fermacell

FERMACELL leaflet:

FERMACELL Powerpanel H_20 for moisture-proof rooms

The Powerpanel H_20 is a product of the cement Powerpanel family by FERMACELL.

Panel characteristics		
Panel thickness	12.5 mm	
Panel dimensions	1000 x 1250 mm	50 items/pallet
	2000 x 1250 mm[1]	30 items/pallet
	2600 x 1250 mm	30 items/pallet
	3000 x 1250 mm[1]	30 items/pallet
Weight	1000 kg/m³	12.5 kg/m²

[1] delivery date on request

The H_20 Powerpanel is a cement-bonded light-concrete construction board with a laminated structure reinforced on both sides beneath the top surface with an alkali-resistant glass fibre weave (5 mm x 5 mm). The H_20 Powerpanel is non-combustible and conforms to construction material class A1.

The H_20 Powerpanel is the new water resistant class for all moisture-proof rooms. It has many advantages, whether it is used in the domestic bathroom with shower (Class 0), in toilet rooms or wellness areas (Class A01/A1), in public or business establishments (Class A1) or when subject to chemicals in commercial kitchens and industrial areas (Class C).

For sealing in areas A1 to C subject to building supervisory regulations, the ZDB datasheet require a general building supervisory test certificate (ABP) as proof of usability.

The Class A1 FERMACELL sealing system consisting of the undercoat, the liquid foil the sealing band and if necessary the sealing sleeve can also be used in areas with minor/moderate loads that are not regulated by the building supervisory regulations.

For load class 0 (the domestic bathroom) only the wall, floor and if necessary the ceiling joints need to be sealed with sealing tape

The FERMACELL leaflet “Sealing” addresses the requirement for moisture-proof room themes: sub-surfaces, sealing systems and detailed solutions.

ZDB datasheet “Information relating to the implementation of joint sealing with coatings and coverings of flagstones and laminated board for internal and external use” January 2005

Xella Neues Bauen

Suitable Sub-Structures	Moisture Load Class							
	A 1	A 2	B	C	0	A0 1	A0 2	B0
Concrete according to DIN 1045	●	●	●	●	[1]	●	●	●
Lime cement plaster	●			●	[1]	●		●
Plaster wall panels					●	●		
FERMACELL gypsum fibre panel					●	●		
FERMACELL Powerpanel H_20	●			●	● [2]	●		

[1] Area where sealing is not absolutely necessary.

[2] Only the wall, floor and ceiling joints must be sealed with sealing tape.

Panel storage and transport

The H_20 Powerpanels are packed horizontally and delivered on pallets. The panels should be stored flat on a smooth base. Storage on end can lead to deformation of the panels and damage to edges.
If the stack of panels is laid on a floor then the load bearing capacity of the floor must be observed.

Due to their resistance to frost and water the panels may be stored in the open. Due to the subsequent surface treatment the panels should be covered with a waterproof cover to protect them from water and dirt from building site operations.

Horizontal transportation of the panels is possible with forklift trucks or other panel transporters. Single panels must be transported on end. Manual lifting of the panels is made easier with panel lifting/transporting tools. If these tools are not available workmen should wear gloves.

Please reach an agreement with your dealer about the return of the wooden pallets.

Building site conditions

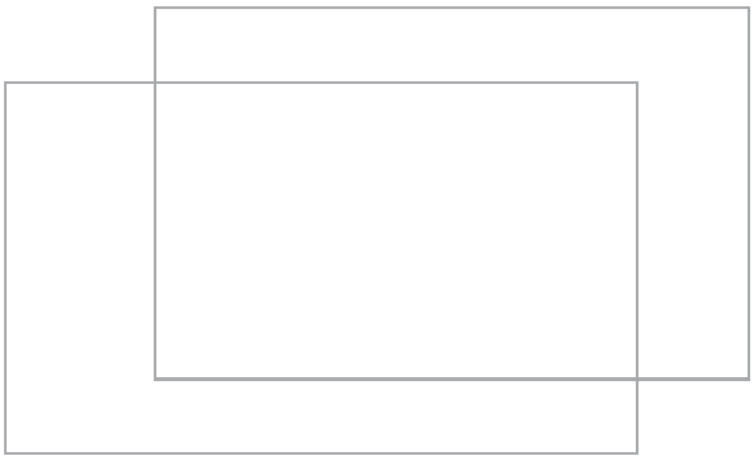
Just like all other building materials the FERMACELL H20 Powerpanel panels are subject to a process of expansion and contraction under the influence of temperature and moisture. To ensure fault free drying of walls and ceilings the following process conditions must be adhered to:

H20 Powerpanels and complementary products must be protected against moisture and especially rain. Dry building materials that have become wet for a short period must not be used until they are completely dry again. The panel materials must be stored flat on a smooth surface. Damaged materials must not be used for building work.

H20 Powerpanels and complementary products can be used at a relative air humidity of ≤ 80%.

For technical processing reasons the gluing of H20 Powerpanels must take place at relative air humidity of ≤ 80% and a room and material temperature of at least + 5 °C. The adhesive temperature should be ≥ + 10 °C. The dry building materials should be adapted to the ambient room temperature, which should not change substantially for 12 hours following the gluing process. Lower temperatures and relative air humidity lengthen the hardening times.

Gas burner heating can cause damage due to the formation of condensation. This is particularly true for cold internal areas with bad ventilation.
Fast, abrupt heating should be avoided.



Processing
The H_20 Powerpanels should be cut with a standard rail-guided hand-held circular saw, preferably the plunge saw type. For accurate and sharp cutaways we recommend the use of hard-metal reinforced saw blades.

Vacuum removal should be provided when using circular saws. The amount of dust can be minimized by using saw blades with a small number of teeth and running at low revolutions.

Curving and adaptation can be achieved with a keyhole saw or with a cavity box drill.

If no hand-held circular saw is available then the H_20 Powerpanels can be cut with a knife as follows: lightly score the outer

Sub-structure
The CW vertical profiles should be inserted vertically into the UW connection profiles attached to the ceiling and floor.

The CW profiles are initially placed only approximately at the required centre distance, on subsequent planking of the first wall accurate and vertical arrangement is achieved. The centre distance is a maximum of 62.5 cm.

The longitudinal cutting of the CW vertical profiles must be done with a certain amount of space to allow for limited building tolerances. The CW profile should extend at least 15 mm into the ceiling connection profile and stand in the floor connection profile on the profile step.

Note:
The profiles must not be fixed or mechanically connected in any way.

FERMACELL
Apply joint adhesive
to the middle
of the panel edge.

Staple or screw to the sub-structure

Remove excess adhesive

Attachment
The panels are attached with FERMACELL Powerpanel screws with a spacing of ≥ 250 mm without pre-drilled holes on a sub-structure of CW and UW profiles.

For rooms with increased requirements for corrosion protection, such as swimming pools, saunas, industrial kitchens or dairies, profiles with corrosion protection according to DIN EN 13964 for moisture-proof rooms should be used. The joining material should also conform to the requirements of the corresponding corrosion protection instructions.

For attachment to wood sub-structures in walls FERMACELL Powerpanel screws (≤ 250 mm) or clamps spaced at ≤ 200 mm are suitable.

Joint technology
For the joining of H_20 Powerpanels the adhesive jointing technique is used both for horizontal and vertical splicing. The horizontal splices are implemented without butt joints and with an offset of 400 mm. The vertical splices always rest on the sub-structure.
To achieve fault free joints H_20 Powerpanel panels must be glued with the special FERMACELL joining adhesive. This is available in a 310 ml cartridge or a 580 ml foil bag. For the glued joints factory supplied panel edges must be used. The factory prepared FERMACELL H_20 Powerpanel panels used for assembly must be sharp-edged and absolutely straight.

When making the glued joint you must be absolutely certain that the panel edges are dust free and the line of adhesive is placed in the middle of the panel edge and not on the sub-structure. It is important that when the two panel edges are pressed together the adhesive fills the joint completely (the adhesive is visible in the joint).

For two-layer planking H_20 Powerpanel panels are placed with offset joints (≥ 200 mm). The adhesive joint technique is used only on the floor layer (outer panel layer).

The adhesive used is 20 ml FERMACELL joint adhesive per panel joint.
The adhesive hardens after 12-36 hours according to the room temperature and air humidity, after which the excess adhesive is removed completely. This can be done with a plastering board, a spatula or a wide plunge iron/caulking iron.

Note:
The maximum width of the joint must not exceed 1 mm. To avoid disturbing the adhesive film on subsequent attachment and hardening the joint should not be pressed together fully.

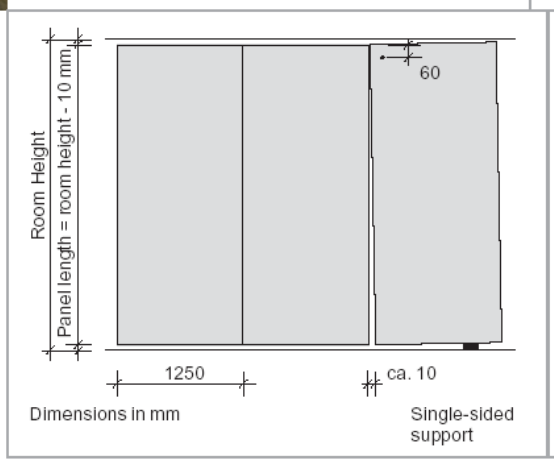
Partitions with H_20 Powerpanel

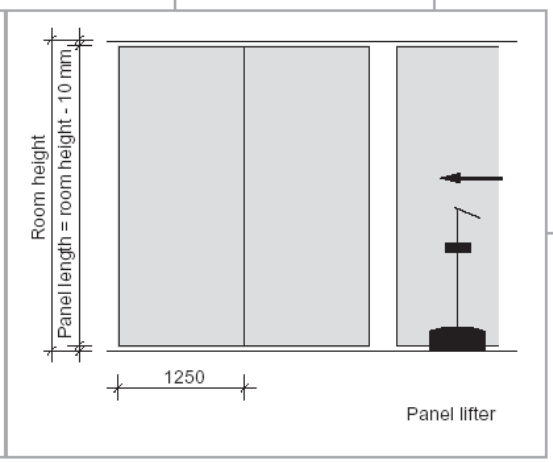
In wall areas the 12.5 mm thick H_20 Powerpanel is mounted on a sub-structure with a clearance of 625 mm. The first H_20 Powerpanel panel is screwed to the CW vertical profile with FERMACELL Powerpanel screws, starting at the open profile side. For wooden verticals the first layer of panels is attached with clips or nails. Then the cartridge is used to apply the FERMACELL joint adhesive in flat beads to the vertical panel edge.

The second H_20 Powerpanel panel is laid beneath on one side so that the panel edges are overlapping and below there is a narrow wedge-shaped gap of 10-15 mm between the two panels. For this the panel length must be about 10 mm shorter than the room height. Attach the panel to the CW vertical profile about 60 mm below the upper edge with a FERMACELL Powerplant screw or attach it to the wooden upright with a suitable attachment device (clips, nails).

When the one-sided support on the floor is removed the weight of the second panel forces it against the first panel. In this way the adhesive is compressed and the joint sealed. Attachment of the panel is a continuous process from the top to the bottom. If required, positioning of the panels can also be carried out with the panel lifter. Using this installation technique also requires sufficient pressure from the H_20 Powerpanel panel on the joint adhesive. In this case attachment is achieved from the centre outwards.

Fitting of panel





Ceilings with H_20 Powerpanel

For ceilings the clearances of the sub-structure should be selected according to the table. Other sub-structures should be dimensioned in such a way that the permitted bowing of 1/500 of the support spacing is not exceeded. Connection of the elements of the sub-structure must be implemented with suitable means of attachment, i.e. with screws or diagonally inserted nails or clips for wood (DIN 1052), or with special connectors for metal profiles.

In the wall area the clearance of the sub-structure is a maximum of 500 mm and the panel is attached with FERMACELL Powerpanel screws ≤ 200 mm apart or with clips or nails ≤ 150 mm apart.

Sub-structures		Permitted support width in mm [1] Single layer planking to 15 kg/m2
Profile in sheet steel		
Basic profile	CD 60 x 27 x 06	900
Load bearing profile	CD 60 x 27 x 06	1000
Wood battens (width x height) (mm x mm)		
Basic batten	48 x 24	700
Directly attached	50 x 30	850
	60 x 40	1000
Basic batten	30 x 50 [2]	1000
Suspended	40 x 60	1200
Load bearing batten	48 x 24	700
	50 x 30	850
	60 x 40	1100

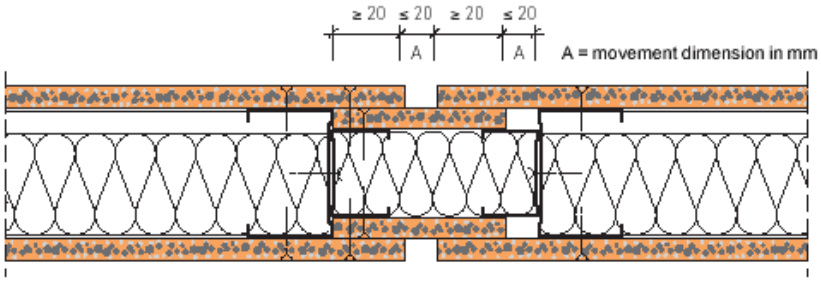
1] Support width means the distance between the suspension points for basic profiles or basic battens and the centre distance of the basic profile or the basic batten for load bearing profiles or battens.
2] Only in relation to load bearing battens of 50 mm width and 30 mm height.

Movement joints (continuous separation of the structure)
Movement joints in FERMACELL H_20 Powerpanel structures are required at the same points where movement joints are required in buildings (building shell). They must be able to take up the same amount of movement. It must be ensured that both the FERMACELL H_20 Powerpanel planking and the sub-structure are separated.

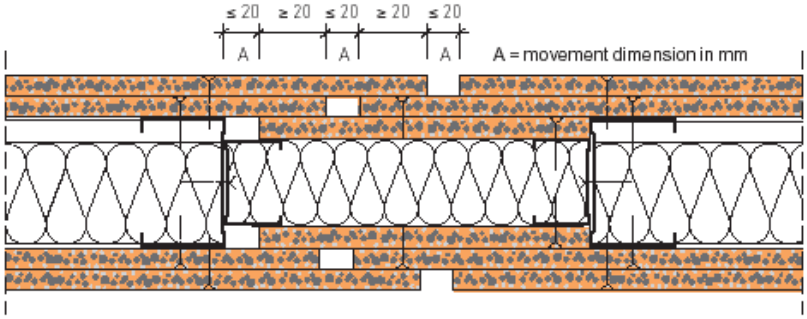
Wood sub-structure:
Separation of planking
Due to the varied expansion and contraction characteristics of wood sub-structures and FERMACELL H_20 Powerpanel planking when there is a change of air humidity, there must be an 8 mm gap in the planking (open panel joint, not filled, not glued). Ideally the gap should occur at a point that is not visible, e.g. behind a transverse wall connection.

Metal sub-structure:
In addition to expansion and contraction of the FERMACELL H_20 Powerpanel planking when there is a change of air humidity, changes in temperature cause a change in the length of metal structures. For these structures movement joints spaced at 8 m must be provided.

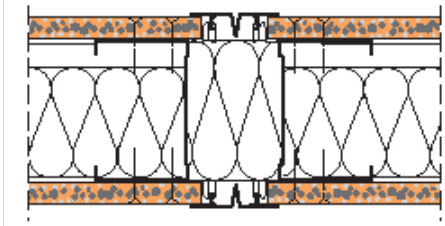
Construction and formation of the movement and expansion joints of one and two layer planked assembly walls are shown in the drawing. Ensure that with respect to both FERMACELL H_20 Powerpanel planking and the sub-structure there is a definite separation of the two wall layers. Take care to observe the measures required to conform to noise and fire protection regulations.



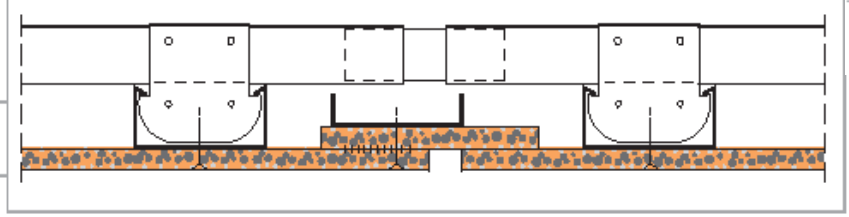
FERMACELL H20 Powerpanel assembly wall, single layer planking
Movement joint with batten strips



FERMACELL H20 Powerpanel assembly wall, double layer planking
Movement joint with batten strips



FERMACELL H20 Powerpanel assembly wall
Movement joint with additional profile



FERMACELL H20 Powerpanel ceiling structure movement joint with single layer planking.
Batten strips glued on one side and secured with screws

Specification	
Building material class:	Non-flammable, A1 according to EN 13501-1
Dimension tolerances: L, B	± 1 mm
Thickness tolerance:	± 0,5 mm
Equalization humidity	ca. 5 %
Water vapour diffusion resistance figure μ:	56 according to DIN EN 12572
Thermal conductivity $\lambda_{10,tr}$	0,173 W/(mK) according to DIN EN 12664
Heat transfer resistance $R_{10,tr}$:	0,07 (m2K)/W according to DIN EN 12664
Specific heat output c_p:	1000 J/(kgK)
Bend resistance	ca. 6,0 N/mm²
E module bending:	ca. 5200 N/mm²
Alkalinity:	ca.10

Surface

The most popular surface arrangement of the H_20 Powerpanel is tiling. For showers and permanently wet areas the FERMACELL sealing system should be applied to the panel beforehand. Further information about applications in these wet areas is contained in the new FERMACELL leaflet “Sealing”.

In areas where the H_20 Powerpanel does not come into contact with water directly, but is used due to high air humidity and not covered in tiles, then the adhesive joints and connection medium should be trimmed with the FERMACELL Powerpanel spatula or smoothly plastered.

For the plastering/ filling a primer/flame barrier such as the FERMACELL primer or a quartz-filled adhesive bridge is recommended.

In addition the pre-treated panel can be coated with structurally thin plaster and adhesive felt plaster up to a thickness of about 4 mm.

According to the requirements placed on the plaster surfaces in the interior it is also possible to apply and shake down the FERMACELL light mortar in a 3-4 mm thick layer on the un-primed panel

FERMACELL
Powerpanel surface filling

The cement universal surface filling for internal and external areas
The ideal supplement to the FERMACELL H20 Powerpanel

FERMACELL H20 Powerpanel surface filling is a plasticised cement filling ideal for filling screw heads and joints, but also suitable for smoothing out and filling unevenness on walls and ceiling surfaces and for repairing and filling cracks and holes or surface inequalities before applying tiles.

Processing
The Powerpanel surface filling is mixed with water and is workable for up to 30 - 60 minutes depending on consistency, temperature and layer thickness. The surface should be dry and dust free.
FERMACELL primer should be applied to porous surfaces.

When covering the entire surface of the FERMACELL H20 Powerpanel with a layer of ≥ 2 mm there is no need to apply undercoat. For thin layers the panels should be treated with FERMACELL primer. In the case of full surface filling it is not necessary to apply protective material.

Quantity:	Approx. 1.2 kg/m^2 per mm layer thickness
Storage:	6 months in a dry and frost-free place
Processing temperature	At least + 5 °C
Packaging size	10 kg and 20 kg sacks

Quality grades for surface soundness

Descriptive texts for walls and ceiling structures often contain statements such as "paint ready" or similar, but these do not represent an exact definition of the surface quality. As these designations do not meet the requirements of the customer in enough detail, Leaflet 2 of the Federal Association of Plaster and Plaster Construction Panels Industry e.V. provides a guide for planners and craftsmen by laying down quality grades, which allow uniform and clear contractual agreements to be reached.

FERMACELL quality grades QF1 to QF4 are based on these standards.

Normally the permitted tolerances of DIN 18202 apply to the smoothness of wall and ceiling surfaces. Quality grades 3 and 4 combine the increased requirements for the smoothness. If the customer wants to use highlighting or artificial light to assess the surface soundness, then the customer must ensure that the required light conditions are present when the work is carried out. For special requirements the required light conditions must be the subject of an additional contract.

The basis for the implementation of the FARMACELL joint system is the current processing regulations for the FERMACELL. H_20 Powerpanel

For tiled surfaces the filling of joints and visible means of connection can be dispensed with, if the filling system covers these areas in accordance with aforementioned contract conditions.

Quality grade 1: QF1

For surfaces with few or no cosmetic requirements, but which for technical or constructional reasons require gluing of joints.

Required work processes.

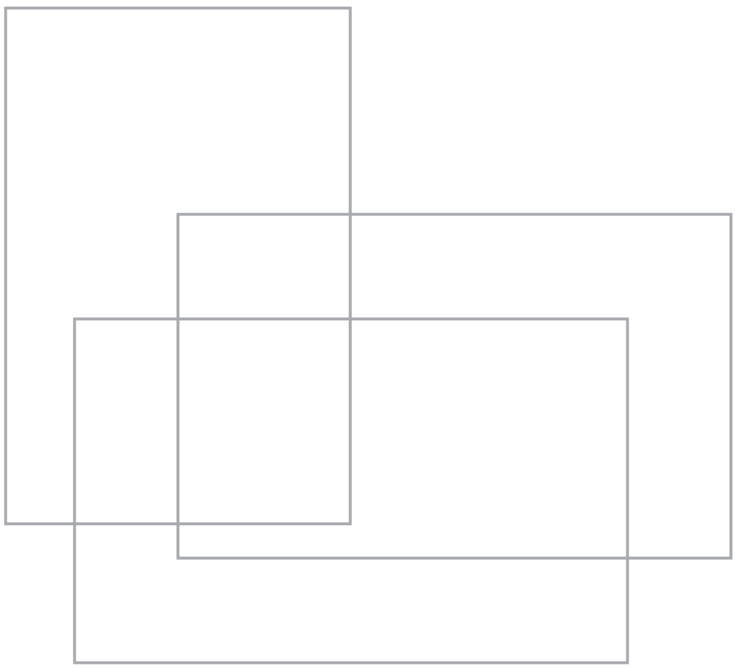
- Joint gluing
- Removal of surplus joint adhesive after hardening
- Filling of the joints and visible joining medium with FERMACELL Powerpanel surface filling or with flexible tile adhesive.

Quality grade 2: QF2

The surfaces are implemented in quality grade 2 under the following normal requirements:

- structural wall covering in medium and course implementation such as carpets and course fibre (RM or RG granules according to DIN 6742)
- matt, filling coats that are applied with rollers
- removal of residual joint adhesive after hardening
- preparation of surfaces
- Flash and variable filling of joints and visible joint material with the FERMACELL H20 Powerpanel surface filler or with flexible tile adhesive

Quality grade 2 does not exclude offsetting of the joints particularly with highlighting. This does not, however, represent a deviation from the permissible building tolerances. The smoothness tolerances comply with DIN 18202.



Quality grade 3: QF3
For surfaces whose quality goes beyond the normal requirements. The soundness of the surface must therefore be agreed in a special contract or laid down in writing. Quality grade 3 is suitable for the following surfaces:

- Fine, structured wall coverings
- Matt , unstructured wall coverings
- Top plaster with a granule size ≤ 1 mm

Work necessary:

- Gluing of joints
- Removal of residual joint adhesive after hardening
- Application of the FERMACELL surface filling in an approximately 3 mm layer
- Polishing of the surface (e.g. polish with grinding medium)

Alternatively:

- preparation of surfaces
- Flash and variable filling of joints and visible joint material with cement filling material
- Flash and variable filling of the entire surface (surface filling)
- Polishing the surface

When highlighted any visible unevenness such as the trimming of joints is not completely excluded, but unevenness is less than for QF2. Normally the more rigorous requirements of DIN 18202 apply for unevenness of wall and floor surfaces. These must be agreed before dry construction starts.

Quality grade 4: QF4
For the highest quality levels that go well beyond the normal requirements. The soundness of the surface must therefore be the subject of a special contract or specification.
Quality grade 4 is suitable for the following surfaces:

- For smooth or fine structured wall coverings e.g. shiny lacquered surfaces, metal or thin vinyl wallpaper

Work necessary:

- Gluing of joints
- Removal of residual joint adhesive after hardening
- Application of the FERMACELL surface filling in an approximately 3 mm layer
- Accurate, smooth polishing of the surface (e.g. polish with grinding medium)

alternatively:

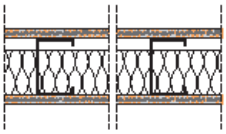
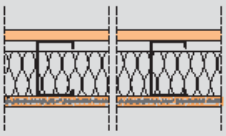
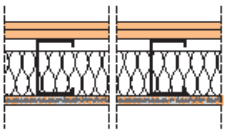
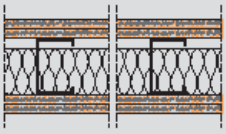
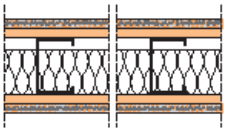
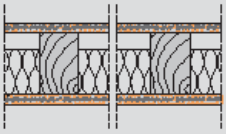
- preparation of surfaces
- Flash and variable filling of joints and visible joint material with cement filling material
- Flash and variable filling of the entire surface (surface filling) (twice if necessary)
- Accurate, smooth polishing of the surface

Unevenness on the joints should no longer be visible. Differences in shading due to large areas of minor unevenness are not excluded. The more rigorous requirements of DIN 18202 apply for unevenness of wall and floor surfaces as well as for the dry construction.

Smoothness tolerances according to DIN 18202 (extract)

Gap	1	2	3	4	5	6
Line	Implementation	0,1 m	1,00 m	4,00 m	10,00 m	≥ 15,00 m
6	Surface prepared walls and the underside of ceilings e.g. plastered walls, wall coverings, suspended ceilings	3 mm	5 mm	10 mm	20 mm	25 mm
7	As line 6 but with increased requirements	2 mm	3 mm	8 mm	15 mm	20 mm

Construction

Structure	Wall thickness	Sub structure	FERMACEL Planking	Mineral wool	Wall height Assembly area		Sound Rating $R_{w,R}$	Fire Rating
	[mm]	[UW/CW]	[mm]	[mm]/ kg/m²	1	2	[dB]	
	100 125	75 x 0,6 100 x 0,6	1 x 12,5 mm $H_2$0 Per side	60/27	450 500	375 425	47	F 30-A (EI 30)
	100 125	75 x 0,6 100 x 0,6	1 x 12,5 mm $H_2$0 and 1 x 12,5 mm Gypsum fibre panel	60/27	450 500	375 425	49	F 30-A (EI 30)
	110 135	75 x 0,6 100 x 0,6	1 x 12,5 mm $H_2$0 and 1 x 12,5 mm + 10 mm Gypsum fibre panel	60/27	450 500	375 425	54	F 30-A (EI 30)
	125 150	75 x 0,6 100 x 0,6	2 x 12,5 mm $H_2$0	60/27	550 650	500 575	55	F 120-A (EI 120)
	125 150	75 x 0,6 100 x 0,6	1 x 12,5 mm Gypsum fibre panel+ 1 x 12,5 mm $H_2$0 Per side	60/27	550 650	500 575	58	F 120-A (EI 120)
	85 105	Wood-UK 40 x 60 Wood-UK 40 x 80	1 x 12,5 mm $H_2$0 Per side	60/27	310 410	310 410	40	F 60-B (EI 60)

For mixed structures using FERMACELL H20 Powerpanel and FERMACELL gypsum fibre boards the processing instructions for FERMACELL gypsum fibre boards must be observed.
With $H_2$0 Powerpanel the console load is 4 kN for single layer wall structures and 5 kN for a double layer structure with a cavity dowel.
Introduced by DIN 4103, safety factor 2 (observe processing information of the dowel manufacturer)
The supplied load values can be added, if the dowels are spaced at ≥ 50 cm. For shorter dowel spacing for each dowel 50% of the respectively permitted maximum load can be applied. The sum of single loads for walls should not exceed 1.5 kN/m. The standing position safety of the wall at high console loads must be established by reference to DIN 4103.

Material requirement

FERMACELL single layer assembly wall with FERMACELL H20 Powerpanel
Fire protection F30-A, soundproofing : $R_{w,R}$ = 47 dB,
Wall thickness: 100 or 125 mm
Assumed wall size: 15 m2, high 3 m, length 5 m

FARMACELL single layer assembly wall with FERMACELL H20 Powerpanel				
Material requirement	**(without offcuts)**	**Quantity m2 wall**		**Unit**
Powerpanel H_2O	Format: 1,25 m x 2,60m	Thickness: 12,5 mm	2,0	m2
Sub-structure	U wall profile	UW..... x 06	0,8	m
	C wall profile	CW..... x 06	1,8	m
Insulating material:	Gross density: kg/m3	Thickness: ..... mm	1,0	m2
Side insulating strip	Material:	Width: ..... mm	1,0	m
Impact dowel	Length: ..... mm	Diameter: ..... mm	1,6	Item
Screws	35 mm FERMACELL Powerpanel Scews		20	Item
FERMACELL joint adhesive for glued joints			45	ml

The H20 Powerpanel is also available in the format 1.25 x 3 m. This means the quantity of joint adhesive required is much less.

FERMACELL double layer assembly wall with FERMACELL H20 Powerpanel
Fire protection F30-A, soundproofing: $R_{w,R}$ = 55 dB, Wall thickness: 100 or 125 mm
Assumed wall size: 15 m2, high 3 m, length 5 m

FARMACELL single layer assembly wall with FERMACELL H20 Powerpanel				
Material requirement	**(without offcuts)**	**Quantity m2 wall**		**Unit**
Powerpanel H_2O	Format: 1,25 m x 2,60	Thickness: 12,5 mm	4,0	m2
Sub-structure	U wall profile	UW.....x 06	0,8	m
	C wall profile	CW.....x 06	1,8	m
Insulating material:	Gross density: kg/m3	Thickness: ..... mm	1,0	m2
Side insulating strip	Material:	Width: ..... mm	1,0	m
Impact dowel	Length: ..... mm	Diameter: ..... mm	1,6	Item
Screws	35 mm FERMACELL Powerpanel Scews		32	Item
FERMACELL joint adhesive for glued joints			45	ml

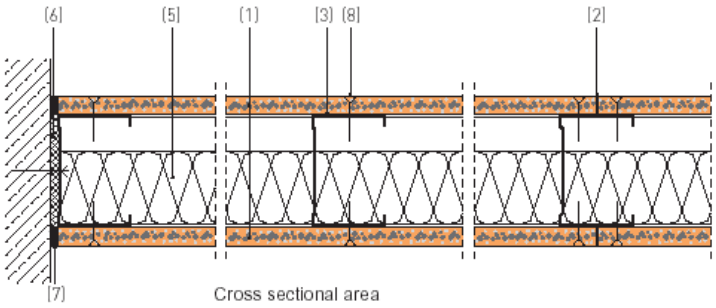
The H20 Powerpanel is also available in the format 1.25 x 3 m. This means the quantity of joint adhesive required is much less.

FERMACELL single layer assembly wall with FERMACELL H20 Powerpanel
Assumed wall size: 35 m2, high 7 m, length 5 m

FARMACELL single layer underfloor with FERMACELL H20 Powerpanel				
Material requirement	**(without offcuts)**	**Quantity m2 wall**		**Unit**
Powerpanel H_2O	Format: 1,00 m x 1,25 m	Thickness: 12,5 mm	1,0	m2
Load profile	CD 60 x 27 x 06		2,2	m
CD Galv. cross quick connector			2,2	m
Galvanised basic profile	CD 60 x 27 x 06		1,2	m
Galv. CD suspension unit			1,5	Item
Screws	35 mm FERMACELL Powerpanel Screws		22	Item
FERMACELL joint adhesive for glued joints			35	ml

The H20 Powerpanel is also available in the format 1.25 x 3 m. This means the quantity of joint adhesive required is much less.

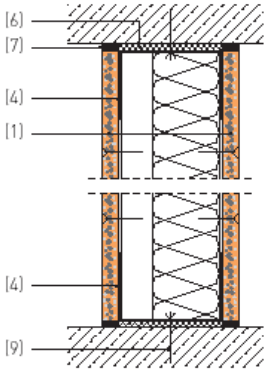
FERMACELL single layer assembly wall with FERMACELL H20 Powerpanel 12.5 mm
Fire protection F30-A, soundproofing: $R_{w,R}$ = 47 dB, Wall thickness: 100 or 125 mm



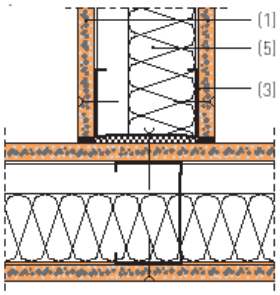
Cross sectional area

Schematic drawing

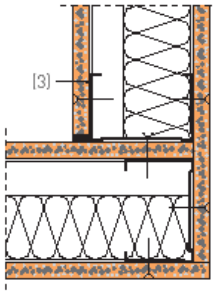
(1) FERMACELL H20 Powerpanel 12.5 mm
(2) Glued joint
(3) CW vertical profile
(4) UW connection profile
(5) Cavity insulation
(6) Connection sealing
(7) Elasto-plastic sealing
(8) FERMACELL Powerpanel screws
(9) Suitable metal or plastic dowel



Height section

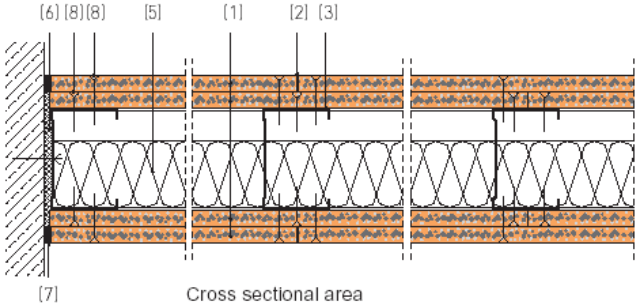


T connection



Corner formation

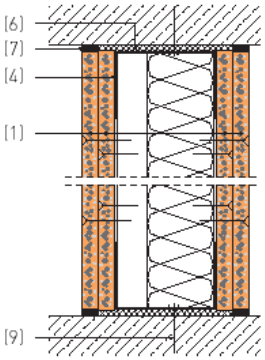
FERMACELL double layer assembly wall with FERMACELL H20 Powerpanel 12.5 mm
Fire protection F120-A, soundproofing: $R_{w,R}$ = 55 dB, Wall thickness: 100 or 125 mm



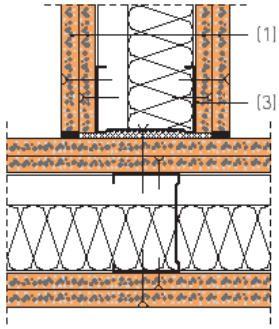
Cross sectional area

Schematic drawing

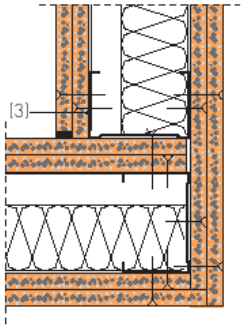
(1) FERMACELL H20 Powerpanel 12.5 mm
(2) Glued joint
(3) CW vertical profile
(4) UW connection profile
(5) Cavity insulation
(6) Connection sealing
(7) Elasto-plastic sealing
(8) FERMACELL Powerpanel screws
(9) Suitable metal or plastic dowel



Height section



T connection



Corner formation

Technical changes reserved. Issue 1/2007
The current issue is valid.
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