



Our test partners

### 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 composition

### Material colors:

Silver Grey, D-Black, Galaxy Black, Cobre New, Argento Auro, Cobre, Verde, Auro, Verde Gris, Argento, Sea Green/Mare, Molto Rosa, California Gold, Negro, Arcobaleno Colore, Arcobaleno Gris, Falling Leaves, Blanco, Terra Rosso, Tan, Burning Forrest, Rustique

### Color variance:

Slate is an absolute timeless natural product, which evolved over millions of years in the earth's crust. Slate is a natural product; form and color variation is possible and invariably makes every square meter to a unique design. We are always striving for little color variation in lots and structurally similar sheet decor. For large areas you should contact us if a specific color and structure is required.

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

### Sizes in mm:

Standard sizes 1220 mm x 610 mm in all material colors  
Special sizes up to 2400 mm x 1200 mm available in multiple stones

### Dimensional tolerances:

The dimensional tolerance is +/-1,5 mm in length and width and at the right angles.  
For industrial use tolerance requirements may be adjusted.

Weight	Thickness	Density	Thermal Expansion	Formaldehyde
ca. 1.500 g/m <sup>2</sup>	1,5 – 2,0 mm	1,45 kg/m <sup>2</sup>	0,5 - 0,8 mm by temperature variations up to 90°C	Formaldehyde free

Spektrum	In Statistik	C	O	Na	Mg	Al	Si	Cl	K	Ca	Ti	Fe
Oberfläche	Ja	8.60	39.73		0.88	7.76	16.41		5.67		0.63	20.33
Kunststoff	Ja	72.70	26.18				0.82	0.30				
Faser	Ja		58.76	0.59	0.23	6.38	22.26		0.19	11.59		
Bindeschicht	Ja	75.86	23.44				0.31	0.17		0.22		

### Test according to ASTM C-121:

Water absorption in unsealed surface +2,50%

### UV Resistance Test:

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

Test cycle: 4h Radiation 50°C

4h Bedew 40°C

Duration of Test: 1000 h rating after 250 h, 500 h, 750 h

Rating: Change in color to DIN EN ISO 11664-4, Sp62 Fa. X-Rite, measurement geometry: d/8°, kind of light: D65/10° observation angle, measurement of brightness to DIN 67530

### Abrasion test according to DIN EN ISO 10545-7:

Reached Class PEI 2 without surface treatment. (Tested Falling Leaves & Argento)

**PEI I** Tiles for areas with light traffic and without abrasive dirt, e.g. bathrooms, bedrooms

**PEI II** PEI II Tiles for areas with average traffic and medium to low abrasion, e.g. studying rooms, living rooms

**PEI III** Tiles for areas with height medium to high traffic and average abrasion, e.g. foyer, kitchen in private residences

Tiles for areas with intense traffic, e.g. restaurants, offices, shops, public offices

**PEI IV** (excluding floors under cash desks and shop counters and narrow unavoidable passageways)

**PEI V** Tiles for areas with especially intense traffic.

### Fire resistance:

Fire resistance is currently under examination by means of a technical institution.

Fire class / Fire behavior

### Heat Resistance:

Slate Lite is heatresistent up to 120°C.

**CE Certification:**

Slate Lite has been approved by CE-Standard: Din EN 15102:2008-01 & EN 15102:2007+A1:2011.

**Processing temperature:**

10° to 35°C are recommended.

**Application:**

Slate-Lite can be applied in almost all areas (floors, walls, ceilings, interior design, furniture, outdoor areas and facades)

For these areas we recommend different types of adhesives, for example: Soudaseal HT, Soudal Fix All Floor & Wall, Soudaseal 240FC, Ponal All for One, PU adhesive, epoxyde adhesive, 2 component adhesive and a few others depending on your application.

**Tools to work with:**

Slate-Lite can be worked with any commercially available tools (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.

**Lamination on wood, metals, plasterboard, fiber cement:**

When laminating (bonding) Slate-Lite onto wood, fiber cement, plasterboard and metal, as well as most furniture applications, we recommend a 1 component PU (polyurethane) adhesive such as Soudal PU Construct. If Slate-Lite is only applied on one side of a carrier material, it is important to have a counter balance on the other side for stability. Mechanically mounted panels which have the Slate-Lite on one side, need a craft paper or foil of at least 150 g/m<sup>2</sup>. Slate-Lite has a natural, rough split able surface with a tolerance of up to 2 mm. Thickness equalizing additions protect the veneers from being damaged. Proven are 7 mm thick rubber plates with a shore grade of 50 and a temperature Resistance of at least +80°C. It is important that the rubber matt has an insulating effect, so that the press time can therefore be extended.

Depending on the adhesive type and press temperature of 80°C, press time is approximately 6 minutes. Depending on the press configuration, the pressure has to be carefully set.

**Sealing:**

By a single treatment with Slate-Lite Stain Stop, almost all natural stone surfaces are easier to maintain. Not only water but also oil and grease can no longer penetrate into the surface. Sun spots are prevented. For light traffic areas indoors, we recommend sealing with the Slate-Lite Stain Stop. For walls, ceilings, furniture and kitchen fronts. This is suitable for all surfaces without too much use. Note the processing information from the manufacturer.

When being applied on high traffic areas, such as industrial floors and outdoors, a 2 component PU sealer is recommended (KLB 800E).

For lower traffic areas such as private homes or apartments, we recommend water based impregnator (Slate-Lite Special Impregnator).

**Regular maintenance:**

All natural stone surfaces, even if impregnated (sealed), must be wiped moist regularly. We recommend our Slate-Lite Care Cleaner, which contains a small amount of the impregnator which insures the surface stay sealed. The care cleaner is mixed with water and then can be mopped over the floor.

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

**Storage:**

The storage of unsealed material must be dry, preferably frost-free and sun protected. Protect against climatic influences.

**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 through each square cm of the product is put through a strict quality control. All products are inspected by several quality inspectors tested until the final release to be shipped.

**Shipping:**

Normally, Slate-Lite is packed into boxes and put on paletts or delivered without a palett. The maximum capacity of a palett goes up to 700 pieces. 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.

**Distributors:**

The 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](http://www.slate-lite.com)

**R&D GmbH**

Boschstr. 12  
53359 Rheinbach  
Germany

[www.slate-lite.com](http://www.slate-lite.com)  
[info@slate-lite.de](mailto:info@slate-lite.de)

