wedi® Subliner Dry Waterproof Sheet Membrane System

Technical Data Sheet

- Waterproofing Membrane System: a practical system aid for sealing, bonding, and installation.
- For high performance Vapor-proofing in Steam Showers/Steam Rooms.
- For use with all types of cement, or epoxy based thinset mortars.
- Naturally improving crack protection.

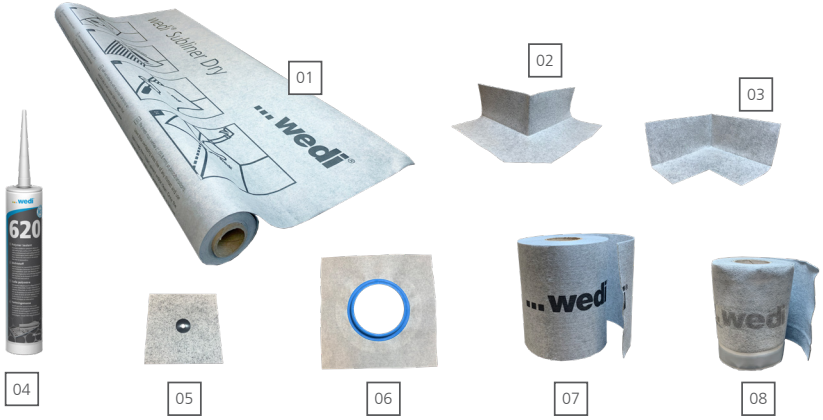
General product description

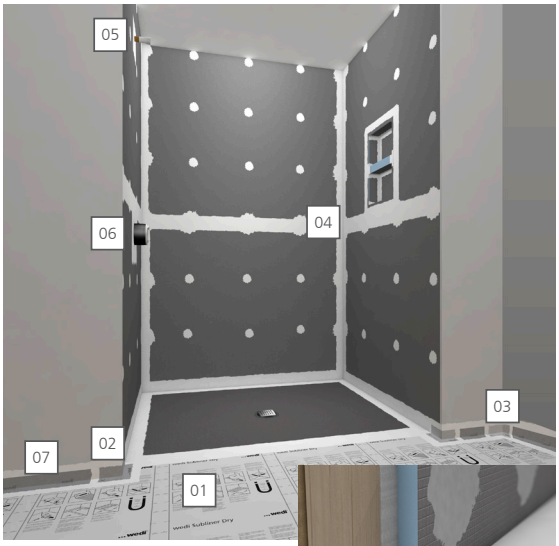
The wedi products within the group of Subliner Dry Systems offer specific benefits in installations and applications complementing our traditional wedi® Building Panel and Shower Systems. Subliner systems are sheet membrane products, each designed to provide sound and thin profile underlayments for tile. Each system component provides water and vaporproofing as needed over ordinary cement or fiber-cement backer boards or mortar beds, or other comparable and suitable traditional structures for tiled applications in wet rooms. The Subliner Dry Sheet Waterproofing Membrane and its Subliner Accessories and components are sealed and connected with 2 inch wide membrane overlaps. In-between, wedi® Sealant 620, a specialty sealant, is used to water and vaporproof these connections.

The wedi® Subliner Dry System includes the Subliner Dry Sheet Membrane, Sealing Tape, Prefabricated Outside and Inside Corner Tapes, and various Sealing Collars that waterproof entire structures, especially in shower and steam room construction. wedi® Subliner Dry is well suited for sealing measures over the pre-existing wall or floor underlayment, including drywall. Use Subliner Dry in combination with ceramic tiles, slabs, and natural cast tiles for indoor wall and floor areas. It has strong performance in steam showers and rooms due to its unique Vapor Resistance rating of 0.09 WVTR/Perms as tested using ASTM E96; method E.

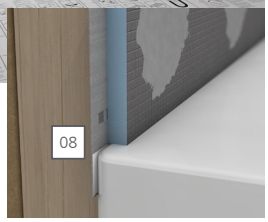
Subliner Dry is a strong yet very pliable membrane. Installation steps, measuring, and cutting lines are printed on its surface. The Subliner Dry System includes many accessories, including wedi® Sealant 620 to achieve waterproof and vaporproof seams in the installation. Using wedi® Sealant 620 between sheet membrane seams is similar to the traditional technique of applying thinset mortar between sheets; but where taped and mortared seams will allow water to absorb and pass through it, seams sealed with wedi® Sealant 620 are 100% waterproof and vaporproof.

wedi also has special sealing tape options available, such as tub sealing tape. wedi® Tub Sealing Tape is equipped with a butyl-based adhesive strip which attaches to a plastic tub unit's outside perimeter edge before it is attached to blocking installed horizontally between framing studs. Here it creates a waterproofing back-up to a tub's traditional surround wall backers, which are prone to separate and leak at the transition from tub to wall.





wedi Fundo Curbless Shower installation with Subliner Dry System



Tub Installation with wedi Subliner Dry Tub Tape

01 wedi® Subliner Dry Sheet Mem-

02 wedi® Subliner Dry Outside Corner

03 wedi® Subliner Dry Inside Corner

04 wedi® Sealant 620

05 wedi® Subliner Dry Pipe Seal

06 wedi® Subliner Dry Mixing Valve Seal

07 wedi® Subliner Dry Sealing Tape Outside Corner

08 wedi® Subliner Dry Tub Sealing Tape

Technical Properties ▪ wedi Systems

Properties & Test Methods Value (wedi Building Panel and Fundo Shower System Components)		
Test/Designation	**Evaluation/Result**	**ANSI Specification**
Mold Growth (ANSI 118.10 Section 4.2)	does not support mold growth	"Membrane shall not support mold growth"
Seam Strength (ANSI 118.10 Section 4.2)	1637 PSI	170 PSI minimum
Breaking Strength (ANSI 118.10 Section 4.3) Longitudinal	822PSI	
Dimensional Stability (ANSI 118.10 Section 4.4) Longitudinal (158°F)	-0.14% change after 2 hours	0. 7% max. length change
Longitudinal (-15°F)	0.04% change after 2 hours	0.24% change after 2 hours 0.03% change after 2 hours
Transverse (158°F)	-0.24% change after 2 hours	
Waterproofness (ANSI 118.10 Section 4. 5)	no moisture penetration	no moisture penetration after 48 hours
Shear Strength to Ceramic Tile and Cement Mortar** (5.0) 7-day shear strength 7-day water immersion shear strength 4-week shear strength 12-week shear strength 100-day water immersion shear strength	 152 PSI 127 PSI 132 PSI 90 PSI 130PSI	 greater than 50 PSI greater than 50 PSI greater than 50 PSI greater than 50 PSI greater than 50 PSI

Property	Test Method	Specimen Results							Requuirment
		#1	#2	#3	#4	#5	Avg	St Dev	
wedi Subliner Dry 20 mil nominal thickness Desiccant Method; Test @ 100.0±1.8°F & 90±2 % RH	ASTM E 96 (Procedure E)								
	Thickness (mil)	19.5	19.7	19.3	19.7	18.9	**19.4**	0.33	Report
	WVT (grains/h·ft2)	0.084	0.091	0.085	0.092	0.090	**0.089**	0.003	Report
	Permeance (Perms)	0.05	0.05	0.05	0.05	0.05	**0.051**	0.002	Report

Test Methods: ASTM E 96/E96M-13

Results Summary:

Procedure E - Dry Cup @ 100.0±1.8°C & 90±2 % RH WVT 0.09 grains/h·ft2 Permeance 0.05 Perms

Purpose:

Determine the water vapor transmission performance of the product in accordance with ASTM E 96: Standard Test Methods for Water Vapor Transmission of Materials.

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 show 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, Riolito, Riolito 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 found to comply with with ASME A112.18.2/CSA B125.2 and do not require weep holes.

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

To view general limitations, view our Requirements/Limitations section of our technical handbook here and as it may apply to wedi Subliner Dry products.

Packaging and and Usage Recommendations for select applications

wedi® Subliner Dry Sheet Membrane

- Average curbless shower installation uses 2 rolls of 16 ft. long wedi® Subliner Dry mat
- Packaged in 16 foot long (53 sqft.) or 98 foot long (322 sqft.) rolls (Sheets are 3 foot wide).

wedi® Sealant 620

- Average steam shower installation uses 2.5 oz. of wedi® Sealant 620 for each one linear foot of taped/ overlapped seams in assembly (includes fastener points in board area)
- Packaged in 10.5 oz cartridges or 20 oz sausages

wedi® Subliner Dry Sealing Tape

- Average 3 x 6 foot steam shower with 4 walls, ceiling and 2 benches uses 3 rolls of wedi sealing tape
- Packaged in a 5 inch wide x 32 foot long roll.

wedi® Subliner Dry Tub Tape

- Average tub installation uses 1 roll of wedi® Subliner Dry Tub Tape
- Packaged in a 5 inch wide x 12 foot long roll with a self adhesive strip to adhere to a smooth tub surface and is sealed against framed blocking using wedi Joint Sealant (serves as a back up for otherwise vulnerable sealed joints between a backer board and a prefabricated tub surface when no flanges secure waterproofing).

wedi® Subliner Dry Inside and Outside Corners

- Average curbless shower installation may use 2 wedi Outside Corners
- Average steam shower installation may use 6-8 wedi Inside Corners and 6-8 wedi Outside Corners.
- Packaged as sets of two

wedi® Sealing Collars

- Average shower or steam room installation uses one wedi® Subliner Dry Pipe Seal per pipe protrusion and one wedi® Subliner Dry Mixing Valve Seal per mixing valve
- Packaged individually
- Due to many design variants of mixing valves used in bathroom designs, the Mixing Valve Seal may have to be modified to fit the installation. This can be done by cutting its fleece sheet to open up the diameter of its opening for larger mixing valves. The collar functions to divert moisture moving through the thinset layer behind a wall tile. The moisture in a wall assembly mostly moves downward and any cuts in the collar around the top half of the mixing valve should be avoided.

Storage & Handling

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

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 downloaded by clicking on the button at the top of the page: Download Warranty.

Training, Installation Resources and Technical Support

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

- Virtual and in-person AIA Presentations for CEU's
- Specification assistance, technical drawings and more
- For more information, email: architecture@wedicorp.com