



Product Information | Technical Datasheet

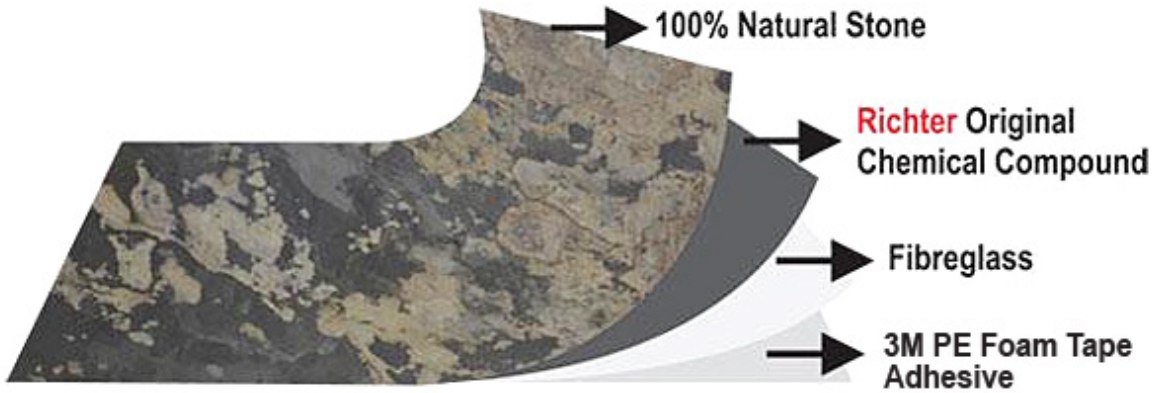
FastStone+ is bonded with 3M PE Form Tape. It sticks fast and hard so accurate placement “the first time” is required because it will not come off easily and damage may occur to the surface it was applied to while trying to remove the FastStone+.

Before applying to the surface, make sure that the surface it is being applied to is free of dust, dirt and oils. After peeling off the protective cover on the backing, be careful as to the placement of the product since the adhesion is immediate and permanent.

Fast and easy direct application on all flat, clean, oil and dust free surfaces. For decorative designs of all kinds, ideal for walls, ceilings, displays or for “DIY”. If used for direct application, it is recommended to use exact cut-to-size sheets.

FastStone+ COLLECTION: Indian Autumn, Copper, Black Line, Silver Shine. All other colors available on a special order basis. Minimum quantities may apply.

Above mentioned FastStone+ is available in sizes 3” x 6”, 6” x 6”, 6” x 9”, 12” x 12”, 12” x 24”. Sizes can be produced as per customers requirements. Minimum quantities may apply.



COMPOSITION

FastStone+ is natural stone veneer laminated to a fiberglass/polyester resin substrate bonded with 3m PE foam tape adhesive.



PREPARATION

Before application it may be necessary to clean, brush, or degrease any surface of dust or oils. To obtain optimum adhesion, the bonding surfaces must be clean, dry and well unified. Some typical surface cleaning solvents are isopropyl alcohol or N-heptane. Note: Carefully read and follow the manufacturer's precautions and directions for use when working with solvents. It is recommended to acclimate the Stone-Veneer sheet and the work object for at least 24 hours to avoid potential damage due to tension and/or warping. Ideal tape application temperature range is 70 degrees F to 100 degrees F (21 degrees C to 38 degrees C). Initial tape application to surfaces at temperatures 50 degrees F (10 degrees C) is not recommended because the adhesive becomes too firm to adhere correctly. However, once properly applied, low temperature holding is generally satisfactory.

INSTALLATION

Installation of FastStone+ is quick, simple and easy. When FastStone+ is applied, it is almost impossible to remove or re-adjust the sheet from the object without damage. To apply the panels, it is recommended to start at the top corner and work your way down. It is a must to follow a straight line and even line. To press the sheets onto the surface, it is recommended to use a felt or rubber roller.

FLEXIBILITY

FastStone+ can be used in many of the same applications as other thin laminate products are used. It will bend to a minimum 8" radius depending on the stone colour or type. With the assistance of heat, smaller radii can be achieved. Testing should always be done prior to any installation. FastStone+ can be bent inward or outward to meet a given look or architecture. Fiberglass strand is used in the makeup of FastStone+, which gives it superior strength and flexibility.

SEALERS & IMPREGNATORS

FastStone+ has been pre-treated with a leading brand stone sealer.

Please visit www.moellerstonecare.eu, www.lithofin.com, www.akemi.com, www.laticrete.com, or your local dealer.

LAYOUT & PATTERNS

Preparation of the area to be covered and the layout of the FastStone+ sheets is the same as for natural stone or tile. Time spent preparing the work area will pay off immensely. A preliminary dry fit of FastStone+ allows for arrangements and orientation of individual sheets, patterns, textures, and colours before final placement. It is recommended that each sheet be dry fit exactly where it will be placed on horizontal or vertical surfaces. Numbering the sheets to track relocation before cutting and trimming is recommended and will save time.



CUTTING

Cutting straight lines and curves is best done using long nosed tin snips. FastStone+ can also be cut with a metal shear, wet saw, or table saw with carbide blade.

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Stone-Veneer 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.

FastStone+ on concrete or mortar cement plastered wall or Gypsumboard Exterior or interior: EXPOXY based grouts available in the market with flexibility component are recommended. Contact local dealer /engineer of the area visiting website www.mapei.com or www.laticrete.com or local supplier of similar products. We strongly recommend to seal the Stone with Lithofin sealers.

HAND ROLLERS

A hand roller is recommended to remove air between the FastStone+ sheet and substrate. To properly roll out trapped air, start in the middle of a sheet while firmly rolling to the edge. Do not press too hard while rolling as this may cause back-filled areas to push adhesive out and leave an air void. Proper back-filling and good rolling techniques will result in a solid, hard surface.

TILING, GROUTING & JOINING

FastStone+ can be used to create a tiled effect by leaving a grout joint between cut pieces. Sheets may also be butt-jointed for the look of a smaller seam. Due to the thin nature of FastStone+ a 1/8" to 1/4" grout joint will produce better results. Tests show the use of water based epoxy and acrylic premixed grout work well to fill between the sheets. These grouts are available in several colors to match the existing decor. If desired, a deeper grout joint can be achieved by removing material just under the grout joint area with a grinding or scraping tool. Modified grout and caulking grout can also be used.

SUBSTRATE

FastStone + can be applied to MDF, HDF boards, Styro Foam sheets, melamine, mortar plastered walls, drywall, plywood, acrylic or other plastic sheets. In some indoor and most outdoor applications expansion and contraction must be equal to prevent delamination. A flexible adhesive may be considered in this case. Concrete and masonry substrates must be at least 28 days old. Hydrostatic pressure conditions and vapor transmission cannot exceed 3 lbs. per 1,000 sq. ft. (1,36 kg per 92,9 m²) per 24 hours using a calcium chloride test (reference ASTM F1869), and retained moisture should be less than 2.5%. Above mentioned companies are multinational and the local dealer can be contacted. Websites can be visited for recommended glues for fiber glas polyester resin sheet application on MDF and HDF. Companies may recommend white emulsion polymer glue or polyurethane foaming glue or polyurethane double component non foaming glue depending on the hot press machine available with the user.



VARIATIONS

Since FastStone + is a natural product DESIGNED BY NATURE, color and texture variances are not defects within the material, but are inherent to it and part of the natural beauty of quarried materials. cannot be guaranteed to match dye-lot to dye-lot, so it is recommended that orders take into account future maintenance or re-fit possibilities.

UV & TEMPERATURE

The stone surface of FastStone + like most stone elements, acts as a UV inhibitor and will resist high sun conditions for years. When adhered to a substrate, FastStone + will handle thermal contraction and or expansion of most standard construction materials. FastStone + will handle both, - high temperatures and freezing without cracking.

STORAGE

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

PRECAUTIONS

Precautions must be taken when working with FastStone+ due to the fiberglass composition of the backing materials. ALWAYS use the proper gloves, goggles, and dust mask when working with FastStone+. Industry standards recommend a NIOSH/MSHA approved respirator for this type of material. When using a saw ALWAYS be sure to take proper precautions to cover skin and eyes from fiberglass dust. When cutting FastStone+ with saws, grinders, or sanders ALWAYS properly filter and exhaust equipment.

SAFETY

AVOID BREATHING SILICA DUST. This product when cut, drilled, or abraded produces dust containing Free Silica which may cause cancer or delayed lung injury (Silicosis) if inhaled. Work outdoors, in a well ventilated area, or use mechanical ventilation. Please wear safety glasses and a dust mask. If working in dusty areas or where airborne dust exceeds PEL wear NIOSH/MSHA approved respirators. This product contains one or more chemicals known to the State of California to cause cancer.



Application Techniques:

Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure helps develop better adhesive contact and improves bond strength.

Application Ideas

- 1600T series tapes are specially formulated for many indoor/outdoor high performance purpose mounting and joining applications, including binding to many Plastics, where moderate temperature and shear performance are required.

- For secure joining / mounting, 2 kilograms is the maximum static loading for 1 square inch tape application. Due to the consideration of less than 100% contact with the surface, variations in surface preparations, extreme / environmental conditions, customer evaluation and testing are required for every specific application.

Product	Color	Adhesion to Stainless Steel ASTM D3330 - 90° angle Peel, Jaw Speed 12 in/min, 72 hour swell time, 5 mil Al foil backed, at 22°C, 50%RH	Relative High Temperature Operating Ranges	
			Long Term (days, weeks)	Short Term (minutes, hours)
1600T	Grey	5Kg/in (11 lb/in)	70° C (158° F)	82°C (180° F)



Test Method: US code of federal regulations Part. 1500.44, Titel 16

Flammability Test on Rigid and Pliable Solids: PASS
Sample Burning Rate: inch/sec
Polyester Resin based Metalized Panel: 0.004

*A sample is considered to have passed the test if the burning rate is not more a 0.10 inch per Second.

Test method: As specified in AOAC 16th Ed. Section 973.32 & 973.82

Polyester resin-based- metallized panel / bowl

Lead and Cadmium content in earthenware quantilation by AAS: PASS

SGS Laboratory No.	Extract, Volume ()	Lead, ppm (mg/L)	Cadmium, ppm (mg/L)
14324	2.0	<1.0	<0.25
14324	2.0	<1.0	<0.25
14324	2.0	<1.0	<0.25
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14324	2.0	<1.0	<0.25

Limit for FDA (any one of six) 1.0 ppm 0.25

Notes:

- < = less then
- mg / L = milligrams per litter
- ppm = parts per million

AAS = ATOMIC ABSORPTION SPECTROPHOMETER

Conclusion: The client submitted samples described above comply with the leachable lead and cadmium requirements of the American Food and Drug Administration (FDA).

Test Method: Nitric Acid digestion and analyzed by Atomic Absorption Spectrophotometer.

Test Sample: 04249 Stone/Slate on Resin 12 x 12 tile size 6x12

To determine the soluble Heavy Metal contents in accordance with the European Standard EN 71 part 3.1994 + A1:2000 – Migration of certain elements.

Migration of Certain Elements	04249	Limit
Soluble Lead (Pb), mg/kg	12.7	90 mg/kg
Soluble Antimony (Sb), mg/kg	<5 60	mg/kg
Soluble Arsenic (As), mg/kg	0.2	25 mg/kg
Soluble Barium (Ba), mg/kg	<0.5	1000 mg/kg
Soluble Cadmium (Cd), mg/kg	<0.5	75 mg/kg
Soluble Chromium (Cr), mg/kg	7.5	60 mg/kg
Soluble Mercury (Hg), mg/kg	<0.5	60 mg/kg
Soluble Selenium (Se), mg/kg	<0.5	500 mg/kg

Methodology:

with reference to EN 71 Part 3.1994 +A1:2000 by inductively coupled argon plasma (ICP-OES)

Analysis: 04249

Lead (Pb), ppm ND (None detected) detection limit for Pb is 5.0 ppm

FastStone+ Details

S.No.	MATERIAL Compound/ Ingredient	Quantity Kg./Sqm.
1.	Processing Material	1.300 - 1.500
2.	Backling Material	0.150 - 0.200
3.	Natural Stone	0.100 - 0.200
	Total Weight per sqm.	1.550 - 1.900

THICKNESS OF MATERIAL PARTICULARS		in MM
4.	Thickness of natural stone layer	0.50 - 0.60
5.	Thickness of other chemicals backing	1.00 - 1.40
6.	Total thickness	1.50 - 2.00



Test conducted at testing laboratory which is ISO 9001:2000 approved internationally		TEST VALUE		PROTOCOL
		SLATE	QUARTZITE	
7.	Waterabsorption in % bu wt	2.50	1.90	ASTM C-121
8.	Waterabsorption in % Test carried out on thin slate specimen pasted on marble piece	0.17	0.12	ASTM C-97
9.	Abrasion Test Average wear, mm Max wear on individual specimen, mm	0.70 0.80	0.90 1.00	IS: 9162-1979 guidelines
10.	Density (mass per unit area Kg/m ²)	1.45	1.66	IS: 12866-1989 guidelines

The Limited Warranty

FastStone+ products are warranted to be free from defects in materials and workmanship. Any such defects must be reported within ten (10) days of date of delivery. During this warranty period we will repair, or at our option, replace free of charge, such merchandise as shall prove to be defective. THIS WARRANTY DOES NOT APPLY TO DAMAGE RESULTING FROM ACCIDENT, ALTERATION, MISUSE, TAMPERING, NEGLIGENCE, OR ABUSE. INCIDENTAL AND CONSEQUENTIAL DAMAGES ARE SPECIFICALLY DISCLAIMED. ALL OTHER WARRANTIES (INCLUDING ANY WARRANTY OF MERCHANTABILITY OF FITNESS FOR ANY PARTICULAR PURPOSE) ARE HEREBY EXCLUDED. THE FOREGOING SHALL CONSTITUTE THE SOLE REMEDY OF THE CUSTOMER.

Concrete and masonry substrates must be at least 28 days old. Hydrostatic pressure conditions and vapor transmission cannot exceed 3 lbs. per 1,000 sq. ft. (1,36 kg per 92,9 m²) per 24 hours using a calcium chloride test (reference ASTM). NOTICE: Before using, user shall determine the suitability of the product for its intended use and user alone assumes all risks and liability whatsoever in connection therewith. ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR SHOULD HAVE BEEN DISCOVERED.