

Introducing

STOVEN

ART OF NATURAL STONE



ECONOMY • EXCELLENCE • ETHICS

CONCEPT

STOVEN
ART OF NATURAL STONE

STOVEN Flexible stone veneer is made from a thin layer of stone stripped or peeled from a metamorphic stone slab.

Thin veneers (from .5mm to 2mm thick) of slate, schist, or sandstone are pulled away from the original thicker stone slabs by using a special proprietary technology. Fiber Glass backing is fused onto the stone veneer's backside to make the final product.

With a total thickness of 1.5-2.0mm, STOVEN opens up new, Exciting and Unexplored Possibilities for all Interiors & Exteriors.

Being a Natural product, STOVEN is an Environment Friendly product and a "Must-Have" for every GREEN Home.

STOVEN brings the warmth and the luxurious charm of natural stone with FLEXIBLE, NATURAL STONE VENEERS. Made from real natural stone from the million years old crust of our planet, the engineering process of combining the strength of fiberglass and thin layers of beautiful natural stone creates hundreds of new possibilities where natural stone can be enjoyed.



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STOVEN requires low or negligible maintenance. Because of its Light Weight & High Strength it is suited for both internal and external applications

STOVEN is available in 16 different exciting colors for all diverse needs and lasts a Lifetime

9003
BLANCO SLATE

9012
MANTLE CRUST

9001
COPPER HAZE

9013
PUEBLA MARBLE

9005
CUBAN SAND

9001
AQUA BASE

9010
LAKE STONE

9005
DARK SPRUCE

9011
MAGMA

9002
BALSAM GREEN

9004
BRICK DUST

9008
FOX SLATE

9015
SMOKED PEARL

9014
SAND STONE

9009
KNIGHT STONE

9008
FOX SLATE



Applications

STOVEN
ART OF NATURAL STONE

Wall Panels

Door Skins

Kitchen Backsplashes

Bathroom Counters

Curved Columns

Decorative Ceilings

Office Desks

Backlit Panels

Feature Walls

Exterior Wall Cladding

Shower Walls

Front Office Desks

Kitchen Cabinetry

Internal Wall Cladding



Specifications

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Stoven is a 100% Natural Stone Surface - The key characteristics are

- # Harder & stronger than slate tile by reinforcing of FRP.
- # Thickness vary from 1.02 - 2.0 mm,
- # Weight approx 1.65 kgs per m²
- # Sizes : 1220 x 610 mm (All colours) 2440 x 1220 mm (Selected colours)
- # Size Accuracy +/- upto 2 mm in width & length
- # Angle Accuracy +/- upto 2 degrees at right angle to be expected.

STOVEN™ is a real slate stone. There are natural inconsistencies, fractures, colour and surface variations and imperfections visible on the surfaces. These are quite normal and do not constitute faults or imperfections.



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TEARSHEET

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S.No.	<i>Weight Of Material</i>	Quantity <u>Kg/M2</u>
1.	Processing Material	1.350
2.	Backing Material	0.155
3.	Natural Stone	0.105
TOTAL WEIGHT PER M2 (Weight may differ from type of veneer)		1.600 – 1.700

Thickness of Material

4.	Thickness of Natural Stone Layer	0.40 – 0.80
5.	Thickness of other Chemical backing	0.80 – 1.20
TOTAL THICKNESS OF SAPLESTON – STONE VENEER		1.20 – 2.00



Technical- Slate Stones

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S.NO.	PROPERTIES	VALUES	PROTOCOL
1	Water Absorption %age by Wt.	4.81	ASTM C-21
2	Thermal Expansion (mm)	0.09	IS-2046
3	Density , Kg/m ²	1.93	IS-12866
4	Temperature Limits (Celsius)	190	IS-2046
5	Fire Behavior -Burn Rate (mm/min)	273.1	IS-15061
6	Abrasion Resistance- Avg Wear (mm)	0.5	IS-9162
7	Weight per square meter (lbs)	4.3	IS-12866
8	Backing	Glass Fiber in Polyester Resin Mix	



Technical- Quartzite Stones

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S.NO.	PROPERTIES	VALUES	PROTOCOL
1	Water Absorption %age by Wt.	3.52	ASTM C-21
2	Thermal Expansion (mm)	0.06	IS-2046
3	Density , Kg/m ²	1.84	IS-12866
4	Temperature Limits (Celsius)	190	IS-2046
5	Fire Behavior -Burn Rate (mm/min)	142.4	IS-15061
6	Abrasion Resistance- Avg Wear (mm)	0.9	IS-9162
7	Weight per square meter (lbs)	4.1	IS-12866
8	Backing	Glass Fiber in Polyester Resin Mix	



Toxic Elements (EN-71)

Migration of Certain Elements Method

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S.NO.	ELEMENTS	STANDARD Mg/kg -Max	STOVEN Mg/Kg
1	Antimony (Sb)	60	<5.0
2	Arsenic (As)	25	<5.0
3	Barium (Ba)	1000	10.0
4	Cadmium (Cd)	75	<5.0
5	Chromium (Cr)	60	<5.0
6	Lead (Pb)	90	10
7	Mercury (Hg)	60	<5.0
8	Selenium (Se)	500	<5.0



SIZE/PRODUCT CHART

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S.No	Product Code	Product Name	Material	FRP-Std Backing		FRP-Translucent		Cotton &/or Fleece	
				1220*610	2440*1220	1220*610	2440*1220	1220*610	2440*1220
1	9001	Aqua Base	Quartzite	Yes	N/A	Yes	N/A	N/A	N/A
2	9002	Balsam Green Slate	Slate	Yes	N/A	Yes	N/A	Yes	N/A
3	9003	Blanco Slate	Slate	Yes	Yes	N/A	N/A	N/A	N/A
4	9004	Brick Dust	Slate	Yes	N/A	Yes	N/A	Yes	N/A
5	9005	Cuban Sand	Slate	Yes	Yes	Yes	Yes	Yes	Yes
6	9006	Dark Spruce	Slate	Yes	Yes	Yes	Yes	Yes	N/A
7	9007	Earth Crust	Slate	Yes	Yes	Yes	Yes	Yes	Yes
8	9008	Fox Slate	Quartzite	Yes	Yes	Yes	N/A	Yes	N/A
9	9009	Knight Stone	Quartzite	Yes	Yes	N/A	N/A	N/A	N/A
10	9010	Lake Stone	Quartzite	Yes	Yes	Yes	N/A	N/A	N/A
11	9011	Magma	Quartzite	Yes	Yes	Yes	N/A	N/A	N/A
12	9012	Mantle Crust	Slate	Yes	Yes	Yes	Yes	Yes	Yes
13	9013	Puebla Marble	Slate	Yes	Yes	Yes	Yes	Yes	Yes
14	9014	Sand Stone	Quartzite	Yes	Yes	Yes	Yes	Yes	N/A
15	9015	Smoked Pearl	Slate	Yes	Yes	Yes	Yes	Yes	Yes
16	9016	Sparkled Granite	Quartzite	Yes	Yes	Yes	N/A	Yes	Yes



SUBSTRATES

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- Curved surfaces and columns
- Metal
- Lacquered surfaces
- Concrete
- Wood
- Plywood
- Particle board
- Ceramic tiles
- Drywall
- MDF (Medium Density Fibreboard)



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INSTALLATION

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Installing STOVEN stone veneers is typically done by cutting the sheet using long nose tin snips and then adhering to a substrate using various adhesives.

Because the flexible stone veneer sheets are waterproof they can be used in most of the wet locations.

STOVEN holds up to most indoor/outdoor environments other than extreme low freezing conditions.

Like real stone STOVEN stone veneers can also be sealed using wood or stone sealers to bond and protect the surface while bringing out the colors. Thin Stone Veneer Sheets can be sealed with the same sealers which we use for slate, stone tiles, and wood surface.

We suggest you to please pre-test the respective sealer for the desired lustre and penetration required before installation.



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INSTALLATION-2

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Pre-Install : Clean, brush, and degrease the surface before applying STOVEN sheets

Depending on the adhesive which we are using, it may be necessary to prepare the backside of the Stone Veneer sheet by sanding or scuffing to expose the fibreglass.

We always recommend doing a test for one particular area with any suitable adhesive prior to final application.

STOVEN veneer sheets are also used for flooring after laminating on MDF & HDF & groove cutting with special machines. Interior applications of thin veneer are usually based on MDF, HDF, Ply-boards or real solid wood.

STOVEN veneers can also be installed directly on concrete or Mortar wall, but first clean the surface well enough.

Before installing the STOVEN veneer sheets on the surface it is very important to remove the air between the sheet and substrate, so to remove the air “A Hand Roller” plays an important role in the installation of the veneer sheets.

To remove the air we should properly roll out the trapped air by rolling out the hand roller towards the edge of the sheet



CUTTING & BENDING

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STOVEN stone veneer sheets are very easy to cut with the help of any normal scissors but if large volume of sheets are to be cut then wet diamond marble cutting blades can be used with electric hand tools or machines.

STOVEN slate stone veneer can also be cut with the help of tungsten carbide wood cutting blades. Wood panel saw blades of Diamond & tungsten carbide mixture are the most suitable cutting tools for dry cutting.

STOVEN Stone Veneer can be twisted in both ways concave & convex so It can be easily installed around round Pillars.

Fibre glass backing gives STOVEN a very good bending strength. The stone veneer sheet can be bent or flexed along the length but the width is not recommended for bending because of the nature of the different thickness of the individual items, the degree of radius varies with every item



ADHESIVES

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- Titebond "GREEN Choice" heavy duty construction adhesive.
- Titebond "FAST GRAB" SOLVENT FREE FRP adhesive
- Premixed grout and tile adhesive.
- Acrylic copolymer based tile adhesive.
- Polyurethane wood glues and PU construction grade adhesives.
- Wood, parquet, and outdoor carpet adhesives.
- Highly modified thin-set. Use only after testing. Not recommended where high adhesion is required
- Thick latex or acrylic latex type tile adhesive. Use only where air drying can take place. Not recommended for exterior applications.
- Epoxy.
- Silicone (with primer only).
- Construction grade multi-purpose adhesive, Liquid Nails type.
- Polyester resin with filler.



SEALANTS

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If the *STOVEN*[™] is being used in any wet areas such as kitchen backsplashes, near a food preparation area or sink, it does need to be sealed. Bacteria & everyday stains and dirt can accumulate in the slate's pores making it difficult to clean. The natural minerals present in your water can also accumulate in the stone's pores. This is most noticeable in bathroom application and shower/bath areas.

There are a variety of stone sealers on the market today and when applied according to the manufacturer's recommendations will seal the pores on the *STOVEN*[™] surfaces. We have tested **Protect Guard FT** (Matt Finish) and **PG (Wetlook)** with very satisfactory results. You can also use **TEC- EnsealantSB**, it is a solvent based stone enhancer and sealer.

All stone veneer need sealer & impregnators for stain & scratch protection. The sealers & impregnators available in the market are polyurethane matt & glossy, water based sealers & impregnators, solvent based sealers & impregnators & silicone based sealers & impregnators. All these sealers are similar to the ones used in sandstone & slate industries.



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MAINTAINANCE

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Care & Handling - **STOVEN™** is a real and natural slate product and it is as porous as any natural slate would be. The slate may absorb the oils found on your hands and fingers. Follow the cleaning instructions to remove any smudges. Wearing gloves when handling these material will minimize the amount of cleaning required.

Cleaning – Any impurities splashed or spilled on the **STOVEN™** should be removed as soon as possible. In doing so warm water and a lightly moistened lint free cloth often suffices.

If the impurity or stain is not easily removed, we recommend washing the surface with a soft lint free cloth moistened with a mild dish washing liquid and warm water solution. If you do use any additional cleaners, test them on an inconspicuous area first to make sure they will not adversely harm or stain the surface of the **STOVEN™**.

If the **STOVEN™** is being used in any wet areas such as kitchen backsplashes, near a food preparation area or sink, it does need to be sealed. Bacteria & everyday stains and dirt can accumulate in the slate's pores making it difficult to clean. The natural minerals present in your water can also accumulate in the stone's pores. This is most noticeable in bathroom application and shower/bath areas.



TRANSLUCENT STONE VENEER

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Translucent Stoven Veneers, are an innovative product that enhances the spaces around you. Without Light Translucent Stoven seems a natural stone panel but once illuminated a translucent light reflects off the surface of the stone.

The translucent stone has all the properties of a slab or sheet of Stoven but also allows the entry of light which creates a warm and innovative environment at the same time.

With a wide range of colors and textures translucent Stoven the slabs create a unique and natural design.

Uses: columns, panels, windows, floors receptions and translucent Stoven make an exceptional piece.





FLEXI-STONE

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FLEXI-STONE is an extremely thin and flexible veneer with the natural stone surface and a fabric backing. The product is less than 0.8mm in thickness and weighs less than 0.8kg/sq mtr.

FLEXI-STONE is extremely flexible and is easy to apply around corners and round objects

FLEXI-STONE can be used for the following applications :

- Wall Coverings
- Furniture
- Doors
- Ceilings
- Kitchen Cabinets
- Fashion Accessories





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FLEXI-STONE

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