

Whats inside the guide?

- Product Overview
- Tools & Materials
- Available Sizes
- Step-by-Step Installation
- Key Features & Benefits
- Applications
- Pro Tips
- Contact Information



Product Overview:

INSUTILE® Shower Underlay Board is a pre-sloped extruded polystyrene (XPS) shower tray former with a built-in drainage fall. Designed for constructing level-access (barrier-free) wet rooms and walk-in showers, the Shower Underlay Board provides a ready-made gradient that channels water directly to the drain point — eliminating the need for traditional sand-and-cement screeding to create a fall.

When used alongside **INSUTILE®** Build Boards on the surrounding walls and floor, the Shower Underlay Board creates an exceptionally stable, insulated, and fully waterproof substrate to tile upon — ensuring a long-lasting, leak-free wet room installation.

Board Construction:

- **XPS Core:** Extruded polystyrene — closed-cell, rigid, and inherently waterproof. Provides superior moisture resistance, thermal insulation, and compressive strength to support tiled finishes and foot traffic.
- **Pre-Formed Gradient:** Factory-moulded slope directs water toward a central or offset drain point. No on-site screeding required — the fall is built in and guaranteed consistent.
- **Integrated Drain Recess:** Pre-cut recess accommodates standard point drains or linear drain channels. Ensures a flush, watertight connection between the board and the drainage hardware.
- **Fiberglass Mesh:** Alkali-resistant reinforcement embedded on the top face for enhanced durability and crack resistance under tiled finishes.
- **Cementitious Mortar:** Polymer-modified coating on the top face for superior tile bond. Works with all standard cement-based, dispersion, and reactive adhesives — no priming needed.



Tools and Materials:

Essential Tools:

- Tape measure
- Spirit level (1200mm recommended)
- Utility knife or scoring tool (for score-and-snap cutting)
- Straight edge / T-square
- 10mm notched trowel (for adhesive application)
- Drill/driver (for fixing washers)
- Hole saw or jigsaw
- Pencil or marker
- Safety equipment: gloves, goggles, dust mask
- Flexible measuring tape for curves
- Temporary clamps

Materials:

- Insutile® Shower Underlay Board panels (in required size and configuration)
- Insutile® Sealant-Adhesive
- Insutile® Fixing Washers
- Insutile® Build Board panels
- Joint Reinforcing Tape (alkali-resistant mesh)
- Waterproofing Membrane (for wet areas)
- Insutile® Waterproof Corner Seals (for internal corners in wet areas)
- Flexible tile adhesive (thin-set mortar)
- Grout and sealant for finishing



Available Sizes

INSUTILE® Dimensions			
Description	Size (mm)		
	Thickness	Width	Length
Insutile Small (1200mm)	4	600	1200
	6		
	10		
	12.5		
	20		
	30		
	40		
	50		
Insutile Large (2400mm)	60	600	2400
	10		
	12.5		
	20		
	30		
	40		
	50		
60			



Step by Step Installation

Follow these essential steps for a successful **INSUTILE®** Shower Underlay Board installation:

Step 1: Subfloor Preparation

The subfloor must be clean, dry, structurally sound, and level. Remove any existing floor coverings, adhesive residue, or debris. Check the subfloor is flat to within 3mm over a 2m span. For timber subfloors, ensure the joists and decking are rigid with no flex or bounce — reinforce if necessary. For concrete subfloors, fill any cracks, holes, or depressions with a suitable leveling compound.

PRO TIP: The Shower Underlay Board has a built-in fall — the subfloor itself must be level. If the subfloor slopes, the pre-formed gradient will not drain correctly. Take the time to level the subfloor accurately before proceeding.

Step 2: Drain Position & Pipework

Determine the drain position based on the Shower Underlay Board configuration (centre drain, offset, or linear). Ensure the waste pipe is routed to the correct position and is at the correct height to connect with the drain fitting. The drain outlet should sit flush with or slightly below the top of the subfloor to allow the Shower Underlay Board to sit flat.

PRO TIP: Test-fit the Shower Underlay Board and drain assembly before applying any adhesive. Confirm the waste pipe aligns perfectly with the board's drain recess and that the board sits flat on the subfloor without rocking.



Step 3: Installing the Drain

Install the drain body into the Shower Underlay Board's pre-cut recess. Apply a bead of **INSUTILE®** Sealant-Adhesive around the drain recess to create a watertight seal between the drain body and the XPS board. Connect the drain body to the waste pipe below. Ensure the drain flange sits flush with or slightly below the top surface of the board.

PRO TIP: Follow the drain manufacturer's instructions for fitting and sealing. The drain connection is the most critical waterproofing detail in the entire installation — take extra care to ensure a perfect seal.

Step 4: Fixing the Shower Underlay Board

Apply **INSUTILE®** Sealant-Adhesive to the subfloor using a 10mm notched trowel, ensuring full, even coverage — no voids or gaps beneath the board. Carefully lower the Shower Underlay Board into position over the drain. Press the board firmly and evenly into the adhesive. Check with a spirit level that the board is sitting correctly and the pre-formed gradient runs true to the drain.

Ensure full adhesive contact across the entire underside of the board. Any voids beneath the shower tray could cause the board to flex under foot traffic, leading to cracked tiles or grout.



Step 5: Surrounding Floor & Wall Boards

Install **INSUTILE®** Build Board panels on the surrounding floor area and walls, butting them tightly against the edges of the Shower Underlay Board. The surrounding floor boards should be level with the thinnest edge of the Shower Underlay Board to create a seamless, barrier-free transition. Tape and mud all board-to-board joints using Joint Reinforcing Tape and flexible tile adhesive.

PRO TIP: For a true level-access wet room, the surrounding floor must transition seamlessly to the shower tray edge. Select the correct Build Board thickness to achieve a flush junction.

Step 6: Waterproofing (Critical Step)

This is the most critical step in a wet room installation. Apply Waterproofing Membrane (liquid-applied tanking system) over the entire shower area — the Shower Underlay Board, all surrounding floor boards, and wall boards to a minimum height of 1800mm (or full height in shower zones). Apply the membrane in two even coats, allowing the first coat to dry before applying the second.

Ensure complete, unbroken membrane coverage across the entire wet room envelope — floor, walls, joints, corners, penetrations, and drain. Any gap or pinhole will compromise the waterproof integrity of the entire installation. This is a fully tanked system — there must be no path for water to reach the substrate.



Step 7: Tiling

Apply flexible tile adhesive (thin-set mortar) directly to the waterproofed surface using an appropriately-sized notched trowel. Install tiles using standard techniques, following the gradient of the pre-formed slope. The cementitious surface bonds reliably with all standard tile adhesives — no priming is required.

For shower floors, use smaller-format tiles or mosaic sheets that follow the gradient smoothly without lipping. Back-butter tiles for full adhesive coverage. Ensure tiles around the drain are cut precisely for a clean, watertight finish.

Step 8: Finishing

Grout all tile joints using a waterproof grout suitable for wet room applications. Apply silicone sealant to all internal corners, wall-to-floor junctions, around the drain, and any penetrations. Install the drain grate or cover. Allow the grout and sealant to cure fully (typically 24–48 hours) before exposing the installation to water. Test the drain flow by pouring water across the shower area and checking for smooth drainage with no pooling.



Key Features and Benefits

Waterproofing	Closed-cell XPS core absorbs virtually zero moisture – even when fully submerged. No swelling, no delamination, and no mould growth behind tiles.
Built-In Drainage Fall	Factory-moulded gradient eliminates the need for sand-and-cement screeding. Guarantees a consistent, accurate fall to the drain point every time.
Excellent Tile Adhesion	Factory-applied cementitious coating creates a rough, porous surface that grips adhesive firmly. Compatible with all standard adhesives – no priming needed.
Thermal Insulation	Thermal conductivity of just 0.034 W/mK. Reduces heat loss through the substrate and improves thermal comfort.



SHOWER UNDERLAY BOARD

Installation Guide

Dimensional Stability	XPS doesn't expand, warp, or shrink with temperature or humidity changes. Tiled surfaces stay flat and crack-free year-round.
Lightweight	Up to 85% lighter than cement backer boards. One person can carry and position full-size panels, cutting labour time and logistics costs.
Easy to Install & Cut	Score and snap with a utility knife — no power tools or dust. Fix to studs, masonry, or existing surfaces using adhesive and fixing washers.
Level-Access Design	Creates barrier-free, level-entry shower areas compliant with accessibility requirements. Ideal for wet rooms, mobility bathrooms, and age-in-place designs.
Fast Installation	No screeding, no drying time, no guesswork on gradient accuracy. The Shower Underlay Board is ready to waterproof and tile immediately after fixing.



Applications

INSUTILE® Shower Underlay Board is ideal for creating level-access, fully tanked shower and wet room installations:

- **Walk-In Showers** — Create barrier-free, level-entry walk-in showers in residential bathrooms. The pre-sloped board provides the drainage fall without the need for a raised shower tray.
- **Wet Rooms** — Build fully tanked wet rooms with seamless floor-to-wall waterproofing. The Shower Underlay Board forms the centrepiece of the wet room floor.
- **Accessible Bathrooms** — Design level-access bathrooms for wheelchair users, elderly residents, and mobility-impaired occupants. Compliant with accessibility standards for barrier-free shower entry.
- **Hotel & Hospitality** — Premium wet room installations for hotel bathrooms, resort suites, and serviced apartments. Delivers a high-end, contemporary finish with guaranteed waterproof performance.
- **Spa & Wellness Facilities** — Engineered for demanding commercial environments with high moisture levels, frequent use, and strict hygiene requirements.
- **Residential Renovation** — Convert existing bathrooms to modern wet rooms. The lightweight board adds minimal build-up compared to traditional screed, making it ideal for retrofit projects.



INSUTILE®

Lightweight Construction Boards

SHOWER UNDERLAY BOARD

Installation Guide

Contact and Support

For technical support, product enquiries, or to request a quote, contact the **INSUTILE®** team:

INSUTILE®

Website: www.insutile.com

Email: info@insutech-eg.com

A product by



INSUTECH

For the latest technical data sheets, safety information, and installation videos, visit our website.



(+2) 02 23228200



www.insutile.com