Processing Instructions

EGGER PerfectSense® Lacquered Boards

Premium Matt / Premium Gloss – Feelwood - Texture

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1. Product description PerfectSense® Lacquered Boards

PerfectSense® Premium Matt and Premium Gloss
PerfectSense Premium Lacquered Boards with matt or high-gloss surfaces impress with visual perfection and appealingly natural feel. Our melamine resin coated MDF boards are precisely finished using an innovative lacquering process, PerfectSense Premium is ideally suited for upmarket furniture and interior design sectors.
The PerfectSense Premium Gloss lacquered boards represent pure luxury with a deep, reflective, glass-like surface. Premium Matt is warm and smooth to the touch, with superior chemical and mechanical resistance and anti-fingerprint properties. As of May 2021, we are able to recommend Perfectsense Premium products for limited horizontal applications, thanks to continuously improving our advanced lacquering system.

PerfectSense® Feelwood
With PerfectSense Feelwood, we combine the properties of two premium products: the matt, velvety-warm look and feel of the PerfectSense surface with the deeply textured Feelwood synchronised pore textures. To manufacture this product, our sustainable chipboard core Feelwood is further refined by a lacquering process, ensuring superior chemical and mechanical resistance and anti-fingerprint properties, particularly beneficial for dark decors.

PerfectSense® Texture
With PerfectSense Texture, we are able to offer a matt anti-fingerprint lacquered surface on a sustainable chipboard core. This is achieved by combining the innovative PerfectSense lacquer surface with a flat-textured, melamine-resin-coated chipboard core.
PerfectSense Texture is the perfect complement to the Premium variants of the PerfectSense portfolio and can be used for all vertical applications, e.g. as a décor end panel, back panel or cabinet material.

2. Safety

Tools, processing instructions and safety instructions should be known before starting work.
As a general rule, personal protective equipment such as gloves, safety glasses, hearing protection, dust/breathing protection and safety shoes should be worn when opening packaging and during processing.
Processing should only be carried out using correct tools and recommended accessories. To this end, tools must be checked for integrity before each use and must not be left running unattended.
This product contains formaldehyde. A safety data sheet with information on general or health risks can be found online at www.egger.com

2.1 Health hazard due to dust generation

Dust may be generated during processing, causing a risk of irritation to skin and respiratory tract. Dust inhalation (depending on particle size) can cause further health hazards, therefore the generation of dust must be taken into account when assessing workplace risks. Effective extraction must be used in accordance with the applicable occupational health and safety regulations, particularly in the case of machining processes (e.g. sawing, milling etc.). Suitable breathing protection must be worn when processing if no adequate extraction system is in place.

2.2 Fire and explosion hazard

Dust generated during processing can lead to fire and explosion hazards, applicable safety and fire protection regulations must be observed.

3. Storage and climate control

3.1 General instructions

- Egger wood-based materials should be stored and processed in a closed storage/workshop space with a stable climate (T≥10 °C at approx. 50-60% relative humidity)
- Storage and processing conditions should correspond to the climate of later use
- To ensure products remain in optimum condition, the following must be **avoided** during transport, storage and processing:

- Storage in the immediate proximity of heating devices or other sources of heat
- Storage in direct impact of heat radiation and direct sunlight (UV light outdoors)
- Storage in an uneven climate with increased variation of air humidity levels

- Individual boards and the top/bottom boards of a pack will react faster to changing environmental influences (climate) than boards in the middle of a pack
- Prior to installation/processing, PerfectSense Lacquered Boards should be sufficiently conditioned in the premises under the subsequent conditions of use
- It remains the user/purchaser's responsibility to ensure materials are fit for their intended purpose; the provision of information does not release the user/purchaser from their obligation to assess this material and any production process for suitability
- The continuous development of PerfectSense Lacquered Boards and tool/machine technology advancements may result in ongoing changes to our processing recommendations. We therefore recommend that you check this document against our website at: http://www.egger.com/perfectsense

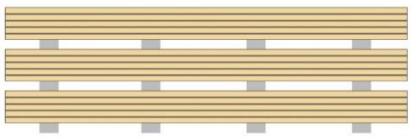
3.2 Protective film

- The protective film must remain intact on the entire surface during the processing
- Products with film must not be exposed to direct sunlight (UV radiation)
- PerfectSense Lacquered Boards – protective film should be removed immediately after processing or installation; film must be removed no later than 5 months after the date of delivery to ensure that the film can be removed without leaving a residue

3.3 Horizontal storage / stacking

- Maximum stacking height for PerfectSense Premium Gloss Lacquered Boards (PG) is 1.5 m
- Stacking should be carried out on a load-bearing and level surface
- Bearers should have a uniform thickness and their length should correspond to the width of the board stack
- The distance between the joists depends on the thickness of the boards.
  - 2800mm (L) boards – minimum 4 bearers recommended
  - All other lengths
    - Board thickness ≥ 15 mm, the distance must not be greater than 800 mm
    - Board thickness < 15 mm, the following calculation can be used: *distance = 50 * board thickness (mm)*
- To protect the surface of the board, always place the decorative tops of two boards against each other face to face and/or use a cover board
- If board stacks are palletised using steel or plastic strapping, adequate edge protectors or a top board must be used to avoid damage
- Where several stacks are stored one on top of the other, bearers must be aligned vertically to reduce risk of bowing – see image below
- Protruding boards in stacks of the same size should be avoided

Correct!



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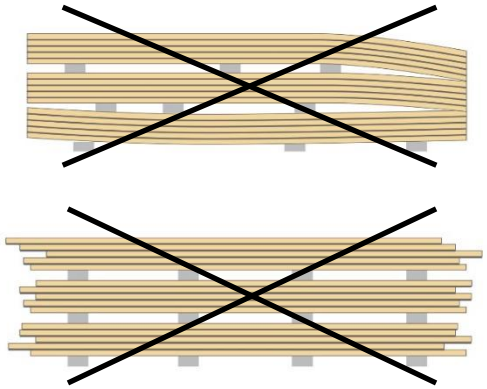
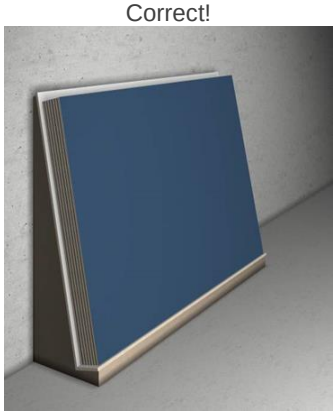


3.4 Vertical storage

- Vertical storage should only be used for a very small number of Egger wood-based materials, horizontal storage is always the preferred method
- If you are storing vertically, particular care must be taken to ensure that the boards are securely fixed e.g. closed storage racks, storerooms or shelves – storage compartments should not exceed a width of 500 mm
- If open storage racks are used, the contact surface must have a minimum inclination of approx. 10°
- In addition, only PerfectSense Lacquered Boards of the same format should be stored in open storage racks.

Correct!



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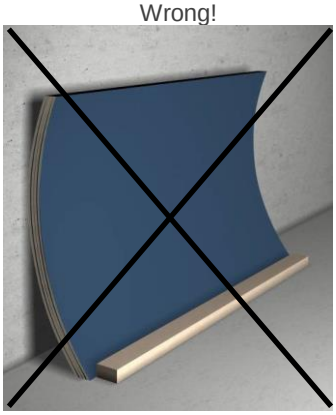
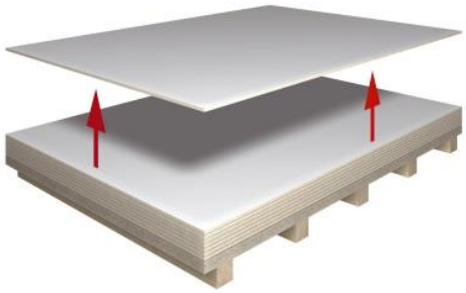


3.5 Handling

After removing the packaging and before processing, product should be checked for visible damage. As a general rule, all persons transporting and handling boards should wear personal protective equipment such as gloves, safety shoes and suitable work clothing. The boards must be lifted, they should never be pushed against one another or dragged over one another.



4. Tool recommendations

Detailed information regarding processing by milling, sawing and drilling can be found in the tool recommendations. These tool recommendations are based on various test series with the best machining results in cooperation with well-known tool manufacturers.
For more information, please visit www.egger.com/downloads

5. Edging and sealing

Lacquered surfaces used as table/work surfaces, fronts, etc., are generally protected against moisture penetration as a result of the coated top surface. However, moisture and damp can still reach the core board via unprotected edges such as cut-outs, corner joins, mitres, back edges, drill holes, screw holes and fixtures. During final assembly, all raw/exposed areas of core board must be sealed – this is particularly important when products are used for horizontal application. EGGER ABS/PP edgebanding products are available to seal visible cut edges.

For cut edges that remain concealed after fitting, we recommend the use of sealing profiles and self-curing sealants such as silicon rubber, polyurethane and acrylic. If using these materials, please carefully follow the manufacturer's instructions.

5.1 Processing edges with protective film

It is recommended to use regular release, cooling and cleaning agents when processing edges that are equipped with protective film for the protection of the surface. The release agent may be sprayed onto the first pressure roll or directly onto the boards and edging surface after covering the edge. If the protective film becomes loose during processing on cycle systems, it is recommended to check and clean the heads and use a lubricant to minimise friction between protective film and head. The protective film should only be removed upon final installation of the furniture, so as to protect the edge for as long as possible from external influences.

PerfectSense Gloss and PerfectSense Matt edges are suitable for processing on cycle systems as well as on machining centres. Please observe the general processing instructions for EGGER ABS edging.

5.2 Important notes on processing surfaces with deep textures and protective film

- The use of release agents in edging machines is not necessary due to the protective film
- We recommend the use of colour complimentary or clear adhesives to achieve a clean edge aesthetic
- Adhesive g/m² must be adjusted to suit the application to avoid overspill – the more adhesive allowed to escape, the more difficult it is to clean
- Fine adjustment of the machining units is necessary i.e. the profile scraper must be set respectively lower than the keying in relation to the protective film
- The flat scraper should be adjusted so the protective film is cut back 1-2 mm, this allows any leaked adhesive to be removed by cleaning brushes
- Tools with an appropriate clearance angle are recommended
- Manual reworking and especially cleaning may be necessary
- Any adhesive left on the surface after processing must be removed as soon as possible with a suitable cleaning agent, this is particularly important when using PU based adhesives

For more information on edging deep textures, please refer to our Technical Data Sheet at www.egger.com/PerfectSense/Feelwood

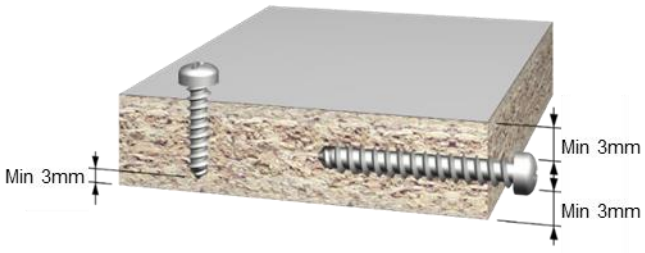
6. Bonding

Bonding of EGGER wood-based materials must be carried out in such a way that dimensional changes are not hindered. To avoid stresses, only sufficiently conditioned boards may be bonded together. Prior to bonding, the boards have to be sanded and pre-treated as necessary, ensuring removal of dust, grease and dirt. We recommend you test small batches in advance of bulk processing. Please observe the processing guidelines of the adhesive manufacturer.

7. Point fixings

If fittings, wall end strips, etc., are fastened to EGGER wood-based material surfaces using screws, pilot holed must be drilled. Pilot holes must be at least 1 mm larger than the screw shank to prevent unnecessary material stress. With horizontal surfaces, we also recommend lining the inside of the screw hole with sealant before screwing.
Heavy duty connections such as corner and body joints can be reinforced by a combination of bonding and fasteners, shaped springs or grooves.

Screws should not be fixed less than 3mm from the edge of the board – see image below for illustration.



8. Flat screw joint

Flat screw joints with through holes must have sufficient clearance to compensate for the dimensional movement resulting from temperature and humidity fluctuations. The diameter of the drill hole should be 2-3 mm larger than the diameter of the fixing device. This avoids any tension caused by climate related shrinking/swelling.

9. Cut-outs, horizontal joints and board joints

As a rule, before machining, it is important to ensure that the board is securely in place so that no damage is caused by sawing, milling or drilling work. Especially narrow joining areas can break during machining due to improper storage. The board cut-outs must also be secured so that they cannot fall out or break in an uncontrolled manner and thus cause personal injury or other damage. Furthermore, splinters can occur.

Cut-outs must always be rounded off because corners with sharp edges can be subject to cracking. This is especially true for kitchen back panels, cabinets, shelves, etc., where increased shrinkage stress occurs due to frequent exposure to heat from drying. When using halogen lighting (built-in spots), it must be ensured that a continuous temperature of 50 °C is not exceeded.

Horizontal corner joints of EGGER wood-based materials should be made by mitre cuts on circular table saws or by milling using CNC routers or manual routers with the aid of templates.

10. Wall cladding

EGGER wood-based materials are suitable for use as internal wall cladding, a minimum board thickness of 8 mm is recommended for such applications. The substrate should be completely dry before application. Always ensure sufficient rear ventilation. The material should not be exposed to trapped moisture.

10.1 Substructure and rear ventilation

EGGER wood-based materials must be fixed to a stable, corrosion-resistant and force-fit substructure, which safely absorbs the load of the wall cladding and ensures rear ventilation. In drywall constructions, the fixing of the substructure as well as the wood-based panel must always be anchored to the stud framing. Fasteners should be selected based on the substructure and the weight of the wall cladding.
Different climate conditions in front of and behind boards can lead to warpage, for this reason, wall cladding with wood-based panels should always be executed with sufficient rear ventilation, this enables temperature and moisture equalisation. Ventilation must be towards the room side.

Vertical battens generally permit air circulation. Where substructures are arranged horizontally, an appropriate construction must ensure that adequate ventilation is provided. The substructure should be vertically plumb to allow stress-free mounting of the entire board surface. Suitable substructures are vertically arranged strips of, for example: wood or aluminium. The maximum spacing of the battens or the substructure depends on the board thickness used. It is important to ensure that air inlet and outlet areas remain unobstructed so that air circulation is not impeded. Also make sure that the moisture content of the substrate does not deviate too much from the moisture content of the building component.

10.2 Visible mechanical fastening

Fastening is commonly often carried out by securing screws on the substructure, again, care must be taken to ensure sufficient expansion clearance. When using wood as a substructure, an EPDM tape is recommended for decoupling.

10.3 Non-visible mechanical fastening

The invisible fastening of wood-based panels by hooking allows for easy disassembly and is more visually appealing compared to visible fastening methods. Removing the boards is also quick and simple and cables and pipework installed behind the cladding are easy to reach. Depending on the chosen fastening system, another advantage is that the cladding can be easily adjusted later on. Stress-relieved mounting of the cladding is also possible. For all fastening methods that involve hanging, sufficient space must be allowed to raise and lower panels, this air space or "hanging space" remains visible as a shadow gap.

Hanging by means of profile strips
For this fastening method, a groove is cut into the horizontal substructure to hold the rebate rail attached to the wall element. For ease of fitting, the tongue of the rebate rail should be thinner than the groove. The rebate rail on the wood-based panels should not extend across the entire element width, but should be interrupted to allow vertical air circulation. Rebate rails made of plywood or metal Z-profiles can be readily used. If it is not possible to securely screw thin wood-based panels, they can also be glued.

Hanging by means of metal hardware
Systems with metal fittings are also available for fastening wall elements. The chosen system must be used according to the manufacturer's recommendations to ensure secure installation.

10.4 Non-visible glued fastening

Wood based products can also be mounted by gluing the panels to a rigid substructure. When using wood as a substructure, it is necessary to apply a primer as a preliminary step in order to ensure secure adhesion and moisture decoupling.

11. Recommended approaches to cleaning and usage

As a general rule, stains and spills such as tea, coffee, wine etc. should be cleaned up immediately, as the cleaning effort increases if they are left to dry. When cleaning is necessary, mild detergents should be used. Cleaning detergents must not contain any abrasive components, likewise no abrasive cloths should be used as they may adversely affect the gloss level or scratch the surface. It is important to clean regularly to avoid heavy and stubborn dirt build-up over time.

The following information should be observed for daily use:

Placing burning cigarettes on lacquer surfaces leads to surface damage.
Always use an ashtray.

In general, lacquer surfaces should not be used as cutting surfaces, as knife cuts leave cut marks even on resistant surfaces. **Always use a chopping board.**

Placing hot cookware such as pots, pans, etc., as well as continuous heat sources such as a laptop on lacquered surfaces should be avoided, as a change in gloss level or surface damage may occur, depending on the heat exposure. **Always use heat protection.**

Spilled liquids should always be absorbed or removed directly, as prolonged exposure to certain substances can cause changes in the gloss level of lacquer surfaces. Especially in the areas around cut-outs and joints, spilled liquids should always be cleaned up quickly and thoroughly.

For more information, please visit www.egger.com/downloads

12. Disposal

Any residues of EGGER wood-based materials that accumulate on the construction site, as well as those from demolition measures, should primarily be recycled. If this is not possible, they must be sent for energy recovery instead of being sent to landfill.
Waste code according to European waste catalogue: 170201/030105.
The country-specific laws and regulations on disposal must always be observed.