STONE SPECIFICATIONS: Stone shall be Norstone Rock Panels as produced by Norstone of Sydney, Australia. For more information, please contact your nearest distributor by email.

CLASSIFICATION: Quartzite-based Natural stone.

COLOR OPTIONS: Ochre Blend, Charcoal, White Quartz, Ivory Quartz

Size: 6” Tall by 24” Long, or 1 Square Foot in face coverage. Thickness varies between approx ¾” to 1 ¾”.
CORNER UNITS: 6” Tall by 24” Long, or 1 Square Foot in face coverage. Thickness varies between approx ¾” to 1 ¾”. Wraps 8” on one side and 16” on the other (see diagram).

Weight: approx 12lbs per panel, or square foot.

Packaging: 4 panels per box = 4 square feet per box; 48 boxes per crate = 192 square feet per crate; please call for customized container-load quantities.

RECEIVING & ON-SITE STORAGE

STONE DELIVERY: The contractor will be responsible to prepare a suitable area for delivery of stone. The stone is to be delivered in crates and the site must be prepared with gravel or other ground cover to place the crates of stone. Deliveries may require a forklift on the site to unload the truck. Check with Norstone to find out what type of delivery can be arranged in your area and how much room will be required on the jobsite to deliver and place the stone. After the stone is on the jobsite it should be covered with plastic or a tarp to keep clean and dry until it is ready to be used.

NOTE: Covering the stone will help protect the stone from theft and/or vandalism.

STONE PROTECTION: It is the responsibility of the contractor to maintain a ground cover of gravel or other suitable material under and adjacent to stockpiles and in all work areas to prevent mud splash and damage to material. It is especially important to maintain a minimum 4’ wide ground cover around the perimeter of all walls to prevent mud splash until the landscaping is complete.
At the completion of each day’s work, the tops of the walls should be covered to prevent water penetration into the wall cavity. Rain-wash entering a wall is one of the main causes of wall staining. The water causes a reaction with alkaline salts inherent to Portland Cement and cement blocks. The salts penetrate into the joints and eventually percolate to the surface leaving a brown stain in the process.

INSTALLATION TIPS

These are just a few pertinent tips regarding your installation. Please see the Norstone Installation Guide for more detailed instructions on installing our products.

MECHANICAL FASTENING: A method of a mechanical fastening to be considered is the use of the Angle or “L” Ledge, which should be appropriately fixed to the building frame to ensure maximum stability, functionality, and durability. However it is critical that mechanical fastening must always be performed according to state or county code regulations. Failure to do so will absolve Norstone of any responsibility or liability for problems arising due to faulty workmanship and/or incorrect mechanical fastening.

STONE PATTERN: Stones are to be installed in staggered fashion. Avoid continuous running joints as much as possible. Please see installation guide for further, more detailed instruction.

STONE SETTING: Stone shall be set with a modified thinset / 2 – part tile adhesive with a bonding agent; there should be no joints whatsoever. It is important to make sure all cavities behind stones and on each individual panel is sufficiently filled with adhesive in order to ensure structural integrity and endurance. Stone shall be laid free from mortar stains and be kept as clean as possible. No stonework shall be set unless the jobsite temperature is no lower than 35 degrees Fahrenheit and rising, or the architect has approved a cold weather-setting plan.

MOISTURE MANAGEMENT: Norstone Products should not be used in installations where they would be exposed to standing water, run-off water or too much humidity. Proper moisture management should be employed to ensure a successful, long-term installation. Consult a building professional to ensure you are employing proper moisture management techniques before proceeding with your installation.

SHORT & LONG TERM MAINTENANCE

POST INSTALLATION & STONE CLEANING: After completion of stonework, if adhesive has been exposed to the face of the stone, cleaning shall be accomplished with a stiff bristle brush and water using a mild detergent. Acidic Cleaning Agents should not be used unless otherwise directed by the manufacturer.

Norstone Ochre Rock Panels are a product of nature and may contain deposits of minerals and iron that may react to moisture. Stone bleed or rusting is a common example of this. A sealer is required but will not prevent the chemical reaction from happening. Please contact your sealer manufacturer for information about products that can protect the stone from moisture exposure.
Norstone takes no responsibility for oxidation. If your project is experiencing oxidation, Norstone can outline a cleaning and maintenance process that may assist in removing the oxidation from the installation.

**NATURAL STONE SEALING:** For Exterior & Wet Applications, Norstone Ochre Rock Panels must be sealed. Application of a quality sealer will afford the following benefits:

- Keeps walls easier to clean as the surface will be less absorbent to pollutants in the atmosphere.
- Reduces absorption of water, thus lowering humidity level within the wall interior.
- Minimize freeze/thaw fluctuations.
- Helps control efflorescence, or pigment leaching from cement or stone.
- Helps minimize oxidation which can change the color of the stone.

NOTE: Sealers must be periodically reapplied, especially on exterior applications, and could alter the natural coloring of the stone. Follow the manufacturer's instructions regarding the application of the sealer, and test sealer to ensure desired results.

If you've installed Norstone in a pool, it will be important to re-seal your application periodically. We recommend every 18-24 months, or whenever you notice that your sealer has worn off. This maintenance will ensure the stone stays stable and in good condition.

**ROUTINE MAINTENANCE:** Though natural stone will last many lifetimes, routine maintenance may be required from time to time. Depending on the application – as with any wall finish - various types of scaling or build-up may occur. Should you experience a need to clean your Rock Panels:

- Regular dusting for interior applications and hose washing for exterior applications is recommended.
- In the event that cleaning agents are needed, please select a natural detergent that is non-corrosive and non-acidic to remove build-up in problem areas. Test your detergent in an inconspicuous place to verify compatibility and results.
- In some cases, a low grade pressure wash may be used. However, the stone should never be exposed to a direct angle of attack from the nozzle. Note that up-close attack from a pressure washer may corrode the stone, so please stand a minimum of 5 feet away when pressure washing.
WARNING

DO NOT:

· Acid wash the stone unless otherwise directed by the manufacturer.

· High Pressure Wash the stone (directly or indirectly).

· Use any sharp object, such as a steel scraper, knife, or screwdriver, to remove stubborn deposits from the face of the stone. This can result in damage to the natural texture of the product.

We welcome your questions, so please visit us on the web at www.norstoneusa.com or call into one our branches at 866.717.4548.