SPECIFIED SOLUTIONS STONE VENEER SURFACES

INSTALLATION GUIDELINES

These installation guidelines are recommendations only. All adhesives should be tested prior to any installation including consideration of moisture and temperature in the planned environment. If the application is outdoors, consideration to thermal expansion needs to be taken into account. Since these are veneers they must expand and contract with the substrate or de-lamination may occur. All adhesives should be tested by the installer before final installation.

Specified Solutions Stone Veneers are available with various backers. Installation guidelines are listed below.

FIBERGLASS BACKER

(Slate/Quartzite, Marble, Limestone, Sandstone and Concrete)
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TRANSLUCENT ACRYLIC BACKER

(Slate/Quartzite)
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FABRIC BACKER

(Slate/Quartzite, Marble)
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RECOMENDED ADHESIVES LIST

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FIBERGLASS BACKED STONE VENEER INSTALLATION GUIDELINES

Fiberglass backed stone veneers can be used the same way thin laminate type products are used. It will bend to a minimum radius depending on the stone color or type before cracking. With the assist of heat smaller radii can be achieved. Testing should always be done prior to any installation. Veneers can be arched or bent inward or outward to meet a given look or architecture. Fiberglass strands are used in the makeup of the veneers, which gives them strength and flexibility. Fiberglass backed veneers are suitable for interior, exterior and wet area applications.

SUBSTRATE PREPARATION

Prior to application it is best to clean, brush, and degrease any surface of dust or oils.

LAYOUT & PATTERNS

Preparation of the area to be covered and the layout of the veneers is the same as for natural stone or tile. Time spent preparing the work area will pay off immensely. A preliminary dry fit of the veneers allows for arrangements and orientation of individual sheets, patterns, textures, and colors 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 fiberglass backed veneers can be done with standard woodworking equipment, such as a table saw with a carbide blade. Long nosed tinsnips, wet saws and metal shears can also be used. For CNC, a router bit for composite material is suggested.

MITERING

Fiberglass back stone veneers can be mitered to your desired angle on a table saw. Mitering can also be done easily by hand with block sander. Only a few passes are needed.

FIBERGLASS BACKED STONE VENEER INSTALLATION GUIDELINES (CONTINUED)

RECOMMENDED ADHESIVES

- · Heavy duty polyurethane based construction adhesive
- · Polyurethane wood glues
- . Solvent Free FRP adhesive
- · Acrylic copolymer based tile adhesive
- Double-sided VHB Tape

TILING, GROUTING & JOINTING

Our stone veneers can be also be used to create a tiled effect by leaving a grout joint between cut pieces. Sheets may also be butt jointed for a minimal seam look. Due to the thin nature of the veneers a narrower grout joint will produce better results. Test show the use of water based epoxy grouts, premixed acrylic grouts, or sanded grouts work best. These grouts are available in several colors to match the desired decor. Always apply masking tape on the edges on all sides prior to grouting. On final clean up with a sponge, the epoxy grout will also seal and fill the stone veneer surface. If desired a deeper grout joint can be achieved by removing material just under the grout joint area. For exterior applications we recommend having a grout joint between the sheets.

HAND ROLLERS AND PRESSING

A hand roller is recommended to remove air between stone veneer sheet and substrate. To properly roll out trapped air start in the middle of a sheet while firmly rolling out towards the edge. Do not press too hard while rolling as this may cause too much adhesive to push out. Proper back-filling and good rolling techniques will result in a solid hard surface. Do not use non-catalyzing (water vapor type) cure adhesives where the substrate is a moisture barrier. Non-catalyzing adhesive will not cure properly if applied between non-porous materials. Vacuum and cold pressing can be done with a foam sheet between the platen and the veneer surface.

RE-SEALING

Fiberglass backed veneers will arrive pre-sealed. Interior applications should not require resealing. For exterior applications and wet area applications it is recommended to reseal the product after 7 years.

Protect Guard® MG and Akemi Stone Impregnation are recommended.

TRANSLUCENT ACRYLIC BACKER INSTALLATION GUIDELINES

Acrylic backed stone veneers can be used the same way thin laminate type products are used. It will bend to a minimum radius depending on the stone color or type before cracking. With the assist of heat smaller radii can be achieved. Testing should always be done prior to any installation. Veneers can be arched or bent inward or outward to meet a given look or architecture.

<u>Acrylic backed veneers are suitable for interior, exterior and wet area applications.</u>

SUBSTRATE PREPARATION

Prior to application it is best to clean, brush, and degrease any surface of dust or oils.

LAYOUT & PATTERNS

Preparation of the area to be covered and the layout of the veneers is the same as for natural stone or tile. Time spent preparing the work area will pay off immensely. A preliminary dry fit of the veneers allows for arrangements and orientation of individual sheets, patterns, textures, and colors 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 acrylic backed veneers can be done with standard woodworking equipment, such as a table saw with a carbide blade. Long nosed tinsnips, wet saws and metal shears can also be used. For CNC, a router bit for composite material is suggested.

MITERING

Acrylic backed stone veneers can be mitered to your desired angle on a table saw. Mitering can also be done easily by hand with block sander. Only a few passes are needed.

RECOMMENDED ADHESIVES

For acrylic backed veneers we recommend using a clear/transparent acrylic adhesive.

TRANSLUCENT ACRYLIC BACKER INSTALLATION GUIDELINES

(CONTINUED)

HAND ROLLERS AND PRESSING

A hand roller is recommended to remove air between sheet and substrate. To properly roll out trapped air start in the middle of a sheet while firmly rolling out towards the edge. Do not press too hard while rolling as this may cause too much adhesive to push out. Proper back-filling and good rolling techniques will result in a solid hard surface. Do not use non-catalyzing (water vapor type) cure adhesives where the substrate is a moisture barrier. Non-catalyzing adhesive will not cure properly if applied between non-porous materials. Vacuum and cold pressing can be done with a foam sheet between the platen and the veneer surface.

RE-SEALING

Translucent backed veneers will arrive pre-sealed. Interior applications should not require resealing. For exterior applications and wet area applications it is recommended to reseal the product after 7 years.

ProtectGuard® MG and Akemi Stone Impregnation are recommended.

FLEXIBLE FABRIC BACKER INSTALLATION GUIDELINES

Fabric backed stone veneers can be used the same way thin laminate type products are used. It will bend to a minimum radius depending on the stone color or type before cracking. With the assist of heat smaller radii can be achieved. Testing should always be done prior to any installation. Veneers can be arched or bent inward or outward to meet a given look or architecture. Fabric backed veneers are for interior dry applications only.

SUBSTRATE PREPARATION

Prior to application it is best to clean, brush, and degrease any surface of dust or oils.

LAYOUT & PATTERNS

Preparation of the area to be covered and the layout of the veneers is the same as for natural stone or tile. Time spent preparing the work area will pay off immensely. A preliminary dry fit of the veneers allows for arrangements and orientation of individual sheets, patterns, textures, and colors 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, scissors or a utility knife. The veneer can also be cut using a CO2 or Fiber laser.

RECOMMENDED ADHESIVES

We recommend using glass fiber wallpaper adhesives, spray adhesives or contact adhesives.

FLEXIBLE FABRIC BACKER INSTALLATION GUIDELINES

(<u>CONTINUED</u>) _

TILING, GROUTING & JOINTING

Flexible Fabric Backer materials can be also be used to create a tiled effect by leaving a grout joint between cut pieces. Sheets may also be butt jointed for a minimal seam look. Due to the thinner nature of ECO-S-TILE a narrower grout joint will produce better results. Test show the use of water-based epoxy grouts, premixed acrylic grouts, or sanded grouts work best for ECO-S-TILE. These grouts are available in several colors to match the desired decor. Always apply masking tape on the edges on all sides prior to grouting. On final clean up with a sponge, the epoxy grout will also seal and fill the surface. If desired a deeper grout joint can be achieved by removing material just under the grout joint area. For exterior applications we recommend having a grout join between the sheets.

HAND ROLLERS AND PRESSING

A hand roller is recommended to remove air between sheet and substrate. To properly roll out trapped air start in the middle of a sheet while firmly rolling out towards the edge. Do not press too hard while rolling as this may cause too much adhesive to push out. Proper back-filling and good rolling techniques will result in a solid hard surface. Do not use non-catalyzing (water vapor type) cure adhesives where the substrate is a moisture barrier. Non-catalyzing adhesive will not cure properly if applied between non-porous materials. Vacuum and cold pressing can be done with a foam sheet between the platten and the veneer surface.

RE-SEALING

Fabric backed veneers will arrive pre-sealed. Interior applications should not require resealing. If re-sealing is desired ProtectGuard® MG and Akemi Stone Impregnation are recommended.

RECOMMENDED ADHESIVES

All adhesives should be tested by the installer before final installation.

ADHESIVES FOR FIBERGLASS BACKED VENEERS

EXTERIOR OR INTERIOR

- Loctite PL Premium Max Heavy duty polyurethane based construction adhesive
- Original Gorilla Glue Polyurethane wood glue
- <u>Titebond Ultimate Advanced Polymer Panel Adhesive</u> Solvent
- Free FRP adhesive
- <u>Litoelastic EVO Tile Adhesive</u> Acrylic copolymer based tile adhesive
- 3M™ VHB™ Tape 5952 Double-sided VHB Tape

ADHESIVES FOR TRANSLUCENT ACRYLIC BACKED VENEERS

EXTERIOR OR INTERIOR

- Loctite Power Grab Ultimate Crystal Clear Acrylic adhesive.
- Gorilla Max Strength Construction Adhesive Clear Acrylic adhesive.

ADHESIVES FOR FLEXIBLE FABRIC BACKED VENEERS

INTERIOR ONLY

- ROMAN PRO-880 Ultra® Clear Strippable Wallcovering Adhesive
- 3M™ Hi-Strength 90 Spray Adhesive
- 3M™ Fastbond™ Contact Adhesive 30NF