



PRODUCT

Slate-Lite consists of a layer of natural slate with 0,1 – 1,4 mm and a backing made of natural polyester with glass fiber for strength and dimensional stability.

MATERIAL COLORS AND CHANGES

Natural stone is an absolute timeless natural product, which evolved over millions of years in the earth's crust. Form and color variation are possible and invariably make every square meter to a unique design.

We are always striving for little color variation in lots and structurally similar sheet decors. For large areas you should contact us if a specific color and structure is required.

Please check our main catalogue or the sample set for the complete range of colors and patterns.

MAIN COMPOSITIONS

Top layer: (in %)		Back layer: (in %)	
Oxygen (O)	44,6	Oxygen (O)	73,0
Carbon (C)	31,0	Carbon (C)	26,0
Silicium (Si)	13,0		
Aluminum (Al)	5,6		
Iron (Fe)	3,4		
Patassium (K)	2,4		

FORMALDEHYDE

Slate-Lite is free of formaldehyde.

STANDARD SIZES

Standard size:	1.220 x 610 mm
Large formats:	2.400 x 1.200 mm
	2.600 x 1.200 mm

All three sizes are available for most colors and decors. For daily up-to-date availability please contact our sales department.

*) The dimensional tolerance is $\pm 1,5$ mm in length, width and at the right angle

WEIGHT

approx. 1,5 – 2,8 kg/m²

THICKNESS

approx. 1,5 – 2,5 mm

DENSITY

1,45 kg/m²

THERMAL EXPANSION

0,5 – 0,8 mm
(by temperature variations up to 90°C)

TEMPERATURE RESISTANCE

up to 120°C

BENDABLE RADIUS

approx. 5 cm

TEST ACCORDING TO ASTM / C-121

Water absorption in unsealed surface + 2,5%.

UV-RESISTANCE TEST

Due to the weather hardly or minimal uniform deviations of the coloring arise.

Resistance against UV radiation (UV-B) to DIN EN ISO 11507

Test cycle: 4 hours; Radiation 50°C
4 hours; Bedew 40°C

Duration of test: 1.000 hours rating after 250h, 500h, 750h

Rating: Change in color to DIN EN ISO 11664-4, Sp62 Fa. X-Rite

Measurement geometry: d/8°, Kind of light: D65

VOC EMISSION TEST

Slate-Lite has achieved **category A+** in all emission classes of the test!

We tested the slate decor *Falling Leaves* as an example - due to the extremely low measured emissions, the test institute was even able to stop the test chamber test prematurely!

FIRE RESISTANCE

Slate-Lite as reached fire protection class Cfl-s1 (EN 13501-1) / B1 (DIN 4102). *Slate-Lite* has is also available in a fire retardant version reaching class Cs3d0 in European Burning Classification. For more information please contact our sales department.

ABRASION TEST

Abrasion test according to DIN EN ISO 10545-7: Reached Class PEI 2 without surface treatment. Tested decors: *Falling Leaves* and *Argento*.

PEI 2: Tiles for areas with average traffic and medium to low abrasion; e.g. studying rooms, living rooms.

SLIP CLASS

Slate-Lite as reached slip classes R9 (Slate) / R10 (Myca).

CE-CERTIFICATION

Slate-Lite as been approved by CE-Standard:

DIN EN 15102:2011-12

DIN EN 15102:2008+A1:2011

PROCESSING TEMPERATURE

10°C to 35°C are recommended.



FIELDS OF USE

Doors and gates, furnace construction, ceilings, floors, walls, roofs, wet areas (shower/bath), furniture and as facade cladding.

Please note that the limestones are not suitable for wet areas or outdoor areas. Don't use the marbles in chlorinated water.

SUBSTRATES

Wood, metal, glass, rigs, concrete etc.

Please note the instructions and datasheets of all used adhesives or plastics used for subfloor processing.

TOOLS

Any commercially available tool (DIY-tools): Sawing, drilling, milling, cutting, bending, pressing.

For industrial processing we recommend using diamond blade tools due to strong wear on wood blades.

If masking tape is used, please make sure, that no adhesive is left on the sheet. So please use tape with low adhesion and do not leave the tape on the surface for too long.

Test any adjustments to the materials and tools beforehand in an inconspicuous place or a test sheet.

When processing only use sheets that could lay flat and are completely relaxed!

LAMINATION ON WOOD, METALS, PLASTERBOARDS

Lamination with 1-Component-PU-Adhesive (Polyurethan), such as **Slate-Lite PU**.

Compensating additives:

Backing paper 120 g/m² or 0,8 mm HPL.

Use an additional 7 mm rubber with a hardness of 50 Shore. Depending on the design of the press, the pressure must be carefully selected.

CLEANING

All natural stone surfaces, even if impregnated or sealed, must be wiped moist regularly.

Please use a lint-free cloth.

Important note: Acid cleaners attack the surface of the stone!

SURFACE PROTECTION

Slate-Lite
Special Impregnator



Slate-Lite
Special Protection



Slate-Lite
2K-Protection Wall



Slate-Lite
2K-Protection Floor



Note: For detailed information about our impregnations and sealings, please refer to the respective datasheet and instructions.

Slate-Lite Special Impregnation

Test substances:	Exposure	Slate	Myca
Acetone	10 s		
Caustic potash (10%)	2 min		
Ultrasol	10 min		
Vinegar (5%)	1 h		
Ammonia (25%)	16 h		
Water	16 h		
Butyl acetate	10 s	Attacks impregnation	
Mustard	5 h		
Ethanol (48%)	1 h		
Acetic acid (98%)	1 h	Attacks impregnation	
Pure acid cleaner	16 h		Discoloration
Basic cleaner 1:5	16 h	Discoloration	Discoloration
Skin protection creme	16 h	Discoloration	
Cola	6 h		
White spirit K30	16 h		

Slate-Lite Special Protection

Test substances:	Exposure	Slate	Myca
Acetone	10 s		
Caustic potash (10%)	2 min		
Ultrasol	10 min		
Vinegar (5%)	1 h		
Ammonia (25%)	16 h		
Water	16 h		
Butyl acetate	10 s		
Mustard	5 h		
Ethanol (48%)	1 h		
Acetic acid (98%)	1 h	Leaves edges	
Pure acid cleaner	16 h		Discoloration
Basic cleaner 1:5	16 h		Discoloration
Skin protection creme	16 h	Discoloration	Discoloration
Cola	6 h		
White spirit K30	16 h		

Slate-Lite 2K-Protection Wall

Test substances:	Exposure	Slate	Myca
Acetone	10 s		
Caustic potash (10%)	2 min		
Ultrasol	10 min		
Vinegar (5%)	1 h		
Ammonia (25%)	16 h		
Water	16 h		
Butyl acetate	10 s		
Mustard	5 h		
Ethanol (48%)	1 h		
Acetic acid (98%)	1 h	Attacks sealing	Attacks sealing
Pure acid cleaner	16 h		Discoloration
Basic cleaner 1:5	16 h		Discoloration
Skin protection creme	16 h		
Cola	6 h		
White spirit K30	16 h		

Slate-Lite 2K-Protection Floor

Test substances:	Exposure	Slate	Myca
Acetone	10 s		
Caustic potash (10%)	2 min		
Ultrasol	10 min		
Vinegar (5%)	1 h		
Ammonia (25%)	16 h	Attacks sealing	
Water	16 h	Attacks sealing	
Butyl acetate	10 s		
Mustard	5 h		
Ethanol (48%)	1 h		
Acetic acid (98%)	1 h	Attacks sealing	Discoloration
Pure acid cleaner	16 h	Discoloration	Discoloration
Basic cleaner 1:5	16 h		
Skin protection creme	16 h		
Cola	6 h		
White spirit K30	16 h		

ADHESIVES

For detailed processing and adhering information please use our manuals and instructions for processing.

We recommend to use the **Slate-Lite Floor & Wall Interior** or the **Slate-Lite X-treme Bath+Exterior** if adhering *Slate-Lite*. Both adhesives are available in our product range.

If you adhere *Slate-Lite* in areas with temperatures from 90°C to 127°C (oven/fireplace) please use another adhesive like the **ASK DS770**.

SILICONE

If you want to use silicone for sealing or as a finishing edge, please use the natural stone silicone from **Ottoseal S70**, as other silicones sometimes do not adhere correctly.

STORAGE

The storage of unsealed material must be dry, preferably frost-free and sun protected. Protect against climatic influences. Material should be stored flat in order to avoid deformation.



QUALITY ASSURANCE

For quality assurance, a German quality management is used. Starting in the purchase of the slate raw-material until the eventual shipment of the finished *Slate-Lite*, each square cm of the product is out through a strict quality control. All products are inspected by several quality inspectors and tested until the final release to be shipped.

SHIPPING / UNBOXING

Our standard size 122 x 61 cm will be sent to you in a flat shipping box. Depending on the decor, up to 15 Sheets of *Slate-Lite* can fit in one package.

Our large sizes 240 x 120 cm and 260 x 120 cm are either rolled or shipped on pallet. To do this, we heat the sheet across the surface and carefully roll it to the optimum size. Up to 2 large formats can fit in one package and up to 35 sheets of *Slate-Lite* on one pallet.

Please check directly when receiving the goods whether the corners have been damaged. Acknowledge any damage directly. Please open all packaging carefully and make sure that you don't damage the material.

Rolled large formats must best be heated over a large area and should lie completely flat before processing! Do not unroll the material too quickly or when it is cold, as this can damage it. No cracking noises should be heard when unrolling! The optimal temperature for unrolling is between 30 - 70C °

Please note that small chippings of stone are not a damage of the material, but rather a quality feature of the real stone surface: Despite small pieces of stone in the package, the *Slate-Lite* sheet is normally completely undamaged and the stone surface is intact!

In addition, slight superficial scratches on the material can occur, this is storage and transport conditionally unavoidable. Such light scratches can be easily wiped away with a lint-free cloth and are also no damage to the material!

A detailed FAQ video for shipping and unpacking the goods is available on our homepage and on YouTube.

All transport lines can be used. Due to its low weight, *Slate-Lite* can be sent worldwide with low cost. For quick delivery even a parcel service can be used.

	Stock Europe Box Palett	Factory India Slate Myca
122 x 61	15 pcs. 175 pcs.	350 pcs. 300 pcs.
240 x 120	2 pcs. 30 pcs.	200 pcs. 180 pcs.

*) Delivery from factory: 25 pcs. per box in a wooden crate

SALES NETWORK

R&D GmbH has an almost worldwide distribution network. Simply send us your request and we will redirect them to their respective distributors. www.slate-lite.com

ENVIRONMENTAL PROTECTION

Thanks to their lightness and thinness, our thin stone veneers are not only easy to work with and offer unique indoor and outdoor possibilities, but with *Slate-Lite* you also opt for an environmentally friendly stone decoration!

The emission rates on the transport routes are many times lower for *Slate-Lite* than for conventional stone slabs, which leads to a much more positive life cycle balance.

Most of our goods are shipped by sea to our central warehouse. With a pollutant quantity of approx. 15.1 grams of CO₂ emissions per kilometer (source: NABU), the following example calculation of one of our containers results: (Comparative calculation: Sea route India/Germany. granite slab vs. *Slate-Lite*)

	Transport route	Material (m ²)	Charge (kg)
Slate-Lite	Seacontainer 40'	10.637 m ²	26.500 kg
Granit slab (2 cm)	Container 40'	441 m ²	26.500 kg
	Distance (km)	CO ₂ emission (g)	CO ₂ emission / m ²
Slate-Lite	7.500 km	3.001.125,00	282,12 g
Granit slab (2 cm)	7.500 km	3.001.125,00	6.806,27 g

A sheet of *Slate-Lite* produces about 95% less CO₂ than a conventional thick stone slab during transport!

In addition, the manufacturing process we have developed also conserves a lot of natural resources: Depending on the decor, we extract 200 – 400 sheets of *Slate-Lite* from the stone material of a single conventional stone slab of 2 cm!

Of course, we are also increasingly relying on recyclable solutions for our packaging, so that we have already been able to reduce the proportion of plastic waste many times over in recent years. And of course we will continue to work on this path in the future!

INFORMATION: MATERIAL CHECK AFTER DELIVERY

Slate-Lite is made of layered rock. Color differences in the individual plates and quartz veins that run through the stone, natural cracks or slight chipping may occur.

This is not a complaint reason, but is a feature of the natural stone surface!

Should you nevertheless discover a defect or too great changes in color and structure of the goods sent, we ask you to inform us immediately within 14 days.

Goods that are processed despite obvious defects are excluded from regression claims!