Micro-Thin Slate Veneer

FACT AND APPLICATION SHEET

OVERVIEW:

Micro-Thin Slate Veneer is a new stone veneer that can be applied to many different indoor and outdoor surfaces. It is light weight and flexible allowing it to be used in many applications including vertical and horizontal surfaces not previously considered for stone due to weight and / or flaking issues.

COMPOSITION:

Micro-Thin Slate Veneer is natural stone veneer laminated to a fiberglass substrate.

VARIATIONS:

Since it is a natural stone veneer, color and texture variances are not defects within the material, but are inherent to it and part of the natural beauty of quarried materials. **Micro-Thin Slate Veneer** cannot be guaranteed to match panel to panel, so it is recommended that orders take into account future maintenance or re-fit possibilities.

BACKING:

Micro-Thin Slate Veneer is produced with a fiberglass backing. As a result, in certain instances, a seam will be noticeable when **Micro-Thin Slate Veneer** is used in backlit applications.

USES:

Micro-Thin Slate Veneer is perfect for wall applications, furniture, millwork, lighting, column cladding and numerous other interior and exterior applications. **Micro-Thin Slate Veneer** is not recommended for flooring or countertop applications due to the thin soft nature of the stone veneer.

Micro-Thin Slate Veneer ***may be used in backlit or other translucency applications. Disclaimer: Most applications of this nature will require a custom panel manufactured without fiber and a computer color matched backer.***

UV / TEMPERATURE:

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

SURFACES:

Micro-Thin Slate Veneer can be applied to MDF, foam board, melamine, concrete, brick, block, drywall, plywood, acrylic and other plastic sheeting.

CUTTING:

The use of metal shears is recommended for cutting **Micro-Thin Slate Veneer**. However, standard carbide or diamond saw blades would work just as well.

BENDING:

Micro-Thin Slate Veneer can be bent in the same manner as plastic laminate products. The fiberglass strand used in the manufacture of **Micro-Thin Slate Veneer** gives it strength and flexibility. **Micro-Thin Slate Veneer** can be bent inward, or arched outward, depending on the desired need. **Micro-Thin Slate Veneer** can be bent or flexed to a radius of 18" along the 4' length. The 2' width will also have a slight flex to it, but is not recommended for bending. Due to the nature of the different thickness of the individual items, the degree of radius varies per item. We recommend testing the flex of the considered item prior to final installation.

INSTALLATION:

Micro-Thin Slate Veneer can be glued using most standard laminate adhesives having a thick body or foaming quality. Prior to application, it is imperative to clean, brush and de-grease the receiving surface of dust, oils or any other contaminants. In some installations, and depending upon the adhesive used, it may be necessary to prep the back of the **Micro-Thin Slate Veneer** with solvent or recommended primer by the adhesive manufacturer. We recommend making a test area with any adhesive prior to final application.

ADHESIVES and ADHESION:

Understanding the specifics of adhesives, and the respective surfaces for which they are recommended, is critical in obtaining superior installations when using **Micro-Thin Slate Veneer**. We recommend testing the selected adhesive prior to proceeding with installation, taking into consideration the humidity and temperature of the planned environment. If the application is outdoors, consideration to thermal expansion should be taken into account.

Since **Micro-Thin Slate Veneer** is a veneer, it must expand and contract the same as the substrate to which it is applied…or de-lamination may occur. Whenever a primer is recommended by the adhesive manufacturer, the bond must be tested by the installer prior to final installation.

Recommended types of adhesives & fillers:

- Polyester-based gap filler putties (eg. Bondo and similar)
- Epoxies
- Silicone (with primer only)
- Polyurethane wood glues
- Thick latex-type adhesives, thin set etc. (Use ONLY where air-drying can take place)
- Construction grade multi-purpose adhesives (eg. Liquid Nails or PL Premium Polyurethane {stickwithpl.com} or similar)

NOTE: The back of **Micro-Thin Slate Veneer** veneers may require a filler-type adhesive in some cases. Polyurethane wood glues work well for most applications to board materials by foaming slightly to fill gaps. For wet environments such as shower and bathroom applications, the use of epoxy is best.

NOTE: Contact adhesives are NOT recommended due to the uneven backing of **Micro-Thin Slate Veneer** veneer.

TILING:

Micro-Thin Slate Veneer can be used to create a tiled effect by leaving a grout joint between cut pieces of material. Test results have shown the use of water-based epoxy grouts work well to fill between the cut veneers. By removing the material just under the grout joint, a deeper grout can be achieved if desired. Epoxy grouts are available in many colors to match or co-

ordinate with the different colors of **Micro-Thin Slate Veneer**. On final clean up of the epoxy with a sponge, the epoxy can also be used to seal and fill the **Micro-Thin Slate Veneer** surface. It is recommended in this installation that the entire surface of the **Micro-Thin Slate Veneer** be sealed with epoxy as a final step to ensure complete satisfaction.

SEALERS:

Micro-Thin Slate Veneer can be sealed in the same manner as most slate and / or stone tiles are. Please follow manufacturer's instructions for best results. As sealants are offered in varying degrees of luster or sheen, we recommend that you confirm the reflectance prior to complete installation to get the desired effect.

TECHNICAL ANALYSIS:

Test Method: **US Code of Federal Regulations Part 1500.44, Title 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 than 0.10 inch per second.

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

Polyester Resin Based Metalized Panel/Bowl

Lead & Cadmium content in earthenware quantilation by AAS: PASS

SGS Laboratory No.	Extract, Volume (II)	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
14324	2.0	<1.0	<0.25
14324	2.0	<1.0	<0.25
14324	2.0	<1.0	<0.25
Limit for FDA (any one of six)		1.0 ppm	0.25

Notes: 1) < = less than

2) mg/L = milligrams per liter

3) ppm = parts per million

4) AAS = ATOMIC ABSORPTION SPECTROPHOTOMETER

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 6x

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