



## K814.bg

Drywall Systems

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## Vidiphonic

Description, Sizes of the Boards, Field of Application, Technical Properties, Installation, Joint Technique, Surface Treatment, Sound Reduction

### Composition

Knauf Vidiphonic gypsum fireboards are produced of high quality calcinated gypsum and cellulose fibers extracted from selected types of waste-paper.

The composition of Vidiphonic is modified to achieve higher density. This results in excellent sound-insulation properties in combination with the typical strength of gypsum fireboards

### Board Data

Thickness: 12.5 mm  
 Width\*: 1200 / 1250 mm  
 Length\*: 2000 - 3000 mm

The Vidiphonic boards are produced with SK shaped edges\*:



\*Other alternatives available at request

### Weight of the Boards

12,5 mm 17,5 ± 0,5 kg/m<sup>2</sup>

### Special properties

- Outstanding acoustic properties allow the building of thin partition wall systems with enhanced sound insulation
- Increased efficiency in the low frequency range
- Increased surface hardness (impact resistance)
- Universal applicability in the construction of new buildings, repairing and renovation of existing buildings, improvements and construction of acoustic chambers
- Reaction to fire class A1 acc. to EN 13501-1:2007+A1:2009

### European Norms

- EN 15283-2:2008+A1:2009 Gypsum boards with fibrous reinforcements - Definitions, requirements and test methods - Part 2: Gypsum fibreboards

### Field of Application

#### New construction:

- Metal stud partitions
- Shaft walls
- Partitions between different residences

#### Existing buildings:

- Renovation of partitions between different residences
- Shaft walls as improvement of the characteristics of massive walls
- Renovation of timber and solid ceilings between different residences

#### Sound insulating solutions in:

- Conference and music halls
- Movie theatres
- Recording and broadcasting studios
- Limiting of industrial and production noise
- Kindergartens and schools

### Storage

Knauf Vidiphonic boards must be stored on a flat surface in a dry environment.

## Application

### Formatting

To cut the fiberboards score one side with a knife and snap the board along the score. The cut edge can be smoothed with bevel plane. Clean any dust before applying at glued joint.

Clean edges can be cut also with electric jigsaw or circular saw (dust absorber is recommended).

### Fixing to metal substructure

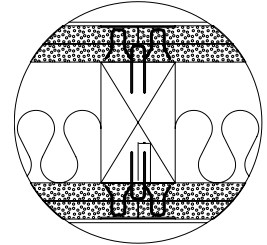
Fixing on metal substructure is done by using special screws for gypsum fibreboard (for single layer cladding use screws 3,9x30 mm, for double layer cladding use screws 3,9x45 mm).

Screw spacing should be not more than 250 mm. When installing the boards on horizontal or tilted surfaces, the distance between the screws should be not more than 200 mm. The recommended distance between the screw and the edge of the board is at least 12,5 mm.

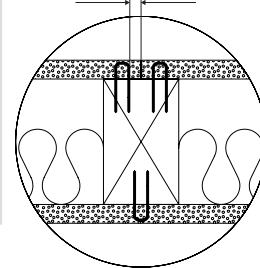
### Fixing to wooden structures

Fixing the gypsum fobreboards to wooden substructure is done with screws, nails or staples, galvanized or with another corrosion-resistant coating.

W369



min 10 mm  
for screws min 12,5 mm



W368

## Technical Data

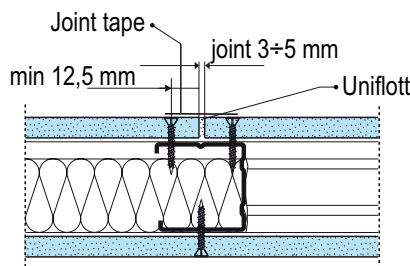
Density:	1400 ± 50 kg/m <sup>3</sup>	Fire classification acc. to	
Thermal conductivity (EN 12667:2004):	λ ≈ 0,308 W/mK	EN 13501-1 non-combustible:	A1
Water diffusion resistance coefficient (EN 12086:2013):	μ = 25	Bending strength (after drying at temperature 40°C):	f <sub>m, test</sub> ≥ 5,8 N/mm <sup>2</sup>

## Joint Technique

### Gap joint

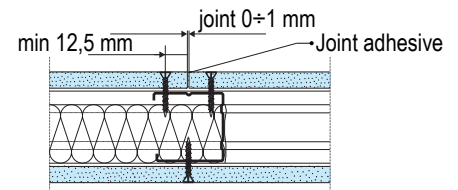
Apply Vidiphonic fibreboards with a gap of 3-5 mm between boards. Fill the gap with Uniflott. Apply some of the joint filler along the joint, so that the jointing tape would be embedded into it. The joints of the first layer are only closed tightly/filled in case of multilayer cladding, while the joints of the final layer are also joint tape reinforced and finely skimmed.

Remove uneven spots with hand or pole sander. Cover the screw heads with Uniflott.



### Glued joint

Fix the Vidiphonic board on the structure and apply joint adhesive on its edge. Press the next board tightly to the first one and fix it with screws, nails or clamps. The width of the joint should not exceed 1 mm. Remove the excessive adhesive with a spatula within an hour.



## Surface Treatment

### Coats

Use a primer on Vidiphonic boards before coating or painting them. Ensure that the primer and the coat or paint are compatible. The coat supplier should be able to offer advice.

### Ceramic Tiles

Tiling on the primed surface is applied with tile adhesive. Ensure that the primer and the adhesive are compatible, the coat supplier should be able to offer advice. Use Knauf Flächendicht in the shower area.

### Finishing

For a fine surface skim the Vidiphonic boards with Knauf Sheetrock.

### Recommendations

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 could cause expansion or contraction of the boards.

Joints should be filled at a minimum temperature of +10°C (+50°F).

Always apply joint tape in critical areas.

### Sound Reduction

Metal substructure (Values according to laboratory tests)

Knauf System fixing the cladding with drywall screws		Cladding on each side			min. Thickness mm	Wall Thickness mm	CW Profile mm	Insulation mm	Sound Reduction Index Rw <sup>(1)</sup> EN 717-1 dB
		Gypsum Plasterboard Type A	Gypsum Plasterboard Type DF	Vidiphonic					
W361				•	1x12,5	100	75	60	55
W362 W312				••	2x12,5	125	75	60	63
			• (outer) <sup>(2)</sup>	• (inner)	2x12,5	125	75	60	63
W363			•• (outer)	• (inner)	3x12,5	150	75	60	67
				••• <sup>(2)</sup>	3x12,5	150	75	60	69
W365		• (outer)		• (inner)	2x12,5	203	2x75	2x60	68
			• (outer)	• (inner)	2x12,5	203	2x75	2x60	71 <sup>(3)</sup>
				••	2x12,5	203	2x75	2x60	71
W625				•	1x12,5	87,5	75	60	39

Timber substructure (Values according to laboratory tests)

Knauf System fixing the cladding with staples		Cladding on each side		min. Thickness mm	Wall Thickness mm	Profile mm	Insulation mm	Sound Reduction Index Rw <sup>(1)</sup> EN 717-1 dB
		Gypsum Plasterboard Type DF	Vidiphonic					
W368			•	1x12,5	115	60/90	50	42
W368			•	1x12,5	142	60/90 + spring rail	50	55 <sup>(1)</sup>
W369		• (outer)	• (inner)	2x12,5	140	60/90	50	46
			•	2x12,5	140	60/90	50	46

(1 - weighted sound reduction index - measurements acc. to DIN EN ISO 717-1

(2 - outer layer is fixed with staples

(3 - weighted sound reduction index - computing data

Legend:

- - single layer cladding
- - double layer cladding
- - triple layer cladding

### Sound Reduction

Knauf system description:

**W322** - single metal stud frame, double layer cladding; mixed cladding

**W361** - single metal stud frame, single layer cladding

**W362** - single metal stud frame, double layer cladding

**W363** - single metal stud frame, tripple layer cladding

**W365** - double metal stud frame, double layer cladding; Normal / Mixed cladding

**W368** - timber construction, single layer cladding

**W369** - timber construction, double layer cladding; Normal / Mixed cladding

**W625** - wall liner, single layer cladding

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**The constructional, structural and specific building properties of Knauf systems can solely be ensured with the exclusive use of Knauf system components or other products explicitly recommended by Knauf.**

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