

HOW MUCH STONE WILL I NEED? First, you will need to determine the square feet and linear feet needed prior to placing order.

- QUICK TIP FOR CORNERS: 1 linear ft. of corners equals approximately 1/2 sq. ft. of coverage.
- CAN I REDUCE MY FLATS ORDER SINCE I AM ONLY USING CORNERS? 6 lin. ft. of corners gives you roughly 4 sq. ft. of coverage. Use a stone calculator that will assist you with a complete materials list for flats, corners, mortar, metal lath and weep screed.

HOW IS THE PRODUCT PACKAGED?

- Our product is packaged in Handy Pack Boxes (10 sq. ft. or 10 lin. ft.) *Limestone and brick may vary.
- We do NOT sell partial handy packs.
- IS THE COVERAGE IN A BOX FIGURED WITH OR WITHOUT A MORTAR JOINT? Products are packaged based on a 1/2" mortar joint EXCEPT for these products: Stack Stone, Ledge Stone and Ledge Plus.
- SALVAGE REQUIRED: You should always add an additional 5% of product to the order for salvage reasons.
 - Boxes are packaged with random sizes and color sequences. Salvage considers customers personal preference on size and color choices they wish to use.
 - Allows for trim and cut pieces.
 - · Covers any possible breakage during shipping.
 - **NOTE:** Many broken stones can be used during installation.
- WHAT IS CONSIDERED EXCESSIVE BREAKAGE IN A BOX OF MANUFACTURED STONE? 5% is industry standard, however many broken pieces can still be used in areas where cuts need to be made.
- WHAT DO I DO IF I SUSPECT FREIGHT DAMAGE? Take photos of the boxes still on the trailer and describe the suspected damage on the driver's copy of the delivery ticket. DO NOT check the box where it says "Delivered Free & Clear". Take picture of the driver's copy after you do this. Immediately send the images to our customer service team along with the order number. If it looks completely destroyed, simply refuse delivery and call us immediately. We will then work to get you a replacement product to you.

WHAT ARE THE COLOR ISSUES?

• I JUST OPENED A BOX OF MANUFACTURED STONE AND IT DOES NOT APPEAR TO BE THE RIGHT COLOR, WHAT HAPPENED? The stone in the box potentially could be not fully cured and will have a darker gray appearance. It will eventually over time lighten to the true color as it is exposed to warm temperatures. Depending on time of year it could take up to 6 months to totally cure on the wall. We recommend viewing our "Curing Process Information" on our website under resources.



- IS THE SAMPLE BOARD AN ACCURATE REPRESENTATION OF COLOR BLEND RATIOS? No, we show all the colors that are represented in the blend. Because of the sample board size, we cannot completely show accurate color ratios. You should ask your sales representative for pictures of completed projects or go online to see examples of the product to get a better visualization.
- I PICKED MY STONE OUT FROM A CATALOG AND IT DOESN'T SEEM TO BE THE CORRECT COLOR, WHAT HAPPENED? Customers should never make final color selections from brochures, websites, photos, etc. Always make final color selections from a sample board and sample pieces of stone. Call your nearest LEE Building Products location for samples.
- WHAT IS THE WHITE FILM ON THE FACE OF THE STONE? WHAT CAUSES IT AND HOW DO I CLEAN IT?

 This white film is called efflorescence and is a form of salt. All masonry and mortar materials contain water within the mix and the water soluble salts mix with the water and rise to the surface. The water then evaporates and what is left is the salt crystal formation (efflorescence). To clean this we recommend a mild detergent such as Tri Sodium Phosphate. Do not use harsh detergents or power washers to clean the stone.
- WHY ARE MY MORTAR JOINTS A WHITE-ISH COLOR? If the installer tools the mortar joint prematurely it can look white-ish instead of gray. A mortar joint is ready to tool once it becomes "thumbprint" dry.

WHAT ABOUT INSTALLATION?

- The Industry Standard Installation Guide from CMHA (Concrete Masonry Hardscapes Association) (previously ICPI/NCMA) is available on our website under resources.
- Recommended mortar is a (Type S-Mason Mix) Pre-mixed mortar or mix one part masonry cement (Type N) with 21/4-3 parts masonry sand.
- Not Recommended to be installed with Thin Set. Use will VOID Warranty.
- To Seal: Use a breathable, non-film forming, penetrating sealant approximately 30 days of manufacturing (based on good weather conditions).
- RECOMMENDED INSTALLATION TIP: Always start by installing corner pieces first.
- **RECOMMENDED INSTALLATION TIP:** For products installing with a mortar joint install product working from top to bottom for less clean up from any excess mortar.
- CAN I USE ADHESIVE INSTEAD OF MORTAR TO ADHERE STONE? No. These are not covered by the CMHA Installation Guidelines (formerly ICPI/NCMA).
- AM I REQUIRED TO SEAL MANUFACTURED STONE PRODUCTS? Sealing is not required but if one chooses to, we recommend a silane based breathable sealer.



- WHY DOES HALF OF MY PROJECT LOOK DARKER OR LIGHTER THAN THE OTHER SIDE? Blending the stone from different run numbers is important, this will lessen the chance of having inconsistent colors and shades. This rule should apply for manufactured stone as well as most masonry product applications.
- SHOULD I BLEND DIFFERENT STONE STYLES AND COLORS? This is a common practice in the industry and it is recommended to build a field panel. This allows you to analyze the stone combinations before making final decision or building the full project.
- CAN I INSTALL #15 FELT OVER TYVEK? Yes. You can install #15 felt over any water resistive barrier such as Tyvek. We recommend using 2 layers of your choice depending on what performance grade of water resistive barrier you need. Climate and building type are 2 examples that will play a role in deciding what barriers to use.
- WHAT IS THE STANDARD SIZE OF MORTAR JOINT FOR INSTALLATION?
 - Normally it is up to personal/customer choice. A common size mortar joint is 1/2" nominal for larger stone styles and 1/4" nominal for smaller ones.
- CAN I USE "JUST ADD WATER" TYPE S MORTAR BLEND? Check the mortar bag and make sure it states that it is a stone veneer mortar mix. If it is not a stone veneer mortar mix, it is not recommended to use, as it will cause the stone to come off of the wall after installed. Always make sure the mortar is for an adhered masonry veneer. Also look at the label for weight strength, as manufactured stone weight is up to 15 lbs. per sq. ft.
- WHY IS MY STONE FALLING OFF OF MY PROJECT?
 - The mortar may have been mixed dry
 - When blended on site, the mortar/sand ratio was not correct.
 - The mortar may have been applied incorrectly to the backs of the stones.
 - Flash cure could have occurred.
 - WHAT IS FLASH CURE? When stone is applied to a hot surface and pulls the moisture from the setting mortar which prevents bonding.
 - HOW TO I PREVENT FLASH CURE? You should wet the surface area before adhering the stone.
- DO I HAVE TO USE CORNERS? No, even though corners make any project look complete with a more professional look
- CAN I USE HEARTHSTONES AS PAVERS? No. Hearthstones are not engineered to withstand the weight that a paver does.



- WHAT DOES THE WEATHER TEMPERATURE NEED TO BE TO INSTALL MANUFACTURED STONE?

 Anything above 40°F (4°C) during and immediately after installation. Additional water may be needed on the scratch coat surface and the backs of the stone if the temperature goes above 90°F (32°C). Shade and frequent misting may be required.
- WHAT IS THE MAX HEIGHT I CAN INSTALL MOUNTAIN STONE? 30' on adhered veneers plus an additional 8' for a gable end, in residential construction and light commercial construction. You can build higher than this but it is recommended for the installer to consult with local building codes for any installation over this amount.
- ARE WEEP SCREEDS REQUIRED BY LOCAL BUILDING CODE? Yes. NCMA Installation Guide requires weep screeds but optional when applying over masonry surfaces. If a jurisdiction is still operating from residential book before 2009 it may not be required to us weep screeds.
- ARE RAINSCREENS RECOMMENDED FOR INSTALLATION? Rainscreens are optional building techniques used to improve the drainage of incidental water behind the cladding and reduce drying time.

ARE RAINSCREENS RECOMMENDED FOR INSTALLATION? (continued)

Rainscreen products (such as drainage mats or formed polymer sheeting) or construction techniques (such as strapping or furring) that create a capillary break/air space between the cladding and the water resistive barrier can be effectively incorporated into Manufactured Stone Veneer applications.

- A complete installation guide is available on our website under the resource section.
- Manufactured Stone can be installed on most interior and exterior projects and can be installed over nearly any solid surface (must be installed according to installation instructions).
- Be sure to follow local building codes and any home owner association policies when installing stone. We are in complete compliance with UBC standards.

• MUST USE LATH AND SCRATCH COAT WHEN INSTALLING ON:

- Sheet rock,rigid back wall,wallboard,plywood,paneling and wall sheathing.
- · Fiber cement board and concrete board.
- Painted, sealed or dirty concrete, brick or masonry (see install guide for more detail).
- Do NOT install on unsound or deteriorating masonry.

• DO NOT INSTALL IN DIRECT CONTACT WITH:

- Swimming pools or constant water sources
- It is not recommended to use manufactured stone around standing or running water.

 Additionally, chlorine and other harsh chemicals used in swimming pools can cause damage to the stone and its color. Flashing, water proofing and the use of a reputable penetrable sealer can be used to deter any damage to the stone.
- · Open flame. Do not use as a fire brick.



- Not Recommended to be installed with thin set. Use will void warranty.
- **RECOMMENDED INSTALLATION TIP:** Two layers of 15 lb. moisture barrier in outdoor application.
- I AM BUILDING ONTO MY HOME, WILL MY NEW STONE MATCH MY OLD STONE?: Depending on how long the original stone has been on the house, there will more than likely be color variation between the old and new stones.
- IS IT OK TO DRYSTACK STONE ON THE EXTERIOR OF MY HOME?: It is recommended to use mortar in the joints on exterior applications. There is a risk that with dry stacking that the product will destabilize due to freezing and thawing conditions (contracting and expanding). This may cause the stone to crack or pop off the exterior of the home. If it is decided to use drystack, we recommend using a polymer modified setting mortar to make bond strength stronger to endure temperature changes and freezing (contracting and expanding).

WHERE CAN I INSTALL MANUFACTURED STONE PRODUCTS?

- CAN I INSTALL MANUFACTURED STONE INSIDE OF MY SHOWER?: Any use near or in water or exposure to harsh chemicals will cause the stone to discolor, have surface damage or will possibly pop or crack. This applies to showers as well as hot tubs and pools.
- CAN I INSTALL MANUFACTURED STONE INSIDE OF MY FIREPLACE FIREBOX?: No. It is not recommended to expose the stone to direct flame from a wood or gas-burning fireplace. The application of the stone to the exterior surround of a fireplace is greatly accepted since it is not exposed to direct flame.
- CAN I INSTALL MANUFACTURED STONE ON TOP OF MY OLD FIREPLACE BRICK?: You should not apply manufactured stone to anchored brick because the anchors were not made to hold the additional weight of the stone.
- CAN I INSTALL MANUFACTURED STONE ON A POLE BUILDING?: Most pole buildings are not constructed 16" on center. Sidewall purlins are typically used. You should consult with a construction engineer for any framing exceeding 16" on centers.
- CAN I INSTALL MANUFACTURED STONE DIRECTLY OVER A POURED FOUNDATION WALL?: No. Release agents are normally used on the concrete forms which prevent a strong bond for the stone. Metal lath needs to be installed with a scratch coat to successfully achieve an acceptable bondable surface.
- CAN I INSTALL MANUFACTURED STONE OVER CONTINUOUS FOAM INSULATION?: Yes, up to certain thicknesses. Reference the minimum fastening requirements in the CMHA (NCMA) Installation Guide.



HOW DO I CLEAN MANUFACTURED STONE?

- NOTE: While installing, clean any residue mortar off the face of the stone with a damp rag. Do not wait until mortar has dried to attempt clean up. Do not use high pressure power washers, wire brushes, acid or acid based products.
- **RECOMMENDED**: After installing the stone, at the end of the day, review the stone. If there are any left over mortar droplets on the stone, take a piece of wood or wooden tool and gently remove it. Do not use metal, as it will scratch the product.
- THE DAY AFTER STONE IS INSTALLED: Gently scrub away dirt and debris from any of our stone products with a soft bristle brush, water and Dawn dish washing soap, granulated soap or detergent. Another mild detergent that is recommended is Tri Sodium Phosphate. Rinse with clean water. Safe, efficient and an easy process to get your stone looking nice and clean!
- For scuffing: Most scuffs can be removed with cleaning methods mentioned above. Sealing the stone
 can also minimize scuffing and in most cases, scuffing will fade or disappear completely over time
 with no treatment at all.
- DO NOT CLEAN WITH ACID OR BLEACH! Installers need to clean mortar mix off of the face of the stone as it is installed
- DO NOT POWER WASH OR SAND BLAST! This will remove the top layer of the stone color and can create breakage.
- For areas where dust and dirt accumulate, stone should be periodically washed down with a low pressure water hose.

WARRANTY—Mountain Stone products carry a 50-year limited warranty when used on structures that conform to all local building codes. Material must be installed according to manufacturer's instructions. Warranty is limited to replacement of defective materials only and does not cover labor to remove or replace stone. Warranty does not cover damage resulting from building settlement, wall movement, contact with chemicals or paint, discoloration due to airborne contaminants or stains caused by material applied to or allowed to come in contact with stone. Warranty is non-transferable and is limited to the original purchaser.