



DIN EN 15012:2008-01  
DIN EN 15102:2007+A1:2001

## 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

Silver Grey, D-Black, Galaxy Black, Cobre New, Argento Auro, Cobre, Verde, Auro, Verde Gris, Argento, Mare, Molto Rosa, California Gold, Negro, Arkobaleno Colore, Arkobaleno Gris, Falling Leaves, Blanco, Terra Rosso, Tan, Burning Forest, Rustique, Ice Pearl, Jade Green, Green Pearl, Black Pearl, Clear White, Clear White Stripes, Teak Wood, Rainbow.

## 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		

## STANDARD SIZES

Standard size 1.220 mm x 610 mm in all material colors.

Special sizes up to 2.400 mm x 1.200 mm available in multiple stones.

## DIMENSIONAL TOLERANCE

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

## WEIGHT

ca. 1,5–2,8 kg/m<sup>2</sup>

## THICKNESS

1,5–2,0 mm

## DENSITY

1,45 kg/m<sup>2</sup>

## THERMAL EXPANSION

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

## FORMALDEHYDE

Free of Formaldehyd

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 +2,5%

## 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

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: 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

PEI IV: Tiles for areas with intense traffic, e.g. restaurants, offices, shops, public offices (excluding floors under cash decks and shop counters and narrow unavoidable passageways)

PEI V: Tiles for areas with especially intense traffic.

## FIRE RESISTANCE

*Slate-Lite* has reached fire protection class Cfl-s1 (EN 13501-01) / B1 (DIN 4102). *Slate-Lite* is also available in a fire retardant version reaching class Cs3d0 in European Burning Classification. Heat Resistance: *Slate-Lite* is heat resistant up to 120°C.

## CE-CERTIFICATION

*Slate-Lite* has been approved by CE-Standard: DIN EN 15102:2008-01  
DIN EN 15102:2007:A1:2011

## PROCESSING TEMPERATURE

10°C 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 240 FC*, *Slate-Lite Floor & Wall*, *Soudaseal HT*, *Ponal All for One*, PU adhesive, epoxy adhesive, 2 component adhesive and a few others depending on your application.

WARNING: Limestones are not suitable for flooring and wet areas!

## 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 *Slate-Lite* on one side, need a craft paper or foil of at least 150 g/m². *Slate-Lite* has a natural rough splitable 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 mat 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 a sealing, 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 water based *Slate-Lite Special Impregnator*. This is suitable for all surfaces without too much use like walls, ceilings, furniture and kitchen fronts. Also we recommend the *Slate-Lite Special Protection* which is even suitable for wet areas and bathrooms due to its nano-perl effect.

When being applied on high traffic areas, such as industrial floors and outdoors, a 2 component PU sealer is recommended. For walls and facades we recommend *Slate-Lite 2K-Protection Wall*. For floor ceilings we recommend *KLB PU 805 E* by KLB Kötztal. Note the processing information from the manufacturer.

## 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 out through a strict quality control. All products are inspected by several quality inspectors and 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

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

