



www.decoramic.co.uk *Tiles With Style*
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EARTHWORKS FIXING GUIDE

WELCOME TO ORIGINAL STYLE

Natural stone tiles from Original Style come in a wide range of types, sizes and finishes. There is a design to suit every taste and every home.

Using this guide will help you to:

- Choose a suitable product.
- Calculate how many tiles you need.
- Fix and grout the tiles.
- Seal the tiles so they retain their natural beauty.

The key to success is to:

1. Gather together all the tiles, tools and materials you need before you start.

2. Thoroughly prepare the surfaces to be tiled; time spent on this will save more time later.

3. Keep the work area clear and clean as you go.

4. Work methodically and avoid mistakes by allowing sufficient time for each task.

**This is not intended to be a definitive guide to tiling or fixing Earthworks products, and if you are uncertain about anything having read this guide you should ask your original style dealer or consult a professional tiler / installer.*

BEFORE YOU START: THE RIGHT TOOLS FOR THE JOB

These tools will help you complete your tiling project to a professional standard. You may already have some of them. Others will have to be bought or hired but they are all widely available.

TAPE MEASURE

For accurately measuring floors, walls and tiles.

DIAMOND CUTTER

A diamond cutter is the best way of cutting natural stone tiles. These are available from tool-hire companies. Follow the manufacturers advice regarding protective goggles, masks and gloves.

EYE PROTECTION AND GLOVES

Essential when cutting tiles with any cutting instruments/machinery.

CHINAGRAPH PENCIL

Use this for marking tiles that need cutting. Never use a felt tip pen because they can permanently stain your tiles.

SMALL POINTING TROWEL

For getting the adhesive out of the container and on to the floor or wall before using your spreader, and for some methods of grouting.

NOTCHED TROWEL OR ADHESIVE SPREADER

The notched edge of these tools ensure an even spread of adhesive.

SPACERS

Small pieces of plastic that are inserted at the corners of tiles as they are laid. Different thicknesses are used depending on the size of the tile and the effect you prefer.

SPIRIT LEVEL

Essential for laying floor tiles to ensure a level surface and for aligning rows of wall tiles. Ideally, a long one for levelling floors and a short one for tight spaces.

LIGHT MALLET

Not essential but useful for tapping tiles down into the adhesive and levelling up.

BEFORE YOU START: THE RIGHT TOOLS FOR THE JOB

SQUEEGEE OR RUBBER TROWEL

Used for spreading grouting compound into the spaces between the tiles.

GROUT FINISHING TOOL

This tool, available from DIY stores, is rubbed along the lines of grout before they set completely to give a neat finish.



SELECTING YOUR TILES

This is obviously the most important (and most enjoyable) task! With such a large range of finishes and effects to choose from, you may like to take some samples home to see how they fit in with the rest of your furnishings and decorations.

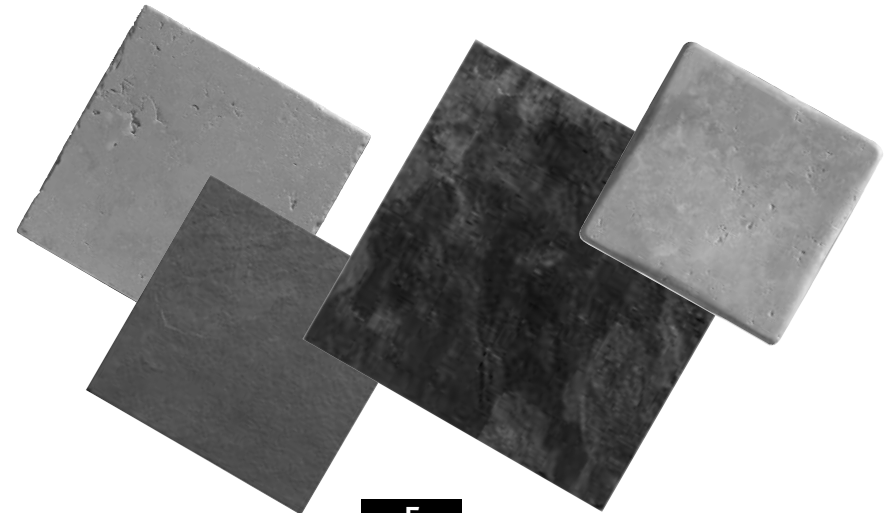
If you are in any doubt about the suitability of certain tiles for your particular requirements, please ask for advice. For instance some types are not suitable for areas that are frequently wet, such as showers.

The Earthworks brochure gives details of the uses and limitations of the full range of Earthworks tiles.

Many tiles are available in a range of sizes and choosing the right size is just as important as choosing which type. Small tiles are often better suited to covering small areas whereas larger areas often look better with larger tiles.

Mixing tiles of different sizes can create attractive effects, and some sample designs using mixed sizes of stone are set out in the Earthworks brochure.

Note: Remember stone is a natural product and no two tiles are identical.



HOW MANY TILES WILL YOU NEED?

Once you have decided on a type and size of tile, calculate how many you will need by measuring the area to be tiled.

Earthworks range includes tiles of various sizes. To calculate the number of tiles required, first decide which size or mix of sizes you want.

- If the shape is a simple square or rectangle you can simply calculate the area of each tile and divide it into the area of the floor or room. This assumes that the area being tiled is square at the edges and if the area is not square at the edges you will need to allow some extra for part tiles.
- Otherwise, the easiest method is to make a scale drawing of the floor and/walls on a piece of graph paper, draw the outline of each tile (including dados, trims and borders where appropriate) and add them up.
- We recommend that you allow for 'part' tiles by adding at least 5% to the total. We also recommend that you add a further 5% to allow for possible wastage.
- The Earthworks brochure will give guidance on estimating numbers of each required.

It can be a false economy to only order an exact quantity. You may break some tiles when you cut them or you may end up with awkward shapes that take more tiles than you had reckoned on. There is nothing worse than getting near the end of the job only to find that you are short of one or two tiles, especially as the extra ones may differ slightly in colour.

Buy all your tiles at the same time. It is the nature of stone tiles to vary slightly in shade and texture - this is part of their charm - but you will need to lay them out roughly before you begin fixing them to achieve the most pleasing distribution of shades. You will not be able to do this satisfactorily if you only buy enough for part of the job.

ORDERING

When you have chosen the tiles you want and the quantities you need, order them from your local Original Style stockist. You can consult the Original Style website at www.originalstyle.com for local stockists.

PREPARATION



The secret to a perfectly tiled floor or wall is to lay the tiles as flat and as evenly as possible. To do this successfully you need the firmest, flattest possible surface to start work on.

Some surfaces are ideally suited for Earthworks tiles, others require a certain amount of preparation first and a few are totally unsuitable.

FLOORS

Sand and cement (screed) floors must be completely dry. Allow at least one week for every 25mm of new screed to dry out; depending on weather conditions it may take longer.

Timber and joist floors must be rigid and stable. The best way to achieve this is to lay marine plywood measuring 15mm or thicker over the entire floor, screwing it down every 30cm in each direction. After laying, seal the timber with a bonding agent.

Old stone, quarry or vinyl floor tiles are best removed. If this is impossible or impractical, and they are completely sound, they should be thoroughly cleaned of oily deposits.

WALLS

Painted surfaces are unsuitable for tiles. You will need to scrape off all loose paint and rub the whole surface down with coarse sand paper until you have removed all the paint.

Plasterboard walls may be suitable for natural stone tiles, depending on their weight and how well the plasterboard is fixed to the stud wall underneath. You may need to seek advice on this.

Plaster is a suitable surface as long as it is dry and in good condition. Remove any loose or crumbling plaster and repair it with new plaster or filler before rubbing down to a level finish. It is important to check weight restrictions when fixing stone however.

Rendered walls can be tiled but, as with floors, new rendering must be allowed to dry out completely before tiling.

Papered walls cannot be tiled. Strip the paper completely, check for loose plaster or other damage, repair as necessary and then allow the wall to dry out thoroughly before continuing.

Old ceramic wall tiles can be tiled over although it takes longer for the adhesive to dry.

PLANNING



1. FLOORS

TAKE A GOOD LOOK AT THE ROOM!

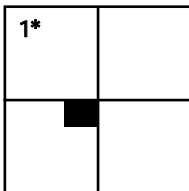
Establish the centre of the room by measuring the midpoints of two opposite walls and drawing a line between these points. Now find the centre of this line.

1* You may have to adjust the midpoint tile to reduce wastage as you reach the edges of the room.
You can use the midlines as edges or centres of the first row of tiles.

2* Now lay out the tiles loosely, allowing 2 - 12mm for the joints, depending on your choice of tiles. If you have chosen a diamond sawn finish, which tends to be fairly even, these can be laid with thinner grout lines. If you have chosen a chipped edge finish or a rustic style, tile edges can be uneven and to allow for this you will need thicker grout lines.

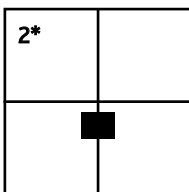
The aim is to achieve a pleasing pattern while avoiding unnecessary cutting or thin slivers of tile at the edges of the room.

Once you have marked out where the tiles are going, begin laying at one corner of the room, ideally the furthest from the door, and work backwards.



The first row is the most important; get this straight and level and laying the rest of the tiles will be easy. Get it wrong and it will become progressively more difficult to obtain a pleasing result.

If you are laying out a pattern with different size tiles based on a design in the Earthworks brochure, please refer to that brochure for further guidance.



HOW WIDE ARE THE JOINTS?

We recommend joints of 2 - 12mm between tiles. The exact width will depend on the size and type of tile and personal preference. In general, rustic tiles such as slate, some travertines and terracotta tend to look better with wide joints whereas quarry tiles, finished stone tiles and machine cut tiles need narrower joints.

Always use the same width between mosaic sheets as the width between the individual tiles on the sheets.

PLANNING



DAMP TILES?

If the tiles are damp when they are delivered, stand them on end in a well ventilated room so that they can dry out before you fix them. If for some reason you cannot delay fixing them, they can be laid while damp but you must not seal them until they have dried completely.

2. WALLS

MARKING OUT THE WORK AREA

First, make a tile gauge:

Use an approximately 1 metre length of straight, planed, wooden batten around 30 x 20mm in cross-section.

Using a pencil, mark off the length of your tiles plus the space between them. For instance, if you are fixing 10cm x 10cm tiles with a grouting joint of 3mm you will make a mark every 103mm.

1. The first row you fix is the most important. If this is sloping or uneven, then all the other rows will be uneven, too.
2. If the skirting board or floor looks level you may be tempted to start tiling directly up to it. Don't! Very few properties, old or new, have walls and floors that are perfectly square so you will need to set the level for the first row. Here's how:
3. Take a straight length of timber batten measuring 10mm x 30mm or 20mm x 30mm in cross section.
4. Using a spirit level to make sure the top is perfectly level, lightly nail it horizontally along the area to be tiled so that its top edge is one tile depth plus the thickness of one grout joint above the floor or skirting board. (Be careful to avoid any concealed pipeworks and electrics)
5. Now place your home-made tile gauge vertically against the wall, its end on the top edge of the batten, and work it up the wall, making pencil marks on the wall as you go, to check that you won't have to cut lots of fiddly small tiles at the top.
6. If this turns out to be the case, reposition the batten lower so that the cut tiles top and bottom will be more or less the same size. Carefully check the level with the spirit level once more.

PLANNING

7. Now use a ruler or tape measure to find the horizontal mid-point of the wall. Put your tile gauge against this point and work horizontally to determine the location of the last whole tile, and mark the batten.
8. Again, make sure you are not left with small slivers of tile at each end and, if necessary, adjust the 'mid-point' slightly to avoid this.
9. Next hang a plumb line - a small weight on a length of string is fine - so that the line hangs directly over the batten mark. Alternatively, you can use a long set-square or an upright spirit-level to produce a vertical line.



FIXING THE TILES

First shuffle the tiles from different boxes so that variations in colour are distributed throughout the room in a pleasing pattern.

IMPORTANT NOTE:

Original Style recommend that all stone tiles are given one coat of sealant before fixing. This will protect tiles from marks caused by excess adhesive.

APPLYING THE ADHESIVE

Spread adhesive over as much of the floor or wall as you can work on within about 15 minutes - about one square metre is usually about right.

Spread an even layer using the solid bed method about 2 - 6mm thick using a notched trowel to form parallel lines. Thick tiles should also have a 2mm layer of adhesive spread on their backs before laying. Always spread the adhesive over the entire back of the tile rather than spotting it on. Otherwise tiles may break after installation.

Place the first whole tile on the adhesive, press it down firmly and tap it gently into place with a wooden block or mallet. Check it is straight and level.

Now lay the adjacent tiles in the same way, using spacers to create an even joint between them.

Check the level of the tiles as you go, using a long spirit level to span several tiles.

When you get to the edge of the room, you can either cut the tile to fit the gap (if necessary) or leave it until the end of the job.

Be careful to keep adhesive off the face of the tiles - wipe away any surplus with a clean, damp sponge as you go.

When you have covered the first square metre prepare another area, and so on, until you have used all the complete tiles.

If there are any untiled areas around the edges of the floor or wall you will need to cut the tiles to fit if you haven't already done this.

WHICH ADHESIVE?

There is a range of adhesives to choose from and some are better suited to certain types of surface than others. Ask your supplier for advice, or refer to the chart at the back of the leaflet.

GROUTING AND SEALING

Grouting gives a neat appearance to the tiled surface, it stops dirt or grease building up between the tiles, and, if you use waterproof grout, it becomes impervious to water leaking in between the tiles.

Allow the tiles to dry out for a minimum of 24 hours before grouting. Thick layers of adhesive, cool temperatures and other factors can prolong drying.

There are numerous makes and types of grouting compound, so check with your tile retailer the most appropriate grout for your application or see the table on pages 21-22 of this booklet.

THERE ARE TWO METHODS OF GROUTING

- 'Pointing', in which the grouting is pushed down between the individual joints.
- 'Slurry' grouting, in which a wet mix of grouting is spread over the entire surface, including the joints.

There are no hard and fast rules about which type of grouting to use but Original Style recommends **pointing** large tiles, or tiles where the joints are wide. If you are laying textured tiles (i.e Terracotta) and you want to preserve the slightly pitted texture, you are also advised to use pointing.

If, on the other hand, you want to fill small imperfections in textured tiles, use **slurry grouting**. Original Style also recommends **slurry grouting** for mosaic tiles, which would take too long to point.

Other than these recommendations, choose the method of grouting that will give you the effect you prefer.

HOW TO GROUT

POINTING

- Mix grout so that it is thicker in consistency.
- Work over small areas at a time, applying grout to the joints with a pointing trowel. Finish off by running a grouting tool or piece of dowel along each joint to give a neat and even finish. Do this before the grout has a chance to harden off too much.

SLURRY GROUTING

- Mix grout so that it is a runnier consistency.
- Spread the grout over the surface of the tiles and joints, using a rubber trowel or squeegee to make sure it fills all the spaces. Work it in firmly to eliminate air pockets.
- Work quickly because grout can begin to harden quite rapidly.
- Before the grout is dry, wipe off the surplus with a wet sponge then leave the grout to dry.
- When you have completed the grouting, run a finishing tool or a piece of dowel along each joint to achieve an even finish.
TIP - wipe tiles diagonally to avoid pulling wet grout out of grouts.

USEFUL TIP

Always aim to complete whole sections of grouting in one session to ensure an even finish with no colour variation

FINISHING OFF

Once your tiling is complete, inspect it carefully for any joints that the grout has missed, and refill if necessary. Wipe over the entire wall or floor with a damp sponge or cloth and allow to dry out completely before sealing and polishing them.

SEALING



Sealing the surface of unglazed tiles prevents them from absorbing stains.

TIPS

- Before you seal them, the tiles must be completely clean and dry - otherwise you will simply seal in the dirt and moisture, defeating the object.
- When you apply sealer, it must soak into the tile. Prevent excess sealer from spoiling the surface by wiping it away with a clean, dry cloth before it can harden.
- Depending on the type of tile, sealer is applied twice: once before the tiles are fixed and again after grouting.
- Every type of floor needs at least one layer of sealer after grouting to seal the grout.
- After sealing, keep off the floor for a few days if possible to allow the sealer to set thoroughly.
- Make sure you use only new, clean cloths and brushes for sealing and keep dirt and dust away from the area while you are working.

NB: Not all adhesives, cleaners, grouts and sealers are equally suitable for all types of tiles. Take advice from your supplier or refer to the table on page 21-22 of this booklet.

SPECIAL INSTRUCTIONS



HANDMADE TERRACOTTA TILES

SEALING

Apply one coat of linseed sealer before grouting. The amount of sealer needed depends on the porosity of the tile and we recommend that you check this with one or two sample tiles first.

Use a short-haired paint roller and work the sealer into the tiles. It should appear matt again in about 10 minutes - if it becomes matt before the 10 minutes are up, use a little more sealer.

On the other hand, if sealer is still on the surface after 20 minutes, wipe away the surplus with a clean, dry cloth and apply it more sparingly on the remaining tiles.

The tiles will absorb more sealer at the first application: reckon on using about three-quarters of the total sealer at this time.

Apply the second coat of sealer after grouting. Make sure the grout is completely dry and any stray grout has been cleaned off the surface of the tiles.

FINISHING

Once the tiles have been sealed twice, and the sealer is dry, apply a coat of wax polish. Use it sparingly and buff it to a hard finish, preferably with an electric polisher.

MAINTENANCE

Sweep the floor regularly to remove loose dirt.

Wipe off spilled fluids immediately with a damp cloth. Stubborn marks can often be removed with a little white spirit.

Wax polish the floor every 4 - 6 weeks at first until a hard surface has built up. After this polishing can be less frequent but the exact period will depend on how much wear the floor gets.

As a guideline, if the wax polish begins to build up on the floor you are polishing too often but if the tiles begin to look dull you are not polishing often enough.

SPECIAL INSTRUCTIONS



NATURAL SLATE

SEALING

Apply one or two coats of slate sealer before grouting. Use a clean cloth and allow about 2 hours between applications.

Remove surplus sealer with white spirit, or water it using a waterbased sealer.

FINISHING

After grouting apply two coats of slate sealer with a soft cloth.

Apply the second coat about 20 minutes after the first and work at right angles to the first coat.

Apply further coats at least once each year: you may need to do this more often, depending on the amount of wear on the floor.

MAINTENANCE

Sweep or vacuum regularly to remove loose dirt.

Wipe off any spillages immediately with a clean, damp cloth. Stubborn marks can often be removed with a little white spirit.

Delamination (flaking) sometimes occurs with slate due to the nature of the stone. If this happens during laying remove all loose pieces. If it happens at a later date reseal the affected area.

NATURAL STONE INCLUDING MOSAICS

SEALING

Natural stone tiles, including mosaics, should be sealed before fixing to avoid excess adhesive staining the front of the tiles.

After the grout is completely dry apply a coat of stone sealer over the entire floor.

Rub the sealer into the stone and the grout with a clean cloth to bring out the natural colour.

Wipe away any excess sealer with a clean, dry cloth after 15 minutes.

SPECIAL INSTRUCTIONS



NAVARRA TERRACOTTA

FINISHING & SEALING

Finish the tiles with one or more coats of wax polish and buff it using an electric polisher.

To seal the floor simply apply extra coats until the stone cannot absorb anymore.

MAINTENANCE

Sweep or vacuum regularly to remove loose dirt.

Wipe off any spillages immediately with a clean, damp cloth. Stubborn marks can often be removed with a little white spirit.

Polish regularly with wax polish.

Polish new floors once a week for the first six weeks and apply more polish every two to four months after this.

Apply the polish with a clean cloth, allow it to harden for 30 minutes then buff the floor by hand or with an electric polisher.

If the wax starts to build up on the surface, reduce the frequency of polishing, whereas if the floor begins to look dull, polish more often.

Warning: Stone tiles can be slippery when waxed - do not overpolish.

CERAMIC STONE

Ceramic stone does not require sealing or finishing.

Maintenance consists of sweeping or vacuuming to remove loose dirt and occasional mopping to remove spills and dirt.

SPECIAL INSTRUCTIONS



SHOWERS

Natural stone tiles can be used in showers provided you take certain precautions in preparing the surfaces, and use the correct adhesive and grout.

The underlying surface must be waterproofed first, using a waterproofing kit. These normally consist of a primer, a liquid waterproofing membrane that you brush on to the wall and floor, and a tape for reinforcing all internal corners. Please refer to specific manufacturer instructions or preferably get a professional to do this job.

You can usually apply the tile adhesive 24 hours after the wall and floor are waterproofed.

Movement joints, such as those between the wall and a shower tray, need to be sealed with a silicone sealant rather than grout.

For 'wet' showers (those without a tray) Original Style advises getting a specialist to do this job to avoid leaks and costly mistakes.

Although most adhesives and grouts are water resistant in normal situations, they can be further waterproofed using an additive. Grout and adhesive can absorb a lot of moisture and can cause a ring mark around the perimeter of each tile. Sealing the grout and tiles well in showers is a must. You should follow the manufacturers instructions.

The requirements for adhesives, grout and sealers differ according to the type of stone used, the background material, the width of the joints and whether the shower is gravity fed or a power shower, accordingly it is important that you seek advice from your supplier.

UNDERFLOOR HEATING

Stone tiles make an ideal surface for conducting and retaining heat and can be used effectively with underfloor heating mats.

The heat mat is laid out in accordance with the instructions provided by the manufacturer.

A thick layer of flexible tile adhesive is laid over the mat and the tiles are laid as normal.

Some manufacturers recommend that you leave a small expansion gap around the perimeter of the room, filled with a flexible sealant.

ENSURE HEAT IS NOT SWITCHED ON BEFORE READING MANUFACTURERS GUIDELINES.

GLOSSARY OF TILING TERMS

Adhesive spreader	A flat tool with notches along its edge. These allow a smooth, even flow of adhesive. There are many types for wall and floor. Seek advice for correct type.
Diamond cutter	An electrical tool for cutting tiles. Available from hire centres.
Grout	A hardening compound used to seal the joints between tiles.
Grout finishing tool	A tool available from most tile dealers. Simply run along grouted joints for an even appearance.
Movement joint	Where tiles meet another surface, such as a bath or shower tray, the joint is filled with silicon sealant, not grout, to allow for minor expansion and contraction.
Pointing trowel	A small pointed trowel for handling grout and for the initial application of tile adhesive.
Render	A wall finish made up of sand and cement.
Screed	A sand and cement compound usually applied to level a floor.
Silicon sealant	A material with elastic and waterproofing properties used to fill movement joints instead of grout.
Spacers	Small plastic mouldings placed temporarily between tiles to ensure they are evenly spaced.
Squeegee	A flexible rubber or rubber-edged tool used to apply grout.
Stud wall	An internal wall in a home, constructed of plasterboard over a wooden framework.
Substrate	Any surface on to which tiles are to be laid.
Tile gauge	An easily home-made device for accurately positioning your tiles.

ADHESIVES & GROUTS FOR FIXING NATURAL STONE PRODUCTS

ADHESIVES	Vitri-Flex 2 hour set single part flexible adhesive	Vitri-Rapid 2 hour set adhesive for non porous tiles	Vitri-Flow flexible 2 hour set pourable thick bed adhesive	Bis-Flex 3 hour set highly flexible 2 part adhesive	Bis-Xtra 24 hour set single part flexible adhesive	Wide Joint Grout	Bis-grout Wall	Vitri-Grout Wall single part flexible	Vitri-Grout Floor single part flexible	Full joint 2 hour set Grout	Speed-E-Poxy Grout
INTERIOR:	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Walls	✓	✓			✓	✓	✓	✓	✓	✓	✓
Floors	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Joint / Bed thickness	3-12mm	3-12mm	3-25mm	3-12mm	3-6mm	3-15mm	1-3mm	3-15mm	1-3mm	3-20mm	1-10mm
Concrete	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Masonry	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cement Sand Screed	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Gypsum Screed	✓**	✓**	✓**	✓**	✓**	✓	✓	✓	✓	✓	✓
Latex Screed	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cement Sand Render	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Gypsum Plaster	✓*	✓*	✓*	✓*	✓*	✓	✓	✓	✓	✓	✓
Plywood	✓	✓	✓	✓	✓	✓***	✓	✓	✓	✓***	✓
Plasterboard	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GROUTS											
Travertine / Limestone	W	W	W	W	W						
Marble Light	W	W	W	W	W						
Marble Dark	G	G	G	G	G						
Slate	G	G	G	G	G						

* Prime surface ** Special preparation is required please call Biscem helpline on 01904 362081

*** Incorporating Flexiboard G: White or grey is suitable W: White adhesive recommended

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