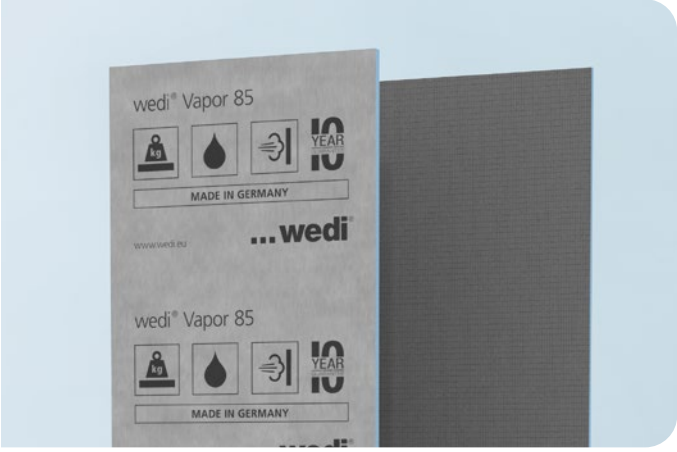
wedi Vapor 85

- For rooms with high levels of humidity
- For wall, ceilings and floors
- Waterproofing, vapour barrier and thermal insulation



General product description

wedi Vapor 85 is made from blue extruded polystyrene hard foam (XPS) which is reinforced with alkali-resistant fibreglass mesh and coated with polymer-modified mortar on both sides, as well as a vapour membrane barrier on one side.

Applications

wedi Vapor 85 is both a panel type sealing system and a building board with constructional and vapour resistant properties which is specifically tested and approved for wall applications. It can be used on solid walls and stud frames, as well as on floors and on ceilings, in interior areas. Due to its special properties, it is versatile in its applications:

- Carrier element for laying tile, slab and natural stone floor coverings using the thin-bed method, and surface for plaster and other materials
- Vapour barrier
- Effective thermal insulation
- Compound seal with tile and slab coverings on wall surfaces

Surface requirements, laying

Information about fitting, implementation of the sealing details and surface requirements can be found in the “wedi Vapor 85 building board application guidelines”.

Technical properties of wedi Vapor 85

Composite element made of extruded polystyrene rigid foam reinforced on both sides with a special cement coating and with a vapour membrane barrier on one side.

Thickness	12.5 mm; 20 mm
Vapour barrier (polyethylene foil with special fleece layer)	0.51 mm
Water vapour diffusion equivalent air layer thickness Sd value	92 m
Resistance to water vapour diffusion (μ) DIN EN 1931 (sheet material vapour barrier)	170,000
Water vapour diffusion flow resistance Z value (sheet material vapour barrier)	555.64 GPa • m² • s/kg 1.54 • 10^9 m² • s/kg
Water vapour diffusion flow resistance (sheet material vapour barrier)	4,065,287 s/m
Fire behaviour EN 13501, building material class	E
Adhesive tensile strength	0.27 N/mm²
Linear coefficient of thermal expansion	0.02 mm/mK

Nominal thickness in mm	Thermal conductivity λ in W/(m • K)	Heat transfer resistance R in m² • K/W
12.5	0.036	0.35
20	0.036	0.56

Technical properties of raw foam building board systems

CO^2-foamed, extruded polystyrene rigid foam with closed cell structure and flame-retardant additive. The polystyrene rigid foam is HCFC and CFC-free.

Long-term compressive strength (50 years) ≤ 2% compression EN 1606	0.08 N/mm²
Compressive resistance or compressive strength at 10% compression EN 826	0.25 N/mm²
Associated module of elasticity EN 826	10-18 N/mm²
Thermal conductivity EN 13164	0.036 W/mK
Tensile strength EN 1607	0.45 N/mm²
Shearing resistance EN 12090	0.2 N/mm²
Shear modulus EN 12090	7 N/mm²
Bulk density EN 1602	32 kg/m³
Resistance to water vapour diffusion (μ) EN 12086	100
Water absorption under long-term immersion EN 12087	≤ 1.5 % by vol.
Capillary action	0
Linear coefficient of thermal expansion	0.07 mm/mK
Temperature limits	-50°C / +75°C
Fire behaviour EN 13501	E
Carbon dioxide propellant GWP value	1

Packing

Boards on pallets

Storage

wedi Vapor 85 should always be stored flat, irrespective of its thickness. It must be protected against direct sunlight and moisture.