

KNAUF

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Vidiwall HI



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Vidiwall HI is 15 mm thick gypsum fibreboard, designated for façade application.

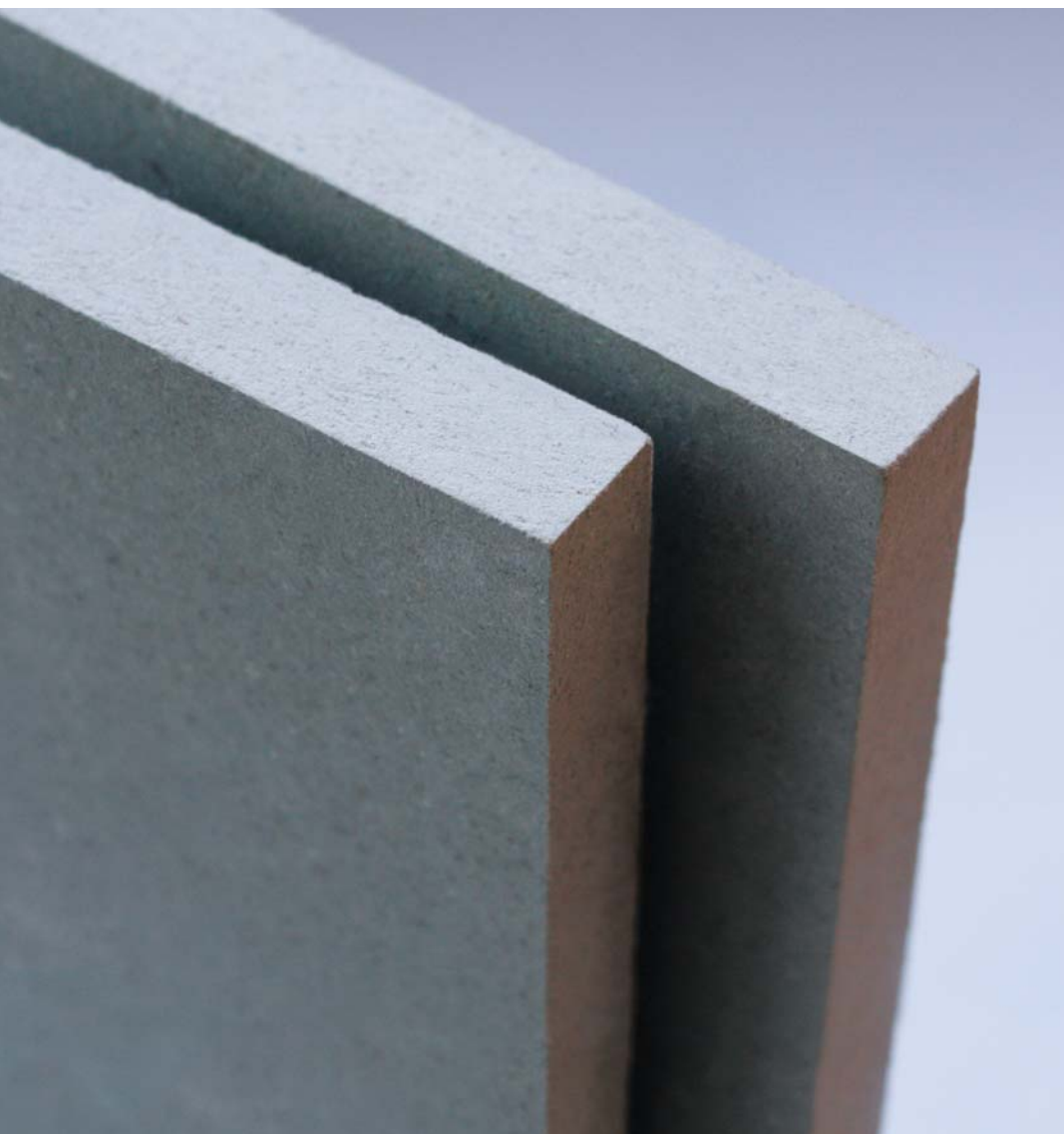
Vidiwall HI is manufactured of stucco and cellulose fibers, which reinforce the boards throughout the entire section.

Due to the high compression during production and the homogeneous structure, a robust

and solid board of high physical properties is achieved.

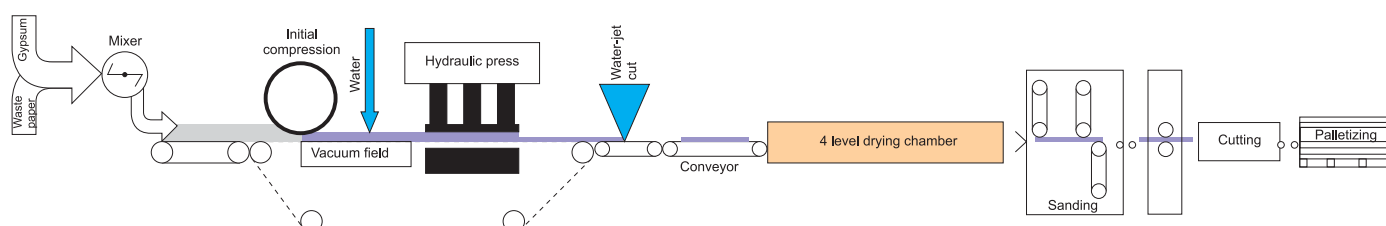
The high degree of impregnation makes it resistant to weathering – rain, snow, high and low temperatures, which is proved by numerous European tests.

Technical data	
Length	2000, 2500, 2600, 2750, 3000 mm
Width	1200, 1245, 1250 mm
Thickness	15 mm
Density	approx. 1250 kg/m ³
Flexural strength (bending)	≥ 5,8 N/mm ²
Compressive strength	≥ 25 N/mm ²
Hardness	approx. 750 N
Water vapour resistance factor	μ ~ 18
Thermal conductivity	λ ≤ 0,30 W/mK
Resistance to fire acc. to EN 13501-1	A2 s1d0
Modulus of elasticity	3900 N/mm ²



Distinguishing feature of Vidiwall HI is the blue colour of the surface.

Quality is secured by a factory production control in compliance with the international standard – EN ISO 9001.



Production technology of gypsum fibreboards



Vidiwall HI

Resistance to humidity

Vidiwall gypsum fiberboards have been for years the standard solution for prefabricated houses in many European countries. They provide stability and excellent physical properties to the constructions, as well as healthy micro-environment to the residents.

The highly impregnated Vidiwall HI is the latest member of the product family manufactured in Vidin which stimulates creativeness and innovative solutions of designers and investors.

Vidiwall HI is resistant to humidity and atmospheric influence. It can be applied and left unprotected outdoors for at least a month without affecting its properties.

Primed and coated with a cement coat and reinforcing mesh, Vidiwall HI is ready to face the challenges of time.

Façades assembled of blue Vidiwall HI boards have been tested in laboratory conditions of cycle changes of temperature and humidity simulating exploitation under the most severe weather conditions. Test results prove that they fully meet the requirements as stated by ETAG 004.

Vidiwall HI façade can be provided with a system of thermal insulation of polystyrene or mineral wool if so required by the intended thermal insulation capacity of the building.



Assembly and processing of Vidiwall HI boards

Vidiwall HI boards are suitable for both pre-fabrication and assembly on site.

They are fastened with screws for fibre-boards 3.9x35 mm. With timber structures assembly is possible using nails or staples.

Vidiwall HI boards can be applied with open joints of 5-7 mm which are filled in with UNIFLOTT impregnated or tightly board to board.

Façades built of Vidiwall HI boards can remain exposed to atmospheric influence for at least a month without finishing coating.

Vidiwall HI boards shall be primed using

suitable primer for instance Knauf Grundiermittel. Then the whole surface shall be basecoated with cement based exterior coat into which the fiberglass mesh is to be fixed. Ready surfaces shall be finished using façade plaster of various choices.

Finishing coating

The following finishing coatings can be used on façades of Vidiwall HI boards:

- ▶ A directly applied system of façade thermal insulation of mineral wool or polystyrene.
- ▶ Façade plaster of own choice.
- ▶ Ventilated façade of plank or PVC siding, stone or ceramic facing.





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Strength

Due to their homogeneous reinforced structure, the gypsum fibreboards are of extreme strength. Installed on metal or timber structures, they add strength to the construction increasing their resistance against buckling and bearing part of the horizontal loads.

The precise values depend on the section and the composition of the structural elements, as well as on the assembly technology. They are an integral part of the structural design of a building.



Sound insulation

Due to their high density and composition Vidiwall HI boards are an excellent material for sound insulation. Vidiwall HI façade systems provide reliable protection of the building from exterior noise.

The sound insulation index shall vary according to the designed structure and the insulation material used. Our experience shows that these values are in the interval between 50 and 55 dB for walls of metal (Knauf CW studs 75/ 100 mm) or timber structures (thickness 100-160 mm) and rock wool in-between.



Environmentally friendly

Vidiwall HI gypsum fibreboards contain gypsum and recycled paper – a tested and absolutely harmless composition. Exploitation parameters of the boards have been checked at the Institute of Construction Biology in Rosenheim and they have been awarded with a 'biological safety stamp'.

The production of gypsum fibreboards is an energy saving process thus limiting the emissions of carbon dioxide in the atmosphere.



Fire resistance

Vidiwall HI boards are non-combustible of class A2 s1d0 according to EN13501-1. They prevent the structure from reducing its bearing capacity in case of fire by significantly slowing down the wood burning or metal plastification.





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