



norstoneuk Ltd

new dimensions in natural stone



Installing Norstone rock panels	2
Tools and materials needed	3
Preparing your substrate for installation	3
Installing over open stud walls	3
Installing over block, brick or concrete	3
Special note on moisture rich environments and freeze thaw climates	4
Post-installation guidelines	4
Cleaning	4
Sealing	4
Ongoing maintenance	5
Warning - please do not....	5
Installing with Laticrete	5-6

NORSTONE MASTERGUIDE

The Norstone rock panel range provides the look and feel of stacked natural stone combined with a fast, fully warranted installation process.

Norstone rock panels strictly adhere to the following physical properties:

Classification: Quartzite-based sedimentary stone

Colour: Ochre Blend, Charcoal, White, Ivory, Sahara, Aztec, Sliver Grey

Size: 152mm tall by 610mm long. Thickness varies between 15-35mm.

Weight: approx. 5.5kg per panel.

Packaging: 4 panels per box; 48 boxes per crate = 17.8 m² per crate.

Professional Installation Recommended

Norstone rock panels can be installed by most home handymen with a limited knowledge of building and construction. However, we strongly recommend they are installed by professional, licensed tradesmen

Installing Norstone rock panels

Make certain the back of each panel is free of dirt, sand, or loose particles. When necessary, wash them completely. If the back of the panel is dry, dampen it first with a wet sponge but do not saturate. This prevents the panel from pulling the moisture from the adhesive, allowing it to cure naturally and with a stronger bond.

Select a tile adhesive that meets or exceeds local building regulations and mix per the manufacturer's instructions. We strongly recommend [Laticrete MVIS](#) and we will only warranty installations using this product.

When laying rock panels it is necessary to start the bottom row on a level line in order to maintain consistent levels in each row as you work up the wall. Always start installing Norstone rock panels at the bottom row, and beginning at an outside corner if one exists. The rock panels should be laid in a random, staggered fashion in an effort to minimise any vertical seams lining up from one course to the next. The panels should not be "stacked" one on top of the other in a single line up the wall, nor laid in a running or brick bond pattern as this increases the likelihood of patterned or vertical seams being visible. It is also important that they rest on a secure base such as a concrete floor or footing to help carry the weight until the thinset adhesive has fully set.

When fixing the stone panels it is essential that the substrate and all parts of the back of the tile are covered to a level not exceeding 10mm. It is important to screed the tile adhesive on to the wall as would normally be the application method used for laying tiles. Applying the adhesive to both the back of each panel and the wall ensures the maximum possible adhesion to your wall surface, ensuring the gaps, voids and cracks are filled.

Press each rock panel into the adhesive, rotating slightly, forcing some of the adhesive to squeeze out freely. Any adhesive forced out beyond the finished joint or on the panel surface itself must be removed before the adhesive is allowed to set. Tight joints will provide a neat appearance. Be sure not to allow any adhesive to harden on the face of the panels as this will hinder the cleanup process.

Tools and materials needed

[1] For cutting and modifying Norstone rock panels, a wetsaw with a continuous rim diamond blade is required and should tilt if mitre cuts are necessary; these are usually available for hire on a daily basis from large equipment hire firms in your area.

See our unique interlocking [fingerjoint corner units](#) which will save labour time and produce a perfect finish for angles of 65-115 degrees.

[2] An angle grinder may be used to notch the back of the rock panels to fit around small protrusions in the wall such as pipes, steelwork etc.

[3] Notched steel trowel

[4] scraper

[5] stiff wire brush

[6] masonry brush

[7] large sponge

[8] selected Norstone rock panels

Preparing your substrate for installation

Norstone rock panels weigh approximately 60kg m², therefore it is critical that they are fixed to an appropriate substrate to ensure a successful installation. Norstone rock panels may be applied over any masonry surface, concrete block, brick, cement, etc. Painted surfaces must be sandblasted or otherwise stripped of paint. If a new wall needs to be built of a thinner and lighter substrate then [Hardie Backerboard](#) (6 or 12mm) for internal walls, or [HardieWall](#) (19mm) for external walls must be used. Warranties are available if used in conjunction with [Laticrete MVIS](#). It is mandatory that local building codes be followed in the installation of Norstone rock panels. Please consult your building authority with any specific questions relating to the local building codes.

Installing over open stud walls

Norstone rock panels can be installed over open stud walls using Hardie Backerboard (see above). Installation details can be found in our [technical library](#).

Installing over block, brick or concrete

First ensure that the surface is clean and free of any foreign agents, including paint that may interfere with the bond between stone and substrate. This may require light sandblasting or waterblasting.

If the substrate is uneven or not plumb, please contact Norstone for specific advice.

** Special note for pre-fabricated concrete tilt up construction – all release agents must be removed from concrete surfaces prior to Norstone rock panel installation.

Radius wall installation

Concave - simply cut the standard rock panel into 3 equal pieces.

Convex - do the same but mitre (45 degrees) the back of all six the vertical ends of the pieces of the panel which will allow the panel to move into the adjoining panel.

This will work seamlessly on a radius up to 180 degrees (i.e. a semi-circle) over 4 linear metres

Special note on moisture rich environments and freeze thaw climates

Moisture Rich Environments

It is essential that [Laticrete MVIS Air & Water Barrier](#) is applied between the substrate and the [Laticrete MVIS Hi Bond adhesive](#).

This will ensure moisture will not reach the substrate material and potentially degrade its ability to support the Norstone panels.

Freeze / Thaw Climates

Norstone rock panels will not be affected at all by the normal freezing and thawing of the climate they are exposed to. However, the same cannot be said about the substrate to which they are applied.

Norstone Ochre Blend rock panels are 100% natural sedimentary slate and may be subject to some spalling. It is a natural product and this characteristic is one of nature. To minimize this, we recommend an application of [Norseal H2O Penetrating Sealant](#).

Norstone Charcoal rock panels are 100% natural slate and are hard wearing. Some iron oxide may exist naturally within the stone and may leave oxide marks on the stone when exposed to moisture. To minimize this, we recommend an application of Norseal H2O Penetrating Sealant.

Post Installation Guidelines

Cleaning

Excess dirt and film may be removed using clean water and a stiff brush; it is important not to allow adhesive to dry on face of the stone panels. Remove it prior to it hardening.

Acidic cleaning agents must not be used under any circumstances as this will cause unnecessary damage to natural stone and void any warranty.

Sealing

Natural stone may be sealed with Norseal H2O only after thoroughly curing.

Follow the instructions on the application of sealer. Sealed stone is easier to keep clean than unsealed stone and also helps repel stains. However, sealers must be periodically reapplied, especially on exterior applications. Norseal H2O has been specially designed to maintain the integrity and natural colour of the stone.

In common with all tiling projects, we strongly recommend that all tests are carried out on a small sample prior to installation.

Ongoing 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 Norstone rock panels please adhere to the following recommendations:

- 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 1.5 metres away when pressure washing.

WARNING - DO NOT:

- Acid wash the stone.
- 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

LATICRETE WARRANTIES

Laticrete will warranty their adhesives when installing Norstone, providing the following steps are undertaken:

1. Internal Installations

Norstone products can be installed onto concrete, suitable high density concrete blockwork, brick or Hardie Backerboard. The background must be free from any dust, debris, paint or any other substance that will inhibit the bond of the adhesive. It must be stable and be able to support the load of the selected Norstone product.

If the substrate is not even, a render coat must be applied to create a smooth, flat surface prior to fixing Norstone. Apply Laticrete 3701 Fortified Mortar in accordance with the instructions in our technical library.

If applying multiple coats, each coat must be fully cured before the next one is applied. Once the mortar has dried, Norstone panels can be installed in accordance the technical guide. Apply the Laticrete MVIS Hi-Bond Masonry Veneer Mortar Adhesive (known as Laticrete MVIS Adhesive) to the substrate and all parts of the back of the Norstone panel, ensure all the Norstone panel back is 100% covered with adhesive. The maximum total thickness of the adhesive bed is 10mm.

Norstone products can be applied directly onto the Hardie Backerboard using Laticrete MVIS Adhesive. As above, apply the adhesive to the substrate and the back of the Norstone panel to achieve 100% coverage. The boards must be installed in accordance with the manufacturer's guidelines. This installation will be eligible for a 10 year Laticrete System Warranty.

The adhesive should be applied onto the substrate and the back of the Norstone panel within 15 minutes of mixing.

2. External Installations

Norstone products can be installed onto concrete, brick, suitable high density concrete blockwork or HardieWall. The background must be free from any dust, debris, paint or any other substance that will inhibit the bond of the adhesive. It must be stable and able to support the load of the selected Norstone product.

If the substrate* is not even, it is recommended to apply a render coat to create a smooth, flat surface prior to fixing Norstone, using Laticrete 3701 Fortified Mortar in accordance with the instructions in our technical library.

*NB - The Laticrete 3701 Fortified Mortar cannot be applied to HardieWall.

After applying the Laticrete 3701 Fortified Mortar, it must be allowed to fully cure before applying two coats of Laticrete MVIS Air and Water Barrier by brush or hairy roller. Ensure the first coat is allowed to dry before applying the second; allow to dry.

The affixing of Norstone must be completed within 30 days of application of the MVIS Air and Water Barrier as it is ultra light light-sensitive and will degrade.

Using both Laticrete MVIS and Laticrete Air and Water Barrier when affixing Norstone onto concrete, high density blockwork or brick substrates will enable eligibility for the 25 Year Laticrete System Warranty.

The Laticrete MVIS Adhesive adhesive should be applied to the substrate and the back of the panels to ensure 100% coverage.

Norstone products can also be fixed to HardieWall™ using Laticrete MVIS adhesive. As above, apply the adhesive to the substrate and the back of the Norstone panel to achieve 100% coverage.

The boards must be installed in accordance with the manufacturer's guidelines.

The adhesive should be applied onto the substrate and the back of the Norstone panel within approx. 15 minutes of mixing.

We would always recommend Norseal penetrating sealer be applied to Norstone products after installation, the sealer does not generally alter the appearance of natural stone - however, we would advise applying a test coat on an off-cut prior to full application onto a completed project.

Note: The Laticrete products detailed above must be mixed and applied as per the latest technical data sheets.

Technical Information regarding Laticrete, Norstone and Hardie boards can be found at <https://www.norstone.co.uk/technical-library.html>

The information provided in this document is to be used as a guide only and does not constitute a Laticrete Warranty. A project specific Laticrete Warranty is available upon request. All information supplied is subject to the company's terms and conditions of sale, copies of which are available.

Norstone UK Ltd., 20 Mortlake High Street, London SW14 8JN. 0203 178 2810

sales@norstoneuk.com

2017 Norstone®

www.norstone.co.uk