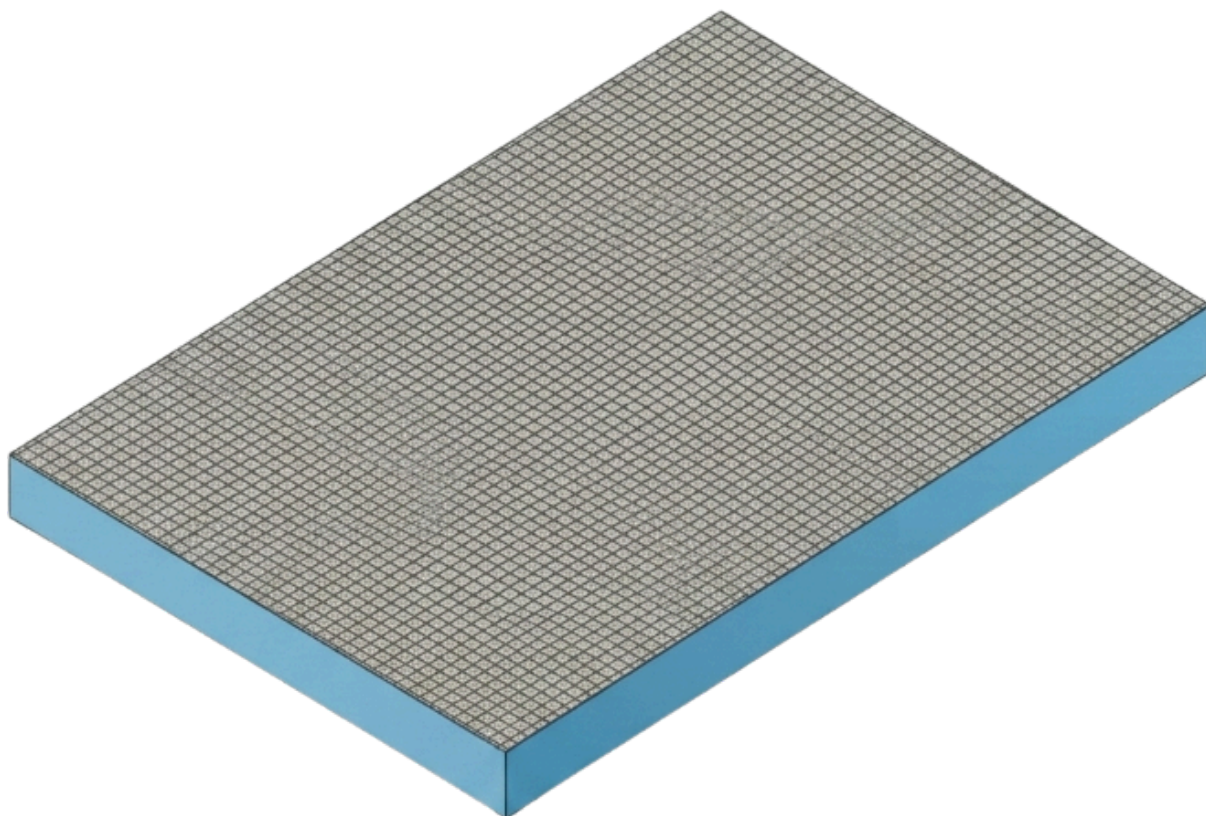


A01 · 0,0

A01 · X+



• LIGHTWEIGHT CONSTRUCTION BOARDS · INSTALLATION MANUAL · VOL. 01

BUILD BOARD.

• FIG. 01

§ 00

Contents

Eight sections — everything you need to specify, source, cut, fix, waterproof and finish an INSUTILE® Build Board installation.

03	Product Overview	BOARD CONSTRUCTION	p.03
04	Accessories & Supply Policy	WHAT WE MANUFACTURE	p.04
05	Tools & Materials	SITE CHECKLIST	p.05
06	Available Sizes	DIMENSIONS MATRIX	p.06
07	Step-by-Step Installation	7 STEPS · DIAGRAMS	p.07– 08
09	Key Features & Benefits	9 CHARACTERISTICS	p.09
10	Applications	WHERE TO USE	p.10
11	Contact & Support	REACH THE TEAM	p.11

SYMBOL LEGEND

Pro tip · required



Checklist item



Dry-fit / layout

↳ FIG.
NTechnical
figure

§ 01 · OVERVIEW

Efficient backer boards.

INSUTILE® Build Board is a high-performance extruded polystyrene tile backer, engineered for wet and dry environments. A rigid XPS core is coated on both sides with a polymer-modified cementitious mortar, outperforming traditional cement boards in almost every metric.

The reinforced cementitious surface bonds reliably with all standard tile adhesives — making Build Board the ideal substrate for ceramic, porcelain and natural-stone installations in residential kitchens, commercial hotel bathrooms, spa facilities, and everywhere in between.

CORE DENSITY

33 kg/m³

COMPRESSION

≤ **300** kPa

λ · THERMAL

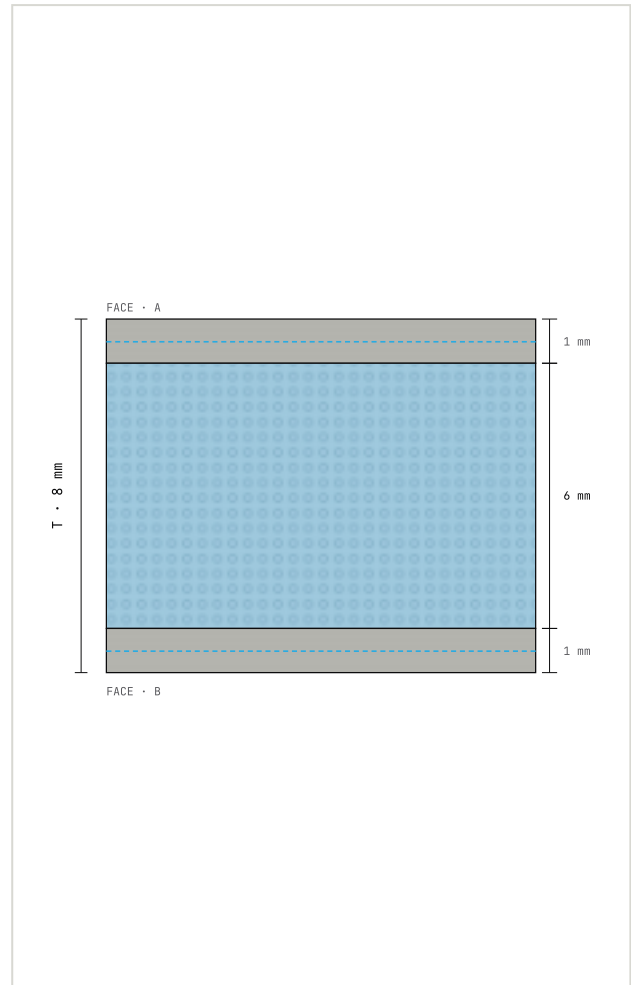
≤ **0.036** W/mK

WATER ABSORPTION

≈ **0** % vol

NOTE · Values are indicative — custom specs available on request.

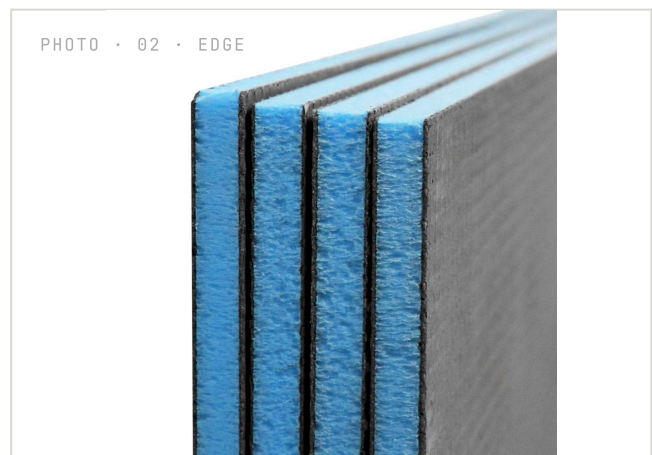
FIG. 02 · SIDE VIEW · SECTION B-B · SCALE 25:1



SIDE SECTION AT 25:1 · INDICATIVE CONSTRUCTION



● IMG



● IMG

§ 02 · SCOPE OF SUPPLY

Our Range of Products.

INSUTILE® manufactures the tile backer boards. Every accessory used in a typical installation is contractor-sourced and are standard tile installation products. On request we can custom-manufacture accessories to a clients specification, subject to an MOQ that varies by product.

- INSUTILE-MANUFACTURED

SKU · BOARDS

Boards supplied from our factory.

B01 Build Board
XPS tile backer · 4–60 mm

B02 Angle Board
Pre-formed angle · wet-area corners

B03 Flex Board
Curved & shaped applications

B04 Shower Underlay Board
Sloped tray substrates

Direct from INSUTILE® – no MOQ on standard sizes.

- CONTRACTOR-SOURCED

NOT INSUTILE-BRANDED

Accessories — your preferred brand.

A01 Adhesive
Optional — extra hold

A02 Fixing screws
Primary fix

A03 Pressure washers
Primary fix

A04 Corner seals
Wet-area corners

A05 Joint tape
Alkali-resistant mesh

A06 Waterproofing membrane
Two-coat, wet areas

A07 Tile adhesive
Flexible thin-set

A08 Grout & silicone
Finishing

Source from your preferred brand.

- CUSTOM

MOQ

VARIES BY
PRODUCT

CUSTOM ACCESSORIES ON REQUEST

INSUTILE® can manufacture accessories — adhesives, screws, washers, corner seals and similar — to your specification, subject to a minimum order quantity that varies by product. Confirm MOQ and lead times before specifying INSUTILE-branded accessories.

FIXATION METHOD

Mechanical fix is the standard.

Screws + pressure washers — the only required method. Adhesive is optional reinforcement.

§ 03 · CHECKLIST

Tools & Materials.

Check the site has everything below before you start.

Essential tools

09 ITEMS

<input type="checkbox"/>	Tape measure 5 m minimum · metric scale	T01
<input type="checkbox"/>	Spirit level 1200 mm recommended	T02
<input type="checkbox"/>	Utility knife / scoring tool For score-and-snap cutting	T03
<input type="checkbox"/>	Straight edge / T-square ≥ 1000 mm rule	T04
<input type="checkbox"/>	Drill / driver Primary fix · screws & washers	T05
<input type="checkbox"/>	10 mm notched trowel Only if adhesive is used	T06
<input type="checkbox"/>	Pencil / marker Soft pencil preferred	T07
<input type="checkbox"/>	PPE Gloves · goggles · dust mask	T08
<input type="checkbox"/>	Spring clamps / bracing Hold boards flat while mechanically fixing · when necessary	T09

Materials

09 ITEMS

<input type="checkbox"/>	INSUTILE® Build Board Panels in required thickness · see §04	M01
<input type="checkbox"/>	Fixing screws Primary fix · contractor brand	M02
<input type="checkbox"/>	Pressure washers Primary fix · 300 mm centres	M03
<input type="checkbox"/>	Construction / sealant adhesive Optional · extra reinforcement only	M04
<input type="checkbox"/>	Joint reinforcing tape Alkali-resistant mesh	M05
<input type="checkbox"/>	Waterproofing membrane Wet areas · 2 coats	M06
<input type="checkbox"/>	Waterproof corner seals Internal corners · wet areas	M07
<input type="checkbox"/>	Flexible tile adhesive Thin-set mortar	M08
<input type="checkbox"/>	Grout & silicone sealant For finishing · colour-matched	M09

SUPPLY NOTE · SEE §02

Items marked ● are INSUTILE-manufactured.

§ 04 · DIMENSIONS MATRIX

Available sizes.

One standard width (600 mm), two standard lengths (1200 / 2400 mm), up to nine thicknesses from 4 to 60 mm. All dimensions in millimetres.

FIG. 03 · INSUTILE SMALL

● 600 × 1200

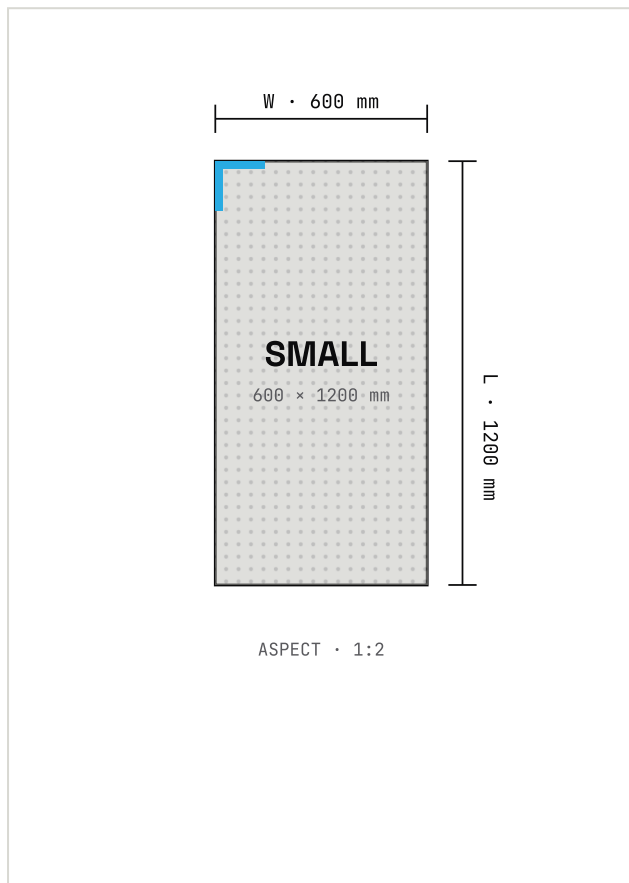
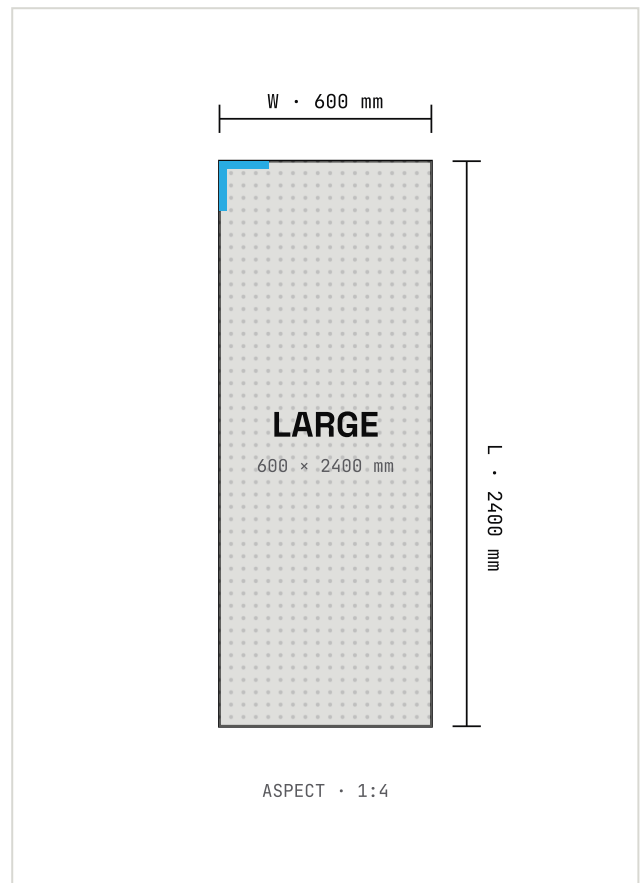


FIG. 04 · INSUTILE LARGE

● 600 × 2400



AVAILABLE THICKNESSES · MM

4	6	10
12.5	20	30
40	50	60

09 options

min 4 · max 60

AVAILABLE THICKNESSES · MM

10	12.5	20
30	40	50
60	—	—

07 options

min 10 · max 60

● CUSTOM

Special orders.

CUSTOM DIMENSIONS & THICKNESSES

Non-standard widths, lengths, and thicknesses outside the nine listed options can be manufactured to specification for special orders. Confirm feasibility, MOQ and lead time with the INSUTILE® team before specifying.

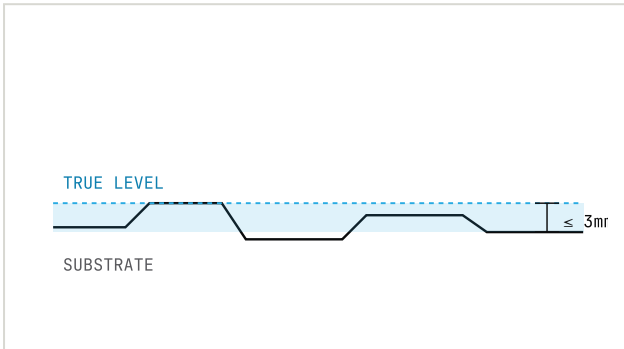
§ 05 · INSTALLATION

Seven steps.

PROGRESS · STEPS 1-4 OF 7



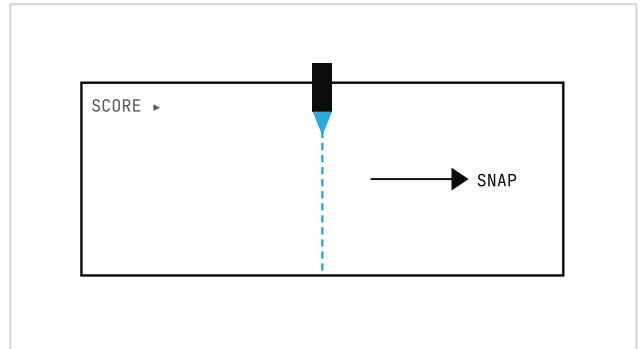
01 STEP 01 Substrate preparation



Clean, dry, stable, level. Floors: flat to 3 mm over a 2 m span. Walls: substrate plumb and secure.

Use a long spirit level to find highs and lows. Fill depressions with levelling compound first.

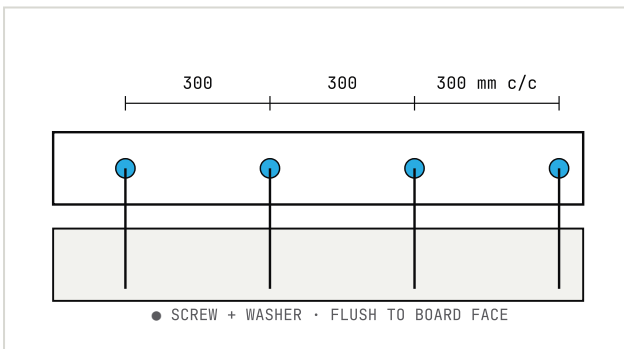
02 STEP 02 Cutting & fitting



Measure, mark, dry-fit. Score through the cementitious face with a utility knife, snap on the line. Fine-tooth saw for complex shapes.

Score one side only; snap; clean the edge with a rasp for a tight fit.

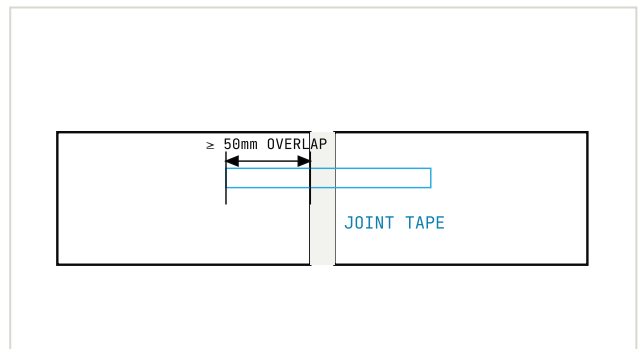
03 STEP 03 · PRIMARY FIX Mechanical fixation



Fix boards with screws and pressure washers at 300 mm centres across the field, 150 mm at edges and joints. Seat washers flush — don't over-drive. This is the only fixation method required.

Optional — where extra hold is needed (irregular masonry, high-impact areas), apply a 10 mm notched bed of construction / sealant adhesive before fixing. Adhesive supplements the screws; it doesn't replace them.

04 STEP 04 Joint treatment



Bed alkali-resistant tape into flexible adhesive over every joint. Embed fully, smooth flat.

Overlap mesh tape by ≥ 50 mm. Let the joint compound dry fully before waterproofing.

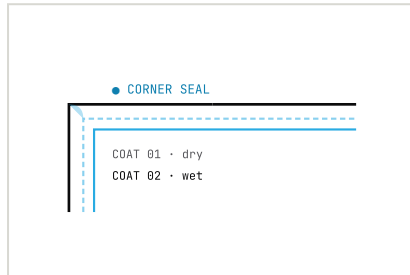
§ 05 · INSTALLATION · CTD.

Seal. Tile. Finish.

PROGRESS · STEPS 5-7 OF 7

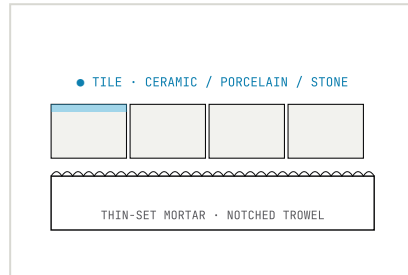


05 STEP 05 Waterproofing



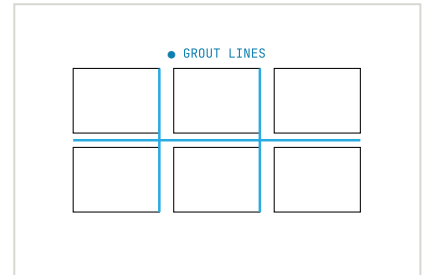
Wet areas only. Apply membrane in two coats over joints, corners, penetrations. Use corner seals in every internal corner. Fully tanked behind tile.

06 STEP 06 Tiling



Apply flexible thin-set directly to the board face — no priming needed. Standard techniques. Back-butter large-format tiles and stone.

07 STEP 07 Finishing



Grout all joints with a tile-appropriate grout. Wet areas: waterproof grout + silicone in corners, junctions, penetrations. Cure fully before water contact.

• NOTE

Recommended guide.

CONTRACTOR DISCRETION

The steps above are an **indicative installation guide**. INSUTILE® Build Board can be installed using any standard method the contractor prefers for tile backer boards — screw-and-washer mechanical fix is our recommendation, but alternative practices that meet the substrate, waterproofing and load requirements are acceptable. Always follow local building codes and the adhesive / membrane manufacturer's instructions.

INDICATIVE CURE TIMELINE

Δt · HOURS

0h

24h · adhesive cure (if used)

48h · membrane cure

72h · grout & silicone cure

• READY FOR WATER

§ 06 · PERFORMANCE CHARACTERISTICS

Reasons it outperforms.

Build Board outperforms cement backer boards on weight, water, thermal, and handling — measured, not marketed.

F01



Waterproofing

Closed-cell XPS core absorbs virtually zero moisture — even fully submerged. No swelling, delamination, or mould growth behind tiles.

≈ 0 %

WATER ABSORPTION

F02



High mechanical strength

Compressive strength up to 300 kPa. Handles heavy tile formats, stone cladding and high-traffic floor loads without flex or crack.

≤ 300 kPa

COMPRESSIVE

F03



Excellent tile adhesion

Factory-applied cementitious coat grips adhesive firmly. Compatible with all standard cement, dispersion and reactive adhesives — no priming.

NO PRIMER

REQUIRED

F04



Thermal insulation

Thermal conductivity ≤ 0.036 W/mK. Reduces heat loss through the substrate and improves thermal comfort.

 $\lambda \leq 0.036$

W/MK

F05



Dimensional stability

XPS doesn't expand, warp, or shrink with temperature or humidity. Tiled surfaces stay flat and crack-free year-round.

ZERO CREEP

TEMP/HUMIDITY

F06



Lightweight

Up to 85 % lighter than cement backer boards. One person can carry and position full-size panels — cutting labour and logistics cost.

-85 %

VS CEMENT BOARD

F07



Easy to install & cut

Score and snap with a utility knife — no power tools, no dust. Fix to studs, masonry or existing surfaces with screws and pressure washers; adhesive optional for extra hold.

NO DUST

SCORE & SNAP

F08



Underfloor heating

Insulating core directs heat upward. Compatible with electric mat and water-pipe systems — improves response and efficiency.

+ EFFICIENCY

ELECTRIC

F09



Perfect for renovation

Install over old tiles, plaster or uneven substrates. Thin, lightweight profile adds minimal build-up — ideal for refurbishments.

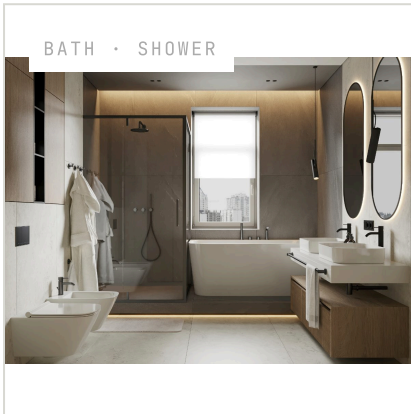
OVERLAY

NO STRIP-OUT

§ 07 · WHERE TO USE

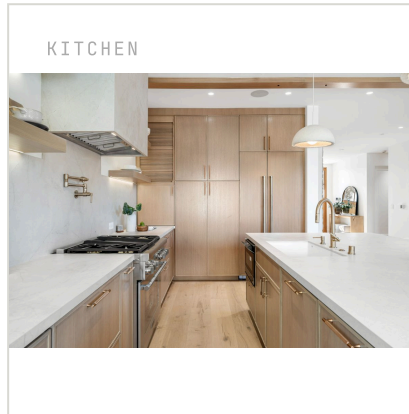
Applications.

From a single residential bathroom to an entire hotel spa floor — INSUTILE® Build Board is specified wherever tile meets moisture, heat, or heavy use.



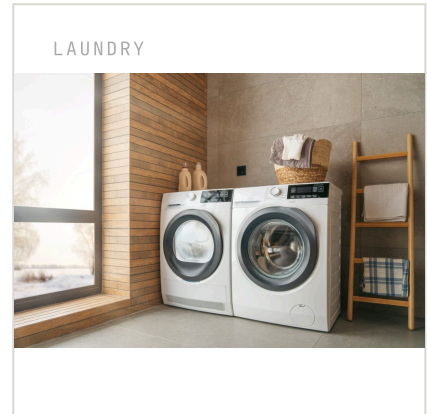
Bathrooms & showers

Superior moisture resistance makes Build Board the standard for bathroom walls, shower surrounds, and steam rooms.



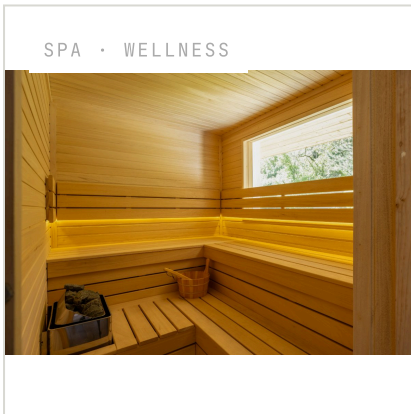
Kitchens

Reliable substrate for kitchen backsplashes and walls — residential and commercial alike.



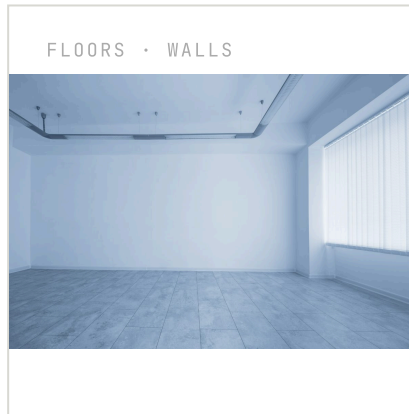
Laundry rooms

Withstands long-term humidity and moisture from washers and dryers. No swelling, no mould.



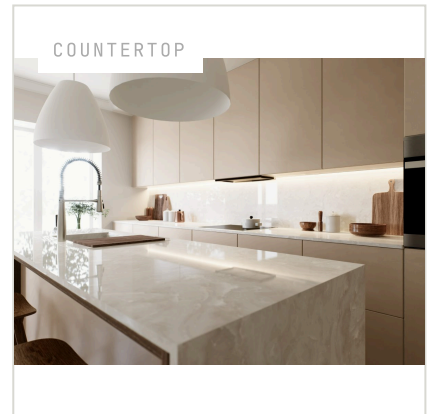
Spa & wellness centres

Engineered for demanding spa environments — high moisture, temperature, humidity fluctuations.



Floors & walls

Versatile for use on both vertical walls and horizontal floor substrates across all environments.



Countertops

Lightweight, dimensionally-stable substrate for kitchen and bathroom countertop tile installations.



• § 09 · CONTACT & SUPPORT

Leaders in Insulation.

For technical support, product enquiries, specification assistance, or to request a quote — reach the INSUTILE® team directly.

WEBSITE

www.insutile.com

Latest datasheets · images

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Technical + commercial

PHONE

(+2) 02 23228200

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