



# Knauf AQUAPANEL® Cement Board Indoor

Redefining expectations for building walls in wet indoor areas



## Tile backer and internal wet room board

Comprehensive range of accessory  
products

Simple score and snap technique

Endless design opportunities with  
ability to curve boards

## Expectations redefined.



Suitable for use in new build projects as well as refurbishments.



Knauf AQUAPANEL® Cement Board Indoor makes handling easier, reducing stress and strain on the body – while still delivering dimensional stability and best-in-class performance in wet areas. Lightweight, only 11Kg/m<sup>2</sup>.



Easy to score and snap, reduces dust on site. Easy to screw fix, no pre-drilling required. Create curved walls – boards have a bending radius of 1m, can be fixed to curved substrates in their dry state. Knauf AQUAPANEL® Cement Board Indoor features a number of alternative joint treatments, so it is easy to install.



As easy to use as gypsum board, Knauf AQUAPANEL® Cement Board Indoor provides fast installation and high productivity even in the most challenging wet areas. No pre-drilling required. Large board sizes available to speed up installation.



Comprehensive range extending beyond a board for interior walls, including 6mm Knauf AQUAPANEL® Cement Board Floor Tile Underlay for tiled floor coverings and Knauf AQUAPANEL® Cement Board SkyLite for ceilings with a dedicated metal mounting system.

This brochure focuses on Knauf AQUAPANEL® Cement Board Indoor for walls and floors. For further information on ceilings, refer to Knauf AQUAPANEL® Interior Ceiling System Brochure.



# Contents

- 04** Introduction to Knauf AQUAPANEL®  
Cement Board Indoor
- 07** System overview
- 08** System components
- 10** Installation methods
- 13** Surface finishing
- 14** Building curved walls
- 15** Technical product information
- 16** Performance overview
- 18** Introduction to Knauf AQUAPANEL®  
Cement Board Floor Tile Underlay
- 20** Case study – The Wave, Coventry
- 22** More information
- 24** CITB Accredited Training Organisation
- 25** Knauf Clerkenwell
- 26** Build for the world we live in

## An introduction to Knauf AQUAPANEL® Cement Board Indoor

---

**Dampness is the principal cause of structural damage. In many areas of a construction, the ability to withstand damp and water is critical for the quality and durability of a building unit. Knauf AQUAPANEL® Cement Board Indoor is approved for use in all domestic and commercial wet areas, in laboratories, kitchens, swimming pools and steam saunas. Protection from damp is also important in cellars and garages because these building units are often at risk from masonry damp, ground damp, ground water or even flooding.**

**Manufactured from inorganic materials and highly resistant to water and mould, Knauf AQUAPANEL® Cement Board Indoor delivers exceptional stability in the most challenging wet indoor conditions – even when exposed to chlorine.**

Knauf AQUAPANEL® Cement Board Indoor is the ideal building panel for such areas. It is water resistant and dimensionally stable. The board remains unaffected even when immersed in water and is also resistant to mould growth.

Designed specifically to meet the needs of installers and contractors, Knauf AQUAPANEL® Cement Board Indoor has always met high expectations.

Now these expectations are taken to a new level.

Re-engineered without compromise on performance, Knauf AQUAPANEL® Cement Board Indoor now weighs just 11kg/m<sup>2</sup>, making it even easier to handle and faster to install.

From swimming pools, steam rooms and steam saunas with a sustained temperature of up to 70°C to communal showers and kitchen areas, Knauf AQUAPANEL® Cement Board Indoor is the preferred choice.



# An introduction to Knauf AQUAPANEL® Cement Board Indoor

## Construction materials for wet indoor areas must meet a variety of requirements and display the following characteristics:

- Water resistance and dimensional stability
- Resistance to mould and mildew
- Moisture vapour permeability for optimum indoor climate

## Water appears in a construction as:

- Standing and flowing water
- Capillary water
- Dripping water
- High relative air humidity

## Features and benefits of Knauf AQUAPANEL® Cement Board Indoor:

- 100% water resistant
- Mould and mildew resistant
- Non-combustible (A1)
- Robust and reliable with high impact resistance
- Easy installation – only 11kg/m<sup>2</sup> meaning less effort in handling; no pre-drilling required
- Full size boards can be curved to a radius of 1m
- Ready keyed for tiling
- Support tiles of up to 120kg/m<sup>2</sup> \*
- Dimensionally stable

\*specific build-up applies, refer to page 15 for additional details.

## Certifications of Knauf AQUAPANEL® Cement Board Indoor

### CE Marking



Knauf AQUAPANEL® Cement Board Indoor complies with EN 12467 Category C, Class 2.

### Safe and hygienic solution



Knauf AQUAPANEL® Cement Board Indoor is 100% water resistant and completely inorganic, so there is no risk of mould or mildew.

It meets the highest requirements for a safe and hygienic environment inside the building – as certified by the German Building Biological Institute Rosenheim (IBR).

### Impact resistance



Various wall build-ups using Knauf AQUAPANEL® Cement Board Indoor have been tested for limited safety against ball throwing according to standard DIN 18032-3 [1]. The systems passed the handball test without deterioration or damage and therefore have been officially certified by the Materials Testing Institute, University of Stuttgart (MPA).

### No MgO

Contains no Magnesium Oxide (MgO).



**Knauf AQUAPANEL®  
Cement Board Indoor**  
is a water-resistant tile  
backing board, offering  
the perfect solution for  
walls that are exposed  
to moisture, chlorine  
and salt.

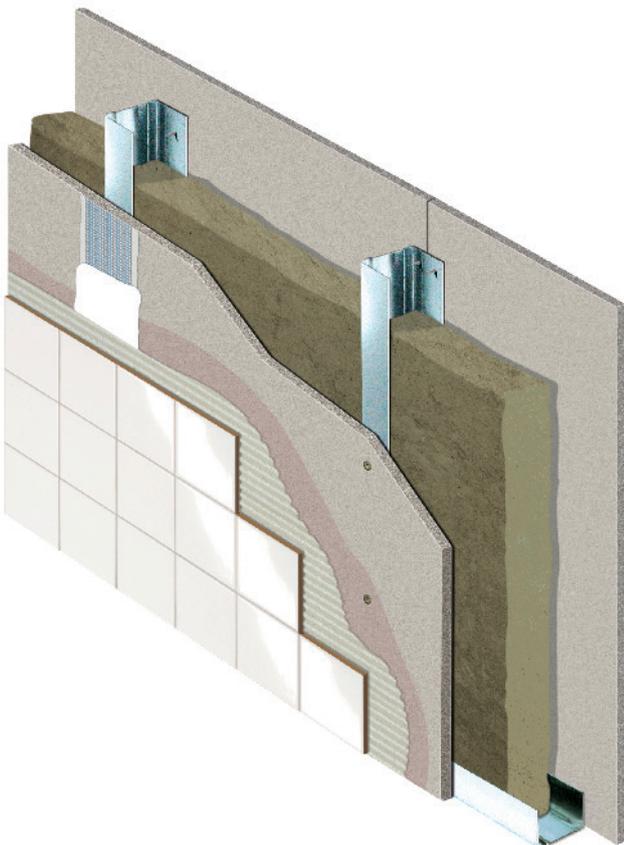


Typical wall applications

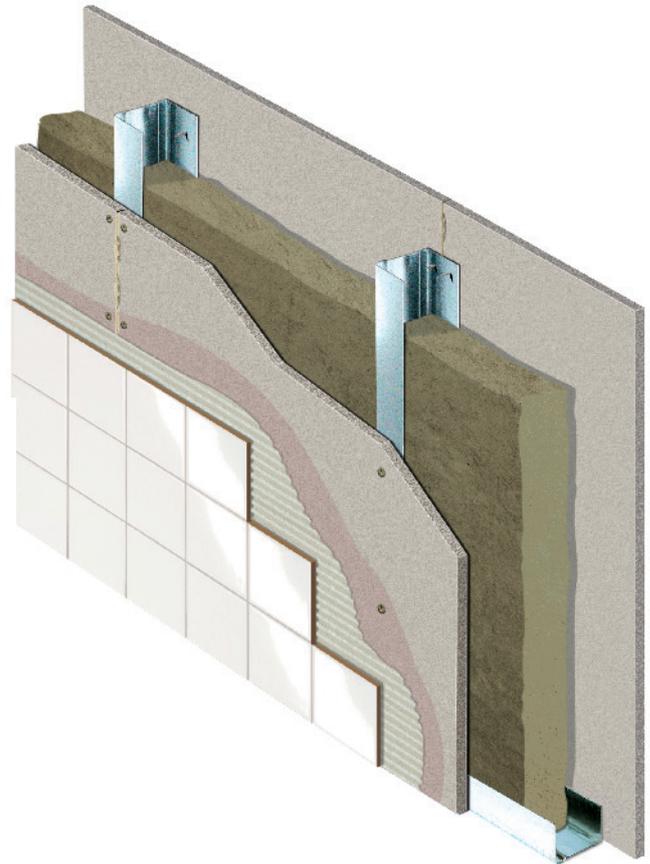


Joint treatment with  
**Knauf AQUAPANEL®**  
**Joint Filler and Skim Coating -**  
**White and Knauf AQUAPANEL®**  
**Tape and paint finish**

Joint treatment with  
**Knauf AQUAPANEL®**  
**Joint Adhesive (PU)**



Joint treatment with  
**Knauf AQUAPANEL®**  
**Joint Filler and Skim Coating**  
**- White and Knauf AQUAPANEL®**  
**Tape**



# System components

## Knauf AQUAPANEL® Cement Board Indoor

### Boarding



Aggregated Portland cement board with coated glass fibre mesh embedded in back and front surfaces. The ends are square cut and the edges reinforced and finished smoothly (EasyEdge™).

Weight kg/m <sup>2</sup>	Dimensions (mm)			Material No.	Ex Stock	Pallet Details		
	Thickness	Width	Length			Boards	m <sup>2</sup>	Tonnes (Approx.)
11	12.5	900	1200	519734	✓	55	59.4	0.65
11	12.5	900	2400	519889	✓	55	118.8	1.30
11	12.5	1200	2400	519708	✓	55	158.4	1.74

Note: 2400mm long boards are recommended for use in commercial applications. Compliance: EN 12467 Category C, Class 2 and ETA-07/0173.

## Knauf AQUAPANEL® Maxi Screws

### Fastening



Knauf AQUAPANEL® Maxi Screws have been specifically developed for fixing Knauf AQUAPANEL® Cement Board Indoor onto timber and metal framework of differing thicknesses. Both needlepoint (SN) and drillpoint (SB) versions with countersunk heads are available.

Knauf AQUAPANEL® Maxi Screws have a special corrosion-proof coating which provides a guaranteed 720 hours corrosion resistance in a salt spray test.

Dimensions (mm)		Material No.	Ex Stock	Pack Details		Timber framework		Metal framework (0.6 – 0.7mm)			Metal framework (0.8 – 2.0mm)
Length	Diameter			Items per Carton	kg (Approx.)	Single layer	Double layer	Single layer	Double layer	Triple layer	Single layer
25 (SN)	4.2	87319	✓	1000	1.8			•			
39 (SN)	4.2	87283	–	100	0.39	•		•	•		
39 (SN)	4.2	53500	✓	500	2.0	•		•	•		
39 (SN)	4.2	87317	–	1000	3.0	•		•	•		
55 (SN)	4.2	95644	✓	250	2.0		•			•	
25 (SB)	4.2	94730	✓	250	0.75						•
39 (SB)	4.2	58549	–	250	0.79						•

Compliance: EN 14566.

## Knauf AQUAPANEL® Joint Adhesive (PU)

### Joint treatment



Knauf AQUAPANEL® Joint Adhesive (PU) is used for wall applications to bond individual Knauf AQUAPANEL® Cement Board Indoor panels.

Cartridge Size	Material No.	Ex Stock	Pack Details
ml			Cartridges per Pack
310	49376	✓	20

Shelf life: 12 months. Estimating Guide: 1 Cartridge is sufficient to joint approximately 6m<sup>2</sup> of wall.

## Knauf AQUAPANEL® Tape

Joint treatment



Knauf AQUAPANEL® Tape is a 100mm wide glass fibre tape with an alkaline-resistant coating. It is embedded into AQUAPANEL® Joint Filler and Skim Coat – White, or tile adhesive, to reinforce joints as part of a Knauf AQUAPANEL® Interior system.

Roll Size		Material No.	Ex Stock	Carton Details	
Length (m)	Width (mm)			Rolls per Carton	kg (Approx.)
50	100	429471	✓	12	4
20	100	465546	✓	18	5.3

Estimating Guide: 2.1 m/m<sup>2</sup>.

## Knauf AQUAPANEL® Joint Filler and Skim Coating – White

Joint treatment and surface finishing



A cement-based filling material for full-surface skim coating and filling joints between Knauf AQUAPANEL® Cement Indoor Board panels.

Bag Size	Material No.	Ex Stock	Pallet Details	
kg			Bags	Tonnes (Approx.)
20	131095	✓	48	0.96

Shelf life: 12 months. Estimating Guide: Joint treatment: 0.7 kg/m<sup>2</sup>. Full-surface skim coating: approx. 4.2 kg/m<sup>2</sup> coating depth: 6 mm. Compliance: EN 998. Available in part pallet quantities.

## Knauf AQUAPANEL® Reinforcing Mesh

Surface finishing



Knauf AQUAPANEL® Reinforcing Mesh is a glass fibre fabric used to reinforce Knauf AQUAPANEL® Joint Filler & Skim Coating – White when being used for full surface skimming.

Roll Size		Material No.	Ex Stock	Pallet Details	
Length (m)	Width (m)			Rolls per Pallet	kg (Approx.)
50	1	102584	–	30	375

Estimating Guide: 1.1 m/m<sup>2</sup>. Available in part pallet quantities.

## Knauf Interior Skim

Surface finishing



Ready-mixed water-resistant skim coat for use over the Knauf AQUAPANEL® Indoor system to create a smooth and level finished surface ready for painting.

Bag Size	Material No.	Ex Stock	Pallet Details	
kg			Bags	Tonnes (Approx.)
25	258278	✓	40	1.0

Shelf life: 9 months. Estimating Guide: Coverage 10m<sup>2</sup> per bag at 1.5mm thickness. Available in part pallet quantities.

## Knauf AQUAPANEL® Board primer

Board priming



Knauf AQUAPANEL® Board Primer is a ready-to-use synthetic dispersion preparation for priming Knauf AQUAPANEL® Cement Board Indoor panels to provide maximum adhesion of tiles or plaster.

Tub Size	Material No.	Ex Stock	Pallet Details	
kg			Tubs	Tonnes (Approx.)
15	49279	–	24	0.36

Shelf life: 18 months. Estimating Guide: Coverage 40-60g/m<sup>2</sup>, 1:2 dilution ratio with water. Available in part pallet quantities.

# Installation in general



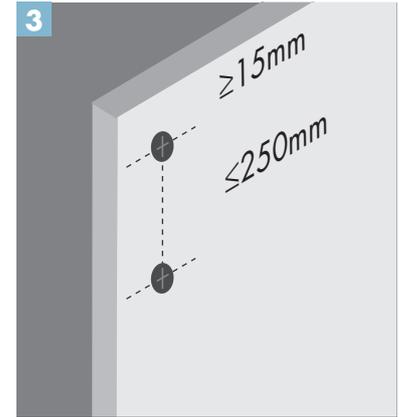
## Step 1. Cutting

Boards can easily be scored and snapped. 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. Alternatively, Knauf AQUAPANEL® Cement Board Indoor is easily and accurately cut using a coarse bladed saw.



## Step 2. Create substructure and align the board

For the best results, Knauf recommend the use of lightweight Knauf Acoustic 'C' Studs. Using Knauf metal studs ensures accuracy and they will not move or twist due to shrinkage or water ingress. When boards are installed vertically, studs at either 450mm centres or 600mm max. (refer to boards size). When boards are installed horizontally, studs at 600mm centres max. Align the first Knauf AQUAPANEL® Cement Board Indoor panel along the profiles using a spirit level. The boards should be orientated so that the Knauf AQUAPANEL® logo is visible on the outer face.

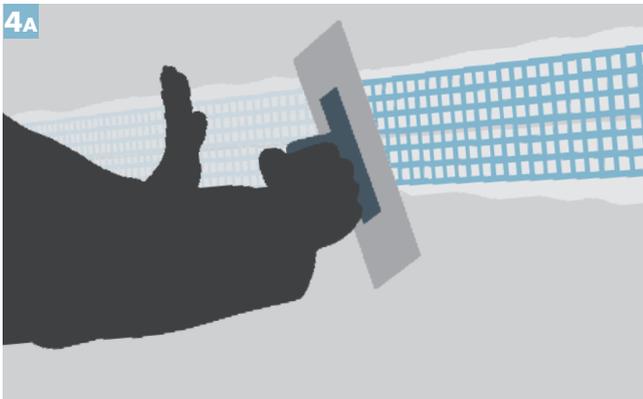


## Step 3. Fastening with screws

Fasten Knauf AQUAPANEL® Cement Board Indoor panels to the framework with Knauf AQUAPANEL® Maxi Screws. First fasten the screws into the centre of the cement boards, then work towards the ends and the edges. During installation, make sure the cement boards are resting on the framework. Screw spacing  $\leq 250\text{mm}$ . Distance from corner and edge  $\geq 15\text{mm}$ .

## Step 4. Jointing boards

There are a number of options for jointing Knauf AQUAPANEL® Cement Board Indoor, depending on the substrate of the project and the desired finish.



### Joint treatment with Knauf AQUAPANEL® Joint Filler and Skim Coating – White, and Tape

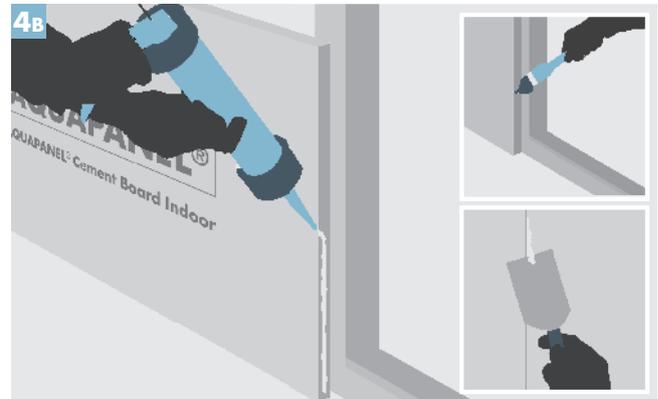
This method can be used when the desired finish is either a skim coat or tiling.

Leaving a gap of 3–5mm between boards, affix all of the boards using the instructions in Step 3.

Fill the joints using Knauf AQUAPANEL® Joint Filler and Skim Coating – White, and embed Knauf AQUAPANEL® Tape, centred, over all joints. The tape should be overlapped by 100mm. Apply a thin layer of Knauf AQUAPANEL® Joint Filler and Skim Coating – White to cover the tape.

Expansion joints should be at maximum 15m intervals.

Note: Joint treatment with flexible cement-based tile adhesive is also possible. Follow the same procedure.



### Joint treatment with Knauf AQUAPANEL® Joint Adhesive (when using metal stud at 600mm centres)

This method can be used when the desired finish is tiling. There are time savings by using this method, as well as it being cleaner and simple.

In order to ensure good adhesion with Knauf AQUAPANEL® Joint Adhesive (PU), clean the edges of the board using, for example, a wet brush. Apply Knauf AQUAPANEL® Joint Adhesive (PU) before the next board is placed.

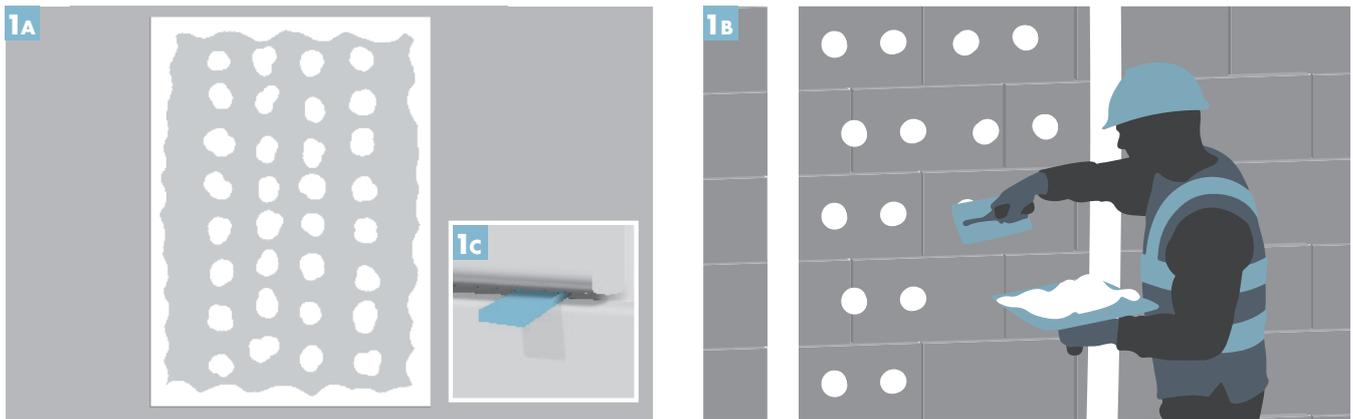
Leave the adhesive to harden, after which the excess Knauf AQUAPANEL® Joint Adhesive (PU) can be scraped off (usually the next day). The joints between the walls, ceiling and floor require permanent elastic sealing in dry areas. Expansion joints should be at maximum of 7.5m intervals.

**Knauf AQUAPANEL® Cement Board Indoor can also be applied direct to a masonry substrate using a dot and dab method. There are instructions below for this type of installation.**

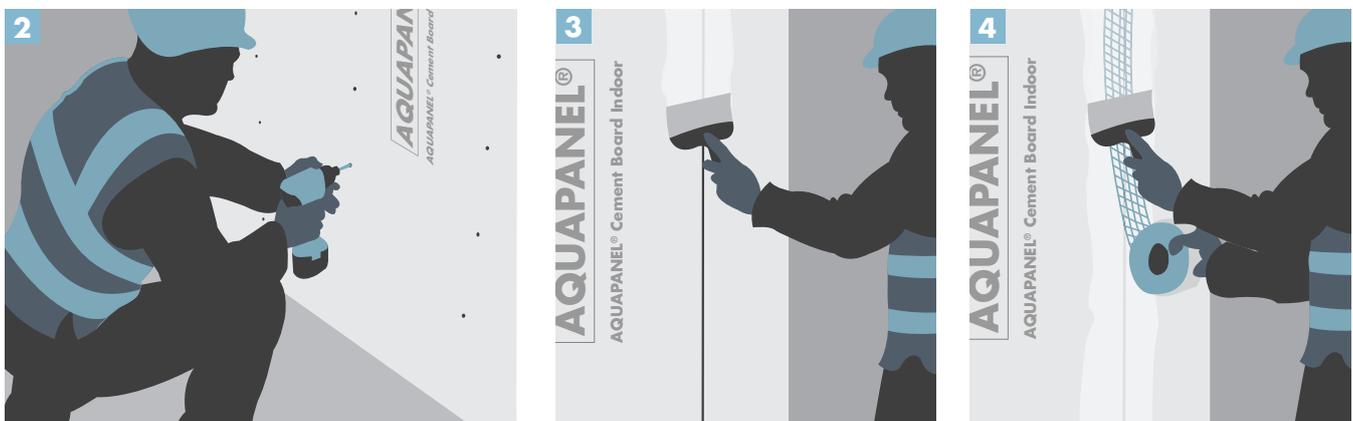
## Step 1.

Apply a 50–75mm wide tile adhesive strip around the board edge on the rear of the board, then apply dabs within this border – see below sketch: 1A (the Knauf AQUAPANEL® print should face outwards) of Knauf AQUAPANEL® Cement Board Indoor\*.

\*We recommend the use of a C2 grade tile adhesive for this purpose; DO NOT use a gypsum-based adhesive.



Alternatively you can apply the tile adhesive perimeter strip and dabs directly to the wall. To do this you need to mark the wall, for example with a chalk line, along the board edges 1B. Board cut-offs should be used as packing strips against which to rest the bottom edge of the board 1C. Position the reverse side of the board against the wall. Tap along the board sides and surface firmly until the board is aligned and levelled. Repeat the process with the next board and leaving 3–5mm gap between all board joints.



## Step 2.

When the adhesive begins to dry (after 1–2 hours), you should fasten the Knauf AQUAPANEL® Cement Board Indoor with 9 stainless steel screws per m<sup>2</sup> (min. 9mm diameter countersunk head steel screws with 6mm diameter core, length to suit – screws supplied by others) along the edges and the middle using wall plugs. Ensure distance from corner and edge  $\geq 15$ mm. For this purpose you should pre-drill the board before fixing the screws. Ensure these are embedded by at least 50mm into the wall. Ensure the wall plug has a collar so it can't slip through the board while fastening.

Be careful to not over tighten fixings.

## Step 3.

Fill the board joints with tile adhesive.

## Step 4.

Embed the Knauf AQUAPANEL® Tape (100mm). Once completed, remove the board cut-off packing strips from the bottom edges of your board.

Note: For dot and dab systems maximum tile loading is 25kgm<sup>2</sup>.

# Installation of walls behind wood burning stoves

## Use Knauf AQUAPANEL® Cement Board Indoor when it comes to hot temperatures.

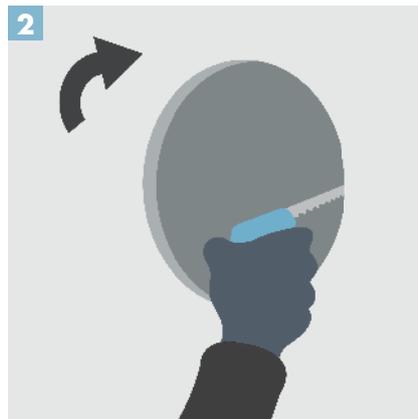
Log burning stoves require surrounding walls that can withstand high temperature and are non-combustible.

Knauf AQUAPANEL® Cement Board Indoor provides this protection as it easily withstands radiating temperatures up to 200°C and is A1 non-combustible to EN 13501-1. It is the ideal substrate for non-flammable and heat resistant surface coatings and finishes as it will not warp, shrink or expand.



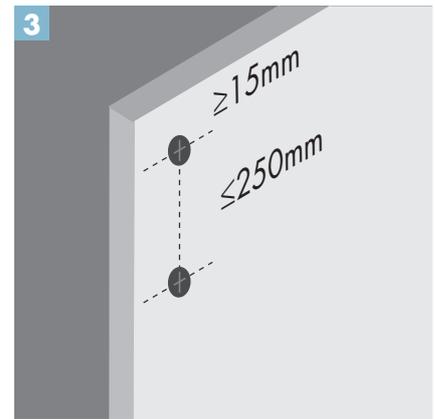
### Step 1.

Boards can easily be scored and snapped. 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 with a rasp.



### Step 2.

To make cut-outs for wiring and pipes, use a jigsaw or keyhole saw. The diameter should be approximately 10mm larger than the diameter of the pipe. The remaining gap can be closed with a cuff, suitable sealant or sealing strip.



### Step 3.

Screw spacing:  $\leq 250\text{mm}$  and spacing from corner and edge:  $\geq 15\text{mm}$ . Screws should not be overtightened. Ensure all joints between boards are staggered and leave a 3–5mm gap between boards.



### Step 4.

Fasten the board to the framework using Knauf AQUAPANEL® Maxi Screws SN 25mm for metal studs or Knauf AQUAPANEL® Maxi Screws SN 39mm for timber. Apply the boards with the Knauf AQUAPANEL® logo facing outwards.



### Step 5.

All joints should be filled with flexible tile adhesive, with Knauf AQUAPANEL® Tape (100mm) embedded into the wet adhesive.



### Step 6.

Tiles must be used to finish the board, always use a quality polymer modified based flexible tile adhesive, following the manufacturer's instructions.

Note: Please make sure you check with the tile and tile adhesive manufacturer that their products are suitable for this application.



## Tiling

When using tiles weighing over 50kg/m<sup>2</sup>, Knauf AQUAPANEL® Cement Board Indoor must be primed before tiling, using Knauf AQUAPANEL® Board Primer (primer/water 1:2).

For ceramic tile coverings, (tile dimensions ≤ 600mm x 600mm), use a flexible adhesive when placing tiles. The tile adhesive must, as a minimum, meet the requirements of class C2 according to BS EN 12004-1:2017.

**Tile weight:** up to 120kg/m<sup>2</sup> \*

\*specific build-up applies, refer to page 15 for additional details.



## Skim Coating

### Skim coating with Knauf Interior Skim

Knauf AQUAPANEL® Cement Board Indoor can also be prepared for painting by applying Knauf Interior Skim (spray or hand-applied). Apply Knauf Interior Skim to a 1.5–2mm thickness, level out with a spatula and allow to dry. If required, sand any high spots from the first coat within 24 hours of application. Repeat, if necessary, to obtain a level surface. Apply a second coat of Knauf Interior Skim, smooth out, and leave to dry.

If necessary, repeat with additional coats to achieve a consistent finish. Sand the surface with a 120 grit sand paper (when using a drywall sander, a finer grade paper is recommended, varying from 180–230 grit dependent on machine used) for a superior finish, then paint.

### Skim coating with Knauf AQUAPANEL® Joint Filler and Skim Coating – White

Apply Knauf AQUAPANEL® Joint Filler and Skim Coating – White with a stainless steel notched trowel to a thickness of 4mm. Embed Knauf AQUAPANEL® Reinforcing Mesh over the whole area (leaving an overlap of approximately 100mm at joints in the mesh) and level out.

At openings, additional mesh is required – this will consist of an extra layer of reinforcement mesh, creating stress patches. Mesh sections measuring 250mm x 250mm are positioned at 45° to the corners of the openings. Leave to dry for 24 hours.

The material begins to harden approximately 45 minutes after mixing.

To achieve a surface suitable for painting, skim over the first coat after hardening with a further 2–3mm of Knauf AQUAPANEL® Joint Filler and Skim Coating – White. As the product begins to harden, work the surface with a smoothing float spatula or trowel, if necessary using a sponge float. Leave to dry for 24 hours. If sanding is required, use 180 grit sand paper taking care not to scratch the surface.

DO NOT apply a gypsum-based skim to Knauf AQUAPANEL® Cement Board Indoor.



## Painting

Depending on the intended use and requirements, water-based emulsion paints, silicate emulsion paints or latex paints can be used. Paint by others.

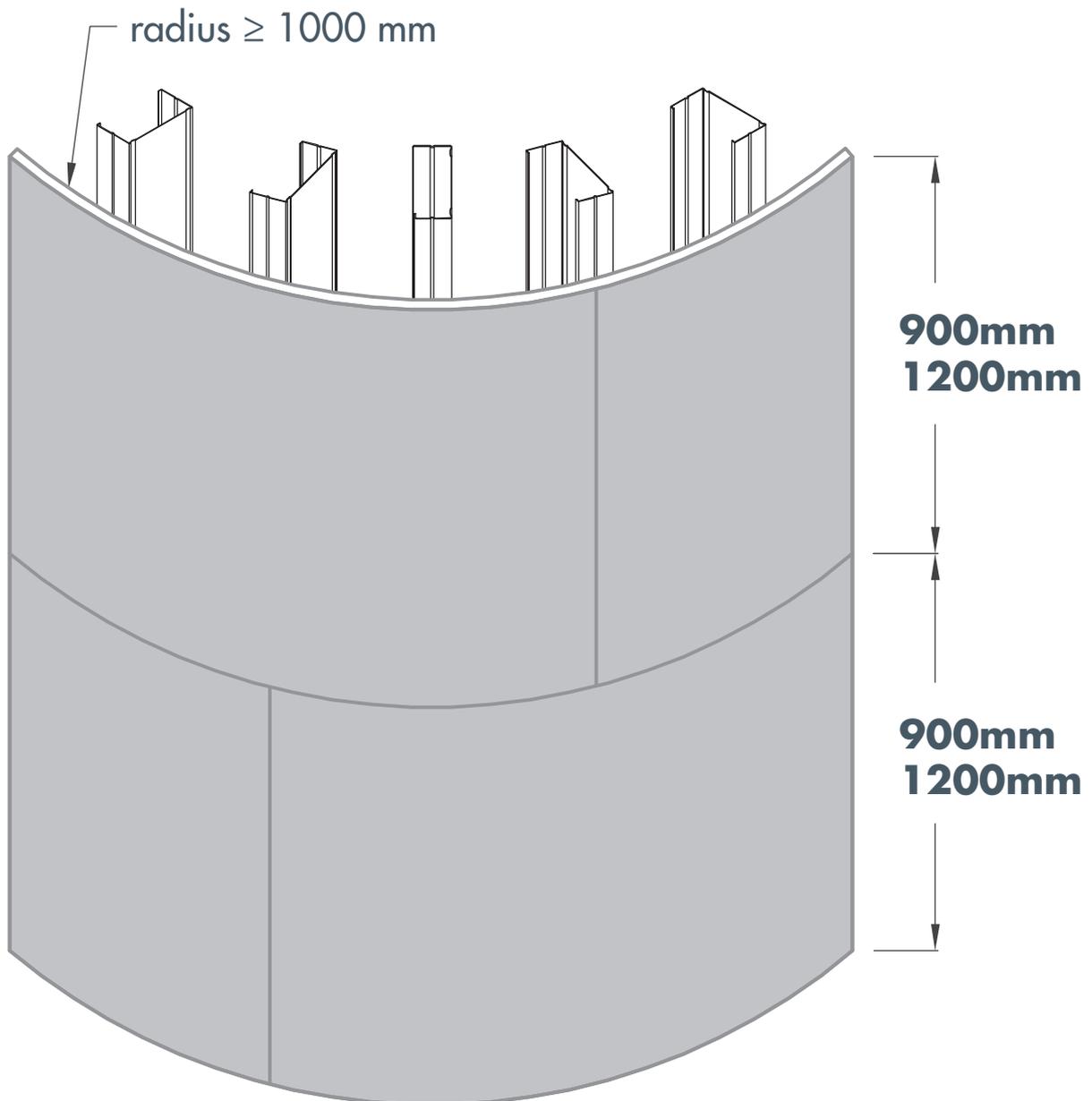
Note: If within a splash zone of a pool or shower the tiled section of the wall should be > 50% of the total height of the wall. Skimmed wall in a pool or a high humid area not near a splash zone can be skimmed and painted to full height.

Not suitable for areas subject to water spray.

All systems require a jointing system before the finish system is applied.

## Building a curved wall

When creating curved or waved walling, Knauf AQUAPANEL® Cement Board Indoor is the ideal product to be used. Cut the Knauf Acoustic 'C' Stud using metal shears. Fit the stud to the desired radius. Before installation, bend the cement board panel. The fine cracks that occur on the board surface will not cause any loss of performance. Max. stud spacing  $\leq 300\text{mm}$  (external radius).



Knauf 'U' Channel snipped and bent to suit radius

### Note:

Knauf AQUAPANEL® Cement Board Indoor should be curved when dry before installation. Knauf AQUAPANEL® Cement Board Indoor can be used to create concave and convex curves.

Small cracks may appear on the surface of the board during shaping. This does not represent any loss of strength or function. Maintain screw centre discipline of max. 250mm centres.

If boards require cutting, cut before you curve the boards and it will give you a cleaner edge.

Material consumption			
Material requirement	Unit	Single Layer (per m <sup>2</sup> )	Double Layer (per m <sup>2</sup> )
Knauf AQUAPANEL® Cement Board Indoor	m <sup>2</sup>	1	2
Knauf AQUAPANEL® Maxi Screw (SN,SB)	pieces	15 (stud spacing 600mm) 20 (stud spacing 450mm)	21
Knauf AQUAPANEL® Joint Adhesive (PU) Option 1	ml	50	50
Knauf AQUAPANEL® Tape Option 2	m	2.1	2.1
Knauf AQUAPANEL® Joint Filler and Skim - White Option 2 (used for jointing)	kg/m <sup>2</sup>	0.7 (used for jointing) 4.2 (used for skimming – 6mm thickness)	0.7
Knauf AQUAPANEL® Interior Skim	kg/m <sup>2</sup>	2.59kg/m <sup>2</sup> (1.5mm thickness)	0.7

Physical properties				
Length (mm)		1200	2400	2400
Width (mm)		900	900	1200
Thickness (mm)		12.5	12.5	12.5
Min. bending radius		1m	1m	1m
Weight (kg/m <sup>2</sup> )		Approx.11	Approx.11	Approx.11
Dry bulk density (kg/m <sup>3</sup> ) according to EN 12467		Approx.750	Approx.750	Approx.750
Bending strength (MPa) according to EN 12467		≥7	≥7	≥7
pH-value		12	12	12
Building material class according to EN 13501		A1 non-combustible	A1 non-combustible	A1 non-combustible

## Knauf AQUAPANEL® Cement Board Indoor can carry tiles weighing up to 120kg/m<sup>2</sup>

Knauf AQUAPANEL® Cement Board Indoor can carry tiles weighing up to 50 kg/m<sup>2</sup> following the standard installation method and a maximum stud spacing of 450mm or 600mm is sufficient. For heavier tiles, weighing up to 120kg/m<sup>2</sup>, additional measures should be taken; the stud spacing should be a maximum of 300mm, the wall height shouldn't exceed 3m, and the tiles should stand directly on the floor or on a load-bearing support. The boards should be primed with Knauf AQUAPANEL® Board Primer beforehand.

Knauf AQUAPANEL® Cement Board Indoor (according to BS EN 12467)				
Max. weight in kg/m <sup>2</sup>	Max. stud spacing in mm	Max tile sizes in mm	Wall height in mm	Max tile sizes in mm
50	450/600	≤ 600 x 600	According to specification	Directly on the wall without a load-bearing support
120	300	≤ 600 x 600	3,000	Directly on the floor or on a load-bearing support

For larger tiles use suitable decoupling systems to decouple the tile from the substrate.

Note: Contact Knauf Technical via Live Webchat at [www.knauf.co.uk](http://www.knauf.co.uk) or email [technical@knauf.co.uk](mailto:technical@knauf.co.uk) for further information on installation of larger tiles in excess 600mm x 600mm.

## A complete system solution for walls

### Interior walls components

System components (mm)			
Boarding specification	Stud, depth and gauge	Insulation	Boarding specification
1 layer of 12.5 AQUAPANEL® Indoor	Acoustic 70 'C' (0.6)	Knauf Insulation 50mm Earthwood Flexible Slab RS33	1 layer of 12.5 AQUAPANEL® Indoor
1 layer of 12.5 Performance Plus	Acoustic 70 'C' (0.6)	Knauf Insulation 50mm Earthwood Flexible Slab RS33	1 layer of 12.5 AQUAPANEL® Indoor
2 layers of 12.5 AQUAPANEL® Indoor	Acoustic 70 'C' (0.6)	Knauf Insulation 50mm Earthwood Flexible Slab RS33	2 layers of 12.5 AQUAPANEL® Indoor
2 layers of 12.5 Performance Plus	Acoustic 70 'C' (0.6)	Knauf Insulation 50mm Earthwood Flexible Slab RS33	2 layers of 12.5 AQUAPANEL® Indoor
2 layers of 12.5 AQUAPANEL® Indoor	Acoustic 70 'C' (0.6)	Knauf Insulation 50mm Earthwood Flexible Slab RS33	1 x 12.5 Performance Plus (inner layer), inclusion of VCL, 1 x 12.5 AQUAPANEL® Indoor

<sup>1</sup> Maximum heights and fire resistance:

Calculated based on a limiting deflection of L/500 at 200 Pascals (0.2kN/m<sup>2</sup>) relate to the fire resistance of system in accordance with BS 476: Part 22: 1987 only.

For greater maximum heights, contact Knauf Technical Services.

<sup>2</sup> Acoustic sound reduction (dB Rw)

Systems tested in accordance with BS EN ISO 10140-1:2010+A2:2014

	Maximum height (mm) <sup>1</sup>	Acoustic sound reduction (dB Rw) <sup>2</sup>	Fire resistance period
Overall width (excluding finishes)	Stud centres at 600mm	BS EN ISO 1040-2:2010	BS 476: Part 22 <sup>1</sup>
97	3000	48	60
97	3000	48	30
122	3600	55	120
122	3600	55	120
122	3600	55	120

# An introduction to AQUAPANEL® Cement Board Floor Tile Underlay

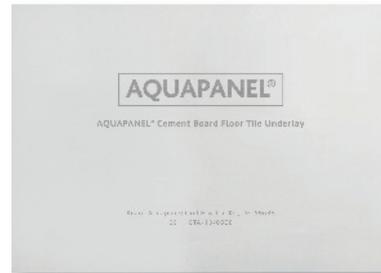
## The ideal substrate for tiles on a wooden subfloor

AQUAPANEL® Cement Board Floor Tile Underlay



### Benefits

- Thickness of only 6mm allowing for increased room height
- Can be installed over existing wooden subfloors
- Will not deteriorate in water
- Resistant to mould and mildew
- Easy to score and snap
- No pre-drilling required
- Only 9 screws per board necessary



### Your big helper in floor renovation projects

Classy kitchen floors with large-size natural stone tiles or comprehensive bathroom refurbishments can also be done on old wooden subfloors. Knauf AQUAPANEL® Cement Board Floor Tile Underlay is a light, highly stable dry floor panel, perfectly suited for ceramic, mosaic or natural stone. As part of the Knauf AQUAPANEL® Cement Board range, it is resistant to water or mildew and thus an ideal solution for wet and humid areas. With a thickness of only 6mm, it makes low floor heights possible as well.

## Solid substrate for your new floor

Set-up for floor tiling in a system overview



### Application table – timber or steel joists

Minimum subfloor thickness				
Joist centres	400 mm	600 mm	800 mm	
OSB 3 subfloor thickness acc. to EN 300	18 mm	18 mm	22 mm	
Chipboard cat. P5 subfloor thickness acc. to EN 312	19 mm	22 mm	–	

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.

### Specifications of Knauf AQUAPANEL® Cement Board Floor Tile Underlay

Length (mm)	1200
Width (mm)	900
Thickness (mm)	6.0
Weight per unit area (kg/m <sup>2</sup> )	approx. 8.5
Dry density (kg/m <sup>3</sup> )	approx. 1250
Building material class according to EN 13501	A1 non-combustible

## One system that works perfectly

From board to fitting accessories

With Knauf AQUAPANEL® Cement Board Floor Tile Underlay you have a complete system solution for your tiling project. You benefit from one-stop shopping and an ensured compatibility of all components and accessories.

When working with wooden subfloors we recommend our system screws for fixing boards on timber, as well as our Knauf AQUAPANEL® Tape (100mm) to effectively reinforce all floor joints.



### Knauf AQUAPANEL® Cement Board Floor Tile Underlay

- Aggregated Portland cement board
- Coated glass fibre mesh embedded in back and front surfaces
- Square cut ends with reinforced and smoothly finished edges (EasyEdge™)

### Knauf AQUAPANEL® Maxi Screw SN 25

- Specially suited for fixing boards onto wooden subfloors
- Special corrosion-proof coating

### Knauf AQUAPANEL® Tape (100mm)

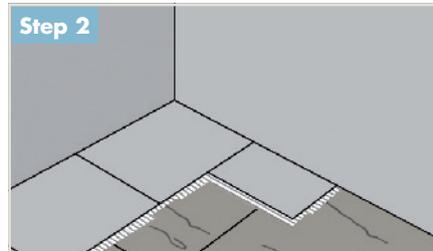
- Glass fabric joint tape with alkaline-resistant coating
- Used to reinforce joints in floors and walls in interior areas
- Coverage of approx. 2.1 m<sup>2</sup>
- Width: 100 mm, Length: 20m

## Floor installation

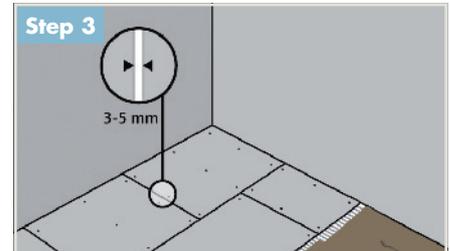
Six easy steps to installation



Apply a complete bed of flexible tile adhesive (class C2/S1 acc. EN 12004 /12002) to the subfloor, in accordance with manufacturer's guidelines. Wooden subfloor must be primed before applying Knauf AQUAPANEL® Cement Board Floor Tile Underlay.



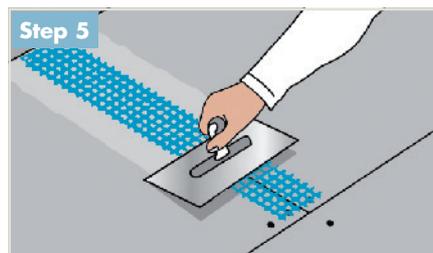
Lay Knauf AQUAPANEL® Cement Board Floor Tile Underlay, starting in the corner farthest from the door. Joints between boards and the subfloor should be staggered (minimum 200mm). No two joints should coincide.



Leave a gap of 3–5mm between each board and screw Knauf AQUAPANEL® Cement Board Floor Tile Underlay to the subfloor using Knauf AQUAPANEL® Maxi Screws SN 25.



Nine screws per board evenly distributed with a minimum distance from the board edge of 15mm.



Fill all the joints with flexible tile adhesive (class C2/S1 acc. EN 12004/12002), then embed Knauf AQUAPANEL® Tape (100mm). Allow for the adhesive in the joints to dry.



Ready to lay tiles: apply a complete bed of flexible tile adhesive (class C2/S1 acc. EN 12004/12002), in accordance with manufacturer's guidelines.

## Project data

**Project:** The Wave, Coventry

**Project outline:** UK's newest indoor waterpark, consisting of three floors filled with exciting state-of-the-art attractions.

**Value:** £25m

**Architect:** Faulkner Browns

**Main Contractor:** Buckingham Group

**Subcontractor:** Miles Industries

**Products:** Knauf AQUAPANEL® Cement Board Indoor, Knauf AQUAPANEL® Joint Adhesive (PU) and Knauf AQUAPANEL® Maxi Screws (SN)

**Summary:** Buckingham Group has specified Knauf AQUAPANEL® Cement Board Indoor on the lively, fun interior of a new £25m indoor waterpark in Coventry.





## The Wave, Coventry

### Case Study March 2020

**Buckingham Group has specified Knauf AQUAPANEL® Cement Board Indoor on the lively, fun interior of The Wave, a new £25m indoor waterpark in Coventry.**

Knauf AQUAPANEL® Cement Board Indoor is a weight-optimised, flexible cement board which is highly resistant to water and mould, and ideal for challenging wet and humid interior conditions. Installed on the waterpark walls, along with Knauf AQUAPANEL® Joint Adhesive and Knauf AQUAPANEL® Maxi Screws, the system solution provides a secure moisture barrier and robust substrate for tiling.

Knauf offers fully tested and certified interior and exterior systems which offer a single source of supply and complete peace of mind for clients, specifiers and contractors. The systems have been developed as complete drywall constructions in accordance with recognised standards and ensure complete system performance when installed according to Knauf guidelines and these standards.

Beyond the impact and water-resistant characteristics, a key reason for specifying Knauf AQUAPANEL® in this project is its flexibility. The boards are malleable and can be curved to a radius of 1 metre, which enabled the flowing curves required in the interior design of the waterpark.

Furthermore, it is quick and easy to install, and it can be cut by scoring with a knife and then simply snapping, as with plasterboard.

As The Wave is a main attraction for kids, creating a fun and captivating space was essential whilst ensuring durability of the design.

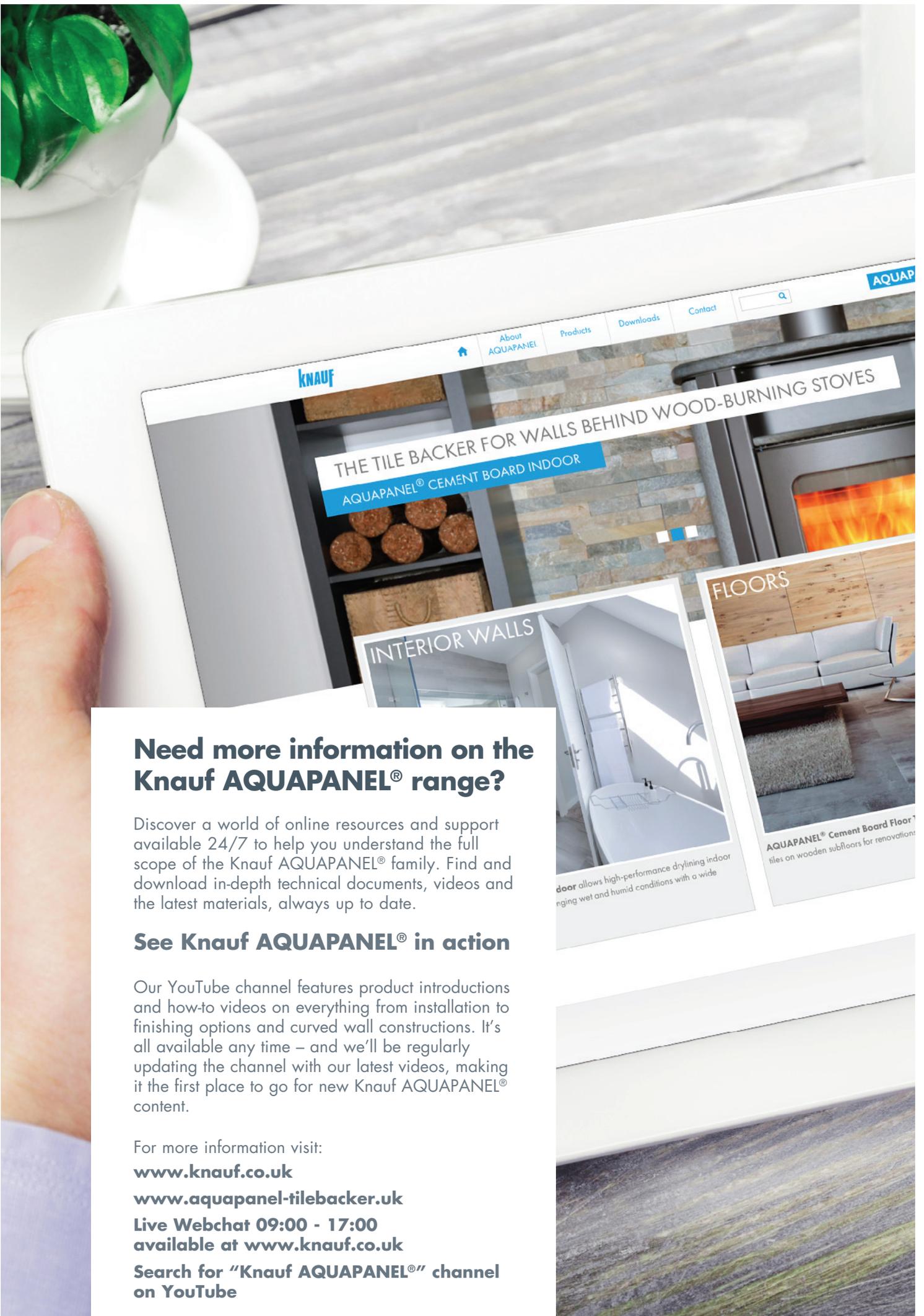
Mark Lee, Director of Miles Industries, said **“This project presented some technical challenges, particularly regarding the interface with steelwork and other waterproofing details. It was apparent that a traditional interior board system would not work in all areas. We were asked to look at putting forward a system that would provide a suitable substrate for the tiling finish.**

**We looked at Knauf AQUAPANEL® as a solution to perform in the pool environment and provide a process enabling us to complete areas within the very tight timescale.**

**In some cases, we were installing the products on curved surfaces 3 lifts high. Again, the time saved in installing in these areas proved very useful.”**

The Wave, Coventry is the UK’s newest indoor waterpark, consisting of three floors filled with exciting state-of-the-art attractions. The first floor is The Wave itself, including six exhilarating slides, a wave pool, the lazy river and a toddler splash zone.

The second and third floors, Lifestyles area and Mana Spa respectively, are more orientated for adult’s leisure time, including a health & fitness centre, a 25m pool and a spa with an aromatic room, herbal steam room and a sauna.



## Need more information on the Knauf AQUAPANEL® range?

Discover a world of online resources and support available 24/7 to help you understand the full scope of the Knauf AQUAPANEL® family. Find and download in-depth technical documents, videos and the latest materials, always up to date.

### See Knauf AQUAPANEL® in action

Our YouTube channel features product introductions and how-to videos on everything from installation to finishing options and curved wall constructions. It's all available any time – and we'll be regularly updating the channel with our latest videos, making it the first place to go for new Knauf AQUAPANEL® content.

For more information visit:

[www.knauf.co.uk](http://www.knauf.co.uk)

[www.aquapanel-tilebacker.uk](http://www.aquapanel-tilebacker.uk)

**Live Webchat 09:00 - 17:00**  
available at [www.knauf.co.uk](http://www.knauf.co.uk)

**Search for "Knauf AQUAPANEL®" channel**  
on YouTube

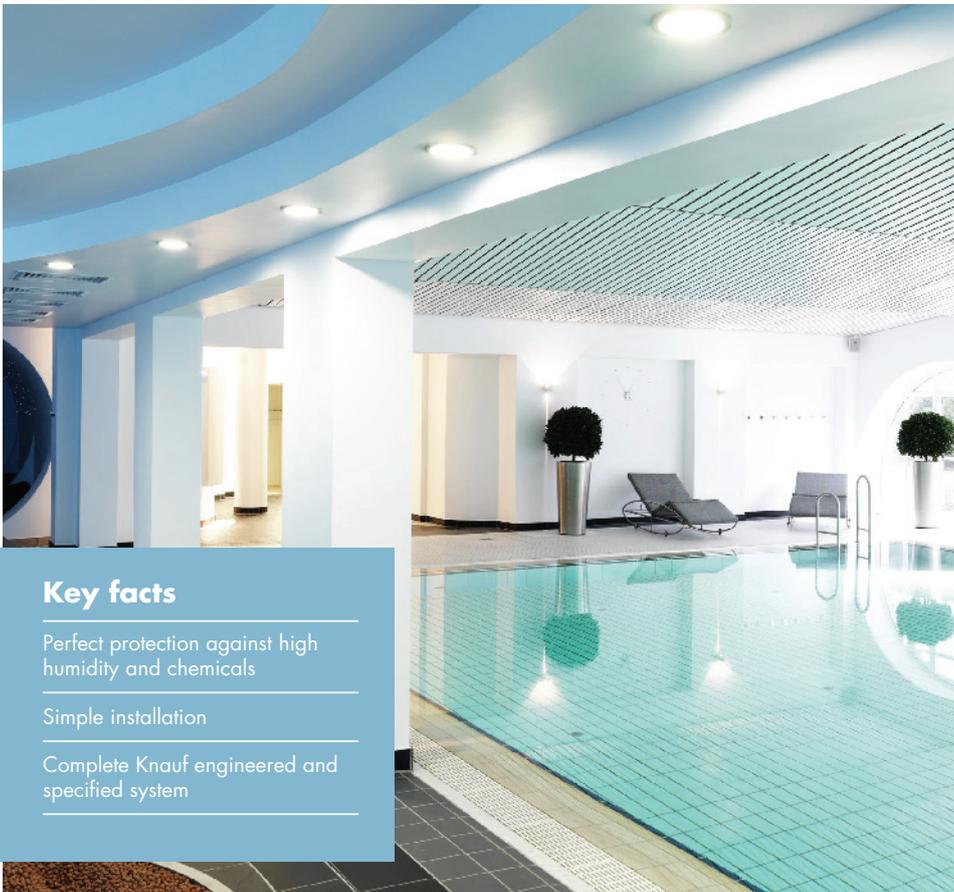
## Did you know...

We also offer an AQUAPANEL® Interior Ceiling System for challenging internal environments.



### Knauf AQUAPANEL® Interior Ceiling System

For wet indoor areas



#### Key facts

Perfect protection against high humidity and chemicals

Simple installation

Complete Knauf engineered and specified system

**AQUAPANEL®**

*Build for the world we live in*

Download the brochure on our website,  
[www.knauf.co.uk/our-services/resources/brochures](http://www.knauf.co.uk/our-services/resources/brochures)  
Alternatively order a printed copy from our literature hotline.

**The Learning Zones at Immingham and Sittingbourne are CITB approved training facilities and offer various courses for the construction industry.**

**We believe in future-proofing and protecting the workforce.**

**We build for the world we live in.**

We provide the best possible training on the large variety of systems and products that we supply, and make our courses widely available to those who request it. Whether the trainees are already skilled tradespeople, wishing to add to their existing knowledge, or people with no previous experience, there is a course in our range to benefit all.

We are happy to advise on the suitability of different courses and the content can be adapted to suit the requirements of the delegates.

All work carried out on the Knauf courses will be in a simulated site environment, and to industry standards, using British Standard and European Codes of Practice for accuracy and finish.

Contact us to find out more about the latest courses available.

**Telephone:** 01795 424499

**Email:** [training@knauf.co.uk](mailto:training@knauf.co.uk)

**Website:** [www.knauf.co.uk](http://www.knauf.co.uk)

## Courses available

---

Drylining – Direct bonding and metal lining systems

---

Fire protection – Encasement systems

---

General overview of interior products and systems

---

Metal stud partitions, shaft wall, wall linings

---

Metal suspended ceiling systems

---

Flooring – Brio and GIFA systems

---

Façades – Steel framing systems

---

Taping and jointing

---

Renders and external wall insulation (EWI)

---

Passive fire protection

---

Demountable ceiling systems

---

Drywall for site managers / Quality Control

---

Airless spray finishing

---

# Knauf Clerkenwell Showroom

Clerkenwell is a hub for design innovation and progressive architecture. It is the largest concentration of practices, showrooms and support services in the UK. Knauf is actively moving into the concept design phase of the project process.

Imagine – a bespoke same day service to the community where your perception is challenged and you can truly discover the possibilities of Knauf products and systems.

Knauf Clerkenwell is a destination for inspiration, learning and collaborative working with the Architect & Design community. The opportunity to talk through a project or design, and being provided a solution even before plans are drawn up.

Our products are used in all parts of the showroom and meeting spaces – from the flooring, to ceilings, wall linings and partitions.

Come and discover the possibilities of Knauf products and systems.

Visit us to:

- Take a look at the stunning installations to influence your project designs
- Speak to our Project Specification Managers who can help with design and technical advice
- Book a meeting room (available for our existing architect partners only)

For more details, please visit [www.knauf-clerkenwell.co.uk](http://www.knauf-clerkenwell.co.uk)



## Knauf Showroom

**Location:** 20 Baltic St E,  
London EC1Y 0UL

**Opening times:** Monday – Friday  
9.30am – 5.30pm

# Here at Knauf, we build for the world we live in

**For nearly ninety years, Knauf has remained relentless, responsible and forward-looking in its pursuit of excellence.**

**We have grown our reputation through making sure we focus on the environments in which our products are employed** – working together to develop the solutions our customers seek; challenging preconceptions of what is possible and always open to new ideas.

**We recognise the importance of the buildings in which we all live, work and relax.** We spend 90% of our lives inside buildings, so it is of the utmost importance that the homes we live in, the hospitals where we care for our sick, the schools in which we educate our children and the offices in which business operates are world class, safe, comfortable, sustainable and enjoyable.

The extensive portfolio of products and systems from Knauf UK & Ireland is developed to support that vision.

As a business, **we look to the future;** building on the knowledge we have acquired with a planned programme of research and development to make sure we continue to keep ahead of current thinking. Experimenting, testing new solutions and working ever more closely with our partners at every stage of a building project: the designers, distributors, contractors and users to make sure the developments we work on are genuinely innovative, relevant and progressive.

Looking to the future also means that our business must be sustainable. **We are always conscious of the wider**

**consequences of our actions, both today and tomorrow.** In terms of our operation we work hard to minimise our impact on the environment and are proud of our recycling, waste reduction and energy efficiency initiatives.

Furthermore, **we recognise that our business is only successful if the people who work within it are supported, encouraged and inspired.** Our employee development programmes ensure that every individual is offered the opportunity to learn and progress both professionally and personally. The result is an exceptional team.

Technical expertise is the foundation of our business, but this has to operate hand-in-hand with a secure focus on our customers. **We work hard to ensure that our support, service and customer relations functions are responsive, accommodating and resourceful.** We proactively seek feedback at every opportunity, ensuring our customers have a fast and easy route to pass on comments and suggestions which are then used to inform further development.

There is always more to do. Every business must continually improve to keep ahead. We are constantly evolving to meet new challenges and capitalise on new opportunities while never losing sight of our ultimate goal: to **Build for the world we live in. Now, tomorrow and for the future.**





**Education**



**Healthcare**



**Residential**



**Commercial**



## AQUAPANEL®

Aquapanel is a registered trade mark of Knauf UK GmbH



When you have finished with  
this document please recycle it



This document is printed  
on 80% recycled paper

### Customer Service

UK Tel: 0800 521 050  
Eire Tel: 01 4620739  
Email: [cservice@knauf.co.uk](mailto:cservice@knauf.co.uk)

Knauf  
Kemsley Fields Business Park  
Sittingbourne  
Kent ME9 8SR

### Technical Service

Live Webchat 09:00–17:00  
Email: [technical@knauf.co.uk](mailto:technical@knauf.co.uk)

Knauf  
87 Broomhill Road  
Tallaght  
Dublin 24

### Literature

UK Tel: 03700 613 700  
Eire Tel: +44 3700 613 700

### Website

[www.knauf.co.uk](http://www.knauf.co.uk)  
[www.knauf.ie](http://www.knauf.ie)



KnaufUK



@Knauf\_UK



@Knauf\_UK



Knauf UK & Ireland

# KNAUF