



# wedi® Building Panels

## Technical Data Sheet



- For tiled shower and tub wall surrounds
- For steam rooms and showers, use Vapor 85.
- For tiled floors over wood and concrete subfloors - creates a thermal break and offers insulation value.
- For tiled countertop and kitchen backsplash installations.
- For constructing tiled seats and benches in wet areas.

### Product advantages and use

The wedi® Building Panel is a high-performance tile backer board that works on its own or within a shower system. wedi® Building Panels have a blue core made from extruded polystyrene, high-load rigid foam. The foam core is formed by a closed cell matrix making the wedi® Building Panel internally waterproof, mold-proof, and insulating. Both sides of the wedi® Building Panel are covered with a specialized fiberglass mesh fully embedded in a cement resin coating that transfers fully through to the foam core. The specific combination of mesh and coating adds high tile backing strength capability and controls moisture absorption and spread on the surface, which is essential to maintain effective topical seals over assembly seams. The mesh reinforces the wedi Building Panel and also provides a waffle pattern structure that thin-set mortar can lock into. At the same time, the mesh and coating provide a flat and even surface ideal for tile. The high quality of raw materials, how they interact, and the manufacturing process we have developed and automated over the last 40 years produces a premium tile backer board like no other. The wedi® Building Panel installation steps and techniques are shown in great detail within our shower system installation manuals in this handbook. In addition, you can find more information about unique installations with wedi® Building Panels on [www.wedicorp.com](http://www.wedicorp.com). We cover applications such as tub surrounds, general floors, floors with heating systems, countertops, and kitchen backsplashes, or building custom seats and benches on our website.



When comparing wedi Building Panel to traditional cement board plus liquid waterproofing, the value is clear:

- wedi offers single-product installation versus multiple products and steps
- wedi offers one comprehensive warranty versus multiple manufacturer and labor warranties
- wedi dramatically reduces installation and labor time, curing times, and overall physical effort and mess
- wedi offers a waterproof and water resistant all-in-one tile backerboard

When installing wedi® Building Panels in a wet area, it often costs less, but adds substantially more value to a project.

## Technical Properties ■ wedi Systems

Properties & Test Methods Value (wedi Building Panel and Fundo Shower System Components)		
Standard Specification for Rigid, Cellular Polystyrene	ASTM C 578 *	Compliant
Thermal Conductivity *	75°F (25°C) - ASTM C518	0.23 Bbtu in/hr F
R-Value *	75°F (25°) - ASTM C518	4.3hr ft. 2 F/Btu/in (R Value for 1" wedi = 4.3)
Tensile Strength ***	ASTM D1623-09	76 psi
Shear Strength *	Under conditions required in ANSI A118.10-1999	7 day Shear Strength Dry: 159 psi 7 day Shear Strength Wet: 112 psi 4 week Shear Strength Dry: 216 psi 12 week Shear Strength Dry: 217 psi 100 day Shear Strength Wet: 201 psi
Waterproof*	ASTM D4068 / ANSI A118.10-1999	Passed
Waterproofness of Assembly *	ASTM E331	Passed, wedi Fundo Kit assembly (complete system)
Robinson Floor Test *	ASTM C627	Heavy duty commercial use, passed *
Fastener Pull Through *	ASTM C473	Wet 131.8 lb./Dry 196.2 lb.
Temperature Limits *		-58 / +175° F
Freeze & Thaw *	ASTM C666 - 25 Cycles	No disintegration/change; Passed
Accelerated Aging *	AC 71 - 25 Cycles	No disintegration; Passed
Surface Burning Characteristics *	ASTM E84-16 (NFPA 255, ANSI / UL 723, UBC 8-1) Tested as required without tile on Building Panel surface	Flame Spread Index (FSI): 20 Smoke Developed Index (SDI) : 70 Classification Class A
Seam Strength*	ASTM D751-11 (requirement 8 lb/in width)	Passed, 36.4 lbs

\* wedi Building Panel tested

\* Consult wedi for proper subfloor, tile, setting materials choice to design heavy duty commercial use floor surfaces.

Weight for wedi Building Panels	Width	Length	Thickness	Weight
	48 in.	60 in.	1/4 in.	12 lb.
	48 in.	60 in.	1/2 in.	13 lb.

Approvals & Certificate				
Approvals and certificates applicable to entire Fundo Shower System incl. wedi Building Panel	City of New York, MEA 912-52-SM	Fundo Shower Systems & Building Panels: ICC PMG 1189 (for USA and Canada)	Meets all applicable ANSI/ISO Standards incl. ANSI 118.10 and IAPMO PS106	TCNA handbook recognized for wall, floor, countertop, more applications
	City of Los Angeles Approved. Please see ICC PMG report.	BBA (British Board of Agrément)	DIN EN ISO 9001	CE marked
	Diverse State Approvals			

Environmental Consideration
Contains no unbonded fire retardants like HBCD ( Hexabromocyclododecane) which has been banned in Canada and is a toxic substance of high concern with the US EPA.

## ICC-PMG 1189 Report ■ National Building Code Compliances

WEDI FUNDO SHOWER SYSTEM AND TILE BACKER BOARD UNDERLAYMENTS	
CSI	DIVISION: 22 00 00 – PLUMBING Section: 22 40 00 – Plumbing Fixtures (Shower System Kit)
Product certification system	The ICC-ES product certification system includes testing samples taken from the market or supplier's stock, or a combination of both, to verify compliance with applicable codes and standards. The system also involves factory inspections, and assessment and surveillance of the supplier's quality system.
Product	wedi Fundo Shower System and Tile Backer Board Underlayments
Listee	wedi Corporation ■ 1160 Pierson Drive, Batavia, IL 60510 www.wedicorp.com
Compliance with the following codes	2021, 2018, 2015, 2012 and 2009 International Plumbing Code® (IPC) 2021, 2018, 2015, 2012 and 2009 International Residential Code® (IRC) 2021, 2018, 2015, 2012 and 2009 International Building Code® (IBC) 2021, 2018, 2015, 2012 and 2009 National Standard Plumbing Code® (NSPC) 2021, 2018, 2015, 2012 and 2009 Uniform Plumbing Code® (UPC)* 2019, 2016 and 2013 California Plumbing Code (CPC)* 2020 and 2017 City of Los Angeles Plumbing Code 2015, 2010 and 2005 National Plumbing Code of Canada** * Uniform Plumbing Code is a copyrighted publication if the International Association of Plumbing and Mechanical Officials ** National Plumbing Code of Canada is a copyrighted publication of National Research Council Canada
Compliance with the following standards	ANSI A118.10-2020, Load Bearing, Bonded, Waterproof Membranes for Thin-Set Ceramic Tile and Dimension Stone Installations ASME A112.6.3-2019, Floor and Trench Drains ASTM E 96-2021, Standard Test Methods for Gravimetric Determination of Water Vapor Transmission of Materials ASTM E 331-00(R16), ASTM E331-00(2016) Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference ICC-ES EG 159, Evaluation Guideline for Composite Backer Board (Approved Dec 2004) ICC-ES AC 71, Acceptance Criteria for Foam Plastic Sheathing Panels Used as Water Resistive Barriers (Approved Feb 2003, Ed Revised Nov 2018) IAPMO PS 46-2012, Field Fabricated Tiling Kits IAPMO PS 106-2015e1, Tileable Shower Receptors and Shower Kits
Identification	Packaging label for each system shall include the manufacturer's name or trademark as well as the ICC-ES PMG certification mark
Installation	The wedi Fundo Shower Systems shall be installed in accordance with the manufacturer's published instructions and the applicable code(s). The wedi Fundo Shower system components shall be assembled and can be customized in the field When provided drains must comply with ASME A112.18.2/CSA B125.2 as applicable. The wedi pre-sloped, ready-to-tile shower bases may be used in lieu of a CSA B45.5/IAPMO Z124 plastic shower receptors or any liner based shower installations. The wedi drain units do not require weep holes.
Listed Models and Characteristics	The wedi Fundo Shower Systems consist of the following: a) The wedi waterproof Fundo shower bases are waterproof, pre-sloped, ready-to-tile floor units. The shower bases with linear and point drainage include factory sealed parts integrated into the floor bases and can be installed with or without curbs in recess, barrier free installations. b) The wedi waterproof building panels which are engineered as a general purpose backer board and underlayment for tile as well as an integral part of the Fundo shower system and consist of a rigid extruded polystyrene foam covered on both sides with a cement-based resin surface and reinforcing mesh for durability and bond performance with tile adhesives. c) the wedi Vapor 85 Building Panel which may be used with or without wedi shower systems. It is a specialized building panel featuring the original wedi Building Panel but with its vapor exposed side protected by wedi Subliner Dry. The wedi Vapor 85 was tested to ASTM E96 Procedure E as a complete assembly with the wedi 620 joint sealing membrane and wedi Subliner Dry sealing tape over seams and fastener points and was found to have a perm rating of 0.03 perms which meets the permeance rating requirement of 0.5 perm or less and can be used in continuous use steam shower/room applications without additional vapor retarders in accordance with Tile Council of North America (TCNA) 2014 Handbook for Ceramic Glass and Stone Tile Installation (SR613-14 and SR614-14). d) The wedi waterproof Fundo Shower system accessories which may include the following waterproof components: wedi pre-sloped curbs, wedi niches, wedi seats, wedi fasteners, wedi drain cover plates, wedi sealants, wedi Fundo drains, wedi Subliner sheet waterproofing membrane system and tapes, with wedi Subliner Dry Bonding Flange drain, wedi Subliner Dry Tub Sealing Tape.  The wedi Fundo family line includes the following: Primo, Riolo, Riolo Modular, Riofino, Discreto, Ligno and OneStep. The wedi Fundo Shower system components and assembly for shower installations were proven to be waterproof, water-resistant, and mold resistant when tested in accordance with A118.10-2014 and ASTM E331. The wedi drains have been found to comply with ASME A112.18.2/CSA B125.2 and do not require weep holes.

## Installation on various surfaces (walls, ceilings, structural wooden surfaces and concrete/cement base surfaces - flooring)

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To view installation on various surfaces, [click here](#).

## Requirements/Limitations for wedi products used in Shower and Wet Room applications

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To view general limitations, view our Requirements/Limitations section of our technical handbook [here](#) and as it may apply to wedi Building Panels.

## Packaging and sales

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To view product sizes, [click here](#) and choose whether you would like to view wedi Building Panels or Vapor 85 Panels. Once a product type is chosen, scroll down to 'Product Sizes' to view detailed information for each variation of product.

## Storage & Handling

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Consult Safety Data Sheet SDS (if available) for safe handling of product

Store product in original packaging on a flat and solid surface and do not store other product or material on wedi product.

Ensure product is protected against traffic and exposure to moving objects to avoid damage to the product.

Protect product during storage in warehouse or on project sites and when in transit against weather and keep at all times in a dry and cool environment (between 41°F to 95°F (5°C to 35°C)) and where product is protected against direct exposure to UV/sunlight.

## Warranty

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To view our information regarding our general and PRO system warranties, or to submit your PRO warranty registration form, [click here](#).

A copy of wedi's 10, 15 and 20-year system warranty information can be downloaded by clicking on the button at the top of the page:

[Download Warranty](#).

## Training, Installation Resources and Technical Support

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To view our training and workshop schedule, [click here](#).

To download our digital technical handbook, [click here](#).

To get in touch with your local technical sales support manager, [click here](#) and select your state to be provided with contact information. Or, scroll down and fill out the contact form to send a message directly to your local technical sales support manager!

## Architectural Support

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- Virtual and in-person AIA Presentations for CEU's
- Specification assistance, technical drawings and more
- For more information, contact wedi at:  
email: [architecture@wedicorp.com](mailto:architecture@wedicorp.com)  
phone: **847-357-9815**.