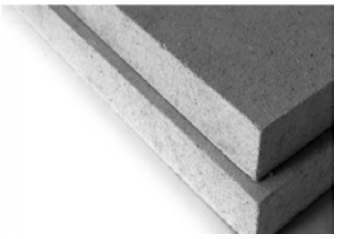
Knauf Vidiwall

Data Sheet



Knauf Vidiwall is a gypsum fibreboard manufactured from gypsum and cellulose fibres from recycled paper. This dense sheet material is suitable for all areas of drywall construction requiring a dense, impact resistant product capable of providing increased durability, rigidity and mechanical strength compared to a traditional gypsum sheet plasterboard.

Application

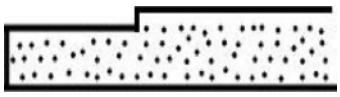
Knauf Vidiwall is particularly suited to applications requiring durability, strength and impact resistance in areas of high footfall within a building. It is therefore appropriate for demanding locations within school, hospital and secure environments.

Physical Characteristics

Thickness	Width	Length	Edge Type	Board Weight
mm	mm	mm		kg/m²
12.5	1200	2400	VT	14.75
12.5	1200	2700	VT	14.75
12.5	1200	3000	VT	14.75
15.0	1200	2400	VT	17.70
15.0	1200	2700	VT	17.70
15.0	1200	3000	VT	17.70

Other sizes available to special order.

Edge Type
VT Stepped edge
Finish with Knauf Uniflott for taped and filled joints.



Storage and Handling

Knauf Vidiwall should be stored on a firm flat and level surface in a dry environment.

Compliance

European Technical Approval ETA-07/0086
EN 15283-2 Gypsum fibreboards. Definition, requirements and test methods.

Product Features

- Versatile application.
- Robustness.
- Durabilty.
- Impact resistance.
- Moisture resistance.
- Ease of installation.
- Optimum fire and sound protection.

Performance Data

Density
1000 kg/m^3 - 1250 kg/m^3

Thermal conductivity
$\lambda \leq 0.30$ W/mK

Water diffusion coefficient
$\mu = 21$

Fire Classification (EN 13501-1)
A2-s1, d0

Deviation in dimension
0.30mm/m
(EN 318 deviation in relative air moisture 30%)

Bending Strength
$f_{m,k} = 4.5$ N/mm^2

Compressive Strength
7.5 N/mm^2

Tensile Strength
2.3 N/mm^2

Modulus of Elasticity
3900 N/mm^2

Fire Resistance & Sound Insulation

The performance achieved with Knauf Vidiwall will depend upon a range of variables which include the board thickness, number of layers, stud centres and type, fixing centres and type and the choice of cavity insulation. A typical specification is detailed below, but for alternative construction details, please contact Knauf Technical Services.

Fire Resistance

Board Specification	Stud Size	Cavity Insulation	Fire Resistance BS 476 Pt.22	Max partition height[1]
			Mins	mm
Outer layer of 12.5mm Knauf Vidiwall with inner layer of 15mm Knauf Wallboard	Knauf 70mm Acoustic C Stud (0.6)	None	60 (TBC)	4700

[1] Maximum height calculated based on a limiting deflection of L/240 at 200 Pa. This relates to fire resistance in accordance with BS 476: Part 22: 1987.

Sound Resistance

Board Specification	Stud Size	Cavity Insulation	Sound Insulation	Partition Duty[1]
	mm	mm	Rw	
Outer layer of 12.5mm Knauf Vidiwall with inner layer of 15mm Knauf Wallboard	Knauf 70mm Acoustic C Stud (0.6)	None	TBC	Severe
Outer layer of 12.5mm Knauf Vidiwall with inner layer of 15mm Knauf Wallboard	Knauf 70mm Acoustic C Stud (0.6)	25mm Knauf Earthwool Acoustic Roll	TBC	Severe

[1] Tested in accordance with BS5234-2:1992 Section 1.6.2 & 1.6.3.

Installation Guidelines

General

Additional time should be allowed for the cutting, handling and fixing of Knauf Vidiwall compared to standard Knauf Wallboard.

Before installation condition the boards to the ambient temperature and humidity. Fill the joints only when no changes in temperature or humidity are expected, which otherwise could cause expansion or contraction of the boards. Joints should be filled at a minimum temperature of 10°C.

Always apply Knauf Joint Tape at board joints. Prime the Knauf Vidiwall surface before the application of finishing material. The primer and the paint or coating material must be compatible.

Cutting

Clean, sharp edges can be cut with a circular saw with suitable dust extraction. For best results use a fine saw blade with a high teeth ratio.

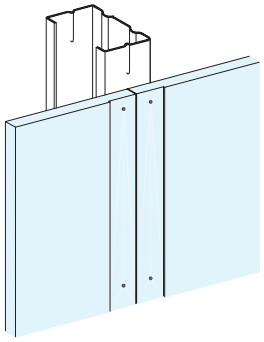
Cut edges can be smoothed with bevel plane. Clean the dust before application at glued joint.

Fixing

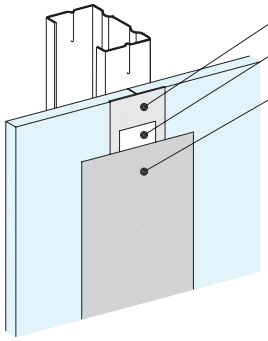
Fixing with screws - Align the Knauf Vidiwall fibreboard along the Knauf metal stud and fix with Knauf Vidiwall Screws. For single layer cladding use 3.9x30mm screws, and for double layer cladding use 3.9x45mm screws. Screw spacing to be max. 250mm centres. For horizontal application the screw spacing must be max. 200mm centres for 12.5mm thick boards.

Fixing to timber - Knauf Vidiwall fibreboards can be fixed to timber structures using screws or nails with corrosion protection covering.

Jointing



1 The boards should be closely butt jointed.



2 The recess is filled with Knauf Uniflott and Knauf Joint Tape is embedded. Fine finish with Knauf Uniflott.

Adjacent Knauf Vidiwall boards should be closely butted together. Apply Knauf Uniflott in the stepped beveled edge and embed joint tape into it.

Remove uneven spots by hand or pole sander.

Cover screw heads with Knauf Uniflott. Sand after the joint filler has dried.

Finishing

Plastering

Knauf Vidiwall can be skim finished using Knauf Plaster or Knauf Readymix Plaster.

Decoration

Knauf Vidiwall boards and their joints must be clean, dry and free from dust. Knauf Wallboard Primer should be used on Knauf Vidiwall before painting or coating. Ensure that the primer and paint are compatible before use.

Fixings

Attaching Loads

Flat loads - Lightweight flat objects, (e.g. mirrors and pictures) can be hung with picture hooks or screws fixed directly into the board without the need for additional background support.

Cantilever loads - Shelves and cupboards can be attached with suitable cavity fixings. The method of attachment is dependent upon the weight, distance of the weight from the fixing and dimensions of the object. Any two points of attachment must have a minimum distance of 150mm from each other. Contact the fixing manufacturer for guidance when calculating cantilever loads.

Heavy Loads - Heavy loads (e.g. wash basins, sanitary units) should be fixed to the partition metal frame system or appropriate supporting patrass.

Fixings

Board lining - Single layer Knauf Vidiwall

The loadbearing capacity of common fixings in Knauf Vidiwall can be seen in the table below.

Fixing Type	Safe working load per fixing*
	Pull out
Fischer UX (8x50) nylon plug & screw	12.5mm = 0.20 kN 15.0mm = 0.20 kN
Fischer HM 8x55 steel cavity fixing	12.5mm = 0.25 kN 15.0mm = 0.25 kN

*Safe working loads calculated using a safety factor of 3 for metal fixings and 7 for plastic fixings. Please refer to the fixing manufacturers recommendations for use.

Maintenance

Damage and Repair

Minor damage - Lightly sand the surface to remove rough edges. Fill flush with two applications of Knauf Fill and Finish.

Deep Indentations - If the indentation is the result of impact, check the board core to ensure it is not broken. If intact apply a coat of Knauf Joint Filler and once set dry, follow the procedure for minor damage as above.

Extensive damage - For areas of extensive damage it will be necessary to replace the area of damaged board. The replacement board must be of the same type and thickness as originally specified and installed. Cut out the affected area back to the nearest stud. Replace the board, using the same type of fixings as originally installed. Fill the resulting edge joints and tape and finish as recommended. Re-decorate as required.

Health & Safety

Refer to the product MSDS and also the Knauf Guidance for Safe Material Management document:

MSDS: http://www.knauf.co.uk/product-data-sheets

Safe Material Management: http://www.knauf.co.uk/literature

Sustainability Credentials

Please view Product Sustainability Credentials Sheet:

http://www.knauf.co.uk/product-data-sheets

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