power dekor

SILICA MINERAL PANEL

For Floors & Walls

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INORGANIC ECO-FRIENDLY MATERIAL

PART OF A HEALTHY AND ENVIRONMENTALLY

FRIENDLY LIFE

NATURAL INGREDIENT HYDRATION

AMAZING DESIGN

HIGH PERFORMANCE & DURABILITY

PERFECT CHOICE FOR DIY

NO HARMFUL SUBSTANCES ADDED

NON PLASTIC

NO SOLVENT

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PMW001
1220 x 2440 mm
1120 x 2440/2660/2800/3050 mm
Silica Mineral EasyTile

LYJ211-27
193/233 x 1210 mm
Silica Mineral Floors

GREEN LIVING

Creating a green, safe, and sustainable living space is the best way to protect yourself and your family. Power Dekor Silica Mineral Panel provides users with the opportunity to live in harmony with nature. We use the best natural materials and manufacture our product with a special formula. Allowing your family to breathe freely indoors is the best thing you can do for them.

WHAT IS SILICA MINERAL PANEL?

Power Dekor Silica Mineral Panel is a natural mineral panel that uses the best natural ingredients and entirely naturally sourced minerals. The panel can be processed into flooring and wallboard using our proprietary formula. It is an innovative and high–performance homogeneous material that takes the environment, sustainable development, market demand, and other factors into consideration. Our flooring brings together the advantages of many different flooring types, and it is natural and environmentally friendly material that stands up to continuous use. Even when disposed of in a landfill after being pulverized into a powder, it does not affect soil and water quality.

Silica Mineral Panel is made of ingredients such as quartz, lime, portland cement, paper pulp, and water. These are mixed using high–temperature and high–pressure reactions to form the tobermorite crystals. The process relies purely on mineral hydration, **with no added glue, plasticizer, or other aldehydes**.

Power Dekor Silica Mineral Panel is non–toxic, aldehyde–free, lightweight, and offers both strength and toughness.



Quartz Stone



Lime Stone



Portland Cement



Paper Pulp



Water



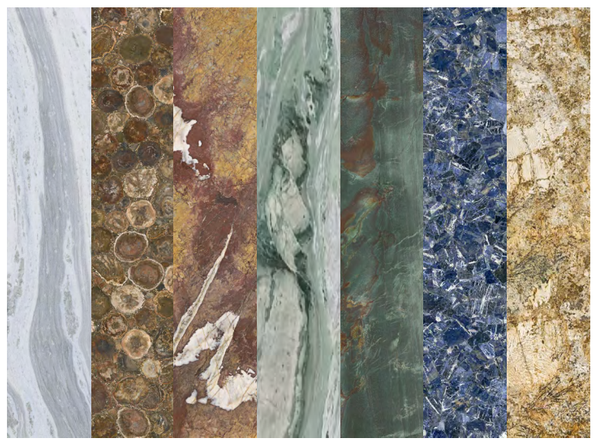
GREEN

- natural mineral substrate that relies solely on hydration
- natural raw materials and natural filler
- easy disposal
- completely odor–free and non–toxic



POWER

- extra solid & durable
- for residential and commercial use
- UV–resistant and temperature–stable
- mildew–resistant & fire–retardant
- outstanding residual indentation performance



INSPIRATION

- various exclusive decors & formats
- optional installation methods, gluing & locking system
- tiles/plank/Herringbone/panels
- creative & unique designs through digital printing
- authentic & natural surface



CNHK(1-7)
1220 x 2440 mm
1120 x 2440/2660/2800/3050 mm
Silica Mineral Wall Panel

LYA148-4
193/233 x 1210 mm
Silica Mineral Floors

WE OFFER A BETTER LIFE THROUGH NATURAL AND SAFE MATERIAL

A comfortable and healthy environment is the foundation for a sustainably comfortable life. Power Dekor Silica Mineral Panel uses pure mineral materials to connect building with nature and create comfortable and environmentally friendly spaces for our users. Silica Mineral Panel emits no harmful substances into indoor air, and at the same time is odorless, non–toxic, and mildew–proof. The stability of construction and temperature also prove its practicability and reduce many associated safety hazards. Its characteristics make it the perfect safe choice for residential or commercial spaces.

DOES Silica Mineral Panel CONTAIN ASBESTOS?

The main component of quartz stone is pure quartz, which is SiO_2, while asbestos is a naturally occurring fibrous silicate mineral. The physical and chemical properties of the two materials are different.
When inhaled or ingested, asbestos fibers become trapped in the body. Over decades, accumulated asbestos fibers can cause inflammation, scarring, and cancer. This kind of mineral is often associated with magnesium series silicate. Under certain geological conditions (e.g. temperature, pressure), asbestos-associated minerals form easily through metamorphic reactions.

VERSATILE PRODUCT

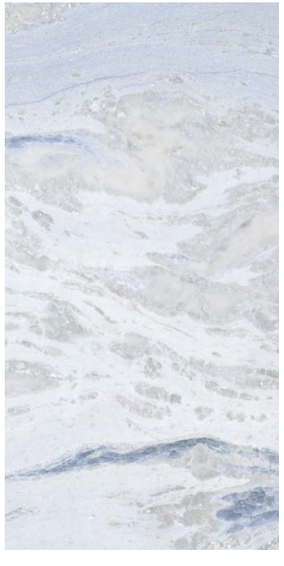
Silica Mineral Panel's unique material and special formula allow its design to mimic the effect of many types of floor and wall materials

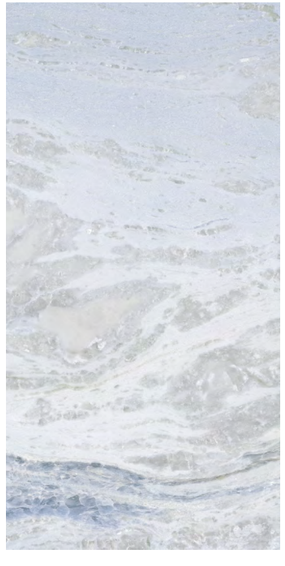
LuxeStone-Digital Printing

Many people believe luxury natural stone is the best return on investment, but stone is often too expensive for most people. To replicate the texture of natural stone found in expensive stone tiles, Power Dekor strives to collect all varieties of expensive and rare stone materials for highprecision scanning, so that we recreate them using Silica Mineral Panel through digital printing technology.









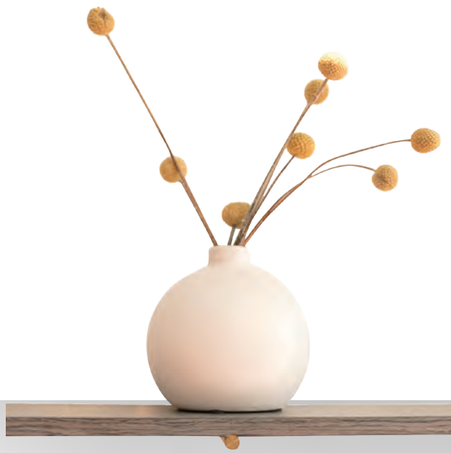




Pre-coated & Mosaic EasyTile

Mosaic tile design must be classic and infallible. Through debugging and equipment innovation, Power Dekor can replicate the effect of grouting for users during production, which saves significant time and effort during installation. You can also choose plain pre–coated Silica Mineral Wall Panel and select the colour from a colour bridge.





Silica Mineral Floors

Silica Mineral Panel made its debut with earth materials, bringing new vitality to the industry. The kaleidoscopic design, pressed on the panel with design paper, can deliver either a traditional or cutting–edge design sense to your space.





Veneered Silica Mineral Floors

Hardwood flooring has always been a popular flooring choice, and people have always enjoyed parquet floors. Power Dekor has used our expertise in VSPC and hardwood flooring to ensure that Veneered Silica Mineral floors achieves high performance while still being part of the veneer.





FEATURES

Waterproof
The only flooring that can withstand boiling water with no deformation.

Low-emission
Passes the European REACH standard and does not emit harmful chemical substances.

Construction & Dimensional Stability
Suitable for any living spaces, such as kitchens and bathrooms.

Fire-retardant
CE–certified as highly flameretardant.

Mildew-resistant
Unwelcome to mildew breeding and inhibitive to its growth.

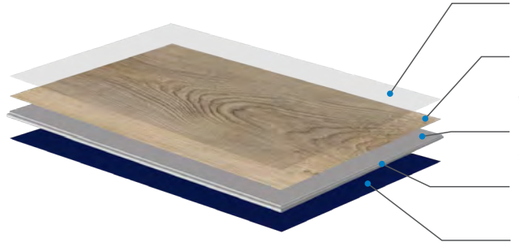
PVC Free
From raw materials to production, no plastic is added.

Asbestos Free
The raw materials do not contain asbestos.

SPECIFICATION

CONSTRUCTION | FLOORS

Silica Mineral Flooring



1. Wear Layer
Offers protection from wear, scuffs, and scratches.

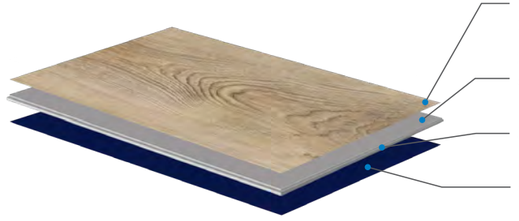
2. Design Layer
Offers stunning wood and design visuals with authentic textures.

3. Silica Mineral Panel
An innovative reinforced mineral core that contains no plastic.

4. Locking System
Ensures easy installation.

5. Underlay
Provides extra comfort and sound absorption.

Veneered Silica Mineral Flooring



1. Veneer Layer
Offers stunning real wood visuals with diverse gloss levels.

2. Silica Mineral Panel
An innovative reinforced mineral core that contains no plastic.

3. Locking System
Ensures easy installation.

4. Underlay
Provides extra comfort and sound absorption.

SIZE & LOCKING SYSTEM | FLOORS

Silica Mineral Floors

PLANK	1210x233 mm 1210x193 mm
Tile	800x397 mm 600x294 mm
Thickness	6.5/8.0 mm
Click System	Valinge 2G (Long side) / Valinge 5G (Short side)

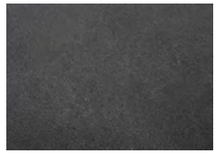
Veneered Silica Mineral Flooring

PLANK (Random Length)	190x(600~1900)RL mm
Thickness	9.2(1.2) mm
Click System	Valinge 2G (Long side) / Valinge 5G (Short side)

Underlayment



Cork



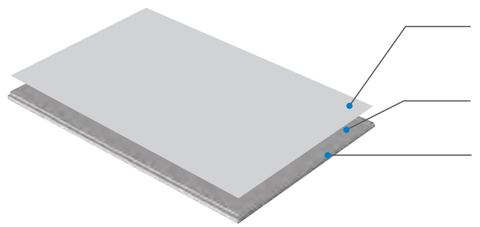
IXPE



EVA

CONSTRUCTION | WALLS

Pre-coated Silica Mineral Wall Panel

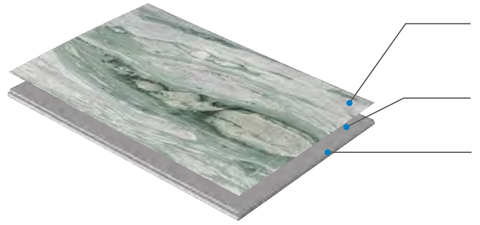


1. Pre-coated Layer
The pre–painted solid color scheme can be easily used to match the interior design.

2. Silica Mineral Panel
An innovative reinforced mineral core that contains no plastic.

3. Edge/Locking System
Ensures easy installation.

Digitally Printed Silica Mineral Wall Panel

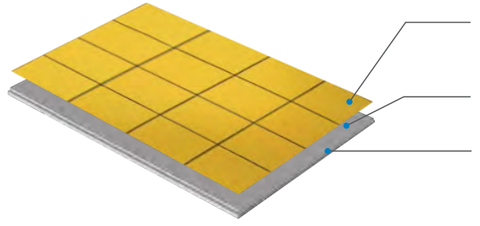


1. Digitally Printed Layer
The digitally printed design enables the interior design to be unique.

2. Silica Mineral Panel
An innovative reinforced mineral core that contains no plastic.

3. Edge/Locking System
Ensures easy installation.

Mosaic Silica Mineral EasyTile



1. Pre-coated Layer with Tile Grout Effect
The classic and unique mosaic tile effect allows for outstanding style.

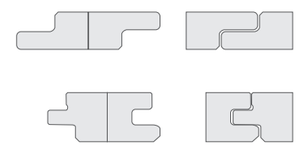
2. Silica Mineral Panel
An innovative reinforced mineral core that contains no plastic.

3. Edge/Locking System
Ensures easy installation.

SIZE & LOCKING SYSTEM | WALLS

Silica Mineral Wall Panel

Large	1220x2440/3050 mm 1120x2440/2660/2800/3050 mm	**Thickness:** 6.0/8.0/10.0 mm
Small	400x600 mm 600x800 mm	**Thickness:** 6.0/8.0/10.0 mm
Interlocking System	L–shape Joints / T&G	
Remark	Cutting is done only for the long side for large sizes Cutting is done for for all sides for small sizes	

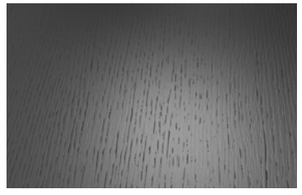


SURFACE | FLOORS

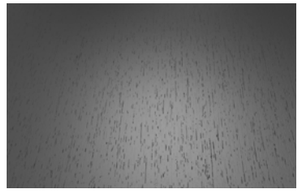
Authentic surface textures have always been one of the reasons why various types of flooring finally replaced solid wood floors, and different textures can match with different designs to create impressive patterns. Silica Mineral flooring offers a wide variety of wood and stone grain embossed surfaces to give a distinctive look and feel, as well as a never–before–seen authenticity.



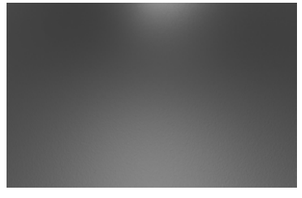
EIR



Deep Vivid



Shallow Vivid



Grain



Flat

SURFACE | WALLS

When you choose a special surface for your wall tile, you make your spacemore unique without overdoing it. Power Dekor Silica Mineral Wall Panel tile includes 4 finishes: high gloss, mosaic grout effect, velvet, and matte. Silica Mineral Wall Panel surface gloss level ranges from 3 to 100 degrees. Its extreme flatness allows the surface to achieve a perfect high gloss effect, while a special roller painting surface treatment facilitates the matte effect. Mosaic grouting and the velvet surface treatment are done in pursuit of the enjoyment of perception and touch. These various surface treatments make it a visually appealing and aesthetically pleasing addition to your space.



High Gloss



Grouting



Matte



LYA146-2
193/233x1210 mm
Botanic

SJZL
1220x2440/3050 mm
1120x2440/2660/2800/3050 mm
LuxeStone

INSPIRATION

INSPIRATION

XXLB
1220x2440/3050 mm
1120x2440/2660/2800/3050 mm
LuxeStone

LYA148-2
193/233x1210 mm
Botanic



LYA148-4
193/233x1210 mm
Botanic



CNHK
1220x2440/3050 mm
1120x2440/2660/2800/3050 mm
LuxeStone

INSPIRATION

INSPIRATION

PMW001-Moon
1220x2440/3050 mm
1120x2440/2660/2800/3050 mm
Mosaic EasyTile



LYI301-1
193/233x1210 mm
Botanic



LYJ211-27
193/233x1210 mm
Botanic

PMW001-Peacock
1220x2440/3050 mm
1120x2440/2660/2800/3050 mm
Mosaic EasyTile

INSPIRATION

HTQHYLS001
1220x2440/3050 mm
1120x2440/2660/2800/3050 mm
LuxeStone

INSPIRATION

LYA2005015
300x600 / 400x800 mm
Urban

LYC407
300x600 / 400x800 mm
Urban

INSPIRATION

NLN924
1220x2440/3050 mm
1120x2440/2660/2800/3050 mm
LuxeStone

PMW001-Orange
1220x2440/3050 mm
1120x2440/2660/2800/3050 mm
Mosaic EasyTile

INSPIRATION

LYF510
300x600 / 400x800 mm
Urban

TECHNICAL DATASHEET

Silica Mineral Flooring

Characteristics		Requirements	PD Values	Test Method
General appearance	Openings between elements, *(o)*	*o* average ≤ 0,15 mm *o* max. ≤ 0,20 mm	*o* average ≤ 0,03 mm *o* max. ≤ 0,06 mm	ISO 24337
	Height difference between connected elements, *(h)*	*h* average ≤ 0,10 mm *h* max. ≤ 0,15 mm	*h* average ≤ 0,06 mm *h* max. ≤ 0,09 mm	ISO 24337
	Flatness of the element - in the length, *(f l)*	*f l*, concave ≤ 0,50 % *f l*, convex ≤ 1,00 %	*f l*, concave ≤ 0,01 % *f l*, convex ≤ N/A %	ISO 24337
	Flatness of the element - in the width, *(f w)*	*f w*, concave ≤ 0,15 % *f w*, convex ≤ 0,20 %	*f w*, concave ≤ 0,04 % *f w*, convex ≤ N/A %	ISO 24337
Dimensional stability due to variation of temperature		≤ 0,25%	Length average -0,05% **Width average -0,00%** **Curling average 0,00mm**	ISO 23999
Micro-scratch resistance	Procedure A	≤ MSR-A2	MSR-A2	EN 16094
Reaction to fire test		NA	A2 - s1, d0	EN 13501-1 2018
Impact resistance	Big ball	≥ 1800 mm	1800 mm	EN 13329
Effect of a furniture leg		No damage shall be visible, when tested with foot type 0	No visible damage	EN 424
Castor chair resistance		25 000 cycles, No damage	Pass 25000 cycles	EN 425
Residual indentation		≤ 0,05 mm	**0,04 mm**	EN ISO 24343-1
Thickness swelling	Length direction Width direction	≤ 12 %	**0,08%**	ISO 24336
Fungi resistance test		NA	**0**	ISO 846 method A
Slip Resistance		NA	Rating 11	DIN 51130
Stain Resistance		NA	Not affected	EN ISO 26987
Additional features if applicable				
Phthalate content test		0,1%	Not detected	ISO 8124-6 method A or C
SVHC (Substance of very high concern)		Report limit 0,05% (whole product)	Not detected	REACH
Lead (Pb) Content		Report limit 0,05% (whole product)	**Not detected**	REACH Annex XVII item 63
Dimethyl Fumarate Content		0,1 ppm	**Not detected**	REACH Annex XVII Items 61
Asbestos content		LOD (Limit of detection) < 1%	**Negative**	NIOSH 9002
RoHS chemical test		Cadmium (Cd) ≤ 0.01%(100mg/kg) Others ≤ 0.01%(1000mg/kg)	Not detected	RoHS Directive EU
Bisphenol A Release		Limit (µg/mL)(Max.) ≤ 0,03	Not detected	EN 14372

Silica Mineral Wall Panel

Characteristics		Requirements	PD Values	Test Method
Micro-scratch resistance	Procedure A	≤ MSR-A2	**MSR-A2**	EN 16094
Reaction to fire test		NA	A2 - s1, d0	EN 13501-1 2018
Moisture movement	Length direction Width direction		**0.06%** **0.06%**	EN 12467
Fungi resistance test		NA	**0**	ISO 846 method A
Stain Resistance		NA	**Not affected**	EN ISO 26987
Additional features if applicable				
Phthalate content test		0,1%	Not detected	ISO 8124-6 method A or C
SVHC (Substance of very high concern)		Report limit 0,05% (whole product)	Not detected	REACH
Lead (Pb) Content		Report limit 0,05% (whole product)	**Not detected**	REACH Annex XVII item 63
Dimethyl Fumarate Content		0,1 ppm	**Not detected**	REACH Annex XVII Items 61
Asbestos content		LOD (Limit of detection) < 1%	**Negative**	NIOSH 9002
RoHS chemical test		Cadmium (Cd) ≤ 0.01%(100mg/kg) Others ≤ 0.01%(1000mg/kg)	Not detected	RoHS Directive EU
Bisphenol A Release		Limit (µg/mL)(Max.) ≤ 0,03	Not detected	EN 14372