

GENERAL INSTRUCTIONS FOR WORKING WITH CEWOOD PANELS

Following proper handling guidelines for wood wool panels is essential to ensure both worker safety and the integrity of CEWOOD panels during transportation, storage, and installation. Below are general instructions for working with CEWOOD wood wool panels.

General Safety Precautions

- 1. Personal Protective Equipment (PPE):** Always wear suitable PPE, including gloves, safety goggles. ①

Transportation

1. Loading and Unloading:

- Use mechanical lifting equipment such as forklifts or cranes equipped with proper lifting attachments to handle large quantities of panels on pallets. ②
- Ensure the panels are securely strapped and covered during transport to prevent shifting and damage.



Storage

1. Environment:

- Store panels in a dry, well-ventilated area to prevent moisture absorption, which can compromise the dimensions of the panels.
- Avoid exposure to direct sunlight, extreme temperatures and direct contact with water. ③

2. Stacking:

- Stack panels horizontally on flat, level surfaces to avoid warping or bending.
- Use pallets or raised platforms to keep the panels off the ground. ④
- Place spacers or battens between layers to facilitate air circulation and acclimatization to ambient conditions in the room.

3. Protection:

- Cover the stored panels with waterproof sheeting to protect against dust and moisture.
- Ensure the cover is securely fastened and allows for ventilation to prevent condensation.

Handling

1. Manual Handling:

- Do not lift large panels alone. Lift one side of the panel so it is supported by long edge on a solid surface. This way you can move the panel around preventing bending or cracking. ⑤
- Hold the panels at the edges to maintain balance.
- Avoid sudden movements or impacts that could cause chipping or breaking. Empty the carrying path before lifting the panels, to prevent damage to the edges and surfaces of the panels.

GENERAL INSTRUCTIONS FOR WORKING WITH CEWOOD PANELS**Installation****1. Site Preparation:**

- Ensure the installation site is clean, dry, and the substructure frame is level. ⑥
- Plan the layout and cutting of panels to minimize waste and avoid unnecessary handling.

2. Cutting:

- Use proper cutting tools such as angle saw, undamaged hand saw or circular saws with dust extraction systems to minimize dust accumulation.
- Wear suitable PPE, including dust masks and eye protection, during cutting operations.
- To recreate the bevelled edges of panels, use sandpaper wrapped around any piece with straight plane or special grinding blocks. ⑦

3. Attachment:

- Follow CEWOOD technical guidelines for attachment methods. ⑧
- Pre-drill holes if necessary to prevent misalignment of screws.
- Do not over screw, screw head must be flush with panels surface. ⑨

4. Finishing:

- Follow CEWOOD recommendations in the 'After Installation' document for any additional treatments and finishing touches.

**Maintenance****1. Regular Inspection:**

- Periodically inspect the panels for signs of damage and perform necessary touch up repairs promptly or change an individual damaged panels. ⑩
- Clean the panels occasionally using non-abrasive methods to maintain their appearance and functionality.

By following these guidelines, you can ensure the safe and efficient handling of CEWOOD wood wool panels, maintaining their quality and top performance throughout their lifecycle.

SCREWING INSTRUCTIONS

CEWOOD Panels are a durable and nature friendly material made of top quality wood wool and cement. By combining fire resistance with good acoustic and heat insulation properties, the product offers the widest variety of design solutions.

Installation

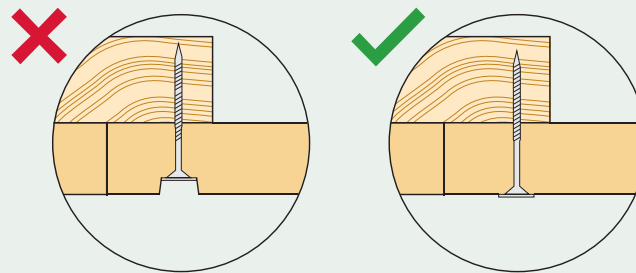
This instruction is intended for the installation of CEWOOD panels on wooden battens, metal profile structures or other structural systems that ensure sufficient strength and load-bearing capacity.

When installing CEWOOD panels on a wooden frame, the minimum cross-section of the battens must be 80x30 mm.

The spacing of the supporting structure (fixing step) is 600 mm, which corresponds to the panel width. Mounting should begin from the center of the room, gradually moving toward the edges. The screw spacing < 600 mm. In corners, screws should be placed 25 mm from the edge of the panel. A standard 1200x600 mm panel requires 6 screws, while a 600x600 mm - 4.

Special CEWOOD screws with a larger head are recommended for fastening the panels. Self-drilling screws must be used for metal constructions, and wood screws for wooden constructions if CEWOOD screws are not used. The screw head must have a diameter of $D \geq 9$ mm.

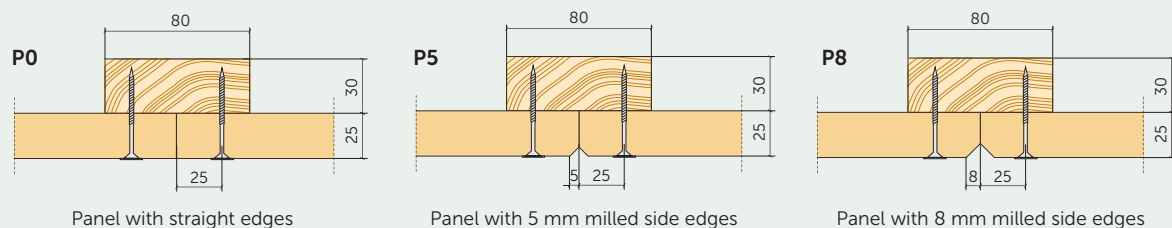
⚠ Do not submerge the screws into the CEWOOD panels! The head of the screw must be left the same level as the visible surface of the board.



Screwing minimal dimensions according to frame structure and panel thickness

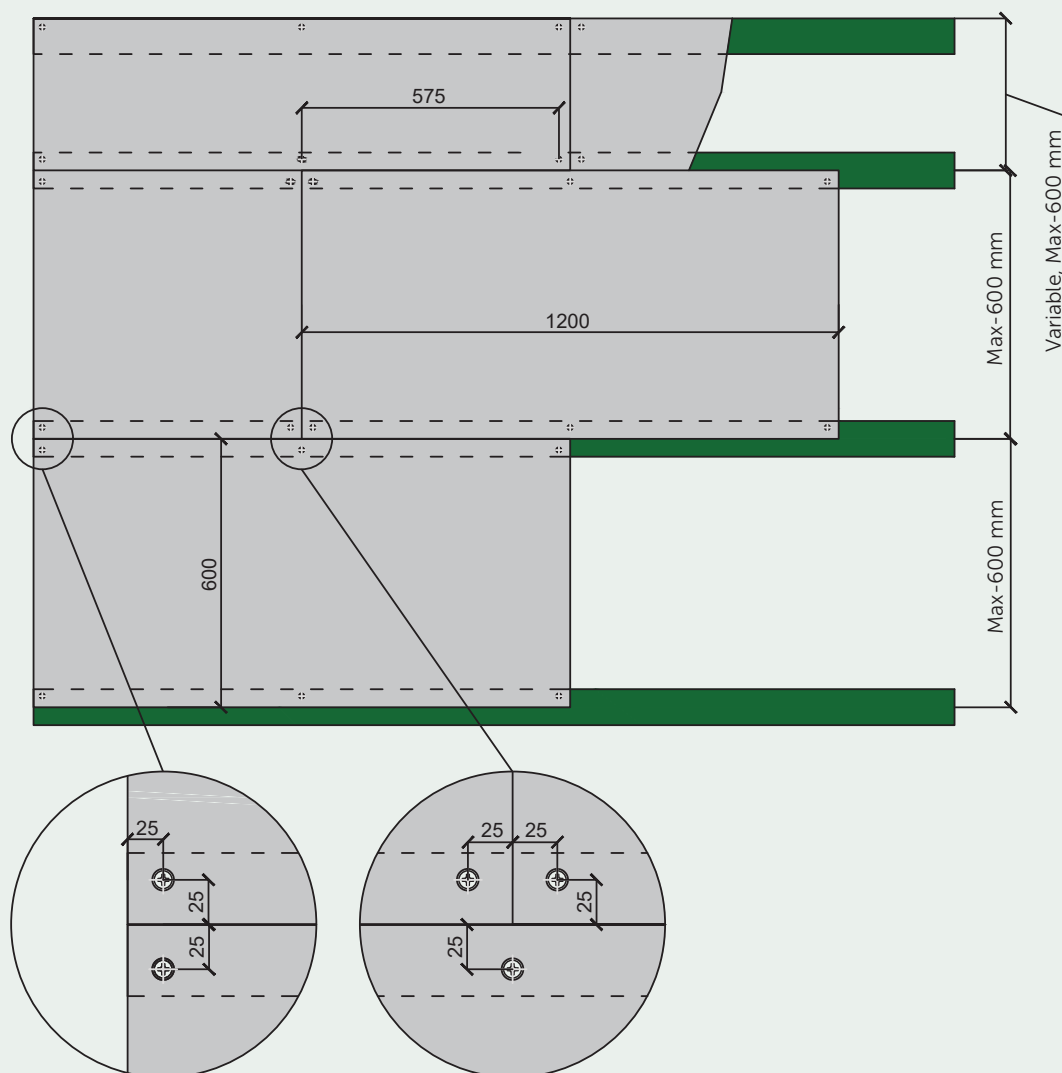
Structures	Panel thickness		
	15 mm	25 mm	35 mm
Wooden lath frame - wood screws	35x4.5	50x4.5	60x4.5
CD metal profile frame - self-drilling screws	35x4.5	45x4.5	50x4.5

Profile



SCREWING INSTRUCTIONS

Screw placement diagram

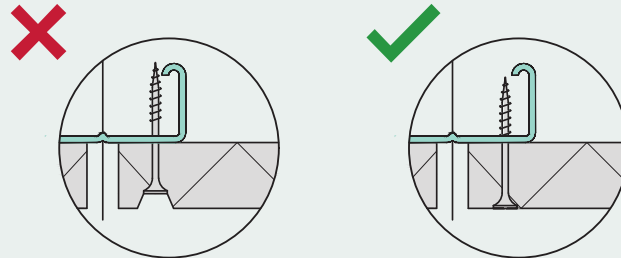


CEILING INSTALLATION GUIDE WITH 10 MM GAP BETWEEN PANELS

This solution is designed for CEWOOD panels with a 10 mm gap between them. The frame assembly element step must be 610 mm, which corresponds to the width of the CEWOOD panels (600 mm) plus the 10 mm gap. Mounting the panels should start from the middle of the room, gradually moving to the edges. The distance from the edge of the panel to the screw must not exceed 20 mm when using metal profiles, and 25 mm when using a wooden frame with battens of at least 80x30 mm. A standard 1200x600 mm panel requires 6 screws, and a 600x600 mm panel requires 4 screws.

Special CEWOOD screws with a larger head are recommended for fastening the panels. Self-drilling screws must be used for metal constructions, and wood screws for wooden constructions if CEWOOD screws are not used. The screw head must have a diameter of $D \geq 9$ mm.

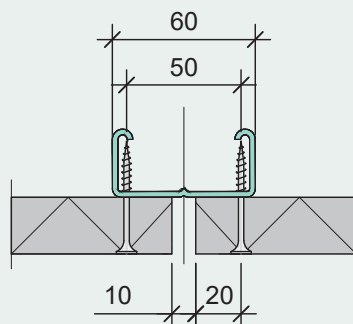
- ⚠ Do not submerge the screws into the CEWOOD panels! The head of the screw must be left the same level as the visible surface of the board.



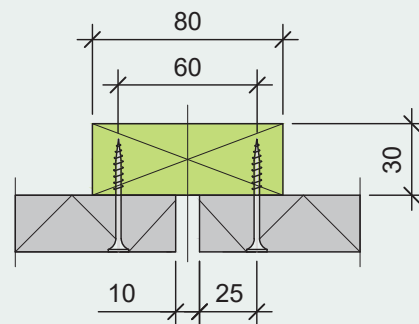
Screwing minimal dimensions according to frame structure and panel thickness

Minimal screw dimensions		
Frame structure/CEWOOD panel thickness	25 mm	35 mm
CD metal profile frame – self-drilling screws	4.5x45 mm	4.5x50 mm
Wooden lath frame – wood screws	4.5x50 mm	4.5x60 mm

Screw placement according to the structure



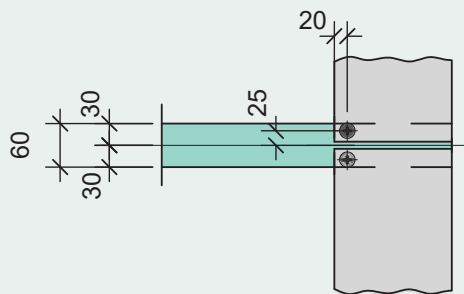
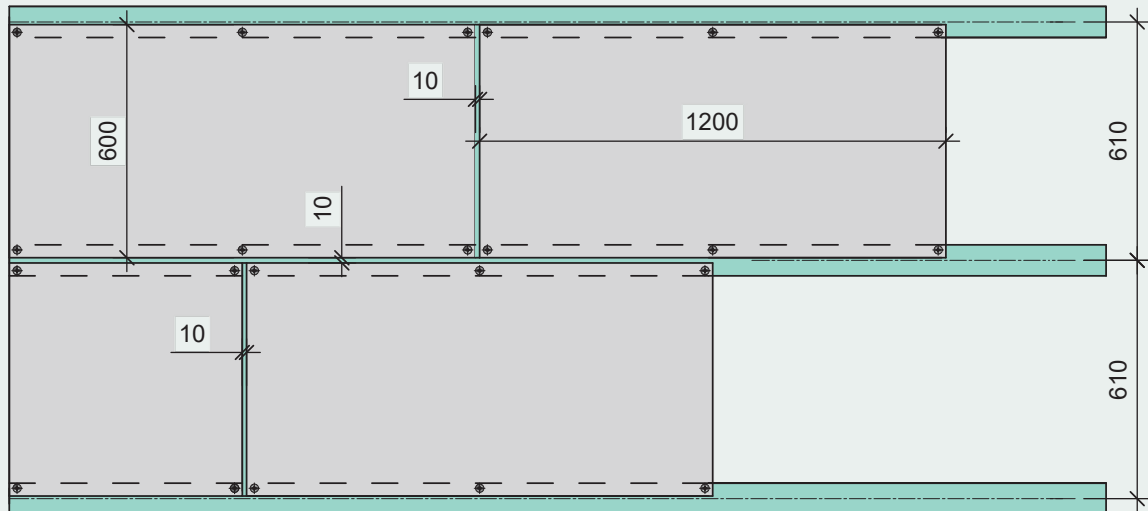
Panel fastening with a metal profile structure



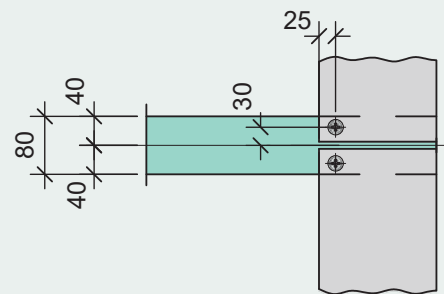
Panel fastening on wooden battens 80x30 mm

CEILING INSTALLATION GUIDE WITH 10 MM GAP BETWEEN PANELS

Screw placement diagram



Screw location with a metal profile structure



Screw location on wooden battens 80x30 mm



Ceiling finish using CEWOOD panels with a 10 mm gap between each panel.

INSTALLATION OF CEWOOD INSPECTION HATCHES

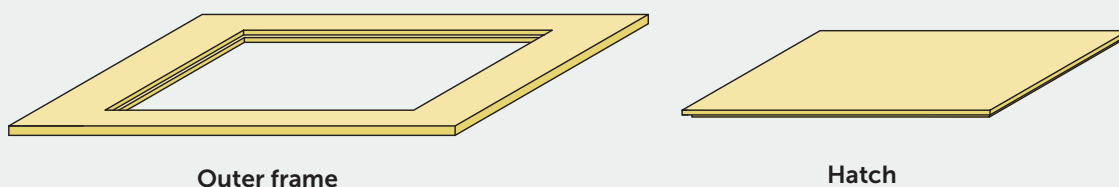
Inspection hatch panels consist of an outer frame and a hatch. The outer frame is installed the same way as a standard CEWOOD ceiling panel. The hatch panel rests on grooves and can be removed or reinserted whenever access is needed.

This section covers only the installation of inspection hatch panels. For complete ceiling installation instructions, see the "Downloads" section under "Installation manuals" and choose the relevant ceiling system.

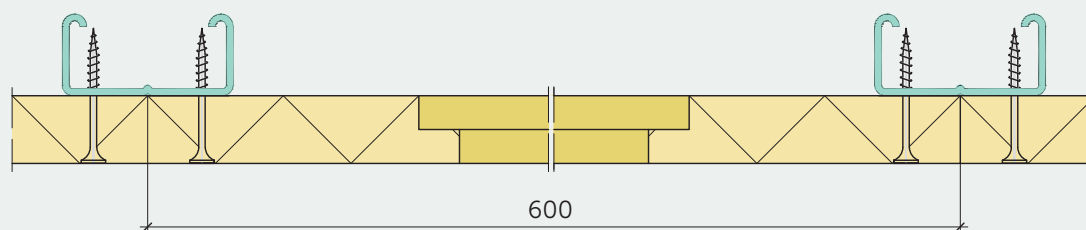
Technical specifications

Wood wool width	1.0 mm; other wood wool upon request
Panel thickness	25 mm; 35 mm
Size (standard panels)	1200x600 mm; 600x600 mm
Size (for suspended ceiling)	1195x595 mm; 595x595 mm
Colours	natural painted, white, black, grey and any shade in RAL or NCS system upon request
Profiles	P0; P5; other edge profiles upon request
Fire reaction class	B-s1, d0

Inspection hatch components



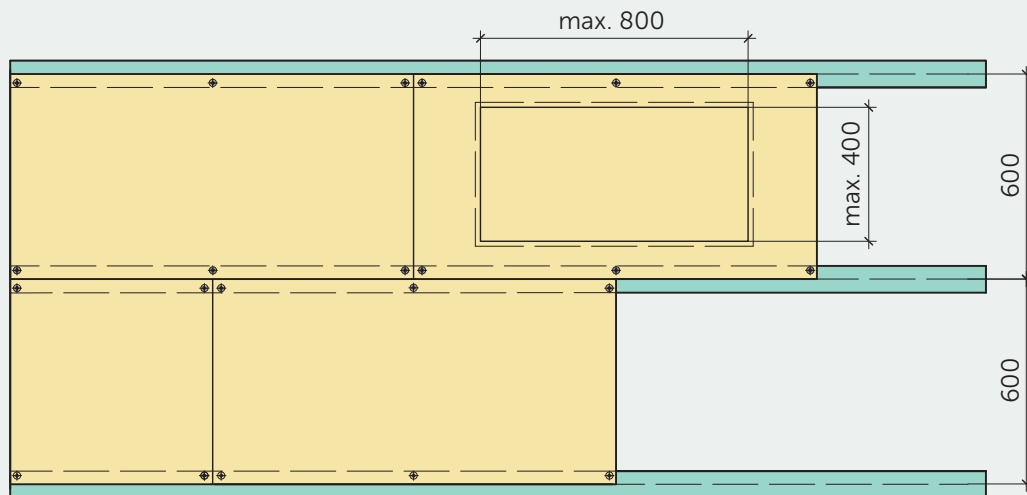
Outer frame installation



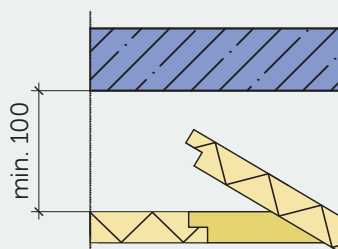
Proper installation of the CEWOOD inspection hatch outer frame with screws, at the standard 600 mm step on CD profiles.

INSTALLATION OF CEWOOD INSPECTION HATCHES

Screw placement diagram with hatch



The outer frame is installed the same way as a standard CEWOOD panel, without additional steps. Use 6 screws for 1200x600 mm panels and 4 screws for 600x600 mm panels; for ceilings on T24 profiles panels are laid on the profiles or fitted with grooves, without additional fixing.

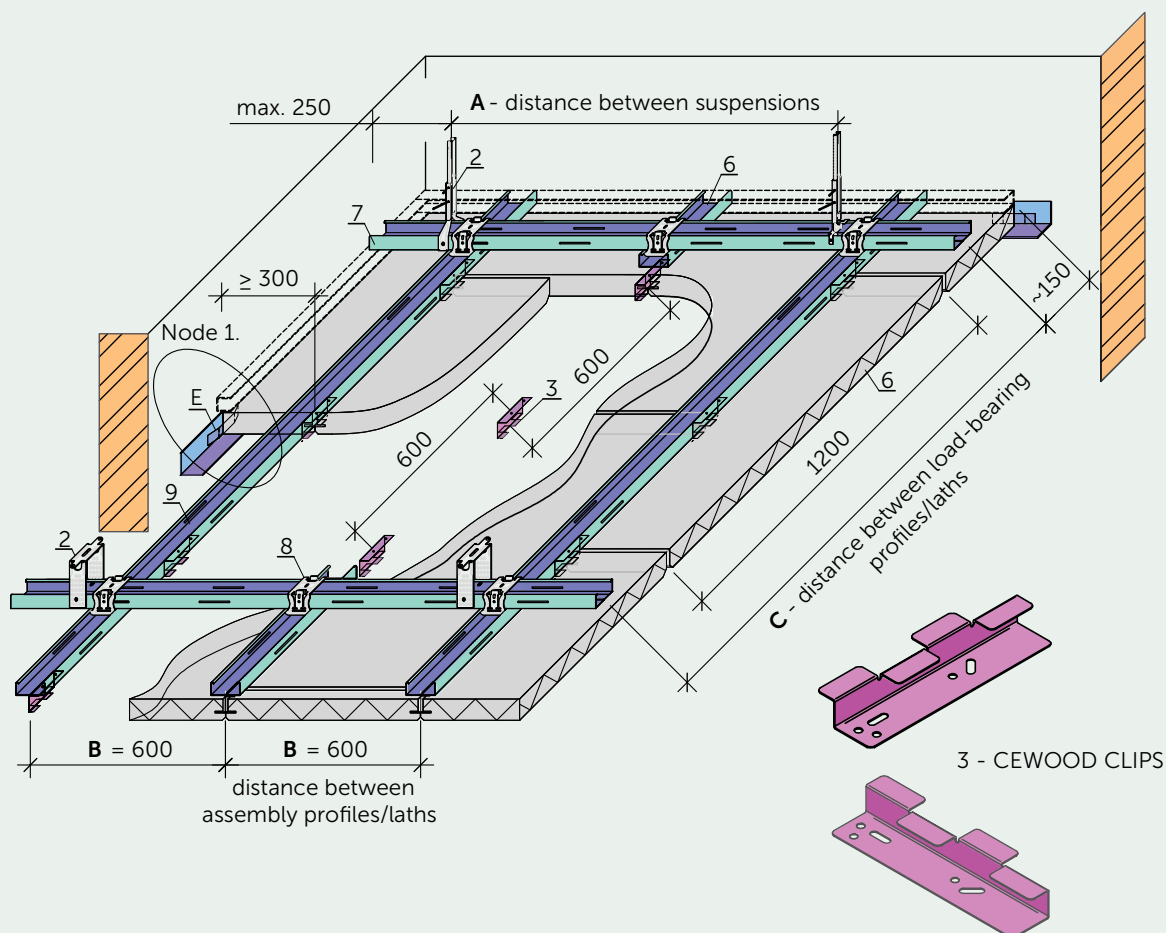


⚠ For installing larger inspection hatches (800x400 mm) diagonally onto the outer frame, a sufficient air gap is required. A minimum of 100 mm clear air gap must be maintained between the ceiling panel level and any structural slab or installations above the ceiling, to allow the hatch panel to be inserted and removed without obstruction.



CEILINGS ON CEWOOD CLIPS

The substructure frame can be made of CD type metal profiles or wooden laths. The frame can be attached to load-bearing structures with a U-type suspension, wire or quick suspension, as well as a nonius type clamp.



Maximum mounting distances of frame elements

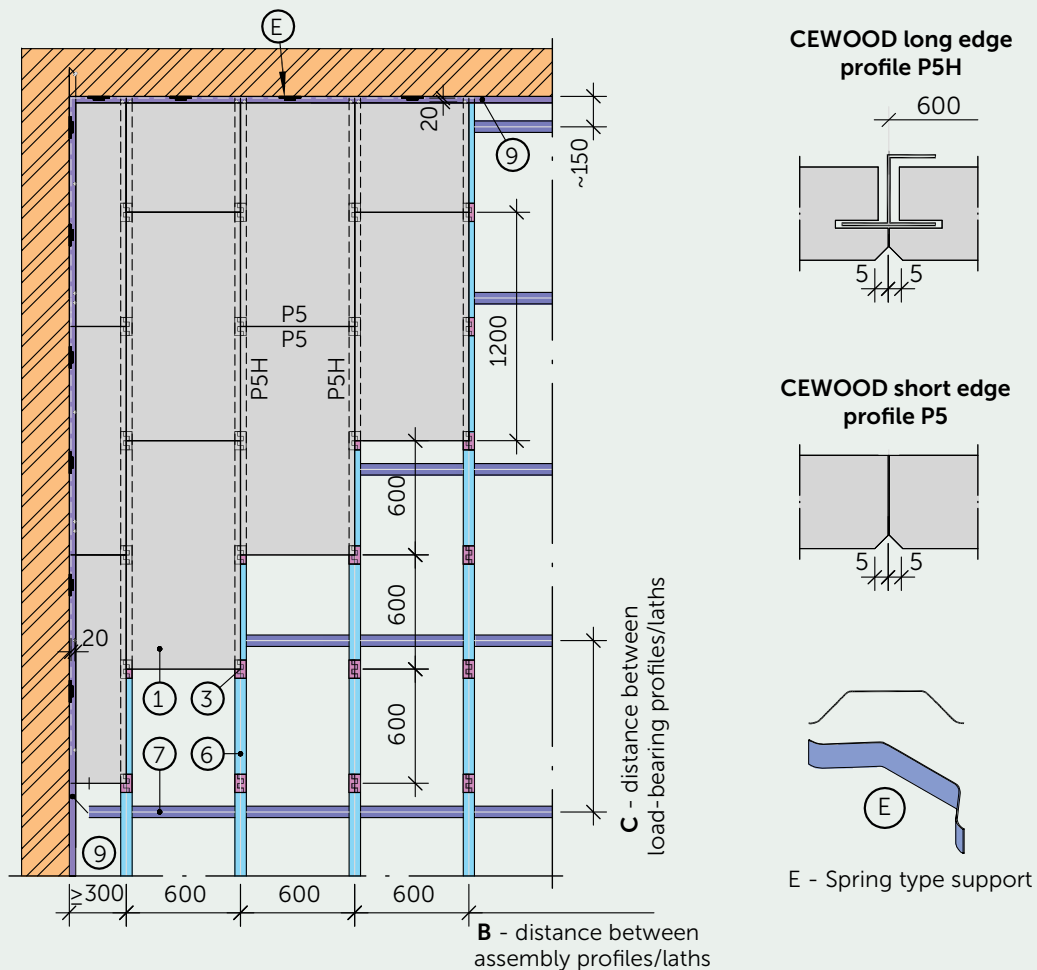
Load-bearing profiles/laths	Assembly profiles/laths	A - distances between suspension elements/fastenings	
		Load class kN/m ²	
Distance C - mm	Distance B - mm	Up to 0,15	Up to 0,30
600	600	1150	900
900	600	1000	800
1000	600	950	750
1200	600	900	

Must use suspensions with load-bearing capacity ≥ 0.40 kN

CEILINGS ON CEWOOD CLIPS

CEWOOD clip assembly guidelines on metal CD and wooden lath frame

Each CEWOOD Panel 25 mm or 35 mm with dimensions 1200x600 mm is supported with 6 clips, 600x600 mm panels are supported with 4 clips. CEWOOD Panels on long edge has profile P5H, but short edge - P5.



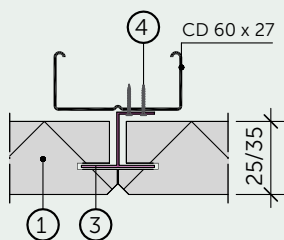
Explanation of numbering

1. CEWOOD Panels
2. Suspension element
3. CEWOOD clip
4. Fastening screw 4,0x25 mm
5. Conical anchor $\geq$ M6
6. Metal CD or wooden lath assembly profile
7. Metal CD or wooden lath load-bearing profile
8. Cross connector for CD profiles
9. Wall L profile L35/35 mm
- E - Spring type support

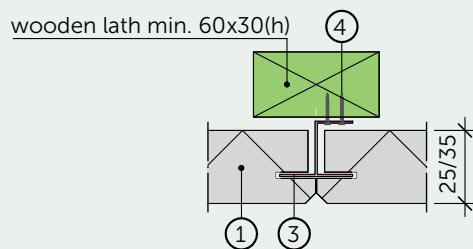
CEILINGS ON CEWOOD CLIPS

CEWOOD clip fastening on different substructure

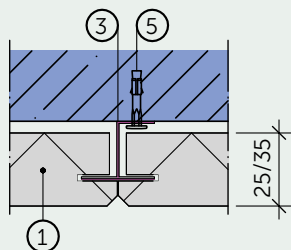
CEWOOD clip fastening on CD profile



CEWOOD clip fastening on wooden lath

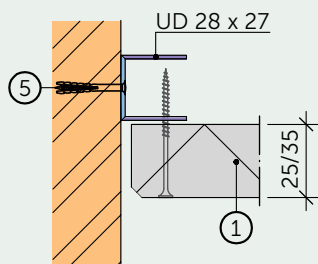


CEWOOD clip direct fastening to load-bearing structure

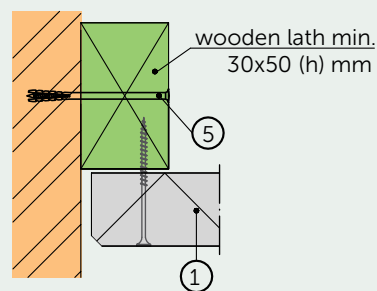


Ceiling perimeter fastening when ceilings fastened with CEWOOD clips

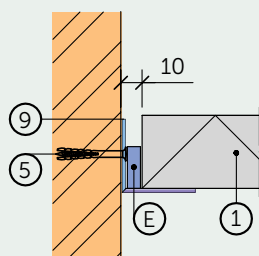
Fastening on perimeter metal profile



Fastening on perimeter wooden lath



Supporting perimeter with wall L profile L35x35 mm



WALLS ON WOOD/METAL FRAME

Wall installation – overview

CEWOOD Panels with a thickness of 25, 35 or 50 mm are typically used for interior wall finishing. Panels can be mounted on a supporting frame made of wooden laths or steel CD profiles, depending on the installation conditions.

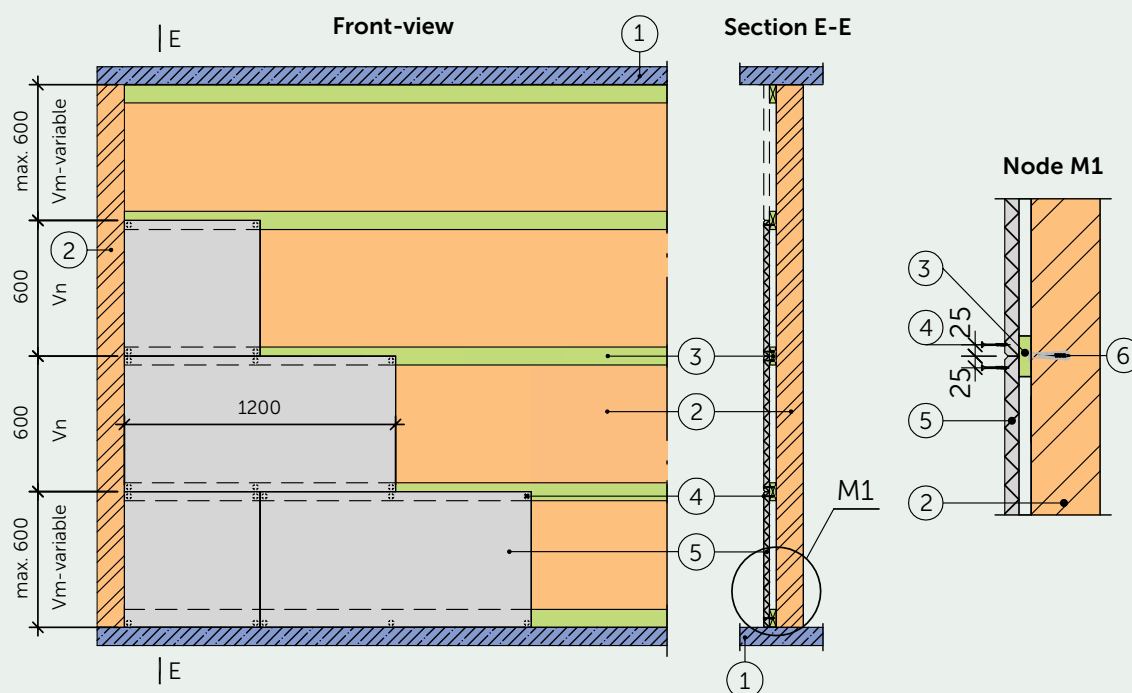
The selection of frame type and fastening method depends on several factors, including:

- the strength and material of the existing wall, and any deviations from vertical or horizontal alignment,
- the desired panel layout and design solution,
- the required load-bearing capacity and type of applied load.

- ⓘ If CEWOOD Panels are fastened with extra mineral wool onto the outer building structure elements, a vapor barrier film must be laid under CEWOOD Panels.

The frame construction consists of horizontally or vertically placed laths of 80x30 mm. This wooden structure can be used if it is not necessary to level the vertical or horizontal planes of the wall, or to achieve a significantly increased sound and heat insulation.

Horizontal fastening of wooden laths to the load-bearing wall structure

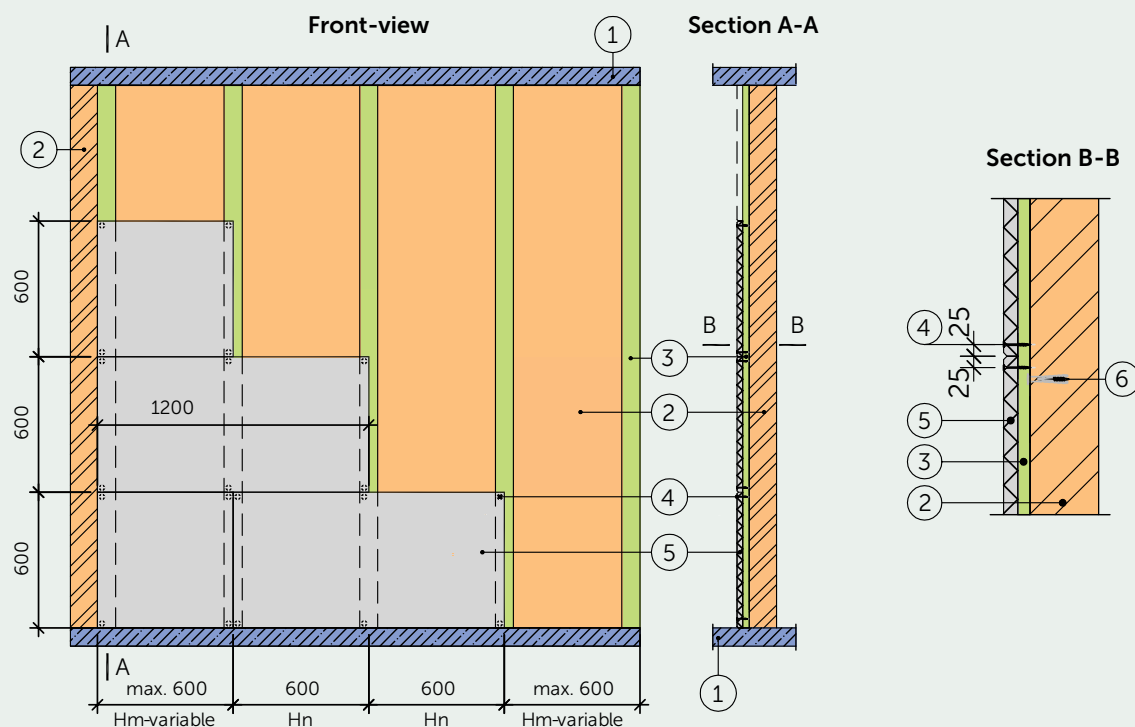


Explanation of numbering

1. Load-bearing slab or foundation structure
2. Wall structure
3. Assembly lath 80x30 mm. Step C/C-600 mm
4. CEWOOD screw
5. CEWOOD Panels
6. Fastening anchor

WALLS ON WOOD LATHING CONSTRUCTION

Vertical fastening of wooden laths to the load-bearing wall structure



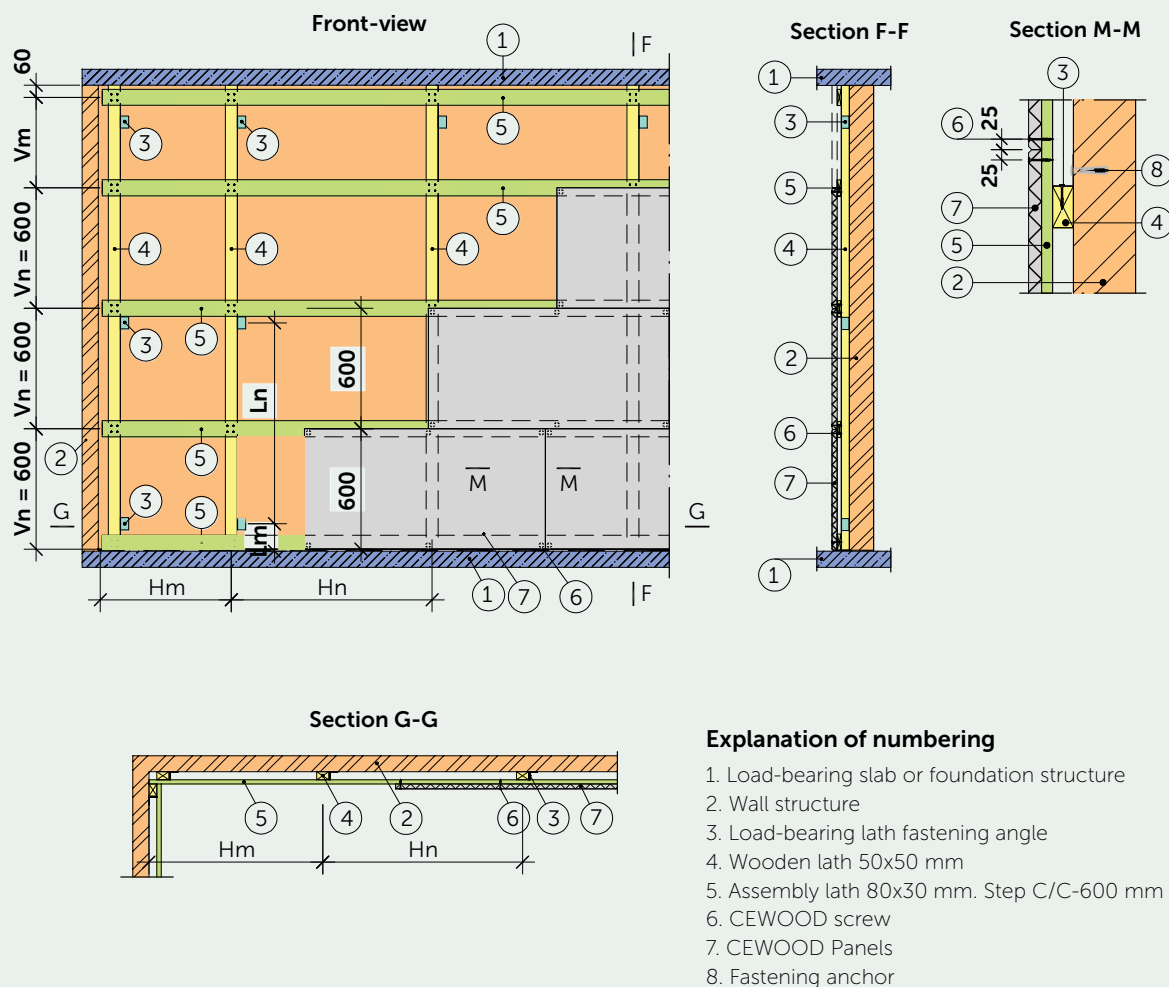
Explanation of numbering

1. Load-bearing slab or foundation structure
2. Wall structure
3. Assembly lath 80x30 mm. Step C/C-600 mm
4. CEWOOD screw
5. CEWOOD Panels
6. Fastening anchor

WALLS ON WOOD LATHING CONSTRUCTION

Double wood lath construction

The double frame can be chosen if it is necessary to straighten the wall plane deviations or to achieve a significant increase in wall sound or heat insulation level.



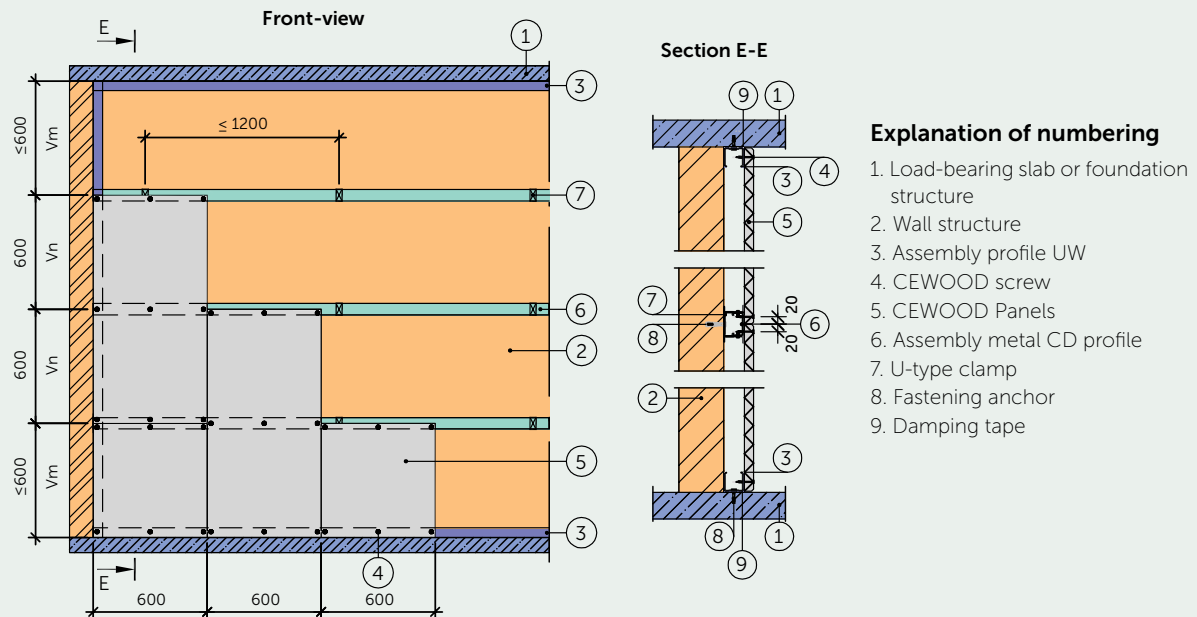
Maximum mounting distances between frame elements

CEWOOD Panel thickness	25 mm	35 mm	50 mm
Step between load-bearing laths Hm , mm	≤ 1000	≤ 1000	≤ 1000
Step between load-bearing laths Hn , mm	≤ 1000	≤ 1000	≤ 1000
Step between assembly laths Vm , mm	≤ 600	≤ 600	≤ 600
Step between assembly laths Vn , mm	600	600	600
Step between fastening elements Lm , mm	≤ 250	≤ 250	≤ 250
Step between fastening elements Ln , mm	≤ 1200	≤ 1000	≤ 800

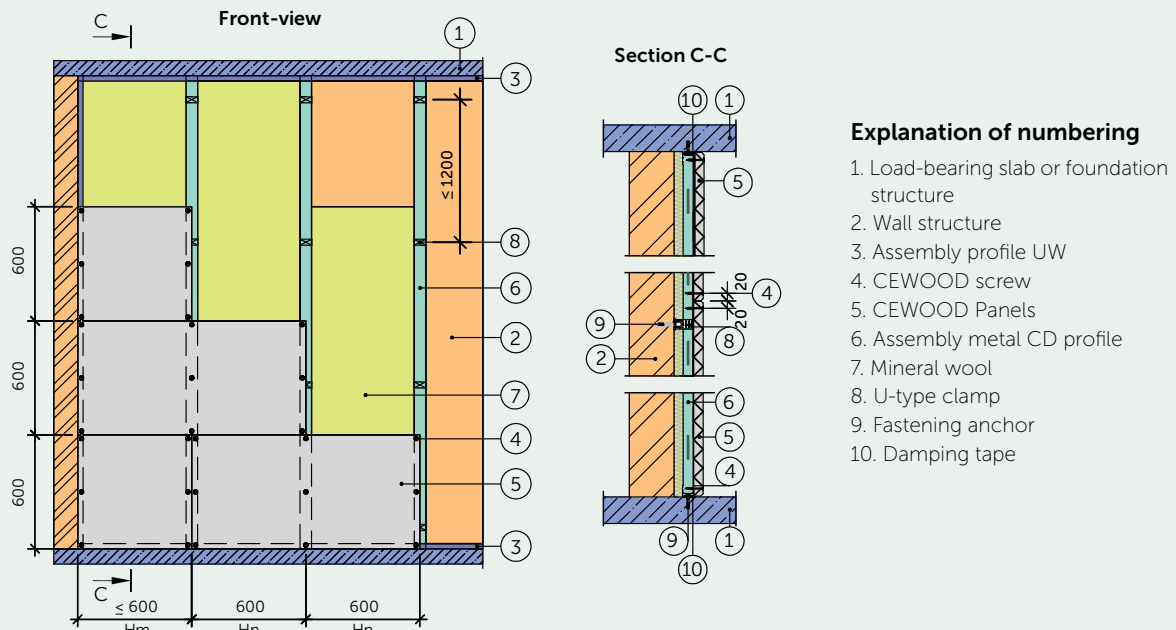
WALLS ON CD PROFILE FRAME CONSTRUCTION

The frame construction consists of horizontally or vertically placed CD profiles. This metal frame structure can be used if it is not necessary to level the vertical or horizontal planes of the wall, or to achieve a significantly increased sound and heat insulation.

Horizontal fastening of metal CD profile frame to the load-bearing wall structure



Vertical fastening of metal CD profile frame to the load-bearing wall structure



CEILINGS ON METAL/WOOD FRAME

SECTIONS:

1. Screwing instructions 1
2. Suspended ceilings on CD profile frame 3
3. Suspended ceilings on wooden laths 6

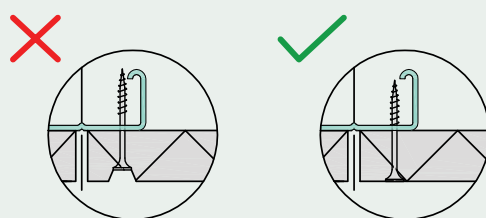
1. SCREWING INSTRUCTIONS

The frame assembly element step must be 600 mm or less, which has to correspond to the width of the CEWOOD Panels. Start mounting the panels from the middle of the room, gradually moving to the edges. Screw fastening step must be less than 600 mm. The distance from the edge of the panel to the screw must not exceed 25 mm. A standard 1200x600 mm panel requires 6 screws, a 600x600 mm panel requires 4 screws.

Special CEWOOD screws with a larger head are recommended for fastening the panels.

Self-drilling for metal constructions or wood screws for wooden constructions recommended, if CEWOOD screws are not used. The screw head should be with head diameter $D \geq 9$ mm.

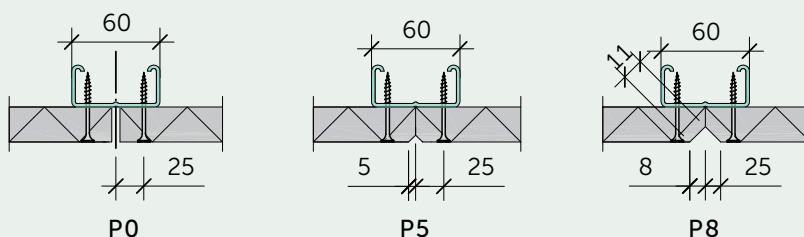
- ⚠ Do not submerge the screws into the CEWOOD Panels! The head of the screw must be left the same level as the visible surface of the board.



Minimal screw dimensions depending on frame structure and panel thickness

Minimal screw dimensions		
Frame structure/CEWOOD Panel thickness	25 mm	35 mm
CD metal profile frame – self-drilling screws	4.5x45 mm	4.5x50 mm
Wooden lath frame – wood screws	4.5x50 mm	4.5x60 mm

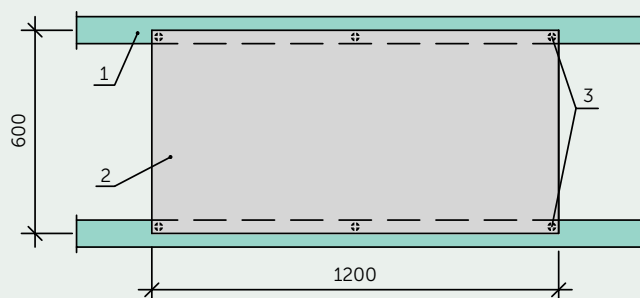
CEWOOD Panel edge profile types



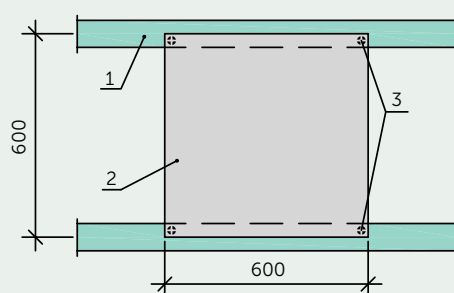
SCREWING INSTRUCTIONS

Standard screw pattern for CEWOOD Panels

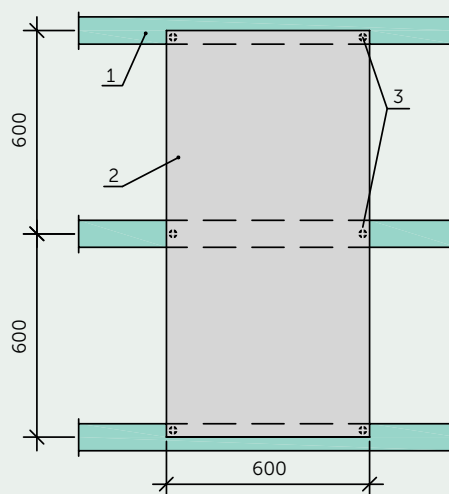
Fastening of 25 mm and 35 mm thick CEWOOD Panels with screws onto metal CD assembly profiles or wooden assembly laths.



Panel 1200x600 mm fastened with 6 screws longitudinally



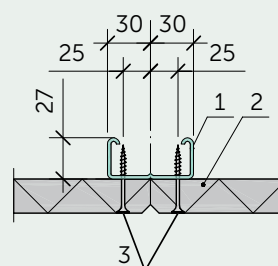
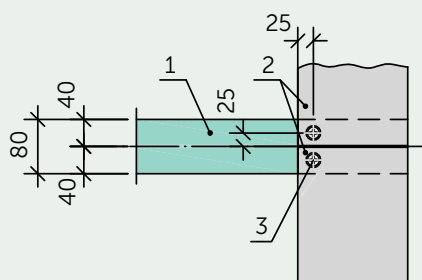
Panel 600x600 mm with 4 screws



Panel 1200x600 mm fastened with 6 screws

Screw locations

The connection seam between panels must always be formed under the frame assembly element.

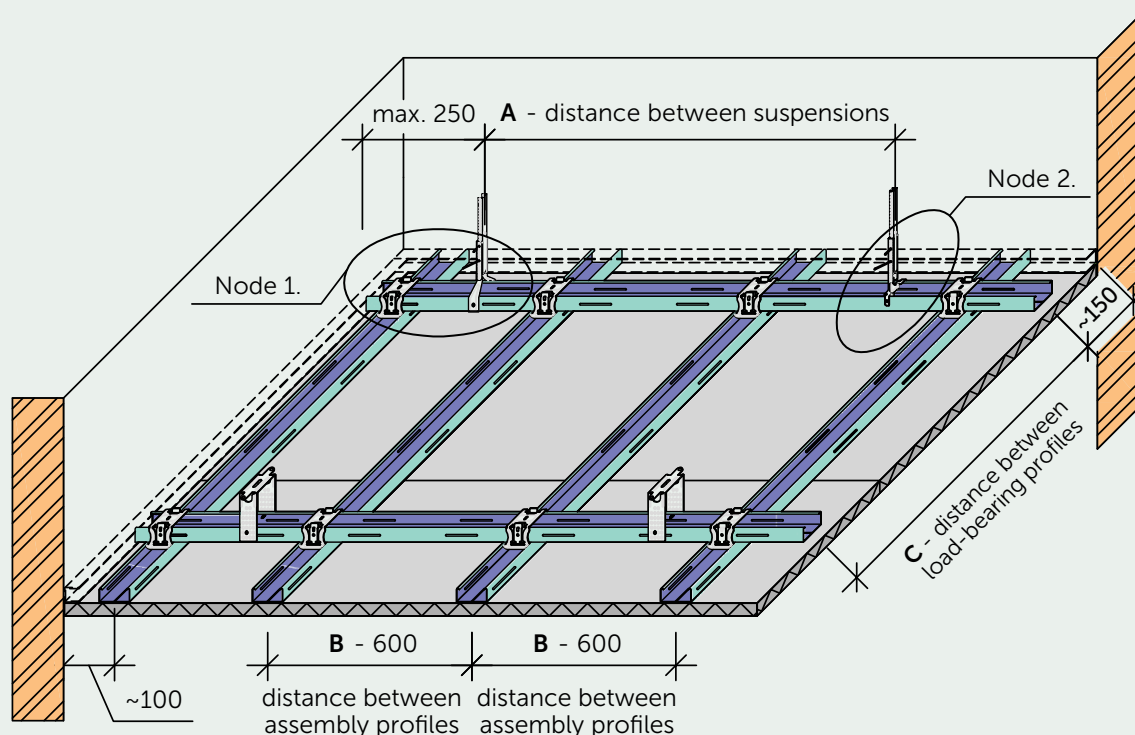


Explanation of numbering

1. Frame assembly element (CD profile or wooden lath)
2. CEWOOD Panels
3. CEWOOD screws 4,65x45 mm or galvanized wood screws with head $\varnothing \geq 9$ mm

2. SUSPENDED CEILINGS ON CD PROFILE FRAME

The frame is made of perpendicularly arranged CD type metal profiles 60/27/0,6 mm. CD profile placement, fastening onto load-bearing structures and connections between elements are implemented according to CD type profile manufacturer guidelines. Placements of suspension elements and frame bearing capacities are stated in the table below.



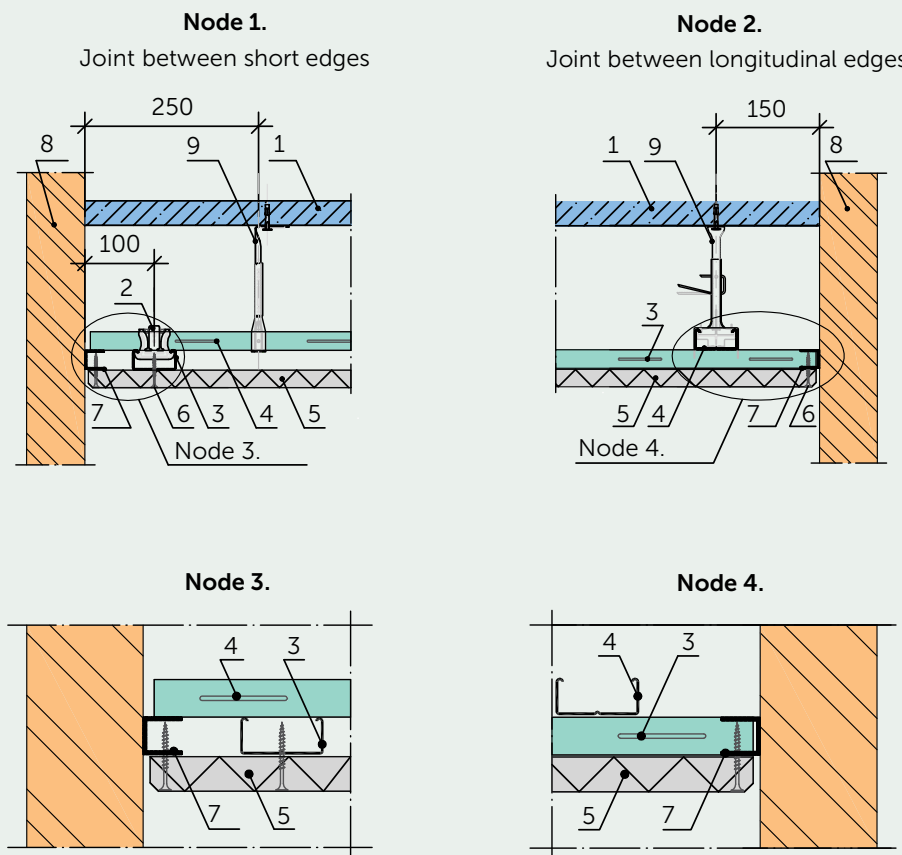
Maximum mounting distances of frame elements

Load-bearing profile CD 60/27/0,6 mm	Assembly profile CD 60/27/0,6 mm	A - distances between suspension elements/fastenings			Double ceilings
		Load class kN/m ²			
Distance C - mm	Distance B - mm	Up to 0,15	Up to 0,30	Up to 0,50	Up to 0,65
600	600	1150	900	750	700
900	600	1000	800		
1000	600	950	750		
1200	600	900			

Must use suspensions with load-bearing capacity ≥ 0.40 kN

SUSPENDED CEILINGS ON CD PROFILE FRAME

CD profile frame perimeter fastening sections and explanation



**In drawings used nonius suspension with bearing capacity 0,40 kN*

Explanation of numbering

1. Load-bearing structure
2. Cross connector for CD profile
3. CD assembly profile 60x27x0,6 mm
4. CD load-bearing profile 60x27x0,6 mm
5. CEWOOD Panels
6. CEWOOD screws 4,65x45 mm or galvanized woodscrews with head $\varnothing \geq 9$ mm
7. UD perimeter profile 28x27
8. Existing wall structure
9. Nonius suspension with bearing capacity 0,40 kN

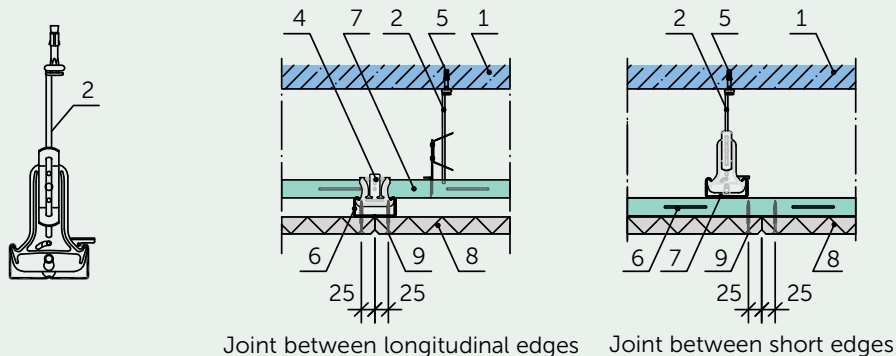
SUSPENDED CEILINGS ON CD PROFILE FRAME

Fastening types of CD profiles on to load-bearing structure

Assembly profile is attached to a load-bearing profile using cross connector for CD profiles. A CD profile frame is fastened onto load-bearing structure using quick suspension, U-type clamp or nonius type fastening. See detailed explanations below.

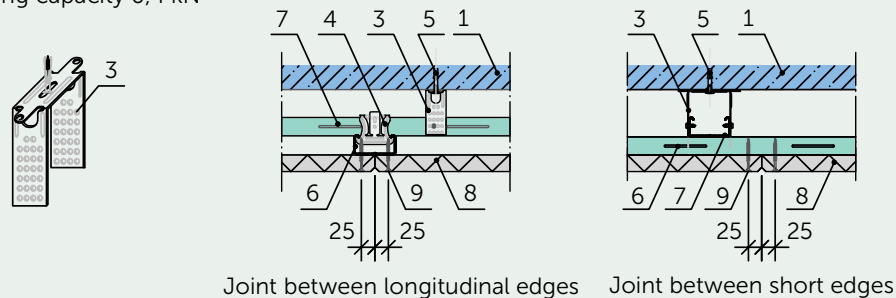
Quick suspension with anchor fastening element

Load-bearing capacity 0,15 kN



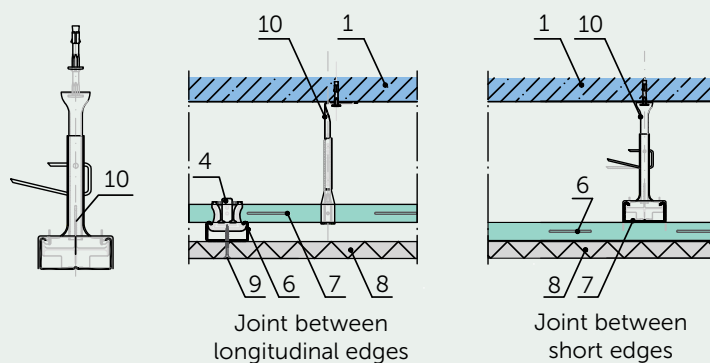
U-type clamp for direct fastening

Load-bearing capacity 0,4 kN



Nonius type suspension with adjustable height

Load-bearing capacity 0,4 kN

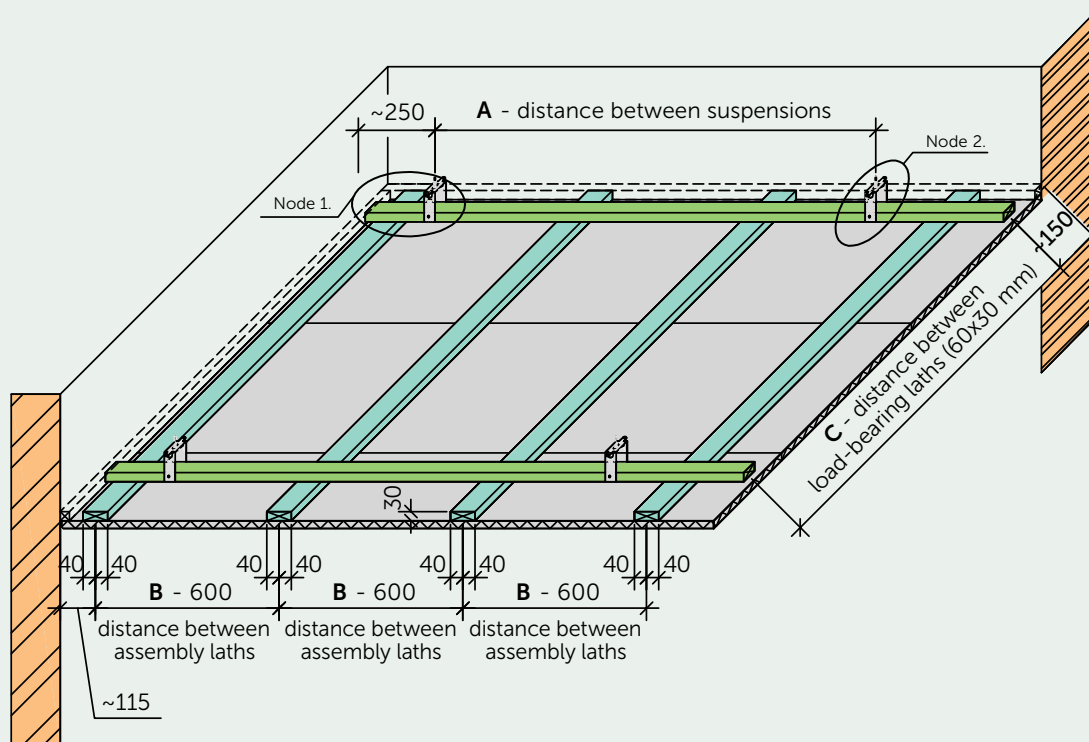


Explanation of numbering

1. Load-bearing structure
2. Anchor Fix Quick Hanger
3. U-type clamp
4. Cross connector for CD profile
5. Conical anchor $\geq M6$
6. CD assembly profile 60x27x0,6 mm
7. CD load-bearing profile 60x27x0,6 mm
8. CEWOOD Panels
9. CEWOOD screws 4,65x45 mm or galvanized woodscrews with head $O \geq 9$ mm
10. Nonius suspension with bearing capacity 0,40 kN

3. SUSPENDED CEILINGS ON WOODEN LATHS

The frame is made of perpendicularly arranged wooden laths. Placements of suspension elements and frame-bearing capacities are stated in the table below.



Maximum mounting distances of frame elements

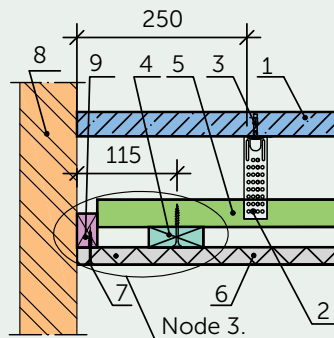
Load-bearing lath, min. cross section 60/30 mm	Assembly lath, min. cross section 80/30 mm	A - distance between suspension elements/fastenings Load class kN/m ²		
		up to 0.15	up to 0.30	up to 0.50
Distance C - mm	Distance B - mm			
600	600	1150	900	750
900	600	1000	800	
1000	600	950		
1200	600	900		
Must use suspensions with load resistance of 0.40 kN Assume minimal load-bearing lath cross section of 60x30 mm				

SUSPENDED CEILINGS ON WOODEN LATHS

Wooden lath frame fastening sections and explanation

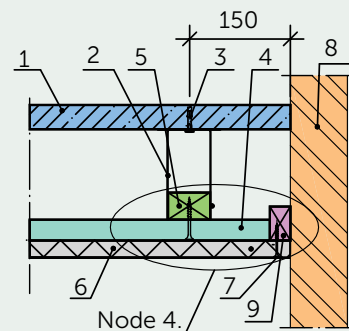
Node 1.

Joint between short edges

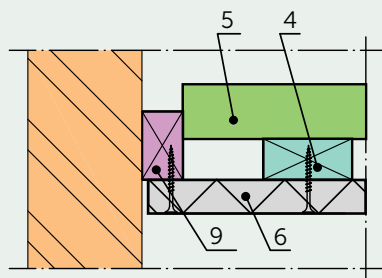


Node 2.

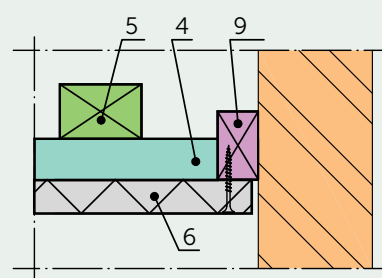
Joint between longitudinal edges



Node 3.



Node 4.



**The drawings show U-type clamp suspension with bearing capacity 0,40 kN*

Explanation of numbering

1. Load-bearing structure
2. U-type clamp
3. Conical anchor $\geq M6$
4. Assembly lath min. 80x30(h) mm
5. Load-bearing lath min 60x30(h) mm
6. CEWOOD Panels
7. CEWOOD screws 4,65x45 mm or galvanized woodscrews with head $\varnothing \geq 9$ mm
8. Existing wall structure
9. Perimeter wooden lath 30x50(h) mm

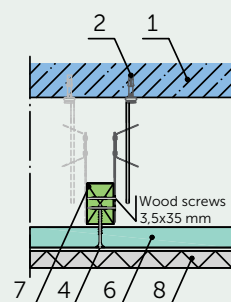
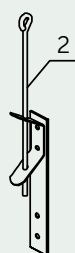
SUSPENDED CEILINGS ON WOODEN LATHS

Fastening types of wooden laths onto a load-bearing structure

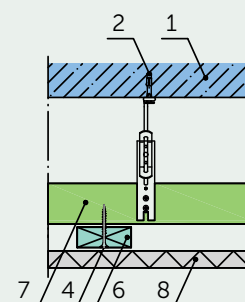
Assembly laths are attached to a load-bearing laths using wood screws. A wooden lath frame is fastened on to load-bearing structure using quick suspension, U-type clamp or with anchors directly to load-bearing structure. Detailed explanations see below.

Quick suspension with anchor fastening element

Load-bearing capacity 0,15 kN



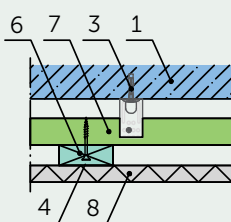
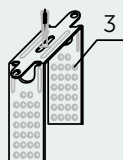
Joint between longitudinal edges (alternating fastening)



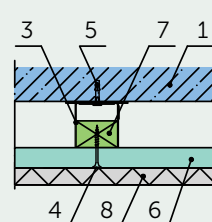
Joint between short edges, load-bearing lath min. 60x30(h) mm

U-type clamp for direct fastening

Load-bearing capacity 0,4 kN



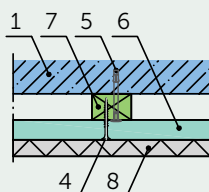
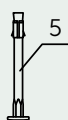
Joint between longitudinal edges



Joint between short edges

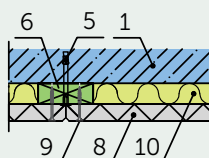
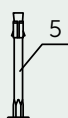
Double-layer frame direct fastening with anchor

Anchor type must be applied onto a load-bearing structure type



Single-layer frame direct fastening with anchor

- ⓘ Assembly laths are fixed directly onto a load-bearing structure
 Fastening type usable if ceiling leveling is not required



Explanation of numbering

1. Load-bearing slab or foundation structure
2. Adjustable ceiling hanger
3. U-type clamp
4. Wood screw min. 4x45 mm
5. Suspension anchor
6. Assembly lath min. 80x30(h) mm
7. Load-bearing lath min. 60x30(h) mm
8. CEWOOD Panels
9. CEWOOD screws 4,65x45 mm or galvanized woodscrews with head $\varnothing \geq 9$ mm
10. Mineral wool