25 mm can be edged directly. For boards with an 8 mm top layer, this is still possible with a board thickness of 50 mm. ABS edgings from 2 mm thickness are suitable for edging without a substructure.

All conventional edgeling machines are suitable for edging. The contact pressure of the profile trimming unit must be reduced from 2 kg/cm² to 1.5 kg/cm².



Support edge

The Thin MDF HD support edge in a standard thickness of 2 mm was developed to meet the high demands of processing all types of lightweight boards, especially frameless lightweight boards.

It forms the basis for problem-free decorative edging and supports the surface layers of the lightweight boards against each other in the margin area. This ensures smooth machine processing even for lightweight boards without frames with surface layers of less than 8 mm and a board thickness of more than 25 mm.

Covering

EGGER Raw Lightweight Boards are ideal as a core material for laminates and veneers. In order to achieve ideal adhesion of the covering material to the lightweight core board, it is recommended to sand the surfaces (K80 - K120 depending on the type and degree of soiling). This removes dust and other soiling.



Due to the special properties of lightweight boards, it is necessary to adjust the pressing parameters depending on the type of coating and type of lightweight board.

EGGER Lightweight Boards	frameless	with frame
Veneering	max. pressing temperature: 90°C max. pressing time: 3 min. max. specific press pressure: 1.5 kg/cm ²	max. pressing temperature: 80°C max. pressing time: 3 min. max. specific press pressure: 3 - 5 kg/cm ²
Covering with laminates	max. pressing temperature: 70°C max. pressing time: 3 min. max. specific press pressure: 1.5 kg/cm ²	max. pressing temperature: 70°C max. pressing time: 3 min. max. specific press pressure: 3 - 5 kg/cm ²

For the actual pressing parameters, also observe the adhesive manufacturer's specifications.

Cut-to-size applications with frames

EGGER Lightweight Board cuts with inserted frames can be directly profiled, postformed or edged. The frames are produced as standard in raw particleboard and in widths of 10, 38 or 65 mm (MDF frames are available on request). They can be inserted on two or four sides.

EGGER Lightweight Boards with frames

The insertion of frames along the edges of the boards brings advantages:

- additional screw pull-out strength
- improved bending strength
- Use of concealed fittings such as dowels or connecting fittings

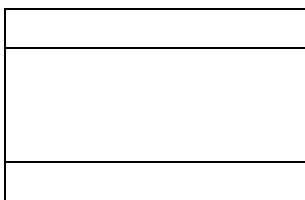


Installation of frames

Depending on the application, frames can be inserted on 2 or 4 sides. We recommend milling out 1.5 mm of the 8 mm thick top layers of the 38 mm board to remove the honeycomb core and any glue residue from the top layers. This provides a smooth clean surface for gluing the frame in place and ensures that the frame fits securely against the 1.5 mm recess.

Suitable materials are wood-based materials such as particleboards or MDF boards or knot-free, dried solid wood.

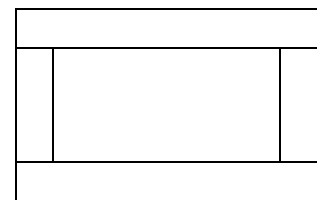
Possible constructions with frames



2-sided frame, lengthwise



2-sided frame, crosswise



4-sided frame

Use of fittings in lightweight boards

LC P-16 lightweight connector from Lamello

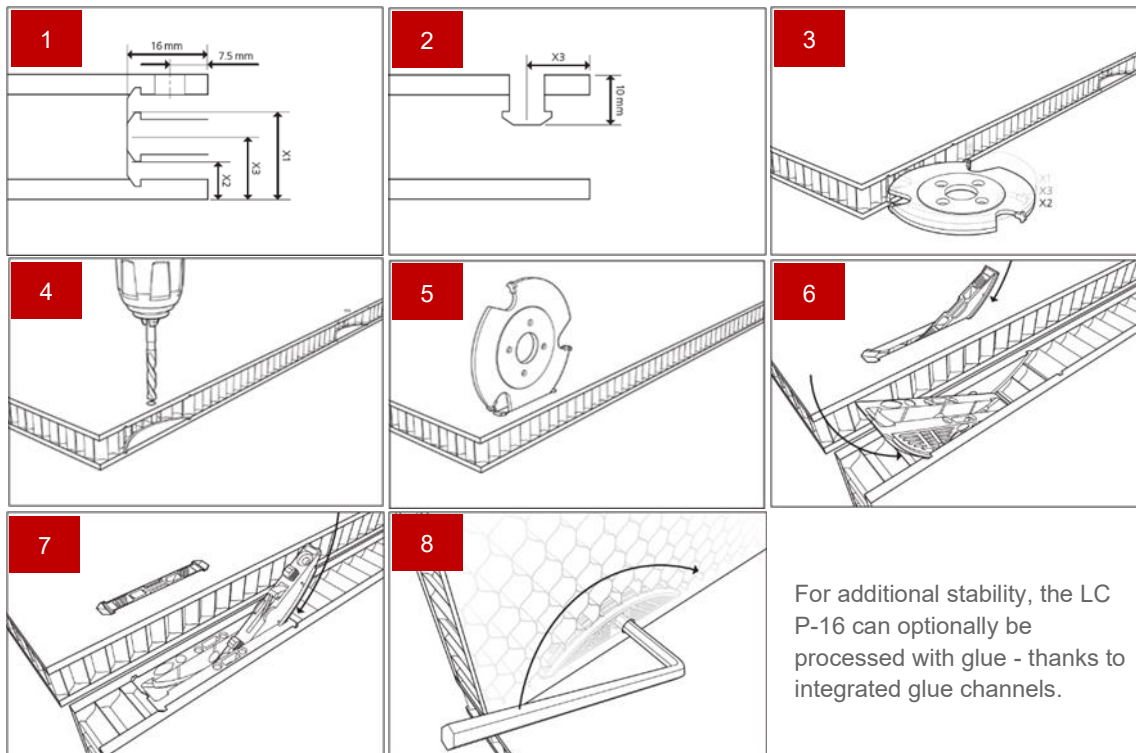


The LC P-16 is a connector that combines the advantages of lightweight construction with the efficient and aesthetic Clamex connection. Due to its width, the LC P-16 is anchored in the surface layers and acts as an adapter into which a Clamex P-14 connector is slid in.

The LC P-16 lightweight connector significantly improves the machining and assembly process. The absence of a frame and the simple assembly – the connector is simply slid in – completely eliminate waiting times due to gluing. The result is a fast, smooth process that reduces time and costs in both manufacturing and assembly without compromising on aesthetics, stability and quality.

» The LC P-16 is available worldwide from Lamello distributors.

Machining with the Zeta P2 or with the CNC machining centre:



For additional stability, the LC P-16 can optionally be processed with glue - thanks to integrated glue channels.

Product variants and the right choice

The LC P-16 lightweight connector is available in three sizes. The thickness of the centre layer is crucial for choosing the right size.

Variants	LC P-16 x 11	LC P-16 x 17	LC P-16 x 22
Required thickness of the centre layer:			
Example of matching EGGER Lightweight Boards:	19mm board thickness with 4mm top layer	25mm board thickness with 4mm top layer	38mm board thickness with 8mm top layer
Tensile strength 90°	> 400 N	> 400 N	> 800 N
Tensile strength 180°	> 600 N	> 400 N	> 800 N
Shear strength 90°	> 600 N	> 600 N	> 1400 N

*Strength values provided by Lamello, tested in EGGER Lightweight Boards described above



Further information can be found on the Lamello product page:
lamello.com/at/products/p-system/lc-p-16



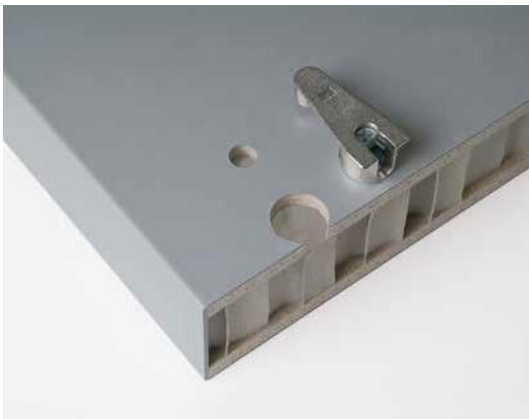
If you have any questions, please contact your local Lamello sales representative or write to: info@lamello.com



Fittings when using 8 mm top layers

Due to the 8 mm thick particleboard top layers, no special fittings are required. Conventional hinges, drawer runners and cabinet rails can be used.

To ensure the best possible screw retention, we recommend the use of Euro screws, such as the Varianta screw from Häfele or the direct fastening screw from Hettich.



Fittings when using EGGER Thin Board top layers

» Simple, fast and robust, Würth's KALTSCHMELZ® technology connects the KALTSCHMELZ® dowels to the two top layers. The dowels melted in this way are now used to screw in particleboard screws, Euroscrews or eccentric connectors and system bolts.

The drill hole is created with a special drill that can be adjusted to the respective board thickness. After inserting the dowel, the KALTSCHMELZ® device is used. The KALTSCHMELZ® dowels are set in motion by the impact and melt at the points of contact with the wood due to the resulting frictional heat and bond with the porous structure of the wood material.

In addition to the KALTSCHMELZ® device, Würth also offers a perfectly matched range of products for joining EGGER Lightweight Boards.

A reliable and highly stable joint is created in just a few seconds. You can immediately attach handles, pot hinges, corner joints, cross plates, etc.

Dowels are available for fastening screws/fittings for the following board thicknesses:
12 / 15 / 19 / 20 / 22 / 25 / 38 mm

For corner joints, the KALTSCHMELZ® dowel pot connector is available.

If you have any questions, please contact your Würth sales representative or the technical application advice centre:
Daniel.Beck@wuerth.com

In addition to Würth's KALTSCHMELZ® technology, all standard hardware fasteners can be used with 8 mm top layers.



Special drill bits and countersinks for KALTSCHMELZ anchors®



KALTSCHMELZ® dowel
Screw holder

Screw extraction values:

- EGGER raw particleboard, E1E05 TSCA P2: 800 - 900 N
- KALTSCHMELZ® dowel: 650 - 700 N (EGGER Lightweight Boards, 4 mm top layer)



Würth KALTSCHMELZ® technology is based on the patented WoodWelding® technology and is licensed by WW WoodWelding GmbH, Switzerland.

Transport and storage instructions

Due to the structure of EGGER Lightweight Boards, there are special features that must be taken into account when transporting, storing and packaging the product.

Transport

When loading EGGER Lightweight Boards, the lorry must be able to be loaded from the side and have sufficient securing straps to secure the load.



In order to protect the uppermost boards in the package from the pressure of the lashing straps, we recommend inserting 650 x 2070mm protective board strips on the top of the stack when transporting full board packages.

We also recommend the use of angular edge protectors. This protects the edge area from damage caused by the securing straps.



Additional intermediate binding supports safe transport and handling during loading and unloading. It is generally recommended to keep the centre of gravity of the load at the bottom for mixed loads. Depending on the loading situation, however, it may be advantageous to stack lightweight boards under particleboards or MDF packages, as the pressure is evenly distributed by the strapping (load securing) and damage caused by straps is prevented.

Delivery and unloading

Careful incoming goods inspections are part of flawless order processing. They comply with the payment and delivery terms of the EGGER Group. In the case of large deliveries, EGGER recommends carrying out the incoming goods inspection according to statistical procedures.

A suitable unloading facility must be guaranteed (e.g. forklift). Unloading must be carried out with care. It must be ensured that the packages are lifted evenly in a line or, if necessary, that the forks are tilted slightly forwards. This ensures that the first panels of the stack below remain undamaged.

Storage

EGGER Lightweight Boards should be stored or processed in a closed storage/workshop space with constant climatic conditions ($T \geq 10^{\circ}\text{C}$ at approx. 50 - 60% relative humidity). Do not store the product outdoors, under flying roofs or expose it to the weather in any way. Storage and processing conditions should correspond to the climate of subsequent use.

Bulk storage



It is advisable to store them horizontally on a level, horizontal and dry surface in a closed building. The distance between the package towers should be at least 400 mm. 80 mm underlays between the packages ensure that the packages are easily accessible individually. The first package is stacked on 4 underlays with the same spacing as the bound underlays on the substrate. For full-size board packages (format 5610 x 2070mm), 8 underlays should be used.

Shelf storage

EGGER Lightweight Board packages in rack storage should not be stored under other wood-based materials packages.



Handling individual boards



The boards must not be lifted by the top layer.



Always cover the entire thickness (both top layers).

Securing with PVC straps



Damage when using PVC straps without protection board.



Always secure consignment packages with two PVC straps and ensure that 16 - 19 mm protection boards - top and bottom - are used for each new package.

Disposal of EGGER Lightweight Boards

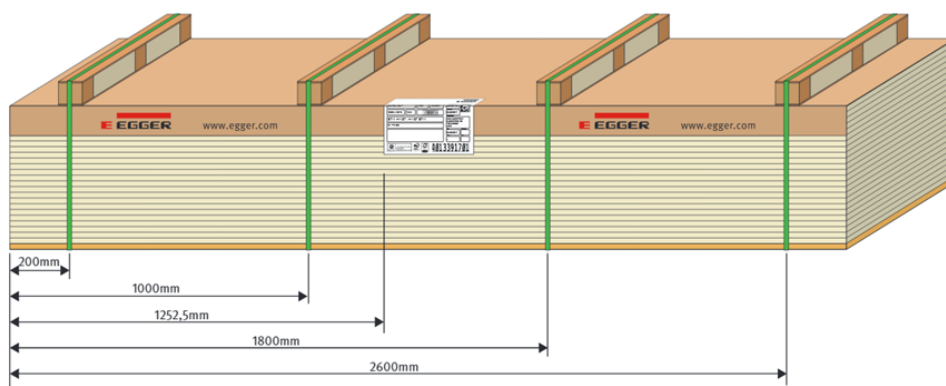
Residues of this product generated on the construction site or during the manufacturing process, as well as residues from deconstruction measures, should primarily be fed into a material recycling stream to be used as post-consumer material. This can be used as a secondary resource in the manufacture of new products as part of the Post-Consumer Recycling material stream.

Disposal methods may vary depending on local regulations. This may require the separation of wood-based panels and cardboard honeycomb structures. In case of conflicting regulations, please follow the regulations of your local disposal facility.

Technical information

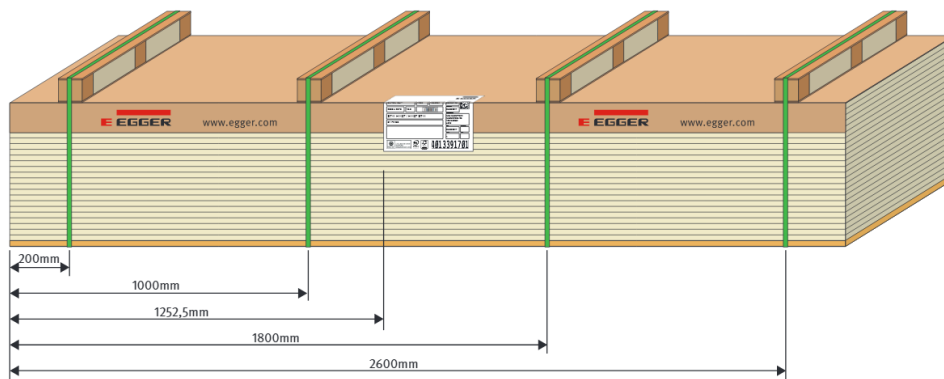
Packaging EGGER Raw Lightweight Boards

- Packing slip: Production order number, material number, package weight, number of boards
- 4 EGGER Lightweight Blocks: 80 x 80 mm, positioning see drawing. Bound with PET straps
- Parcel protection on top: Cardboard
- Package protection at the bottom: cover boards 16 - 19 mm



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- Parcel protection at the bottom: cover boards 16 - 22 mm



Packaging unit

8mm top layer		
board thickness	pcs. per pallet	pallet height in mm
38mm	12	576mm
50mm	9	561mm

Preliminary note:

This technical leaflet has been compiled to the best of our knowledge and with particular care. The information is based on practical experience and our own tests and corresponds to our current state of knowledge. It is for information purposes only and does not constitute a guarantee of product properties or suitability for specific applications. No liability can be accepted for printing errors, standardisation errors and mistakes. In addition, technical changes may result from the continuous further development of EGGER Lightweight Boards and from changes to standards and public law documents. Therefore, the contents of this technical data sheet can neither serve as instructions for use nor as a legally binding basis. Our General Terms and Conditions apply.