



## **Tile Backing**

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Will not deteriorate in water

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Easy to score and snap

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Resistant to mould and mildew

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## **Knauf Aquapanel Interior**

Cement board for wet areas



## **Knauf Aquapanel Interior Cement Board Drywall for Wet Areas**

**Knauf Aquapanel Interior Cement Board is an extremely durable tile backer providing peace of mind in wet indoor areas such as bathrooms, shower rooms and wet rooms.**

Resistant to mould and mildew, Knauf Aquapanel Interior will not deteriorate in water. It retains its strength even if fully immersed.

A purpose designed tile backing board, Knauf Aquapanel Interior solves the problems experienced when traditional backing materials get wet. So no more costly call backs to replace rotten or damaged boards.

Knauf Aquapanel Interior screws ensure a quick and easy installation with no special tools required. Knauf Aquapanel Interior is ready keyed to take tiles up to 50 kg/m<sup>2</sup> as soon as the boards are installed.

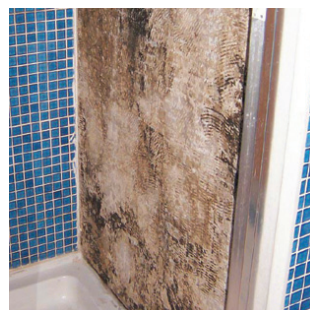
## **Tile Failure Why does it happen?**

**Tile failure can be extremely costly and if traditional materials have been used the result is often replacement of the substrate behind the tiles, as well as the tiles themselves.**

With Knauf Aquapanel Interior, however, tile or grout failure normally means only a simple localised repair is needed, as water ingress will not harm the tile backing.

Tile failure occurs when moisture can get into the substrate:

- X** Water spilt whilst plumbing is being installed
- X** Unseen leaks in pipework within the wall
- X** Powershowers blasting water at high pressure can damage grout and allow water to seep through
- X** Condensation forming along pipework within the wall soaks into substrate



***“We can’t stop the cause of tile failure but we can stop the effects.”***

Water ingress due to damaged grout, tiles or pipes simply does not affect Knauf Aquapanel Interior, leaving you with just a localised repair. Which is why Knauf Aquapanel Interior for walls comes with a 10 year product warranty.

# Installation Procedure

## Large Commercial Projects

For larger commercial applications such as, changing rooms and leisure centres Knauf Aquapanel Interior commercial systems use an innovative glued joint system to allow 600mm stud centres with no loss in performance. Please refer to the Knauf Complete Drywall Manual for more comprehensive performance information or contact Knauf Technical Services.

### 1. Framework

We recommend the use of lightweight metal Knauf Acoustic 'C' Studs. Using metal studs ensures accuracy, and they will not move or twist due to shrinkage or water ingress. In either case set studs at maximum 600mm centres.

### 2. Align the board

Knauf Aquapanel Interior Cement Boards are laid horizontally. Start at one end and align the first board along the studs. Secure the board with Knauf Aquapanel Maxi Screws (SN) at maximum 250mm centres, ensuring that the screws are at least 15mm from the board edge. Do not overdrive the screws.

### 3. Clean the adjacent board edges

In order to ensure that maximum adhesion is achieved when jointing, the adjacent edges of the fixed board and the next board in sequence must be cleaned. Simply clean the edges with a wet brush to remove traces of dust - the edges do not need to be soaked.

### 4. Apply Knauf Aquapanel Interior Joint Adhesive

Using a suitable gun, apply a continuous bead of Knauf Interior Aquapanel Joint Adhesive to the adjacent edge of the fixed board(s). The bead should be of sufficient size to fill the joint fully when the next board is offered up.

Important note: Knauf Aquapanel Interior Joint Adhesive must be applied before the next board is fixed, not after.

### 5. Place the next board

Align the next board and push it firmly into the bed of adhesive. The gap between boards should be less than 1mm. Secure the board with Knauf Aquapanel Maxi Screws (SN).

### Continue the process

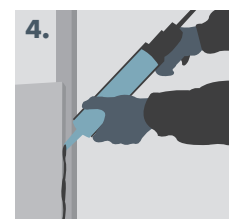
Continue to clean the adjacent edges, apply Knauf Aquapanel Interior Joint Adhesive and place and secure the next board.

### Leave the Knauf Aquapanel Interior Joint Adhesive to dry

In order to achieve a strong bond and to form a complete joint, the Knauf Aquapanel Interior Joint Adhesive needs to be left to cure and expand before the excess can be scraped off.

### 6. Scrape off the excess adhesive

Scrape off the excess Knauf Aquapanel Interior Joint Adhesive the next day using a flexible steel scraper.



The ideal tile backing system for wet and humid areas

- ✓ Will not deteriorate in water
- ✓ Building Regulations approved systems available
- ✓ Resistant to mould and mildew
- ✓ Tough, strong and impact resistant
- ✓ Easy to cut and install
- ✓ Supports tiles up to 50kg/m<sup>2</sup>



# Installation Procedure

## Domestic/Small Commercial Projects

Knauf Aquapanel Interior systems can be designed to meet the requirements of Approved Document E and can be installed with either treated timber or metal studs. Knauf Aquapanel Interior is jointed with tile adhesive and Knauf Aquapanel Interior Joint Tape prior to tiling. Below are the installation instructions for domestic/small commercial project using the Knauf Aquapanel Interior system.

### 1. Framework

For the best results, we recommend the use of lightweight metal Knauf Acoustic 'C' Studs. Using metal studs ensures accuracy, and they will not move or twist due to shrinkage or water ingress. In either case set studs at maximum 450mm centres.

### 2./3. Cutting Knauf Aquapanel Interior Cement Board

Knauf Aquapanel Interior is easily and accurately cut using a coarse bladed saw, or by simply scoring and snapping. Score one side with a sharp knife, cutting through the mesh. Snap the board along the score, then cut through the mesh on the other side. Smooth any rough areas caused by scoring with a rasp.

### 4. Fixing Knauf Aquapanel Interior

Knauf Aquapanel Interior should be screwed to the framework at maximum 250mm centres, with screws 15mm from the board edge. Use 25mm Knauf Aquapanel Maxi Screws (SN) if fixing into metal studs, and 40mm Knauf Aquapanel Interior Screws if fixing into timber studs. Ensure all joints between boards are staggered and leave a 3mm gap.

### 5. Reinforcing Joints

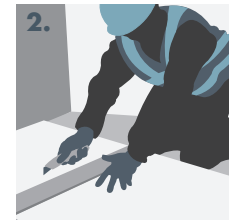
All joints should be filled with flexible tile adhesive, and Knauf Aquapanel Interior Joint Tape embedded into the wet adhesive.

### 6. Tiling

Always use a quality polymer modified based flexible tile adhesive, following the manufacturer's instructions. Tile on the smooth side of the board.

### Sealing Interfaces

Permanently flexible sealant should be used at corners, at wall to floor connections, around penetrations, and at interfaces with baths and shower trays, in combination with sealing tape in wet areas.



Knauf Aquapanel Interior systems offer all the cost and time saving advantages of drywall installation:

Quick & easy score and snap cutting

No pre-drilling required using self piercing and self tapping Aquapanel Screws (SN)

No risk of nail popping or tile cracking with Knauf Aquapanel interior screws

Surface ready keyed for tiling

Metal or timber studs can be used

Curves are easily created

Available from Knauf Drywall stockists.

Knauf Aquapanel Interior Cement Board is installed using the same techniques and tools required for plasterboard and requires no specialist equipment. It interfaces seamlessly with other Knauf Drywall systems.



## Knauf Aquapanel Interior Cement Board System Performance – ‘Part E’ Ready

Knauf Aquapanel Interior partitions have been extensively tested to the latest European EN standards and achieve the acoustic requirements of 40dB for Approved Document E, so can easily be included in the drylining specifications of new dwellings.

### Performance Information

System	Stud Size (mm)	O/A Width (mm)	Sound* (Rw dB)	Weight** (kg/m <sup>2</sup> )	Max Height (mm)
A	50 (0.6) Acoustic ‘C’	75	44	32	2700
B	75 x 50 Timber	100	41	35	2700

\* Acoustic rating is specific to the systems shown below

\*\* Weight does not include the weight of finishing materials, eg. tiles

## Knauf Aquapanel Interior Cement Board Product Range

Knauf Aquapanel Interior Cement Board:  
12.5mm x 900mm

Article Code: 670 60 626 (1200mm Length)

Article Code: 670 60 627 (2400mm Length)

Knauf Aquapanel Maxi Screws (SN):

Screws for fixing to Acoustic ‘C’ Stud

Article Code: 000 87 319 (25mm Length)

Article Code: 000 53 500 (39mm Length)

Article Code: 000 95 644 (55mm Length)

Knauf Aquapanel Interior Screws:

40mm Aquapanel Screws for fixing to timber

Article Code: 933 83 410

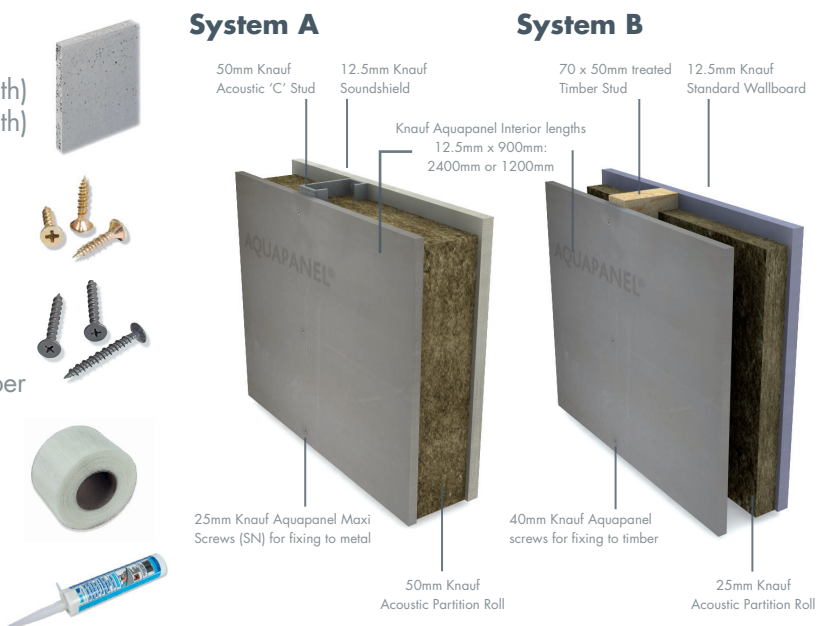
Knauf Aquapanel Interior Joint Tape:

20m roll Article Code: 951 60 008

Knauf Aquapanel Interior Joint Adhesive:

PU Adhesive used for jointing Knauf Aquapanel Interior Cement Boards

Article Code: 670 60 632



# Knauf Aquapanel Floor Tile Underlay: The Ideal Thin Substrate for Tiles onto Subfloors

Professionals have been installing Knauf Aquapanel Interior Cement Board in wet areas for many years, knowing it is the most effective way to stop the causes of tile failure. Now Knauf Aquapanel Interior technology is available in a thin tile underlay for floors.

Traditional plywood methods of tile backing can warp and cause tile failure. Knauf Aquapanel Floor Tile Underlay is completely unaffected by water, virtually eliminating these problems.

At only 6mm thick, room height is not compromised. Knauf Aquapanel Floor Tile Underlay boards and components are non-organic, so there is no chance of mould or fungus growth. You can use Knauf Aquapanel with the confidence that you're using the most suitable product for the job.



## Get Smart About Tile Underlay

Knauf Aquapanel Floor Tile Underlay is made from tough Portland cement and has a coated glass fibre mesh embedded in the core. Not only does this give excellent stability, it also enables the installer to score and snap using standard tools.

For ease of handling Knauf Aquapanel Floor Tile Underlay comes in a convenient 900 x 1200mm size and only weighs 8kg, making it simple to lift and transport.

Ease of installation; ease of handling and total confidence in performance make Knauf Aquapanel Floor Tile Underlay the only choice to protect your tiles.

**“Knauf Aquapanel Floor Tile Underlay meets the recommendations of the NHBC standard, Chapter 8.3 ‘Floor finishes’ when used as an overlay to a chipboard decking.”**

## Refurbishments

Knauf Aquapanel Floor Tile Underlay provides an easy solution for refurbishments where a tiled floor is desired, allowing a very thin floor construction to be maintained and providing an instant flat, keyed surface for new tiles.

## Tile Failure

Tile failure can be extremely costly and if traditional materials have been used the result is often replacement of the substrate behind the tiles, as well as the tiles themselves.

With Knauf Aquapanel Floor Tile Underlay however, tile or grout failure normally means only a simple localised repair is needed, as water ingress will not harm the underlay.

## Application table

### Timber or Steel Joists

Deflection Limits: L/300 bearing wooden/steel framework  
L/400 wooden subfloor (OSB or chipboard)

Minimum subfloor thickness dependent on centre distance of wooden joists.

### Minimum subfloor thickness

Joist centres	400mm	600mm	800mm
OSB 3 subfloor thickness acc. to EN 300	18mm	18mm	22mm
Chipboard cat. PS subfloor thickness acc. to EN 312	18mm	22mm	-



# Installation

## 1. Apply adhesive

Apply a complete bed of flexible tile adhesive (class C2/S1 acc. EN 12004/12002) to the subfloor, in accordance with manufacturers' guidelines.

## 2. Lay the boards

The first Knauf Aquapanel Interior Cement Board board should be fitted in the corner farthest from the door. Ensure the panel is laid in such a way that the joints are staggered between the Knauf Aquapanel Interior Cement Board and the subfloor (minimum 200mm staggering). No two joints should coincide.

## 3. Mechanically fix the boards

Leave a gap of 3 - 5mm between each board and screw the board to the subfloor using Knauf Aquapanel Maxi Screws (SN) 25.

## 4. Screwing the boards

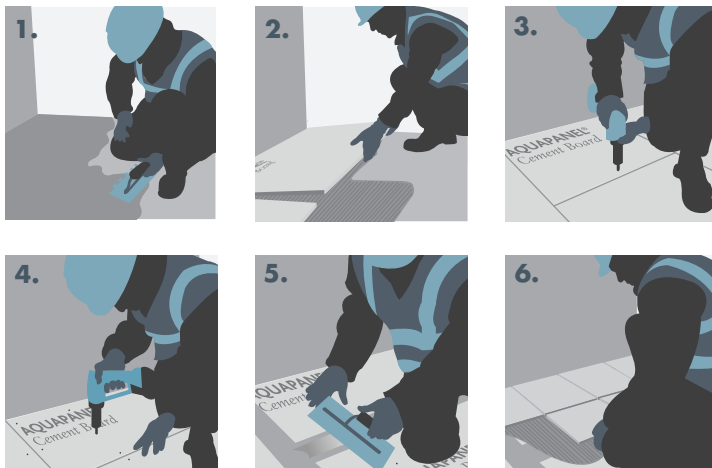
The screws should be spaced 250mm or less in all directions. Ensure the distance from the edge of the board is at least 15mm. Avoid cross joints.

## 5. Joint the boards

Fill all the joints with flexible tile adhesive (class C2/S1 acc. EN 12004/12002), then embed Knauf Aquapanel Joint Tape. Allow for the adhesive in the joints to dry.

## 6. Lay Tiles

Lay tiles directly onto the Knauf Aquapanel Floor Tile Underlay using a complete bed of flexible tile adhesive (class C2/S1 acc. EN 12004/12002), in accordance with manufacturers' guidelines.



In order to install Knauf Aquapanel Floor Tile Underlay, ensure you have the right subfloor thickness. The joist centres relate to the required thickness of floor in both OSB and Chipboard (cat. P5) installations.

6mm Knauf Aquapanel Floor Tile Underlay can be used to receive various tiles sizes of 330 x 330mm and above provided the breaking strength (F) of tile > 1500N (as per the requirements set within BS EN 10545-4).

Product is to be installed as per our recommendations and recommendations set from relevant flooring technical standards.



# **KNAUF** DRYWALL

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## **AQUAPANEL®**

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