

TIMBER FRAME BUILDINGS

CEWOOD Building panels are a natural material manufactured in Latvia that is environmentally friendly and safe for human health. The panels are produced using high-quality wood wool, with premium-quality cement used as the binder. Thanks to their composition of natural raw materials, the panels help create the pleasant indoor microclimate characteristic of timber structures.

Advantages

CEWOOD Building panels are a material that retains its properties throughout its service life. The performance of this material has been proven in Europe for 100 years and in Latvia for more than 50 years. The panels have high thermal inertia, which, when used in a suitable construction, helps protect indoor spaces from rapid temperature fluctuations.

Ecology – environmentally friendly, ecological material

Health – provides a healthy indoor environment

Durability – long service life, does not deform, resistant to damage from rodents and termites

Convenience – easy to transport, process, install and plaster

Thermal insulation – good insulation properties

Acoustics – high sound insulation and sound absorption performance

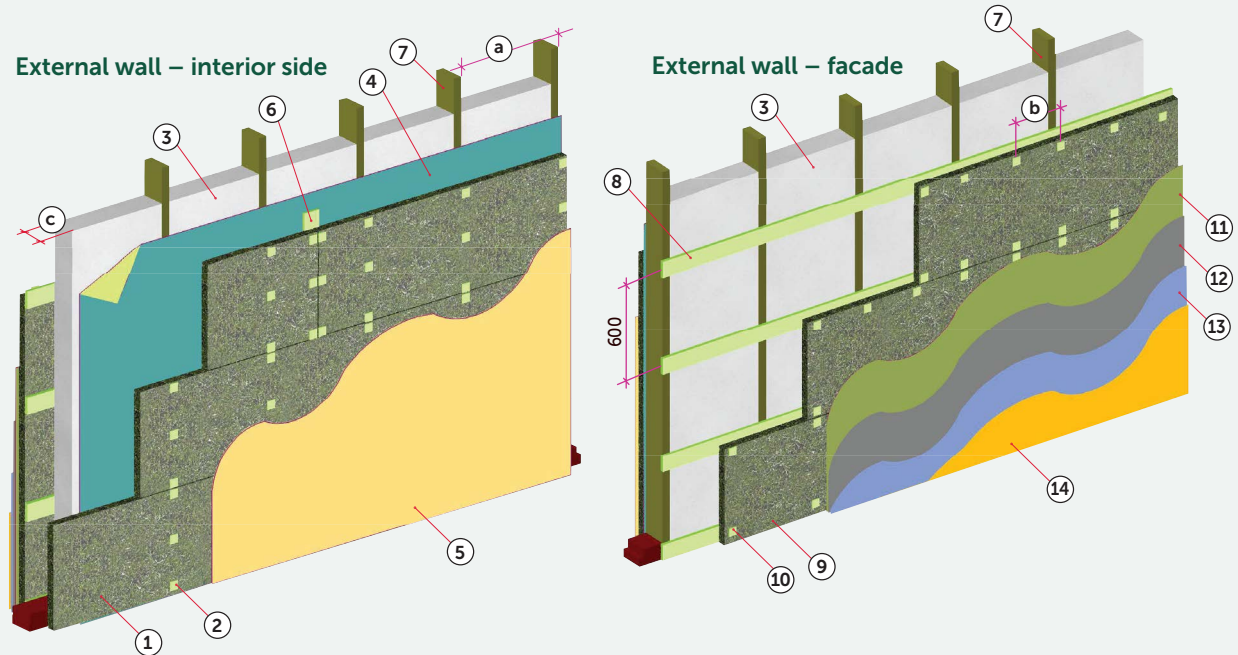
Technical data

CEWOOD Building panels are manufactured using 3.0 mm wide wood wool strands, and the panel size is 2400 x 600 mm. Available panel thicknesses are 25, 35, 50 and 100 mm.

CEWOOD code		CW-G25	CW-G35	CW-G50	CW-G100
Thickness	mm	25 (±2)	35 (±2)	50 (±2)	100 (±2)
Length	mm	2400 (+3/-2)			
Width	mm	600 (±2)			
Weight	kg/m²	11.50	15.00	19.50	36.00
Thermal resistance (Ro)	m²·K/W	0.35	0.55	0.78	1.56
Thermal conductivity (λD)	W/m·K	0.064			
Specific heat (c)	J/(kg·K)	1300			
Minimum strength levels					
• Bend (EN 12089)	kPa	≥ 1300	≥ 1000	≥700	≥300
• Compression (EN 826)	kPa	≥300	≥ 300	≥300	≥200
Reaction to fire (EN 13501-1:2007)		B-s1, d0			

ASSEMBLY ON SUPPORT LATHS

Installation



- ① CEWOOD Building panel 50 mm
- ② Wood screw with metal washer $\varnothing > 40$ mm
- ③ Thermal insulation – mineral wool or cellulose
- ④ Vapour barrier
- ⑤ Plaster (e.g. Knauf MP 75 L)
- ⑥ Connecting board, min. 21×95 mm
- ⑦ Load-bearing timber frame of the building
- ⑧ Wooden support lath, min. 21×95 mm
- ⑨ CEWOOD Building panel 25, 35 or 50 mm
- ⑩ Wood screw with enlarged head $\varnothing \geq 20$ mm
- ⑪ Levelling layer (e.g. SAKRET BAK) approx. 3.0 kg/m^2
- ⑫ Reinforcing base coat with 4×4 mm, 160 g/m^2 glass fibre mesh (e.g. SAKRET BAK) approx. 6.7 kg/m^2
- ⑬ Primer (e.g. SAKRET PG) approx. 0.3 kg/m^2
- ⑭ Decorative plaster (e.g. SAKRET SIP) approx. 3.2 kg/m^2
- a Spacing between frame studs. To be determined according to the requirements of the timber frame structure and the dimensions of the mineral wool insulation (width 565 mm). Standard spacing: 600 mm.
- b Fastener spacing according to wind load:
 $< 0.5 \text{ kN/m}^2 - \leq 600 \text{ mm}$
 $0.5\text{--}1.0 \text{ kN/m}^2 - \leq 400 \text{ mm}$
 $1.0\text{--}2.0 \text{ kN/m}^2 - \leq 300 \text{ mm}$
- c Thermal insulation layer thickness. To be determined in accordance with LBN 002-19 and thermal calculations. Approx. 180–200 mm.

Important

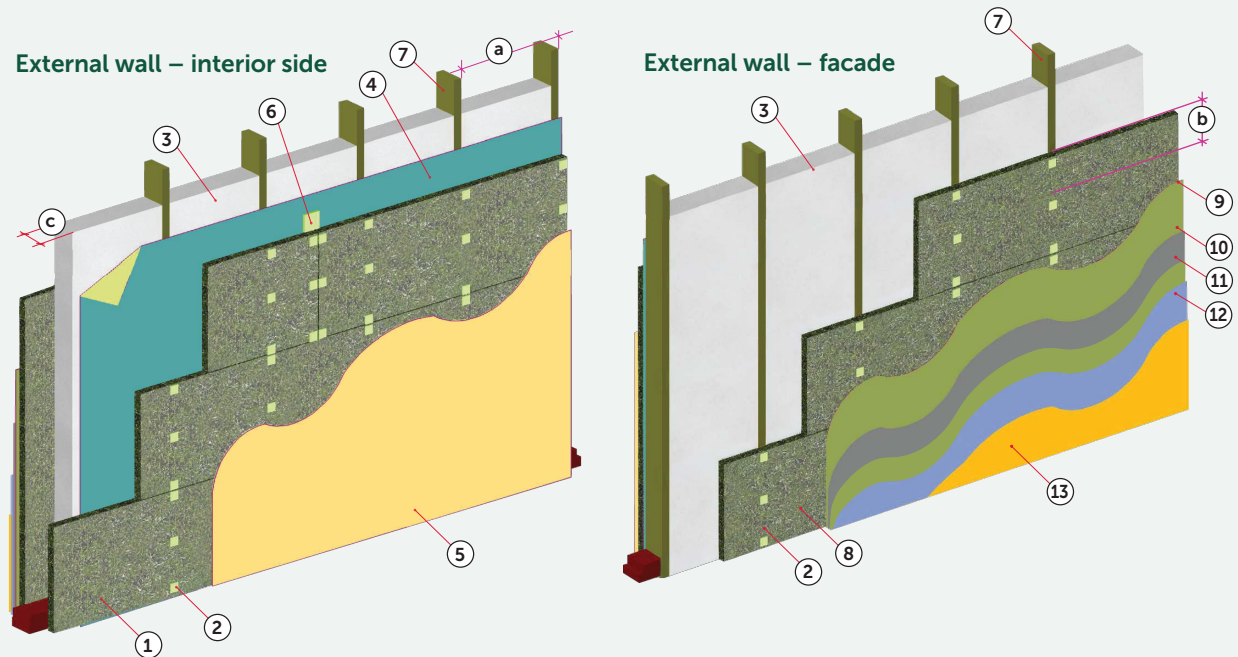
For building facades, 25, 35 and 50 mm thick CEWOOD Building panels can be used. They are fixed to horizontally installed wooden support laths using A4 grade stainless steel wood screws with an enlarged head $\varnothing > 20$ mm. The minimum screw length is the panel thickness + 25 mm.

For interior applications, it is recommended to use CEWOOD Building panels with a thickness of 50 mm or more, as they have higher heat capacity (thermal inertia), which helps retain heat for longer during the cold season and keep interiors cooler in summer.

To avoid "floating ends", the free edges of the panels on the interior side of the wall should be connected with a connecting board and wood screws (see 6).

ASSEMBLY DIRECTLY ON WOODEN BATTENS

Installation



- ① CEWOOD Building panel 50 mm
- ② Wood screw with metal washer $\varnothing > 40$ mm
- ③ Insulation – mineral wool or cellulose
- ④ Vapour barrier
- ⑤ Plaster (e.g. Knauf MP 75 L)
- ⑥ Connecting board, min. 21×95 mm
- ⑦ Load-bearing timber frame of the building
- ⑧ CEWOOD Building panel 50 or 100 mm
- ⑨ Levelling layer (e.g. SAKRET BAK) approx. 3.0 kg/m^2
- ⑩ Plaster base coat with 9×9 mm, 340 g/m^2 glass fibre reinforcing mesh (e.g. SAKRET P1 Plus) approx. 19 kg/m^2

- ⑪ Additional levelling layer, if required (e.g. SAKRET BAK) approx. $1\text{--}3 \text{ kg/m}^2$
- ⑫ Primer (e.g. SAKRET PG) approx. 0.3 kg/m^2
- ⑬ Decorative plaster (e.g. SAKRET SIP) approx. $3.0\text{--}3.5 \text{ kg/m}^2$
- a Spacing between frame studs. To be determined according to the requirements of the timber frame structure and the dimensions of the mineral wool insulation (width 565 mm). Standard spacing: 600 mm.
- b Fastener spacing according to wind load:
 $< 0.5 \text{ kN/m}^2$ – < 300 mm, 3 screws per stud
 $0.5\text{--}1.0 \text{ kN/m}^2$ – < 150 mm, 4 screws per stud
 $1.0\text{--}2.0 \text{ kN/m}^2$ – < 120 mm, 5 screws per stud
- c Thermal insulation layer thickness. To be determined in accordance with LBN 002-19 and thermal calculations. Approx. 180–200 mm.

Important

For building facades, CEWOOD Building panels with a thickness of 50 mm or more are used. They are fixed directly to the timber stud frame using A4 grade stainless steel wood screws $\varnothing \geq 7.5$ mm with $\varnothing 40$ mm metal washers.

For interior applications, it is recommended to use CEWOOD Building panels with a thickness of 50 mm or more, as they have higher heat capacity (thermal inertia), which helps retain heat for longer during the cold season and keep interiors cooler in summer.

Depending on the specific wall finishing detail, installation of a guide profile may be required. The profile is installed at the bottom and/or top of the wall before applying the plaster base coat and is embedded together with the levelling layer.

To avoid "floating ends", the free edges of the panels on the interior side of the wall should be connected with a connecting board and wood screws (see 6).