QUALITY STONE

Panel and Corner Installation Guidelines

Quality Stone provides these Installation Instructions as a guideline. Quality Stone, however, does not install panels or have control over the installation. It is the responsibility of whoever does the installation to ensure all Quality Stone products are installed in accordance to the Quality Stone Installation Instructions. It is also the responsibility of the installer to ensure that all applicable building codes are being met or exceeded. InStone Distribution assumes no liability for either improper installation or personal injury resulting from proper or improper use or installation.

The following installation instructions must be followed for warranty purposes and for optimal performance. The operator of any power tools or other tools should be skilled and familiar with the correct use of each tool. Always study and follow local Building Codes when applying Quality Stone. Proper safety gear must be worn at all times.

RECOMMENDED TOOLS:		
Miter Saw and/or Table Saw	Drill	Measuring Tape
Pencil	Level	10 oz. Caulking Gun
Stagger Stencil	Drywall Saw	Utility Knife
Safety Glasses	Earplugs	Dust Mask

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QUALITY STONE
DETAILED INSTALLATION INSTRUCTIONS

HANDLING AND STORAGE OF PRODUCTS:
Quality Stone products are highly impact resistant once they are installed, but should be handled carefully to reduce damage prior to installation. The products should be laid flat and kept out of direct sunlight or they may be susceptible to warping. Exposed polyurethane will yellow in the sun. Ensure any exposed areas are covered with the recommended Stone Finish (textured caulk) to protect from UV.
Different climates will also have a movement affect (expansion and contraction) in polyurethane products. Quality Stone has been designed to best adapt to this change, but it is always best to install when panels are cool– please ask representatives for the best stone fit for your application.

PRODUCT COLORING:
Please ensure, wherever possible, that the production dates on all product being installed side-by-side are the same. This will help ensure consistent coloring. Most of the time product from different dates will match up, but the installer should check this before installing. Also, there is the possibility for a panel to be slightly off-colored in a batch. Again, the installer should check all panels match before installing.

INSTALLATION – 1-2-3

1. MEASURE and MARK: Products should be measured and marked from the backside. Using a measuring tape, mark the backside with a pencil or marker, and then use a straight edge to mark a cutting line. Then fasten the Starter Strips along the line for the starting (bottom) row. Starter Strips are required for warranty. If the installation is into a substance (ie. concrete) which makes installation of the starter strips difficult, other means (ie. face screwing bottom row) may be necessary.

2. CUT: The panels are easiest cut from the flat backside. Use a miter saw to make the cut. For cutting panels lengthwise, use a table saw. To cut outlet and fixture holes, make markings on the backside of the panel, then use a hole saw or high speed drill to cut the opening. For precise cuts or trimming materials, a utility knife or drywall saw.

3. FASTEN: The bottom row of panels sits and locks into the Starter Strips. Starter Strips must be a minimum of ¼” off the ground for proper fastening. Check your local building code to see if the panels need to be 1-2” off the ground.
Working from RIGHT to LEFT, fasten product to wood substrate using 2” wood screws (must penetrate wood 1”). We recommend putting (6) screws, spaced roughly every 8 inches, into the tongue seam (inside ledge where the tongue meets the top stones), on the top tongue of each panel. (minimum of 6 screws into top tongue of panel). Screws should not be put in the tongue on the side of the panel, as these screws can become visible as the panels move over time. In some cases, where the tongue has been cut off, all screws must be applied directly into the face of the panels. Quality Stone Finish caulking should be used to cover screw holes. Similar to other siding products, a construction paper (Tyvek, Typar, or tar paper) must be put on top of the wood substrate, before applying Quality Stone. When fastening trims and detail pieces – screw directly into the face (longer screws such as 3-4” may be necessary).

EXPANSION AND CONTRACTION:
Polyurethane panels will expand and contract much like many other building materials. It is recommended to install your panels when they are cool (contracted state) and as tight as possible to minimize the visual appearance of expansion and contraction. If a gap(s) is noticeable, Quality Stone Finish caulking can be used to fill in any gaps for a seamless finish. In some cases, backer rod should be used first to fill gaps and then add the Stone Finish.

APPLYING PANELS:
It is much easier to apply Quality Stone working from RIGHT to LEFT.
Each of the stone profiles has 4 different patterns or panels, each of which is numbered accordingly. Effort should be made to keep same-numbered panels away from one another (you don't want them beside one another or on top of one another). Optimally, they should be installed 1-2-3-4, and if there is a row above this one – they should be installed 4-3-2-1, etc.
The wall should first be measured and laid out, and a level line should be set prior to installing the starter strips. After the wall is laid out, place and fasten the corner(s) first. Then measure the distance left between the last panel and the wall. Measure and cut the panel the correct length (using the Stagger Stencil). Put Stone Finish caulking on the cut edge to cover the exposed polyurethane and to ensure a proper moisture seal. Then cut the tongue off of the panel that will meet up to the new cut piece. Place the panel in its designated position to check the fit. Ensure the Stone Finish has created a seal between the panels.

APPLYING CORNER PANELS:
It is much easier to apply Quality Stone working from RIGHT to LEFT.
Quality Stone recommends using our Corner Panels. For best results, alternate Left and Right Corner Panels on each course. This will stagger the joints, giving the best look. Corner Panels are applied the same as Panels, with screws going in the top tongue of the panel. Corner Panels should be installed using a minimum of 3 screws.
IMPORTANT - Make sure to use a Panel or another Corner Panel as a spacer when installing the Left Corner Panels. If this is not done, the return on the Corner Panel will be too tight to the wall, and the tongue of the adjoining Panel will not have a groove to fit into.

MITERING CORNERS
Installers can also cut the corners using regular Panels and a miter saw. This is recommended for interior installs only, as outside expansion and contraction can cause the cut pieces to separate. (Opening up of cut corners is not covered under warranty). Cuts should be very tight, and then Stone Finish caulking and Touch Up Paint applied in combination to ensure long-term color match. If there is a gap, a screw(s) can be used to fasten the two cut pieces together prior to caulking. Separation in the corners is common, so some touch up of corner gaps is usually necessary. To fit a right angle inside or outside corner, cut each end at a 45-degree angle and try for no gap, and apply the caulking. Both cuts should be made at the same place on the same panel to help ensure the stone matches on both sides of the corner.
A second option for inside corners is to have one piece tight to the wall (preferably with the tongue against the wall) and the second piece butted up tight to the secured piece. Caulking should still be applied between the two panels to provide a proper moisture seal. Use a wet grout sponge to clean off the excess grout.
***angles and cuts may need to be played and experimented with, as most corners and walls are often not straight.

APPLYING LEDGE TRIMS:
In most applications, the Ledge Trim will be sitting on top of an already installed panel. The screws should be applied directly through the face of the Ledge Trim (*not the top) using 3½" - 4" screws every 8". Stone Finish caulking and Touch-Up Paint should be applied to cover any screw holes.
*Screws can also be put into the top of the panel, as long as a flashing will completely cover the holes.

APPLYING EDGE TRIMS:
Wherever possible, Edge Trims should be applied prior to installing panels. Screws can be applied every 8" on the side of the trim facing the stone, at a 45-degree angle. This will ensure a strong fasten, and the panels that are installed against the Edge Trim will hide the screws.
The second option is to apply the screws directly through the face of the trim piece (using 3½" - 4" screws) every 8". Stone Finish caulking and Touch-Up Paint should be used in combination to cover the screw holes.

APPLYING FIXTURE TRIMS AND ELECTRICAL TRIMS:
These trims should be installed prior to installing any panels. Both the Fixture and Electrical Trims are applied by diagonally screwing 2 ½" – 3" screws through the sides, bottom, and top. This will allow for the surrounding panels, once installed, to conceal any screw holes. If for any reason the screw is still visible on the side, Quality Stone 'Stone Finish' caulking should be used to cover the screw.

APPLICATION OVER CONCRETE/BRICK:
There are a couple of options. Quality Stone can be applied according to the standard (wood) instructions above, with a couple of differences. A pilot hole can be drilled into the concrete with a masonry bit, and a special masonry screw should be used to fasten the product (no need for construction paper). In some cases, a wood or masonry screw can be applied directly into the concrete without pre-drilling a pilot hole. A second option is to fasten a sheet of 1/2" or 3/4" plywood to the concrete and then to continue with normal wood substrate installation. Adhesive (see below) can be used in conjunction with the screws to ensure a solid installation.

APPLICATION OVER EXISTING SIDING:
All siding should be carefully removed with suitable cutting tools (utility knife, reciprocation saw, etc.). Once this is complete, check to ensure that the construction paper beneath the siding is in good condition (if it isn't, apply new paper). Then proceed with installation above "APPLYING PANELS".

APPLICATION OVER ICF'S (INSULATED CONCRETE FORMS):
Use the standard installation instructions above labeled "APPLYING PANELS". The plastic 'webs' that are contained within the foam walls will act as a suitable anchor for the screws. Check with the ICF supplier to see whether applying construction paper before the stone installation is recommended. Adhesive (see below) can be used in conjunction with the screws to ensure a solid installation.

APPLICATION OVER GYPSUM BOARD:
Gypsum board applied over framing - the product must be fastened to the framing wherever possible. If there are instances where the wood framing isn't sufficient, coarse thread drywall screws can be used. Adhesive (see below) should also be used in conjunction with the screws.

(ADHESIVE):
Products can be fastened to concrete, brick or other hard surfaces using the proper construction adhesive. Quality Stone recommends any 'heavy duty construction adhesive, or other polyurethane-friendly construction adhesives. All surface areas must be clean, dry and free of oily and loose materials. Due to the smoothness of the back of Quality Stone products, the back should also be roughened to allow for better adhesion. If it is not rough enough, the adhesive may not hold. Apply adhesive to the backside of the products; panels and trims - in straight lines.

FINISHING PAINT KITS AND CAULKING:
Only Quality 'Stone Finish' caulking is recommended. There is also paint Touch-Up Kits available for minor touch ups and to properly color the Stone Finish. Touch-Up Paint should always go over Stone Finish caulking to ensure a long-term color match Stone Finish caulking and/or touch-up paint must be used to cover exposed polyurethane, screw holes, damaged panels, or to add extra color. Exposed polyurethane will yellow and can deteriorate over time. You can use your finger to smooth and distribute the caulking or use a small brush to work it in place. A moist grout sponge can be used to clean the excess caulking from the product. After a product edge is cut or trimmed, Stone Finish caulking and the Touch-Up Paint should be applied to the edge. When applying around door or window openings, exterior grade, silicone caulking should be applied according to local building codes. Check desired temperatures before applying any caulking, adhesives or finishing paint.
NOTE: Be sure to dust off any polyurethane dust from the product before applying the Stone Finish. In some instances, a couple of different colors of Stone Finish may need to be mixed to get the desired color. Refer to the Stone Finish Matrix for proper caulking colors.

MAINTENANCE: Dirt and scum can be washed off the product surface with pressure-applied water.
Do not use a high-pressure washer, as they can damage any exterior product. Mild, non-abrasive household cleaners or soap and water can be used with a brush to clean stubborn materials or stains. Stone Finish caulking and/or touch-up paint must be used to cover any damage or exposed polyurethane, as it will yellow and can deteriorate over time.