



# NATURAL STONE CLADDING RANGE

CREATE A BEAUTIFUL NATURAL  
STONE WALL FINISH WITH  
MHG Z-STONE & STONE VENEER.



**stone  
veneer**



NATURAL SLATE & STONE SPECIALISTS



# NATURAL STONE CLADDING RANGE

- Quick and easy to install.
- Extremely cost-effective compared to traditional stone masonry.
- Minimal wastage. No mess, no fuss.
- Available in a wide range of natural stone finishes.
- Suitable for both interior and exterior application.
- Suitable for use with regular width foundations and window sills.

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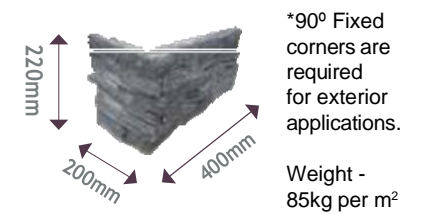


# THE BEAUTY AND CHARACTER OF NATURAL STONE WILL ENHANCE YOUR HOME



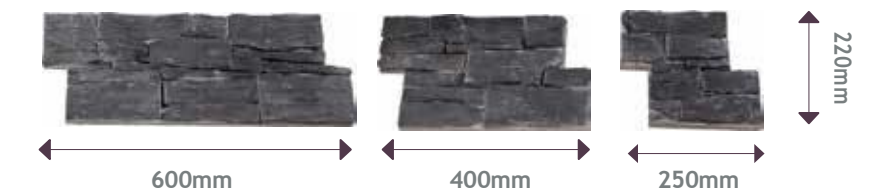
**stone** is available in 3 formats:

- Regular Panel
- Sky Panel
- Contemporary

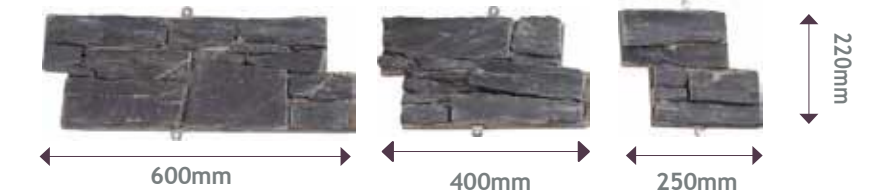


(Allow for +/- 5mm tolerance in panel size)

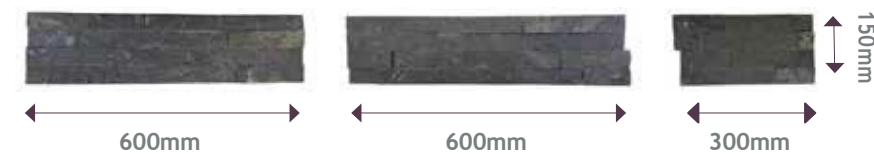
**Regular Panel** format allows every piece to be butted together to form an interior corner if required.



**Sky Panel** format allows every piece to be butted together to form an interior corner if required. It also has a built in clip for added fixing security. NB: The Sky Panel format must be used above heights of 3 metres.



**Contemporary** format uses single size pieces in addition to separate long and short corners. Only 20mm thick. For interior use.



#### SUITABILITY:

- Exterior design feature
- Chimney breasts/fireplaces
- Water features
- Front porch areas
- Timber frame construction

#### CLEANING:

- Do not use hydrochloric acid as it can cause minerals present in the stone to react.

#### MAINTENANCE:

- None required, however, in areas of high traffic we offer a range of sealers and cleaners if required.

#### ACCESSORIES:

- MHG adhesive (15kg bag covers 3m<sup>2</sup>)
- Magnesium Board
- Sealer
- Colour Enhancer
- Cement Away Cleaner \*

\*Please ensure when using chemicals that appropriate protective clothing is worn.

Z-Stone is available in a range of natural slate and stone finishes across two formats: Regular and Sky Panel. Suitable for both internal and external use. (45-50mm thick)

#### REGULAR / SKY PANEL

Range available with and without fixing clips, see page 5 for details.



• Heather Blue



• Nordic Stone



• Multi Slate



• Black Slate



• Quartz



• Scandinavian Mix



• Blue Diamond



• Granite



• Icelandic Grey

Thinner and lighter, our Contemporary Z-Stone is perfect for use in bathrooms, wet rooms or for feature walls. (20-25mm thick)

#### CONTEMPORARY RANGE



• Forest Marble (Honed)



• Forest Marble (Riven)



• Black Slate (Thick)



• Black Slate (Thin)



• Rustic Slate (Riven)



• Blue Diamond (Thick)



# HEATHER BLUE Z-STONE

THIS BEAUTIFUL HEATHER BLUE Z STONE WITH STUNNING GREEN VEINING IS SYNONYMOUS WITH HIGH QUALITY ARCHITECTURE AND IS HIGHLY SOUGHT AFTER ALL OVER THE WORLD.

Heather Blue Z-Stone can be used to create a warm timeless look that melts into the surrounding landscape, or it can be teamed with modern materials to create a contemporary design.



Photo courtesy of Alan Bennett Architects

# BLACK SLATE Z-STONE

45-50mm thick



SIMILAR IN APPEARANCE TO IRISH BASALT, BLACK SLATE Z STONE IS ONE OF THE MOST POPULAR CHOICES IN THE MHG RANGE.



Its warm grey and charcoal tones make it a firm favourite adaptable to any build, modern or traditional. From a small feature wall, to a large commercial building, Black Slate can be adapted to suit any design.



# BLUE DIAMOND Z-STONE

45-50mm thick



ONE OF THE MOST ATTRACTIVE STONES IN THE RANGE; BLUE DIAMOND COMBINES STEELY BLUES, SHIMMERING GREYS AND OCHRE TONES TO CREATE A NATURAL STONE PANEL WITH BAGS OF CHARACTER.

Its light neutral colours and accents of brown make it the perfect choice for an internal wall or fireplace. Used externally the chunkier stone pieces give a very natural finish and as the stone weathers over time it will mellow to create a finish reminiscent of Donegal slate.



# NORDIC Z-STONE

45-50mm thick



SIMILAR TO SCANDANAVIAN STONE, NORDIC STONE IS ONE OF THE LIGHTER COLOURED PANELS IN THE Z-STONE RANGE.

With its cool mix of greys, greens, and warm beiges it offers something light in colour but more contemporary and unusual than classic Quartz or Granite. It is light enough to use inside the home and is a popular choice for chimney breasts or feature walls.



# QUARTZ Z-STONE

45-50mm thick



THE BLEND OF NATURAL CREAM, BEIGE AND YELLOW IN OUR QUARTZ Z-STONE ADDS INSTANT WARMTH AND CHARM TO ANY SCHEME OR BUILDING.

Architects favour the flexibility of this natural product, which can be used to enhance both traditional and modern schemes. The richness of the colours will embellish any home inside or out.



# GRANITE Z-STONE

45-50mm thick



COMMONLY ASSOCIATED WITH QUALITY AND PRESTIGE, GRANITE REMAINS THE CORNERSTONE OF LUXURY BUILDING AND DESIGN.

The instantly recognisable and highly attractive textured finish of this natural stone, makes it ideal for traditional schemes. Similar in appearance to Mourne granite its warm yellows and creams make it perfect for use indoors. A timeless stone that will enhance any build.



# MULTI-SLATE Z-STONE

45-50mm thick

A DESIGNER'S DELIGHT, THIS BEAUTIFUL STONE CATCHES THE LIGHT TO REVEAL AN ARRAY OF GREY, RED, AND PURPLE SLATE.

A very warm and natural choice of Z-Stone, it is equally at home in both rural and urban settings. Its range of colours open up opportunities within the home, to create a mood that suits your design, whether it's a cosy ambience you want, or something chic and modern.



# SCANDINAVIAN MIX Z-STONE

45-50mm thick

SAY HELLO TO THE SCANDINAVIAN MIX. ON-TREND, THIS SHADE IS A MIX OF GREEN, GREY AND BLACKS.

A range of benefits and perfect for extensions, fireplaces, porches and other distinctive parts of your home.



# ICELANDIC GREY Z-STONE

45-50mm thick

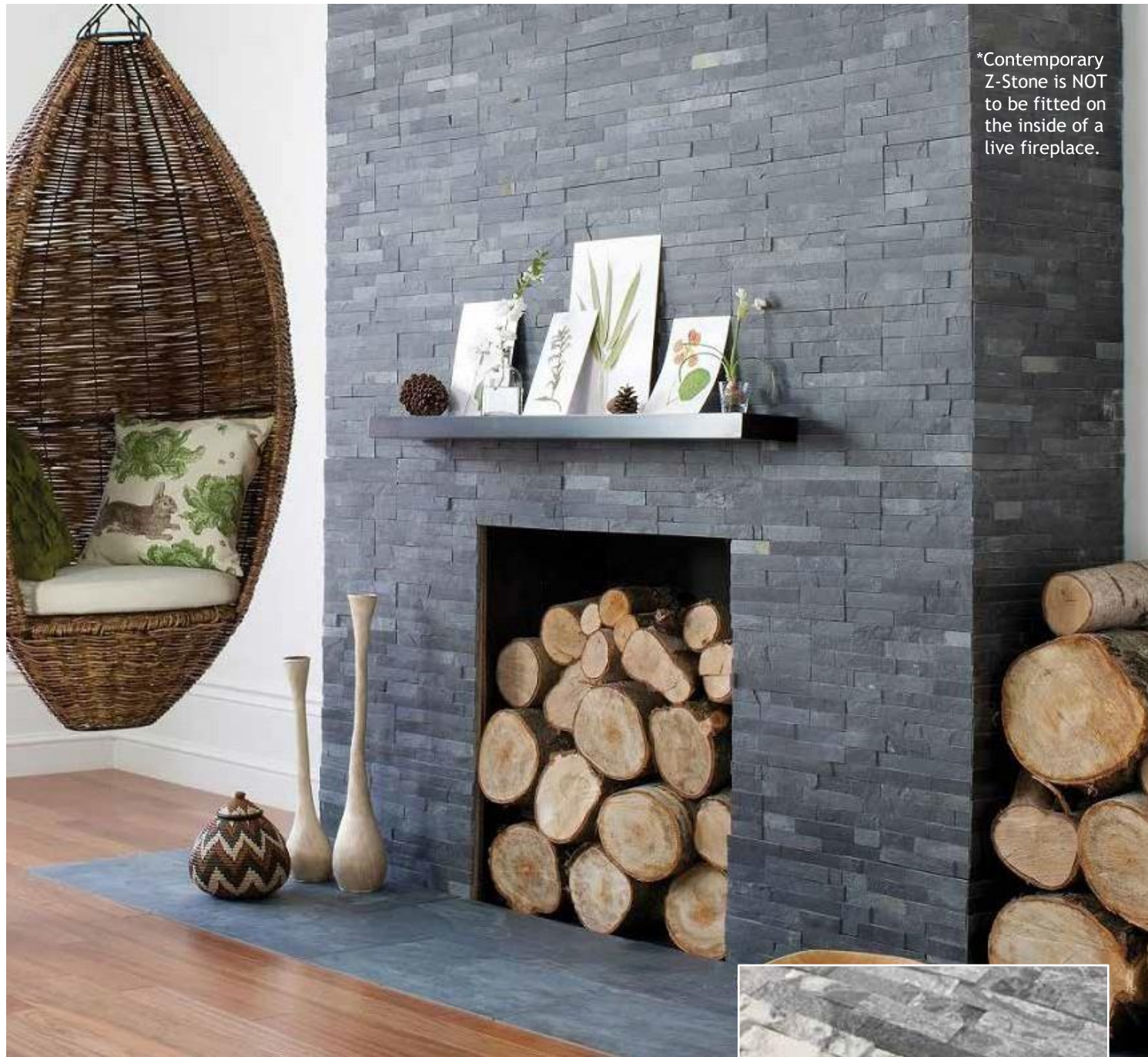
OUR ICELANDIC GREY Z STONE IS A CONTEMPORARY COLOUR. NATURALLY ATTRACTIVE, THIS WILL ADD SOME DEFINITION AND CHARACTER TO YOUR SPACE. THE SUBTLE COLOUR WILL COMPLEMENT MANY ARCHITECTURAL STYLES.





# CONTEMPORARY Z-STONE

20-25mm thick



\*Contemporary Z-Stone is NOT to be fitted on the inside of a live fireplace.

THE CONTEMPORARY RANGE OF Z-STONE IS MADE FROM NATURAL SLATE AND STONE PIECES BONDED TOGETHER WITH A POLYMER RESIN.

These new panels are a lightweight alternative to the standard concrete backed Z-stone. They are ideally suited for interior use, in areas such as wet-rooms.



**ONLY**  
20-25mm thick  
SUITABLE FOR  
BATHROOMS  
AND  
WETROOMS

Panels are 600mmx150mm (20mm nominal thickness), with long and short corners to suit.

## CONTEMPORARY Z-STONE



**Forest Marble (Honed)**  
A bold combination of blacks and whites, honed to a smooth polished finish.



**Forest Marble (Riven)**  
A riven variation of the Forest Marble pattern with a more rugged textured appeal.



**Rustic Slate (Riven)**  
A traditional combination of thick deep reddish rock and grey pieces combined to give a natural baked style.



**Black Slate (Thick)**  
Strips of Black Slate with a split face finish to give a natural, simple, but distinctive look.



**Black Slate (Thin)**  
Thin pieces of black slate are stacked on this panel to give an eye catching appeal.



**Blue Diamond (Thick)**  
Fresh and modern, these thin pieces of light steely blue/grey and ochre tones have been fixed in a staggered design providing a modern finish.



### BENEFITS

- Cost saving on labour and material compared with traditional masonry
- Made from natural stone only 30mm thick - no need for special sills
- Achieve your desired look from 3 stunning colour options - no lines
- No additional fixings over heights of 3m
- Fixed external corners available
- Maintenance free

\*Blue Diamond shown here.



\*Blue Diamond shown here.

### BLUE DIAMOND STONE VENEER



One of the most loved stone mixes in the MHG range - Blue Diamond combines a mix of steely blue grey and ochre stones.

The Blue Diamond stone veneer pieces have an attractive cleaved face that give them a very natural 'traditional masonry' look. The mix of stones allows the house builder to create their own desired finish.

### JERUSALEM SANDSTONE STONE VENEER



With warm golds and yellows, Jerusalem Sandstone is the ideal choice for rustic and traditional farmhouse style properties. Full of warmth and character it is perfect for use inside.

The natural split face of the Jerusalem Sandstone veneer gives a very natural hewn finish that is hard to discern from traditional stone masonry once fitted.

### DONEGAL MIX STONE VENEER



The light and dark tones of the Donegal Mix is a beautiful earthy mix. They are sold in a mix of random sizes around 30mm thick. They can be fitted in any pattern and larger pieces can be cut and dressed to suit.

This veneer will make a great cladding option for old stone cottages or adding an old stone look to a new building.



### CREATE A BEAUTIFUL NATURAL STONE WALL FINISH WITH MHG STONE VENEER.

At only 30mm thick, these individually pre-cut natural stone pieces can be fitted and shaped as required to give a finish very similar to traditional masonry. The benefit over traditional quarry stone is that there will be very little wastage and there is no additional foundation required.

The stone can be fitted relatively quickly in either a dry build or grouted finish. Although not essential, it is recommended that stone veneer is fitted by a tradesman with some experience of fitting similar products.



### Dimensions (nominal)

Stone Veneer is sold in pallet lots of 10 sqm. Each pallet contains a mix of rectangular/square pieces varying between 350 x 210mm and 150 x 80mm. Corners are sold separately.

# FITTING INSTRUCTIONS FOR Z-STONE



Z-Stone is available in 3 formats:  
Regular Panel, Sky Panel & Contemporary

Installation video guide at [mhg.ie](http://mhg.ie)

## FITTING INSTRUCTIONS - we recommend Z-Stone is fitted by an MHG Approved Installer.

Z Stone must be kept dry prior to installation. Z-Stone must not be fitted externally when temperatures are forecast to be 5°C or less or more than 35°C degrees for the next 48 hours.

- The Z-Stone system comprises of 2 panels at 600 x 220mm, 1 panel at 400 x 220mm and 1 panel at 250 x 220mm. **Note: There are 4 pieces per box.** These can be used in most situations to achieve the desired finish. Allow for +/- 5mm tolerance in panel size. For special applications, i.e. curved or radial walling, contact the MHG Technical Team.
- Z-Stone will not require a foundation, as it is a self-supporting unit.
- It is best to apply Z-Stone to a concrete block wall free from any coatings e.g. gypsum, paint, loose plaster. The substrate must be deemed sound to support the weight of the product which is in excess of 85kg per m<sup>2</sup>. All new build concrete substrates containing mortar must be constructed a minimum of 7 weeks prior to fitting Z Stone cladding.
- Always begin by quantifying the area. We recommend measuring out the area for regular panel (below 3m) and Sky panel (above 3m). Work out the quantity of square metres you require by multiplying the width by the height (add 10% for wastage) and remove the areas for windows and door openings. You can work out the quantity of corner pieces you require by calculating the total linear height of the external wall corners required. Reveal corners must be measured separately.
- It is important to measure from the top of the wall to the bottom to ensure you finish with a full-size panel at the top. This commonly means cutting the first course so that it is the desired height. Mark out the first course and cut a wooden batten and ensure it is level. Once levelled this batten can be nailed to the wall and you are ready to begin. You should leave the batten in place for a minimum of 48 hours. You can come back to the first course at the end of the job.
- Before you start, ensure the wall is clean and level and that all dust or rough debris are removed. If the wall needs to be waterproofed make sure that the waterproofing liquid is compatible with the MHG adhesive. We recommend using Hydro Ban waterproofing membrane. If you have any queries, please consult MHG technical prior to waterproofing.
- Mix the MHG Z-Stone Adhesive and generously apply with a notched trowel to the wall and a smooth skim to the back of the panel. We recommend a minimum of 6mm on both surfaces. Adhesive mixing instructions can be found on each bag. **Note that one 15kg bag of adhesive will cover 2-3 m<sup>2</sup> of panel.** MHG Adhesive is specified for use within the BBA Certificate. If you

- are using another adhesive, check the compatibility with our Z Stone Cladding.
- If the wall has any external corners, you must use the pre-made corner pieces and fit these first, alternating the long and short legs to give a broken bond effect so as not to show any joints within the vertical course of the Z-Stone. Internal corners can be created by bonding two panels together.



**Please note:** if you intend to return your pre-made Z-Stone Corners into window or door reveals you should have your blockwork recessed by 50mm to allow corners to return and not obstruct window or door openings. Z-Stone may not be returned on the underside of window or door heads. To achieve a finish here, use a special width steel support lintel, or alternatively finish with a slate reveal unit, raised plaster band or rubbed-up plaster detail. Expansion tape is available to neatly close of any remaining gaps and provide a weatherproof finish.

- Always tap the panel into the wall using a rubber mallet to ensure sound contact between the panel and the wall, and displace any trapped air pockets. There is no need to put any adhesive into the joints, as this is a dry joint product.
- Work your way along the wall and remember to always alternate the different sized panels to stagger the joints. The Z shaped format on the panels allows one panel to fit seamlessly into the next, creating a stunning natural stone façade.
- If a unit has to be cut to a reduced size to finish the wall, always cut the Z shape joint, as this will maintain the seamless finish. During the fitting process, all cutting of Z-Stone panel should be carried out by using a table saw with diamond tip blade and water supply.

*\*For Contemporary Z-Stone panel, fit in broken bond format as per traditional tiling methods.*

- It is good practice to buff off any excess visible mortar with a mini grinder prior to installation. This allows for tighter jointing.
- As mentioned earlier, the Sky panel format must be used when fitting on heights of 3 metres or above. The Sky panel comes with integrated stainless-steel clips for added fixing security in conjunction with MHG Z-Stone Adhesive. You can then drill these panels into the wall. Screws and plugs are provided as part of the Sky panel system. If the Sky panel unit has to be cut to a reduced size to finish the wall, and the cut is greater in size than a small panel (250mm), the cut panel must include a Sky panel fixing clip. When fitting Z-Stone to external chimneys at ridge level, we recommend using SKY panel.

When fitting Z Stone on a new build, lintels with a wide outer leaf overhang should be installed above doors and windows at construction stage. In retrofit applications you should screw on a flat piece of non-corrosive steel above the door or window to carry the weight of the stone. Sky panel is recommended for use above door and window lintels.

- When finishing off the top edge of the Z-Stone along straight edges or verge lines, you should always seal accordingly to prevent water ingress. Sealing can be carried out by a number of different methods using MHG Adhesive, expanding foam tape or a suitable flexible waterproof sealant.
- Finish by removing the timber batten at the base of the wall and installing the first cut course. Once the job has been fully installed, best practice is to inspect and fill any noticeable voids prior to final clean down



*\*MHG recommend you consult your timber/metal frame engineer to check that the design and fixings are appropriate for support.*

- special colour coded mortar is available for this purpose. Hose down and clean the wall, ensuring it is clean and free from mortar.

- When fitting Z-Stone onto a structure which requires a backing board, you must ensure that appropriate backing support is used (Cementboard). This must be secured to either a timber or metal frame with appropriate fixings and must be guaranteed to support the Z-Stone system, weighing in excess of 85kg per m<sup>2</sup>.

All Z-Stone used in this application must be Sky panel format and each unit must be mechanically secured with fixings supplied by MHG.



*Stainless steel clips which are integral to the Z-Stone Sky Panel are required at heights above 3m*

**Please note:** When using MHG adhesive allow one bag (15kg) of adhesive for 3m<sup>2</sup> and the adhesive must be applied generously on both the back of the panel and the wall surface.

*Z Stone is compatible for use on ICF and reinforced concrete structures. Contact MHG Technical Department for specific fitting instructions*

## ARCHITECTURAL RESOURCES

MHG has a team of technical sales professionals and an in-house technical support team. We can provide site Republic specific fixing specifications for any project upon request. In addition, our website offers an architectural resource and assistance, whether with pre-specification or after section, which includes suggested NBS specifications, data sheets, CAD drawings and other valuable resources.

Our experienced team of professionals are fully up-to-date on current building regulations (in both the Republic of Ireland and the UK), and are on hand to provide help and assistance, whether with pre-sales support.



## PRODUCT OVERVIEW:

**MHG Stone Veneer** is a 100% natural stone cladding system, cut to 30mm nominal thickness to give the exact look of 'full thickness' stone. Suitable for interior and exterior projects, Stone Veneer is light and easy to install and offers a cost saving on labour and material compared with traditional masonry. Available in 4 beautiful colours: Blue Diamond, Jerusalem Sandstone, Black Limestone and Donegal Mix.

Stone Veneer is sold per m<sup>2</sup> and each pallet contains 10m<sup>2</sup> which includes a mix of rectangular and square pieces, varying in size. Stone Veneer pre-made corner pieces are also available, which allow for the seamless creation of corner detail.

## ESTIMATING MATERIALS:

### Stone

To estimate the quantity of Stone Veneer you need simply multiply the height by the width of the area to be covered. Then subtract any openings such as doors and windows. This is the total surface area for which you will need flat stone. It is good practice to allow 10% for wastage.

### Corners

To estimate how many corners you will need simply measure the vertical external corners. If the window and door jambs require corner stone also measure the vertical length required for these. Please note that it is advisable to allow some extra time for cutting and trimming. Corners are sold per linear metre.

### Adhesive

We recommend using MHG adhesive for the installation of Stone Veneer. To determine the quantity of adhesive required, allow one bag per 3m<sup>2</sup> of flat stone\*. Multiply the total linear length of corners by 0.2 to give you additional bags required for corner stone.

### Gun Pointing Mortar (GPM)

MHG recommend the use of gun pointing mortar (GPM) for grouting. It is available in both charcoal and natural grey. You should allow one bag of GPM for every 4m<sup>2</sup> of stone\*.

*\*Please note additional adhesive and GPM may be required depending on the stone type and quantity.*

## PREPARATION OF THE SURFACE:

### New Block/Concrete Surfaces

Ensure new block surfaces are clean and free from any debris and dust prior to installation. We recommend applying a scratch coat with a water sealer for chimney stacks to minimise water penetration.

All new-build concrete substrates containing mortar must be constructed a minimum of 7 weeks prior to fitting Stone Veneer cladding.

### Existing Surfaces

Existing plastered or dashed surfaces must be cleaned back to their original surface by sandblasting, water blasting, acid etching or wire brushing. Alternatively, a metal lath could be attached using appropriate corrosive resistant concrete fixings with a coating of adhesive fully applied over the metal lath. All contractors and specifiers must be confident that the existing surface will support the weight of the Stone Veneer once installed.

### Uneven / Rough Surfaces

For levelling any uneven or rough surface, it is recommended to apply a plaster scratch coat. The contractor must be content the surface will be solid and not loose so as to support the weight of the Stone Veneer.

## Step 1 - Pre Application

- Before applying, lay out a small area of stone in front of your project area to give you an idea of the laying pattern on your wall.
- Arrange the pieces so that they fit complimentary next to one another. It is useful to take photographs at this stage to refer back to and use a numbered sequence left to right.
- Try to avoid fitting similar size pieces together in the one area.
- First, coat the wall with MHG adhesive using a notched trowel but only apply enough adhesive that can be covered within 30 minutes.

## Step 2 - Installation

- Start at the corners and work towards the centre of the wall.
- Be sure to alternate long and short returns on corner pieces.
- Take a clean stone and slightly dampen the back, this will remove any dirt and will prevent moisture loss from adhesive.
- Apply a coat of adhesive approx. 10mm to the entire back of the flats and corners.
- Press the stone onto the wall rotating slightly to force some of the adhesive to squeeze out.
- Any adhesive forced out should be removed before the adhesive is allowed to set. Adhesive joints are better off narrow but should be consistent.
- Fill any gaps with small stones and use spacers where necessary to maintain the joint. Evaluate your work as you go along.
- Cut and trim the stones if you need particular size to fill the gaps.

## Step 3 - Fitting Stones & Grouting Joints

- Fill all the gaps between the stones with Gun Pointing Mortar (GPM) or alternatively grout with a sand cement/lime (check suitability) to slightly above the desired finish depth. The grout will tighten and seal up the area around the stone.
- Let the GPM/grout dry until it is firm but not solid. You want to be able to push on it without leaving fingerprints, but don't let the GPM/grout dry too much or it will be very difficult to strike.
- Strike the GPM/grout to achieve the desired finish look.
- Use your striking stick to scrape along the joints until the GPM/grout has a clean and even look.

## Step 4 - Sweeping the Stone

- Finally, use your medium bristled brush to sweep the dust off the stone.

