



KNAUF

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***KNAUF
VIDIWALL HI***
External Ceiling System D962

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Gypsum Fibre Board Vidiwall HI – properties

Vidiwall HI is a gypsum fibre board with high surface impregnation for exterior ceilings such as:

- Soffits of roofs, canopies, balconies and other outdoor areas not directly exposed to weather
- Underground car parks
- Fassade walls under ETICS or ventilated system according to technical detail sheet W333
- Humid indoor areas

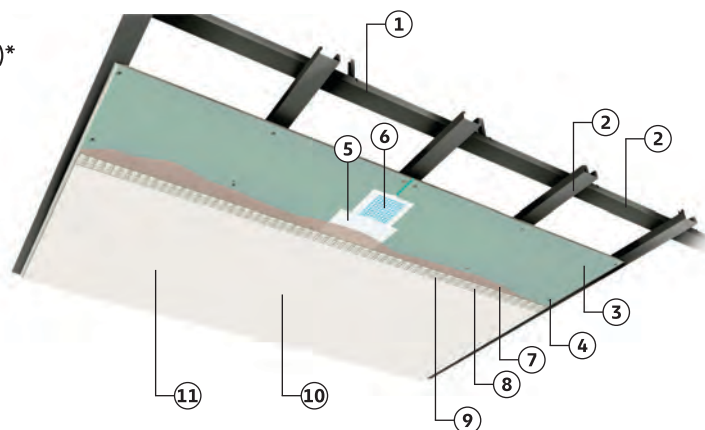
Vidiwall HI properties:	
Length	2000 - 3000 mm
Width	1200/ 1250 mm
Thickness	12,5/ 15 mm
Edges	SK/ VTF
Density	approx. 1180 kg/m ³
Surface water absorption	Class W1 (≤ 300 g/m ²)
Flexural strength (bending)	$\geq 5,8$ N/mm ²
Compressive strength	≥ 25 N/mm ²
Hardness	approx. 750 N
Water vapour resistance factor	$\mu = 18$
Thermal conductivity	$\leq 0,30$ W/mK
Resistance to fire acc. to EN 13501-1	A2 - s1, d0
Modulus of elasticity	3900 N/mm ²
Mould resistance	Class 9 acc. To ASTM D3273-00
Health safety	Certified by Institute Baubiologie Rosenheim
Sustainability	Environmental product declaration EPD-KNB-20190065-IAC1-EN

Vidiwall HI product range:					
Article number	Product	Thickness (mm)	Width (mm)	Length (mm)	Weight (kg/m ²)
00228015	Vidiwall HI SK 12,5/ 1200/ 2000 mm	12,5	1200	2000	14,75
00505188	Vidiwall HI SK 12,5/ 1200/ 2600 mm	12,5	1200	2600	14,75
00228016	Vidiwall HI SK 12,5/ 1250/ 2000 mm	12,5	1250	2000	14,75
00136621	Vidiwall HI 12,5 Sonder	12,5	1200-1250	2000-3000	14,75

Other product sizes may be produced upon request.

System overview

1. Suspension: Nonius or direct brackets (for heights ≤ 200 mm)*
2. Structure: CD profiles*
3. Vidiwall HI 12.5 mm
4. Screws: Aquapanel Maxi Screws 39 mm, spacing ≤ 200 mm
5. Uniflott impregnated
6. Glass fibre tape
7. Primer: Grundol
8. Cement-based mortar SM700 or Klebespachtel
9. Mesh 160 gr/m²
10. Primer: Knauf Quarzgrund
11. Render: Knauf Addi



* corrosion protection according to the conditions should be considered. C3 required, C5 is recommended for seaside area

Installation and application

Installation of the grid

Anchoring of the suspension must be undertaken using anchors suitable for the substrate. Use universal brackets for suspension up to 15 cm or Nonius suspension for higher void depth. The grid consists of carrying and furring CD channels, connected in the intersections by means of intersection connectors for CD 60/27 or 2xAnkerwinkel clips for 60/27. The distances between the carrying channels and suspensions should be calculated according to the wind load (see table with pre-dimensioning values). The furring channels are installed at 300 mm axes distance. Consider 5 mm for the joint gap which should be added to the standard distance between two channels. Choose channels and suspensions protected against corrosion at least C3 or according to the atmosphere conditions.

Table for pre-dimensioning for suspended ceilings in exterior areas:

Max. wind speed/ wind pressure			Structure	
kN/m ²	m/s	Km/h	Type	Axes distance (mm)
0.25	20.0	72	Carrying channels	1000
			Suspensions	750
0.50	28.3	102	Carrying channels	770
			Suspensions	710
0.75	34.6	125	Carrying channels	650
			Suspensions	610
1.00	40.0	144	Carrying channels	570
			Suspensions	540
1.25	44.7	161	Carrying channels	520
			Suspensions	480
1.50	49.0	176	Carrying channels	470
			Suspensions	450

The presented tabular values are indicative. Their refinement can be done by a structural engineer in compliance with the appropriate standards.

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Cladding

Fix Vidiwall HI boards to the furring channels by means of Aquapanel Maxi Screws 39 mm spaced at max. 200 mm. Screws should be applied at least 15 mm from the edge of the Vidiwall HI board. Ensure that there is a gap of 5 mm between the boards. Cross joints should be avoided.

Format the boards to the needed size by cutting one side with a knife and snapping or with electric saw (dust absorber recommended). Dilatation joints should be considered at distance max. 8 m.

Joint Treatment

All Vidiwall HI joints should be filled with Uniflott Impregnated and reinforced with glass fibre tape.

Primer applying

Apply Knauf Grundol primer with a brush, roller or sprayer on the whole surface and let it dry for approximately 12 hours.

Basecoat layer

Apply Knauf Klebepachtel with a stainless steel trowel to a thickness of 5 mm and level out using a notched trowel. Apply mesh reinforcing as below. Remove any burrs as the render begins to harden.

Mesh Reinforcement

Apply Knauf Reinforcing Mesh 160 gr/m² to the whole surface of the board, whilst the basecoat is still wet. Trowel the mesh into the surface, leaving it just below the surface of the render and level out. Ensure that the mesh overlaps by a minimum of 100 mm.

Secondary Basecoat

A second base coat of Knauf Klebepachtel should be applied after the reinforcing layer has been left to dry for a minimum of 24 hours. The second base layer should be applied to a thickness of 2 – 3 mm. Leave for up to 7 days before continuing work. For perfectly even surface use SM 700 Pro.

Render Finish

Onto dry Knauf Klebepachtel apply primer Knauf Quarzgrund, before application of the top coat and allow drying time. Once Knauf Quarzgrund primer has fully dried, apply Knauf Addi to the thickness of the grain with a stainless steel trowel and texture with a plastic trowel.

The stated constructional and structural design specifications and characteristics of building physics of Knauf systems can only be ensured with the exclusive use of Knauf system components, or other products expressly recommended by Knauf.

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