AQUAPANEL® Cement Board Universal

1200 x 2400 x 9 mm / EN 12467

The ideal board for interior and exterior construction

GERMAN TECHNOLOGY

- Weight of only 8.5 kg per m^2 for easier handling and reduced transportation costs
- Water, mould and mildew resistance
- High dimensional stability
- A1 non-combustible
- Bending radius of up to 1 m (full board size)
- Easier to score & snap
- No pre-drilling required
- Safe to use, hygienic, sustainable and asbestos-free
- EasyEdge™, for stronger edges that won't break

AQUAPANEL®

Physical properties

Length (mm)	2400
Width (mm)	1200
Thickness (mm)	9
Min. bending radius (m)	1
Weight (kg/m^2)	approx. 8.5
Dry bulk density (kg/m^3)	approx. 810
Bending strength (MPa)	> 7
pH-value	12
Building class material according to EN 13501	A1, non-combustible

Description

AQUAPANEL® Cement Board Universal of 9 mm thickness (*) is a water-resistant building panel made of aggregated Portland cement with coated glass fibre mesh embedded in back and front surfaces. It offers all the benefits of a dry panel.

The ends are cut square and edges are reinforced for extra strength (the EasyEdge™). The thin and extremely light panel provides a solid base that is easy to install in interior and exterior applications. The 9 mm board is non-combustible (A1 building material class).

Characteristics

- Thin and light material, easy to handle and install
- 100% water-resistant
- Resistant to mould and mildew
- Perfect surface for tiling and other finish options
- Ecological and environmentally friendly building material
- Light and non-combustible
- Can be cut to shape using “score and snap” techniques
- Bendable in the dry state – bending radius ≥ 1 m

Application areas

AQUAPANEL® Cement Board Universal of 9 mm thickness (*) is used in exterior and interior constructions. In interior constructions AQUAPANEL® Cement Board Universal is used for ceiling applications and as a tile backer board for wall applications (other finishing options are also possible). In exterior constructions the usage of the AQUAPANEL® Cement Board Universal is diverse. It can either be:

1. Directly applied in steel frame constructions with an OSB as substrate.
2. Applied as cladding on a steel or timber substructure, e.g. for renovation projects with concrete or brick and block as substrate.
3. Applied for small coverings, e.g. for panelling of beams or duct work, vertical fascia, projecting roof, air-conditioning or similar areas.
4. Ceiling applications

Handling and installation

AQUAPANEL® Cement Board Universal is fixed to a cladding substructure or to OSB panels over light steel framing in exteriors and to a metal or wood stud frame in interiors. The substructure should be selected according to the statics requirements.

Installation time - wall: approx. 15 min/m^2
(including fixation with screws and joint treatment).

Installation time - ceiling: approx. 18 min/m^2
(including fixation with screws and joint treatment).

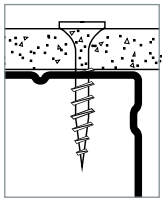
The spacing between profiles shall not exceed 400 mm.

When using AQUAPANEL® Cement Board Universal of 9 mm for small coverings and as direct application on Lightweight Steel Framing (LSF) structures with OSB as a substrate the stud spacing should be calculated separately depending on the project.

Furthermore, please follow the manufacturers recommendations or the instructions of the system provider (steel frame housing / OSB) e.g. in case of weather protection.

General considerations:

- The AQUAPANEL® Maxi Screw is to be used to fasten the AQUAPANEL® Cement Board Universal to the substructure. The distance between screws is set at a maximum of 170 mm.
- It is not recommended to set the screws flush with the board surface, but slightly leave the screw head above the surface.
- A surface coating must be applied in exterior applications (e.g. a colour coating or a suitable render system). A suitable render system is e.g. a protection against weathering that meets the ETAG 004 requirements.



Transportation and storage

Always carry boards upright using a board trolley or on a pallet using a forklift truck. When setting the boards down, make sure that corners and edges are not damaged!

The supporting surface must be able to carry the weight of the boards. AQUAPANEL® Cement Board Universal of 9 mm thickness (*) must be protected from the effects of moisture and the weather prior to installation. Boards that have become damp must be laid flat and dried on both sides before use.

Allow time for the boards to acclimatise to the ambient temperature and moisture conditions before installation.

The ambient, material and background temperature must not be below +5 °C.

Method of delivery

		W x L (mm)
Boards/pallet	80 pieces	1200 x 2400
Surface/pallet	230.4 m^2	1200 x 2400
Item code	521064	1200 x 2400

Technical considerations

Wall applications

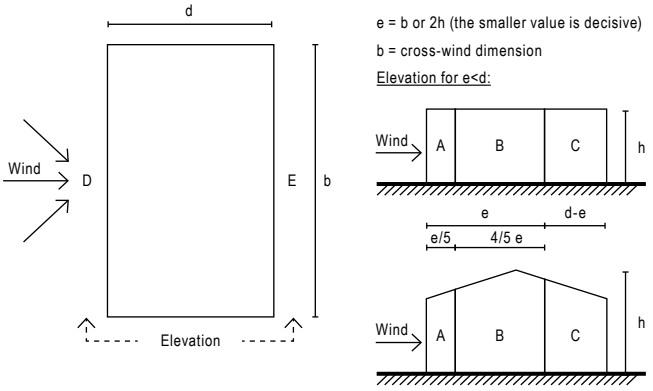
Exteriors:

The following requirements and limitations must be considered for the application of AQUAPANEL® Cement Board Universal on claddings:

- The substructures have to be stable enough to carry the board and further required loads.
- The maximum gust speed pressure must not exceed 1.1 kN / m².
- The spacing between the supporting profiles shall not exceed 400 mm and must be chosen depending on the installation area. The following table may be used as orientation (**):

	Exterior cladding		
Stud spacing (mm)	300		400
area	A	B/D	B/D
$c_{pe,10}$	1,2	0,8	0,8
admissible q_p (z_e) [$c_{pe,10}$]	1,10	1,10	0,90

Sketch:



Interiors:

The following requirements and limitations must be considered for the application of AQUAPANEL® Cement Board Universal on interior walls:

- In interior wall applications AQUAPANEL® Cement Board Universal is used as a tile backer board. If other coating systems are selected (plaster/putty), the suitability of the products must be checked. The instructions of the plaster manufacturer must be observed.
- The maximum wall height permitted is 2750 mm.
- The tile weight is limited to a maximum of 30 kg/m² wall.
- The stud spacing shall not exceed 400 mm.

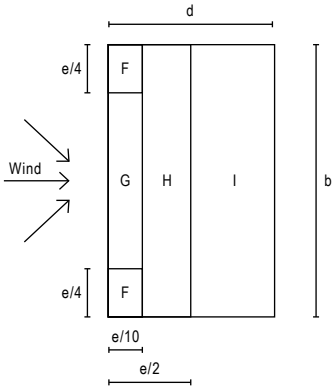
Ceiling applications

Exteriors:

AQUAPANEL® Cement Board Universal is also used in ceiling applications. For exterior ceilings the following requirements and limitations must be considered:

- The substructure must be statically dimensioned and be sufficiently stable.
- The maximum gust speed pressure must not exceed 1.1 kN / m².
- The spacing between the supporting profiles shall not exceed 400 mm and must be chosen depending on the installation area. The following table may be used as orientation (**):

	Exterior ceiling		
spacing of support profiles (mm)	200	300	400
area	F	G	H
$c_{pe,10}$	1,8	1,2	0,7
admissible q_p (z_e) [$c_{pe,10}$]	1,10	1,10	1,10



Interiors:

The following requirements and limitations must be considered for the application of AQUAPANEL® Cement Board Universal on interior ceilings:

- In interior ceiling applications AQUAPANEL® Cement Board Universal is used as a substrate for a suitable plaster or paint finish.
- The stud spacing shall not exceed 400 mm.

(*) Depending on the project-specific requirements, the use of the AQUAPANEL® Cement Board Indoor of 12.5 mm or AQUAPANEL® Cement Board Outdoor of 12.5 mm thickness in interiors and exteriors should be assessed.

(**) The stability of the cladding and ceiling systems must be verified for each specific building project. National standards apply to design loads.

AQUAPANEL®

AQUAPANEL® is a technologically advanced building system. Because it's a system, it involves clear step-by-step process from design idea to project completion. AQUAPANEL® cement board panels, accessories and services work in unison – you can be certain that your project will all come together as planned.

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