



## Scope

These guidelines relate to the construction of low to medium height veneered walls up to a maximum height of 1m.

## General Information

On delivery, the product should be inspected. If there are any issues, please report them immediately and do not commence installation.

Before installation commences a certain amount of sorting of the product may be required to ensure consistency of colour, texture and dimensional tolerance.

Natural stone products are unique and you can expect colour and veining variances between each unit.



## Health and Safety Information

Safe working practices should be employed at all times during the construction process and all necessary Personal Protective Equipment (PPE) should be worn.

## New Build Wall Specification

The following includes some general advice for building a new block wall to receive Marshalls' Stoneface Walling panels, however for more comprehensive installation details, please refer to the Marshalls Installation Details for Concrete Walling.

1. The backing wall should be built of high density blocks, with a density in excess of 1700kg/m<sup>3</sup>. Marshalls recommend the use of high density midi blocks, dimensions 215 x 100 x 290mm. This block size will be suitable for most wall situations.
2. Following the excavation of the non-load bearing topsoil, the wall should be built on a secure foundation with a width a minimum of 3 times the width of the wall, and a minimum of 100mm in depth.
3. For foundations a good standard concrete mix is 1:2:4 (cement : sand : aggregate).
4. Movement joints should be utilised every 6m to 10m.
5. To accommodate any potential movement during the curing time of the wall, it is advised that the blockwork is left to dry out for a minimum of 6 weeks as stated in BS 5385-2 : 2015. However, if the wall has cured sufficiently, is Domestic application only completely dry and structurally stable then Marshalls' Stoneface Walling can be installed, although this is on the proviso that the procedures and guidelines below are adhered to; specifically, the usage of Sika 3N Primer and Sika EBT with the appropriate nozzle.

**Note Professional advice may be required to determine the condition of the existing ground conditions. If in any doubt, please refer to a qualified Structural Engineer.**

## External Installation of Marshalls' Stoneface Walling Units

1. Calculate your coverage area of Stoneface Panel units in terms of square metres (width x height) and the number of external corners required.
2. Make sure the wall is flat, dry, clean and free from dust before starting the installation.
3. All Sika 3N Primer and Sika EBT adhesive instructions should be read carefully prior to application.
4. Sika 3N Primer must be applied to the full wall area prior to installation of the Stoneface Walling system. The system should be allowed to become touch dry before the application of the panels.
5. Ensure the rear of the slips are also coated with Sika 3N Primer prior to application to the wall. This avoids any draw through of moisture to the face of the unit.
6. For application of the adhesive to the Stoneface unit please use the pre-cut VNozzle provided, in all instances. This ensures the correct bead size is achieved to ensure correct performance.
7. Create the baseline. Make sure that the first course of the Stoneface walling is level and supported, as this will impact on all future courses. Use packing material or spacers to help. Whilst creating the baseline, make sure a 2-3mm space is left from the bottom of the wall, which will stop any capillary action from the base. It also helps in the run-off of water from the face of the wall, creating a barrier.
8. If the installation requires corner pieces, install these first. Corner pieces can be identified as they have a long and a short leg. Alternate these in opposite directions to ensure a more random and seamless appearance. Internal corners should be produced either by mitering of the panel ends or butting them up.
9. In the case of the Stoneface Drystack units, apply 5 equally spaced vertical bead lines of Sika EBT to the back of a Stoneface panel. These should run approximately 100mm from the top of the panel to the bottom. Corner pieces should have 3 vertical beads of the long side, and 2 vertical beads on the short side.
10. Install panels from bottom to top to avoid any slippage whilst the Sika EBT is curing.
11. Install the panels butt jointed, with little or no joints. Use the Z-Cut shape of the panels to interlock and achieve a close fit.
12. Push the panel firmly into place, interlocking it with any existing panels. It may be necessary to tilt/raise the previously laid panel to insert the panel you are installing. Use a rubber mallet to ensure good adhesion. Slight taps only are all that is required.
13. If panels require cutting, it is recommended to use a petrol cutting saw with a diamond blade, or an electric angle grinder with a diamond blade. Use a circuit breaker if connected to the mains. A face mask and eye protection should be worn at all times. Whilst cutting, make sure any stone dust is controlled.

14. A coping must be applied to the top of the wall to protect its integrity and prevent water ingress. It is recommended these are fixed to the top of the wall using a 1 to 3 mix of cement to sand. For best practice, cut a drip groove into the coping bottom, near the leading edge to prevent water running down the face of the product.

15. Marshalls' Stoneface walling is not recommended in applications where the product is permanently in contact with water.

## **Internal Installation of Marshalls' Stoneface Walling Units**

Internal installation advice is very much the same as for external projects, with the following key considerations;

- a. Keep the area well ventilated when applying the Primer 3N, in line with the recommendations on the bottle
- b. Marshalls recommend installing onto a bare block wall rather than plaster, render, paint or stud wall. Marshalls have not tested the effectiveness of the system with these substrates and therefore, cannot guarantee performance in these situations

**Note Professional advice may be required to determine the condition of the existing backing walls. If in any doubt, please refer to a qualified Structural Engineer**



### **Inclement Weather**

Installation should be discontinued (and any open work face covered) if weather conditions are such that the performance of the paving may be jeopardised. Laying operations should not be undertaken when the temperature is below 3°C on a falling thermometer and below 1°C on a rising thermometer. All unfinished areas and stockpiles of materials should be covered in the advent of inclement weather to prevent saturation.



### **Further Information**

If Stoneface walling panels are to be installed onto wall over 1m in height, these panels should be mechanically fixed to the backing wall.



### **For more information**

Please contact Marshalls Group Technical Services on **0370 411 2233** or email [grouptechnicalservices@marshalls.co.uk](mailto:grouptechnicalservices@marshalls.co.uk)