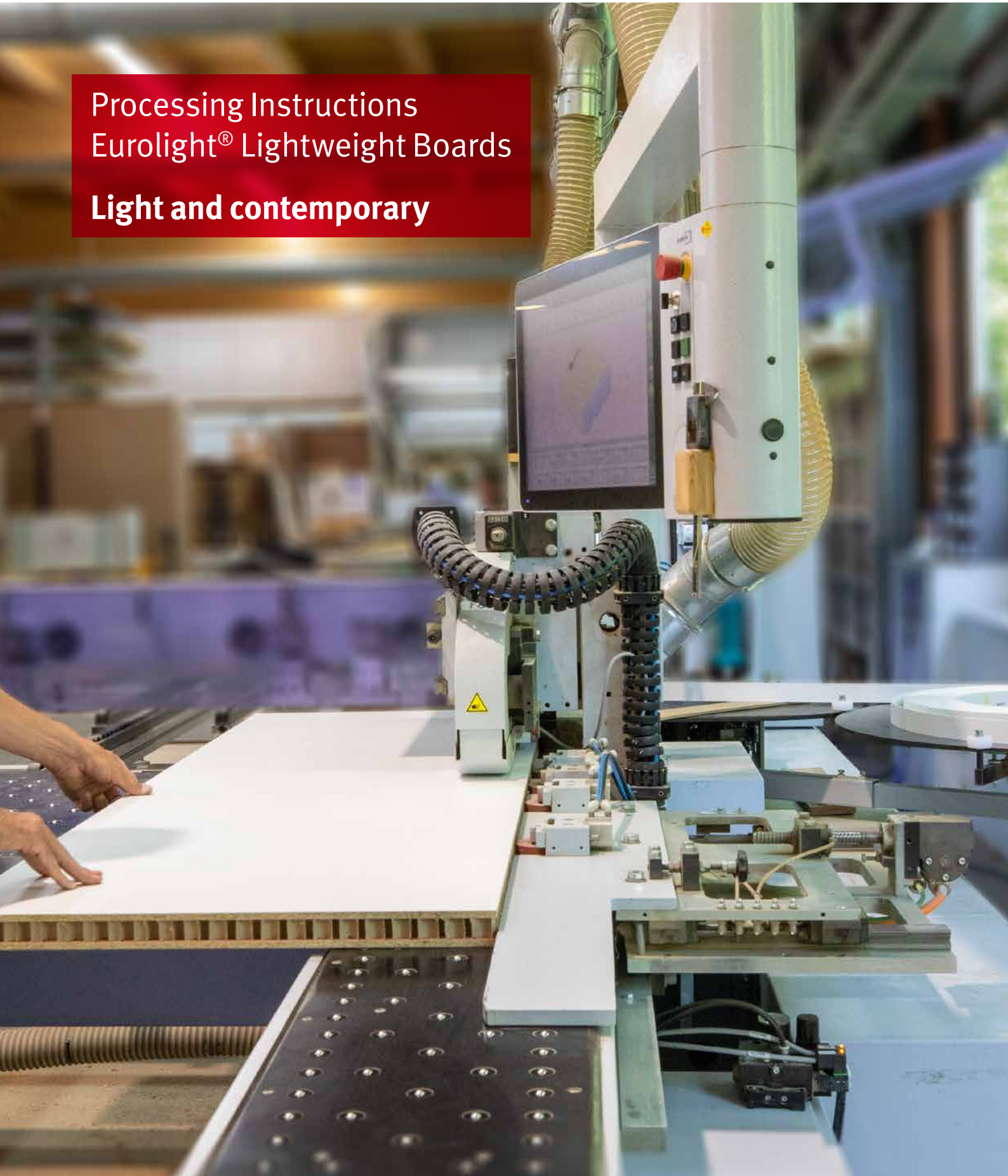


MORE FROM WOOD.

E EGGER

Processing Instructions
Eurolight® Lightweight Boards
Light and contemporary



Applications engineering

» Innovative products are associated with questions in regards to processing. For this reason, we have compiled some processing instructions here.





Simply scan this QR Code to view our Eurolight processing video, which includes additional help and advice.
www.egger.com/qr-video-eurolight-processing



Processing possibilities

Cutting to size

When producing-to-size Eurolight boards on horizontal cutting machines with pressure beam and feeders with chucks, the chuck pressure has to be reduced. Alternatively, blocks should be used to distribute pressure more evenly in the area of the chucks. The maximum compressive rigidity of Eurolight is 0.15 N/mm^2 (1.5 kg/cm^2). Chips occasionally fall into the honeycomb core during cutting. These should be removed before edging the boards.



Drilling and milling

Eurolight can be drilled and milled like conventional wood-based panels.



In addition to this basic information, you will find detailed processing instructions and technical data sheets on our website at www.egger.com/eurolight.

Edging

The majority of Eurolight Lightweight Boards can be edged without an additional base. This means that boards with 3 and 4 mm top layers up to approx. 25 mm thickness can be edged directly. For boards with an 8 mm top layer, this is still possible with a board thickness of 50 mm. ABS edges with a thickness of 2 mm or more are suitable for edging without a base.

All conventional edging machines are suitable for edging. The contact pressure of the mould milling unit must be reduced from 2 kg/cm² to 1.5 kg/cm² for this purpose.

In order to meet the high demands of processing lightweight boards of any kind, especially frameless lightweight boards, the support edge Thin MDF HD was developed in a standard thickness of 2 mm.



It forms the basis for the problem-free application of decor edging and supports the outer layers of the lightweight boards against each other along the edge. In this way, smooth machine processing can also be guaranteed for frameless lightweight boards with top layers of less than 8 mm and a board thickness of more than 25 mm.



Cover

Eurolight raw is ideal as a coreboard for EGGER laminates and also for veneers.



Eurolight Lightweight Boards	Frameless	Framed
Veneering	Max. pressing temperature: 90 °C Max. pressing duration: 3 min Max. specific pressing pressure: 1.5 kg/cm ²	Max. pressing temperature: 80 °C Max. pressing duration: 3 min Max. specific pressing pressure: 3-5 kg/cm ²
Cover with laminate	Max. pressing temperature: 70 °C Max. pressing duration: 3 min Max. specific pressing pressure: 1.5 kg/cm ²	Max. pressing temperature: 70 °C Max. pressing duration: 3 min Max. specific pressing pressure: 3-5 kg/cm ²

Cut-to-size applications with frames

» Eurolight cuts with pre-set raw chipboard or MDF (two- or four-sided) in 10, 38 or 65 mm widths can be directly profiled, postformed or edged.

Eurolight with frame

Inserting frames and blocks along the edges of the board provides benefits:

- additional screw strength
- improved flexural rigidity
- Use of concealed fittings such as shaped springs, dowels or connecting fittings

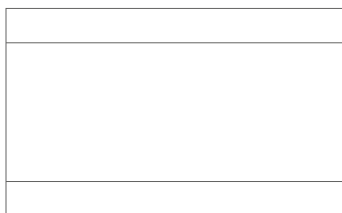


Installation of frames

Depending on the application, wooden blocks or 2- or 4-sided frames can be inserted. We recommend milling out 1.5 mm of the 8 mm thick top layers on 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 chipboard and MDF, or knot-free, dried solid wood.

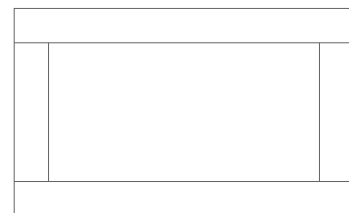
Possible structures with frames



Frame on 2 sides, lengthwise



Frame on 2 sides, crosswise



4-sided frames

Fittings when using 8 mm top layers

Internal fittings

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

To ensure the best screw holding possible, we recommend the use of Euroscrews, such as Häfele's Varianta screw or Hettich's direct fixing screw.



Fittings when using 4 mm 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 chipboard 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.

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

If you have any questions, please contact your Würth sales representative or the technical application department:

Daniel.Beck@wuerth.com

In addition to the KALTSCHMELZ® device, Würth also offers a perfectly coordinated range of products for connecting the Eurolight Lightweight Boards.

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



Special drill and countersink for KALTSCHMELZ® dowels



KALTSCHMELZ® dowel screw fixing



KALTSCHMELZ® dowel eccentric

Screw pull-out values:

- Eurospan E1 P2 CE 800-900 N
- KALTSCHMELZ® dowel 650-700 N (EGGER Eurolight, 4 mm top layer)



The Würth KALTSCHMELZ® technology is based on the proprietary WoodWelding® technology and is licensed from WW WoodWelding GmbH, Switzerland.

Technical data

Mechanical properties		Unit	Values**								
Board thickness		[mm]	19	25		38		50			
Outer layer thickness		[mm]	4	3	4	4	8	4	8		
Density*		[kg/m ³]	346	214	270	184	325	146	238		
Weight / board (2,800 × 2,070 mm)		[kg] approx.	38	39		72		69			
Pack weight		[to]	1.0	0.8		0.9		0.9			
Boards per package		[pcs.]	25	19		12		12			
Internal bond	Top layer to honeycomb	EN 319	[N/mm ²]	≥ 0.15	≥ 0.15	≥ 0.15	≥ 0.15	≥ 0.10	≥ 0.15	≥ 0.10	
	Top layer to frame 10 mm			≥ 0.8							
	Top layer to frame 38 mm			≥ 0.8							
	Top layer to frame 65 mm			≥ 0.3							
Screw pull-out	3 mm with 38 mm frame	EN 320	[N]	> 580	> 580	> 580	> 580	> 570	> 580	> 570	
	4 mm with 38 mm frame										
	8 mm without frame										
Deflection	Test load: 150 kg/m ²	DIN 68874-1	[mm]	-	≤ 14.0	≤ 12.0	≤ 9.0	≤ 4.0	≤ 3.0	≤ 3.0	
	Axis distance: 1,000 mm										
	Test period: 28 days										
	Without frame / without edging										
Compression strength		[kg/cm ²]	≥ 1.5								
Fire class		EN 13501-1	Euroclass	-	-	-	-	D-s2, d0	-	D-s2, d0	
Sound insulation	R'w		[dB]	-	-	-	-	28.0	-	26.5	
Formaldehyde	Emission – rawboard	EN 717-1	Class	E1E05							
Temperature resistance	Top layer to honeycomb		[°C]	≤ 80 °C							
	Top layer to frame										

* Density values are subject to production-related fluctuations and are to be understood as specifications with a tolerance of ± 10%.

** The values given correspond to board averages.

Raw density table

The behaviour of the raw density with different top layer thicknesses of unsealed Eurolight Lightweight Boards

Board thickness Eurolight	Cover layers			EGGER Eurospan raw chipboard
Thickness	3 mm	4 mm	8 mm	-
Board type	E1E05 TSCA P2 CE	E1E05 TSCA P2 CE	E1E05 TSCA P2 CE	E1E05 TSCA P2 CE
Raw density (kg/m ³)*				
15 mm	338	-	-	663
16 mm	317	-	-	674
17 mm	303	382	-	-
18 mm	288	361	-	661
19 mm	-	346	-	651
20 mm	262	330	-	-
22 mm	240	303	-	634
23 mm	230	-	-	-
24 mm	-	280	-	-
25 mm	214	270	450	634
26 mm	206	-	433	-
27 mm	-	251	420	-
28 mm	193	242	406	597
30 mm	182	227	-	615
32 mm	-	215	358	609
33 mm	-	-	348	-
34 mm	163	-	-	-
35 mm	-	-	329	-
36 mm	155	194	321	-
38 mm	146	184	325	581
40 mm	143	174	305	-
42 mm	-	170	-	-
44 mm	-	-	267	-
46 mm	-	-	256	614** (4+38+4)
46 mm	124	-	-	-
48 mm	122	149	244	-
50 mm	119	146	238	634** (25+25)
52 mm	-	142	-	-
56 mm	-	-	212	597** (28+28)
58 mm	-	-	208	-
60 mm	-	-	202	615** (30+30)
70 mm	92	-	-	593** (16+38+16)
72 mm	-	109	-	-
80 mm	-	-	158	-
86 mm	94	-	-	-
88 mm	-	108	-	-
96 mm	-	-	149	-

* the raw density is subject to fluctuations due to production. For this reason, the values given can only be seen as indicative values.

** theoretical values

www.egger.com