

1. WELCOME TO ORIGINAL STYLE

Tiles from Original Style come in a wide range of types, sizes and finishes, with a design to suit every taste and every home.

Using this guide will help you to:

- Choose a suitable product for your project
- Calculate how many tiles you require
- Prepare and plan for the installation
- Mark out the work area
- Fix
- Grout and seal
- Clean and maintain your finished installation

This guide is suitable for the following Original Style products:

Artworks including **Artworks Masterpiece** tiles

Colourworks

Designer Classics

Earthworks

Glassworks

Glassworks Splashbacks

La Belle Collection

Mosaics

Pop Art

Tileworks

Please see separate Fixing Guide for **Victorian Floor Tiles**.

The key to success is to:

1. Gather together all the tools, tiles and materials you need before you start.
2. Thoroughly prepare the surfaces to be tiled; time spent on this will save time later.
3. Keep the work area clear and clean as you go along.
4. Work methodically and avoid mistakes by allowing sufficient time for each task.

This guide is not intended to be a definitive guide to fixing tiles. If you are uncertain about anything having read this guide you should consult a professional tile installer.

PLEASE NOTE

It is the responsibility of the purchaser of Original Style products to adhere to the following guidelines in accordance with the British Standards Institute Wall and Floor Tiling Code of practice BS5385: 1995.

- To store products in adequate, clean, dry and secure space that is free from frost and moisture
- To ensure that installation is carried out in adequate artificial lighting conditions
- To ensure that work is adequately protected during and after fixing

2. 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 can be bought or hired but they are all widely available.

Adhesive Spreader

The notched edge of this tool ensures an even spread of adhesive.

Chinagraph Pencil

Use this for marking any tiles that need cutting. A chinagraph pencil will not stain the tiles and will resist being washed away when using a water-fed cutting machine. Never use a felt tip pen because they can permanently mark your tiles.

Drill

Use a masonry or tile drill bit.

Electric Water-Fed Diamond Wheel Cutter

A diamond wheel cutter is the best way of cutting difficult tile shapes. These are available from tool-hire companies, tile shops, or DIY stores. Follow the manufacturer's advice regarding protective goggles, masks and gloves.

Epoxy Squeegee

A rigid squeegee specifically designed for the application of Epoxy grouts.

Eye Protection, Gloves and Dust Mask

It is vital that you use all possible protection when using any cutting instructions/machinery. Always use personal protective equipment as advised by the HSE. Visit www.hse.gov.uk for further health and safety advice.

Gauging Trowel

For removing the grout from its container, or the vessel used for mixing the grout. Use it to place adhesive onto a trowel.

Glasscutter

This is specifically for cutting glass. Original Style Glassworks tiles cannot be cut or shaped like ceramic tiles, but a glasscutter makes cutting tiles that are 5-6mm/ $\frac{1}{4}$ " thick easy. Simply mark the outline of your cut, score it with the glasscutter, lay a thin wire under the score and apply even but firm pressure either side.

Grout Finishing Tool

This tool is run along the grout lines before they set completely to give a consistent, neat finish. This tool is a must to ensure professionally finished grout lines. A piece of dowel or a lollipop stick can work just as well.

NB: NOT to be used on Epoxy grout.

Light Mallet

Not an essential tool, but useful for tapping Earthworks natural stone tiles into the adhesive, and levelling up.

Notched Trowel or Adhesive Spreader

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

Spacers

These small pieces of plastic are inserted between the corners of the tiles or mosaic sheets to provide consistent spacing. Push them in side-on so they are at right angles to the surface, and place them at regular intervals to maintain the spaces, and remove them before the grout is applied. For **mosaics**, ensure that the spacers you use are the same width as the spaces between the individual tiles on a sheet.

Spirit Level / Laser Level / Plumb Line

One or more of these tools will be necessary to ensure that your tile installation is level and that verticals are straight. A plumb line can be made from a small weight on a length of string.

Sponge

For the removal of grout residue and for smoothing joints. It is always best to purchase new sponges and grouting tools as old tools may have adhesive or grout residue on them which could scratch your tiles.

Squeegee or Rubber Trowel

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

Steel Ruler

A steel rule is an essential toolbox item, as all successful tiling depends on accurate measuring. NB DO NOT use a steel ruler on stainless steel mosaics.

Tape Measure

For accurately measuring floors, walls and tiles.

Tile Cutter

A scribe and snap machine for straight cuts.

Tile Gauge

A device for accurately positioning your tiles.

Tile Nippers

A specialist tool for 'nibbling' away unwanted sections of tiles.

Wedges

These are wooden or plastic for minute tile adjustment.

3. BEFORE YOU START: GLOSSARY OF TILING TERMS

Adhesive

The glue used to fix tiles to the substrate. There is a wide choice available, so always ask your stockist for advice on your particular project and type of tiles.

Grout

A hardening compound used to seal the joints between tiles. There is a wide choice available, so always ask your stockist for advice on your particular project and type of tiles.

Movement joint

Where tiles meet another surface, such as a bath or shower tray, the joint is filled with silicone sealant, not grout, to allow for minor expansion and contraction. Movement joints eliminate stress transferring from the substrate.

Pointing

Where grout is mixed to a thicker consistency than usual and applied into the joints with a squeegee, pressed in firmly and finished off with a grouting tool to give a neat finish. Any excess is removed using a damp sponge and the surface wiped clean.

Render

A wall finish made up of sand and cement, usually made up of sand/cement in the ratio of 4:1.

Screed

Sand and cement floor.

Silicone sealant

A material with elastic and waterproofing properties used to fill movement joints instead of grout.

Solid bed

A method of tiling where the adhesive is applied to fully serrate the substrate and the back of the tile.

Slurry Grouting

Where the grout mix is runnier than normal and is spread across a large area at a time using a spreader. Care is needed to ensure the grout goes right into the joint and no areas are missed out. This method is recommended where a pitted tile has been fitted and the pits or holes need to be filled in for hygiene or cleaning reasons, for example on a kitchen floor or splashback.

Stud wall

Internal walls in a home, usually constructed of plasterboard over a wooden framework.

Substrate

Any surface on to which tiles are laid.

Thin set

A layer of adhesive applied to a depth of less than 5mm / 1/4".

4. SELECTING YOUR TILES

This is obviously the most important and enjoyable task! With such a large range of tiles to choose from, you may like to order some samples 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 contact our customer services team for advice by emailing info@originalstyle.com

Tiles differ in size and thickness and choosing the right size is just as important as choosing which type. Small tiles and mosaics are often better suited to covering small areas, whereas larger areas look better with larger tiles.

5. SUITABILITY

Here are some guidelines but before you plan your installation please refer to specific product brochures for limitations and suitability of our products regarding durability, use on work tops, interior/exterior use, floors, showers/wet rooms and swimming pools.

Slight Imperfections

Due to their natural origins of some **Earthworks** stone tiles and mosaics may have minor chips or blemishes. Likewise, The surfaces and edges of certain individual tiles within **Mosaics** may be slightly uneven, creased, pitted or chipped (in particular Gold Fleck, Iridescent, Ethereal, Paper and Film Faced Mosaics). Such relatively insignificant imperfections should be considered normal and not the result of poor workmanship. We recommend that when calculating the number of tiles/mosaic sheets for your installation, you allow five to ten per cent extra for rectifying mistakes, imperfections and wastage purposes.

Interior walls only

Artworks, La Belle Collection, Colourworks, Serenity, Glassworks and Splashbacks are **only** suitable for **interior** walls. This also applies to certain Earthworks, Tileworks and Mosaics products.

Direct sunlight

The following **Mosaics** should not be placed in direct sunlight as this may cause them to fade over time. They are also not suitable for external use. GW-KOBMOS Kobushi, GW-SUKMOS Sukai, GW-TEKMOS Tekari, GW-YARMOS Yari, GW-ZAOMOS Zao.

Floors

Victorian Floor Tiles, **certain** Earthworks, Tileworks and mosaics products are suitable for floors. Please check if a specific product is suitable for use on floors.

Exterior use

Please check if a specific product is suitable for exterior use. If you are uncertain please ask your Original Style retailer for further information.

Swimming pools

Please refer to the swimming pool brochure 'The Feeling of Wellbeing Swimming Pools and Spas' for use of products in pools. Please note we **do not recommend** the use of any of our natural **stone** products, certain **mosaics** including **metals**, or any **glass** tiles in swimming pools.

Here are some guidelines regarding suitability of specific products:

Artworks

Victoria and Albert Mouldings

Due to their shape, Victoria and Albert mouldings are not recommended for use in areas subject to wall movement. It is also imperative that care is taken when grouting these mouldings to ensure that moisture cannot get into the back of them, as this may cause the moulding to crack.

Victoria Mouldings

These should not be used on any wooden surfaces due to thermal expansion of the wood which may crack the moulding. Silicone expansion joints should be incorporated above or beneath these mouldings.

Victorian Green

Victorian Green tiles should never be used in wet areas such as showers, bath surrounds or basin splashbacks. These tiles have a copper-based glaze which is prone to discolouration by very mild acids often found in the home. To avoid such discolouration they should be cleaned only with pure water and should always be wiped dry after cleaning.

Earthworks

Please remember that stone is a natural product and no two tiles are identical.

Natural stone has many possible applications ranging from kitchens and bathrooms to wet rooms, commercial premises and many other installations. It is vital to ensure the suitability of tiles for your particular requirements. Please refer to the current Earthworks brochure for limitations and suitability of Earthworks products regarding durability, interior/exterior use, floors, showers and hearths.

The characteristics of natural stone, slate, marble and terracotta all vary considerably, as does their suitability for different types of installation. For example, pale limestone used in a kitchen is more likely to show marks and wear than a darker limestone. Natural stone may fade in UV light. No guarantee can be made against this happening.

Natural Imperfections

Due to the natural origins of these products some of our tiles may have minor chips or blemishes. Such relatively insignificant imperfections should be considered normal and not the result of poor workmanship. This factor is more apparent in some materials and finishes than others and your choice of tiles should take this into account. Porous and unfilled tiles are clearly less suitable than polished ones for surfaces that need to be kept spotlessly clean.

Minor damage such as chipping can sometimes be caused in packing and shipping. This is normal and we recommend that if you do receive any chipped tiles, or if there are any unwanted blemishes, you use them for the cuts during the installation process.

Basalt

Basalt is an igneous rock with unmatched durability that is suitable for use on floors and walls internally or externally and in heavy traffic areas. As a result of the way the rock is formed, it is common for basalt tiles to have small voids in the surface. It is vital that this feature is taken into account when choosing basalt. This is a natural phenomena and not a fault. Caution must be taken during installation as any adhesive allowed on the surface of basalt tiles will lodge in these surface voids, detracting from the natural beauty of the stone. We recommend that the surface is cleaned, grouted with black grout and sealed prior to installation. **NB We only recommend black grout for basalt installations.**

Travertine

It is important to be aware that, as travertine is a natural product, gas voids or pinholes can sometimes appear on the surface of the tiles after installation. No guarantees can be given against this happening. Any voids that do appear can be filled using grout or epoxy resin. It is vital that this feature is taken into account when choosing travertine.

Glassworks including Splashbacks

All Glassworks tiles including Splashbacks must be a minimum of 3cm /1¹/₈" from any direct heat source. This will include any hot water pipe work concealed within walls and any radiant heat sources such as hobs, heated towel rails or radiators.

We **DO NOT** recommend installing Glassworks glass tiles or Splashbacks onto wood or as counter tops. As with all glass products, glass tiles can be scratched. We recommend that care is taken in installation and that glass tiles are not put in high-risk areas for scratching. Avoid sharp objects coming into contact with your Glassworks tiles and never use any kind of abrasive product to clean them. Water is normally all that is necessary or, if your tiles have become grimy, use a proprietary glass or window cleaner.

La Belle Collection

Crazed Tiles

Highly glazed ceramic tiles may craze with time, and no guarantee can be given against this happening. Tube-lined tiles, in particular, are more prone to this natural process and additional care should be taken as to where these are used. (Tube lining is where the outline of the design is piped onto the tile by hand, then translucent coloured glazes are applied to create the final design). When used in wet areas, crazed tiles should be sealed with an impregnator to stop moisture penetrating the body of the tile and causing discolouration.

Laurel (Dark Green) and Graphite Glazed Tiles – Special Warning

Laurel tiles and Graphite glazed tiles have a copper-based glaze which is prone to discolouration by very mild acids often found in the home, for example lemon scented soaps. To minimise this, wash the tiles with clean water only and immediately wipe dry. **These tiles are recommended for use in dry areas only and should never be installed in areas such as showers, bath surrounds or basin Splashbacks.**

Use of tiles on counter top surfaces

La Belle Collection Snowdrop, Clematis and Camellia field tiles are manufactured with a harder glaze than other colours. Accordingly, only these colours are suitable for counter top surfaces. Do not forget, however, that if using these tiles on kitchen work surfaces, knives and other implements can still scratch the glaze so we recommend the use of a chopping board or toughened glass surface protector when preparing food or carrying out similar tasks.

Mosaics

CHOOSING THE RIGHT MOSAICS

Please check suitability of the mosaics in the Brochure Usage Guide before ordering and installation (interior/exterior/showers/wet rooms/floors/colour variance and special notes). If you are uncertain please ask your Original Style retailer for further information.

Stone: Most of our Earthworks stone mosaics are porous to some extent. If laid outside, it is possible water could be absorbed and the tiles become susceptible to frost damage. Stone is a natural product and subject to colour variation, pitting, blemishes, chipped edges, size variation and sometimes staining. Natural stone may fade in UV light. No guarantee can be made against fading.

Glass: NB: slip-resistance with **glass** tiles may not be adequate for use in wet conditions when placed on floors (Please see Usage Guide regarding glass tiles that are suitable for floors). We do not recommend glass mosaics are used on counter tops because of the likelihood of scratching.

Use of Glass Mosaics near heat: we recommend that glass mosaics are installed a minimum of 3cm from any direct heat source.

Copper: Please note that Alchemy copper mosaics **must not be used** in kitchens, bathrooms, showers and wet rooms. When installed outside and exposed to air and moisture the copper may, over time, form a patina of verdi gris (a green coating). It is vital that this feature is taken into account when choosing copper mosaics as the colour may change.

Wood, bamboo, coconut: Only suitable for dry areas, not suitable for wet areas such as wet rooms, bathrooms, showers or splashbacks or where they will be exposed to excessive moisture. Mosaics made from or containing wood are subject to natural blemishes such as knots and holes.

Shell: Not suitable for excessively wet areas such as wet rooms, although can be used in showers.

Metal: The surface of **Torque EW-TORMOS** is three dimensional and some edges will be sharp even after installation. We do not recommend it is installed in areas where it can be brushed past or where small children will come into contact with the surface. It is important to take this into account before choosing this product. **Cuirassier Black EW-CURBB, Steel Cuirassier EW-CURBS, Jules Verne EW-JUVEP:** only suitable for dry areas.

The following Mosaics should not be placed in direct sunlight as this may cause them to fade over time. They are also not suitable for external use and must only be used in dry areas. Feng Shui range **Kobushi GW-KOBMOS, Sukai GW-SUKMOS, Tekari GW-TEKMOS, Yari GW-YARMOS, Zao GW-ZAOMOS.**

6. SHADE VARIATION

Shade variation may be an inherent feature of some Original Style ceramic and porcelain tiles, whilst tiles and mosaics made from natural stone are prone to shade variations. We recommend that your tiles/mosaics are loosely laid out and 'blended' prior to fixing to achieve the most pleasing distribution of shades. Differences between batches can be more marked, so for this reason we recommend that you buy all the tiles at one time. No liability for shading issues can be accepted after installation.

Some tiles, for example, Earthworks natural stone may be delivered damp. This is due to the manufacturing process and tiles need to be allowed to dry completely before installation. Moisture content may affect their shading as wet tiles may appear much darker than dry tiles.

7. 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.

To calculate the number of tiles required, first decide which size you want. If you have any problems calculating the number of tiles required please do not hesitate to email our customer services team at info@originalstyle.com

Calculating the tiles you may require is the easy part. Simply measure the height of your room or the height you will require the tiling to end and multiply by the width. On the floor, measure the length and multiply by the width.

If the shape of the area to be tiled 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, if not 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, wastage and any imperfections by adding at least 5 per cent to the total for mosaics and 10 per cent for larger tiles.

It can be a false economy to only order the exact quantity. You may break some tiles when cutting or you may end up with awkward shapes that take more tiles than anticipated. 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 colours can vary between different batches.

8. PREPARATION

The secret to a perfectly laid wall or floor is to lay the tiles as flat and as evenly as possible. To do this successfully you need the firmest, flattest and driest possible surface to work on. Some surfaces are ideally suited for tiling, others require a certain amount of preparation first, and a few are totally unsuitable.

Storage

Please store all Original Style tiles and any fixing materials such as grouts and adhesives in a cool and dry storage area. **All tiles must be dry before installation and Original Style cannot guarantee that any products will be delivered completely dry** (see note about Damp tiles, further below in this section).

Important Note

All surfaces must be allowed to dry out completely before tiling. Failure to do this can result in moisture being trapped behind the tiles which can react with some tiles causing them to deteriorate over a period of time.

Tiles are completely inflexible. With this in mind, it is important to ensure the substrate will not move otherwise cracking will occur. If there is movement in the substrate, we strongly advise that you seek professional advice before proceeding any further. Please look at www.schluter.com/6_1_ditra.aspx for further information.

ALL floors must be primed prior to installation.

Sand and cement (screed) floors must be completely dry. Allow seven days to cure then another 14 days to dry. Please be aware that certain installations may require a longer drying time, due to thickness of the screed, humidity within the room and weather conditions. Use a hygrometer to test for moisture.

Anhydrite screed and asphalt surfaces: always seek professional advice before installing over anhydrite screeds and asphalt.

Timber and joist floors must be rigid and solid without movement. The best way to achieve this is to lay marine plywood boards measuring 15mm/⁵/₈" or thicker over the entire floor, screwing it down every 150mm/6" in each direction. Before screwing the marine ply down, apply PVA to the reverse and sides (but not on the surface to be tiled). We advise employing a tiling professional to tile onto all wooden surfaces, as it is essential that any movement or flexing in the floor is removed and special flexible adhesives are used.

Old stone, or quarry tiles are best removed. If this is impossible or impractical, and they are completely sound, they should be thoroughly cleaned of any contaminants i.e. dirt, grease, oil, waxes etc. **Vinyl** tiles should always be removed. If tiled over they can sweat and cause debonding of the adhesive.

IMPORTANT:

Do not lay tiles directly onto a bed of wet sand and cement. This may give rise to efflorescence on the surface of some tiles. Efflorescence (which is a natural chemical reaction) is the name for a whitish bloom that can appear if there is moisture within the tile. See section on **Cleaning Earthworks Natural Stone tiles and mosaics** below.

Underfloor Heating

Underfloor heating is an excellent and extremely efficient way of heating, either as the sole source of heat in a room or as a backup to an existing heating system. There are two types, electric and piped water. The electric method is extremely simple to install. A length of wire and rolled out mat is laid out on the substrate prior to tiles being fixed. A wall mounted thermostat enables complete control over the temperature. Natural stone, Victorian floor tiles and ceramic and floor porcelain tiles can be used effectively with underfloor heating systems providing expansion joints are incorporated. These absorb thermal expansion and contraction between the tiles and adjoining surfaces. Electric underfloor heating will heighten the floor by approximately 5-6mm / $1/4$ " , so this should be planned into your installation.

NB The underfloor heating manufacturers' guidelines must be followed.

When installing underfloor heating, please note that the adhesive and grout manufacturers' instructions must also be followed. It is very important to obtain all information concerning installation, particularly regarding delay times before and after installation, before the actual work begins. If the installation is done incorrectly, the tiles may be subject to cracking, due to thermal expansion and contraction, and drying.

Underfloor heating should not be switched on until 28 days after installation of the tiles, to allow the adhesive to cure fully. On the first day after the 28 day curing period, turn up the heating to 5°C and then raise it by 5°C per day for the next five days.

Walls

All walls should be primed before tiling.

Make sure the wall to which you are fixing tiles is able to take the weight of the adhesive and tiles.

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 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. Normally a plasterboard wall which has not been skimmed has a load bearing of 32kgs per m². These walls should be primed first, left to dry and then the adhesive applied directly to the wall.

Plaster is a suitable surface as long as it is dry and in good condition. Normally a plaster wall has a load bearing of 20kgs per m². Remove any loose or crumbling plaster and repair it with new plaster or filler before rubbing down to a level finish. Prime the walls and leave to dry before commencing to tile. It is important to check weight restrictions before fixing tiles. Always seek professional advice if you are tiling over plaster.

Rendered walls can be tiled but, as with floors, new rendering must be allowed to dry out completely before tiling; normally a period of 21 days is recommended. Rendered vertical walls are a good base for tiles up to 15mm / $5/8$ " thick with a maximum height of 3.6 metres/ approx 12 foot. For tiles thicker than this the render must be reinforced with metal mesh screwed to the wall. Professional advice regarding this is recommended.

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 priming.

Old ceramic wall tiles We do not recommend tiling over old tiles because of weight restrictions and stability. **Old tiles should be removed and the exposed surface should be prepared as appropriate (see above).**

Wet rooms and showers: certain mosaics, natural stone, ceramic and porcelain tiles can be used in showers provided you take certain precautions in preparing the surfaces, and use the correct adhesive and grout. It is vitally important to prepare all substrates in any area subject to frequent water (such as around a bath, basin or shower) carefully to protect them from water absorption. The best substrates are normally water resistant boards such as PCI Pécidur, Wedi or Marmox. The underlying surface must be waterproofed first, using a waterproofing kit known as a tanking system (see below), to prevent the ingress of water into the substrate. There must also be sufficient falls for water to drain away.

Tanking Systems

We recommend using a tanking system for power showers, shower cubicles, steam rooms and wet rooms in hotels, guest houses, leisure centres, fitness centres and in domestic homes. 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. Tanking a previously painted surface is not recommended. You can usually apply the tile adhesive 24 hours after the wall and floors are waterproofed.

We recommend that all waterproofing processes are carried out by a professional.

Damp tiles

You may have to allow for drying time, as some products, in particular Earthworks stone tiles, may be damp following storage and transit. The drying time will depend on several factors such as the ambient temperature and humidity plus the size, thickness and substance of the tiles. To dry, stand damp tiles on end in a well-ventilated room, or place damp tiles in bright sunlight for at least 24 hours, allowing a flow of air around the tiles. This is best achieved by leaning them against an exterior wall at a 45° angle, while ensuring that the edges in contact with the wall and floor are sufficiently protected against damage. All tiles must be thoroughly dry before installation.

Any moisture content may also affect the shading as wet tiles may appear much darker than dry tiles.

Please note that in some cases it will take several days for tiles to dry out completely. We cannot guarantee that products will be delivered completely dry.

9. PLANNING

It is important to plan the installation of your floor or wall before starting to fit any tiles. Here are a few of the main areas to think about whilst in the planning stage:

Which adhesive and grout should I use?

There is a range of adhesives and grouts to choose from, some are better suited to certain types of surface than others. Before starting your installation, please read the section on adhesives and grouts.

Using coloured grouts with ceramic wall tiles

An inherent feature of our dark coloured ceramic wall tiles (for example in Artworks, Colourworks, Designer Classics, La Belle Collection, Pop Art and Serenity ranges) is a faint lighter line along the outer edge of the tile glaze. This is the case for all glazed ceramics that are not rectified. It is not a fault; it results from the firing process and is known as a surface tension effect. This lighter edge is more visible when dark coloured grouts are used. It is important to bear this in mind when considering the overall effect of your installation before you start your project.

Sealing Tiles

Some tiles need sealing before installation; again you may have to allow time for sealants to be applied and drying time. Please refer to the section below on sealing before starting your installation.

Protecting your installation

We advise that you do not install any tiles until heavy construction has been completed. In between the installation and putting a floor into service, it is important to protect the tile and grout in order to avoid construction related cleaning problems. Do not use plastic covers as this may induce sweating and discoloration by not allowing the grout and bedding material to dry adequately.

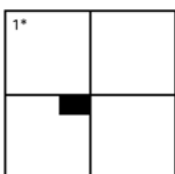
Protecting your tiles

Before installation, please make sure you store any fixing materials and your tiles in their packaging clean and dry area. It is particularly important that any paper faced mosaics must be kept thoroughly dry in order to avoid the mosaics separating from the paper sheets before installation.

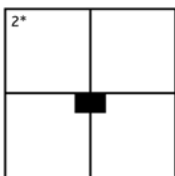
10. MARKING OUT THE WORK AREA

Floors

Begin by taking 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 or mosaic sheet 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 or mosaic sheets loosely, allowing for the joints. The joints will depend on what you are trying to achieve and on your choice of tiles/mosaic.

How wide should the joints be?

- If you have chosen a tile with a straight edge finish (which should be fairly even), tiles can be laid with thinner grout lines
- If you have chosen a rustic style tile, the tile edges can be uneven and to allow for this you will need thicker grout lines
- If you are covering the whole area with mosaics ensure the grout gaps between the sheets are the same as the width between the individual tiles on the sheet
- If you are using mosaics as a border you may have to adjust the grout gaps around the tiles in the middle and around the edge to accommodate the mosaics

Also, if you are using more than one product, check the thickness of the tiles – you may have to adjust levels with extra adhesive to ensure an even and flat surface when the tiling is completed. Different levels can also be built up by using Pecedor, Marmox or Wedi boards.

The aim is to achieve a pleasing pattern whilst avoiding unnecessary cutting or thin slivers of tile at the edges of the room. It is desirable to maintain whole tiles in the doorway. If you are tiling through a doorway (i.e. installing tiles in two different rooms), make sure you install a movement joint at the threshold. This will allow for differing substrates and ambient temperatures between the rooms.

Once you have marked out where the tiles/mosaics are going, begin laying at the centre end of the room i.e. furthest from the door.

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.

Bathrooms

Baths and shower trays must be perfectly level before you start tiling. To ensure a visually pleasing result, use the window as your centre point, and place larger cuts rather than smaller ones into the corners, floors and ceilings.

Walls

First, make a tiling gauge.

Use approximately 1m/39" length of straight, planed, wooden batten approximately 30 x 20mm /1¹/₈" x 3/4" in cross-section. Use a pencil to mark off the length of your tiles/mosaic sheets, plus the space between them. For instance, if you are fixing tiles that measure 300 x 300mm /11¹³/₁₆" x 11¹³/₁₆" and have gaps between each tile of 2mm /1¹/₁₆" you will mark every 302mm /11⁷/₈".

Mark out the work area. You must always check to see whether the ceiling is level first. Aim to position the tiles/mosaic sheets so that they fit either at the top or at the bottom. This way you will be cutting one edge. This can only be achieved if the floor or ceiling is level.

The first row you fix is the most important. If this is sloping or uneven, then all the other rows will be uneven too.

If the skirting board or floor looks even 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:

Take a straight length of timber batten (dimensions as above).

Using a spirit level, make sure the top of the wooden batten is perfectly level then lightly nail it horizontally along the area to be tiled.

NB. Check for concealed plumbing or electrical wiring before nailing into any walls.

Place your homemade gauge vertically against the wall, its end on the top edge of the fixed wooden batten. Work up the wall making pencil marks as you go, making sure that you won't have to cut lots of fiddly small tiles at the top.

Now use a measure to find the horizontal mid-point of the wall. Put your gauge against this point and work horizontally to determine the location of the last whole tile, and mark the batten. Again, make sure you are not left with small slivers of tiles at each end and, if necessary, adjust the 'mid-point' slightly to avoid this.

Next hang the plumb line so that the line hangs directly over the batten mark. Alternatively, you can use a laser level, a long set-square or an upright spirit level to produce a vertical line. Once you have the precise starting point for your first tile you can begin tiling.

Always remember when you are using a pattern border you can only centre one area because some borders must follow the patterns.

11. SEALING

a) SEALING BEFORE INSTALLATION

Please note that Glassworks tiles and mosaics made from metal and glass do not require sealing (unless otherwise stated).

Application of penetrating sealers

The correct application of penetrating sealers is important. Follow the manufacturer's application guidelines. The tile surface must be thoroughly clean and free of any material that may prevent the sealer from penetrating. Apply the sealer following the manufacturer's instructions. A lint-free roller should be used. Do not allow the penetrating sealer/ impregnator to dry on the surface. Penetrating sealers have a life expectancy of five years. Please seek advice on this from the sealer manufacturer.

NB: Not all adhesives, cleaners, grouts and sealers are equally suitable for all types of tiles. For example, please note that some Earthworks stone tiles contain high levels of iron oxides: for this reason we recommend a solvent based sealer. **Take advice from your sealant supplier.**

Sealing Earthworks natural stone tiles and mosaics

Natural stone tiles and mosaics should be sealed **prior** to installation, for both interior and exterior use. Tiles should be completely clean and dry (see note about damp tiles in section 8, Preparation). Sealing the surface of Earthworks tiles protects them from adhesive staining during installation and absorbing moisture and other stains.

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, lint free 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 to cover the grout and the tile (see 'Sealing after Installation' section).

Alexandrian Cream

This stone must be allowed to breathe so that moisture from the substrate and adhesive can permeate through to the surface. Alexandrian Cream tiles are denser than many other natural stone tiles and require extra drying time; approx 48 hours for rapid set, 72 hours for standard set. Certain impregnating sealers will allow moisture to escape from inside while preventing moisture ingress from the surface. If tiles are sealed before all the moisture has escaped (or a non-breathable sealer has been used) this may lead to staining or delamination within the tile as the moisture reacts with the naturally occurring iron particles within the stone.

Please consult the sealant manufacturer if you are in any doubt about the suitability of a sealer.

Pebble mosaics

Pre-sealing pebbles can make the eventual removal of grout easier and may be carried out before the pebbles are laid or just before grouting. After ensuring the sealer is appropriate, apply in accordance with instructions, then remove any excess and leave to dry. Ensure the sealer used is the same as, or is compatible with your final sealer. **IMPORTANT Test the sealers on a single pebble first to ensure it gives you the result you want and is compatible. Sealers should not saturate the pebbles as this can dissolve the backing glue.**

Sealing La Belle Collection

Crazed Tiles

Highly glazed ceramic tiles may craze with time, and no guarantee can be given against this happening. Tube-lined tiles, in particular, are more prone to this natural process and additional care should be taken as to where these are used. When used in wet areas, crazed tiles should be sealed with an impregnator to stop moisture penetrating the body of the tile and causing discolouration.

Sealing Mosaics

Stone

All stone mosaics, **Mother-of-Pearl EW-PARMOS and Purity EW-PURMOS** need sealing before installation (for example HG Marble Neutral Impregnator).

The surfaces of some mosaics may be slightly uneven, creased or pitted. This is an inherent feature of some mosaics. Unless they are sealed first, any pitted surface may become unavoidably filled during the grouting process, resulting in a speckled appearance.

Aluminium: Stellar EW-STLMOS, Telstar EW-TLSMOS, Torque EW-TORMOS: Use PCS Colastic metal adhesive. No grouting required for **Telstar EW-TLSMOS** and **Torque EW-TORMOS**. Seal with Seal Guard.

Alluvial GW-ALLMOS, Silurian GW-SILMOS and Cretaceous GW-CREMOS: before installing, seal stone pieces with a penetrating sealer, clean excess away before it dries with a white lint free cloth. Do not oversaturate as some solvent sealers may affect the backing material. Dark coloured grouts may stain the stone pieces.

Lombok GW-LOMMOS contains metal pieces which are protected by film. Use finely sanded grout to avoid scratching. Seal the bamboo pieces to avoid any leaching into the grout and staining it.

Batu GW-BATMOS, Manaslu GW-MANMOS, Pagai GW-PAGMOS: impregnate grout with Seal Guard.

Copper Mosaics Alchemy Square EW-ALCAC20, Alchemy Cube EW-ALCAC48, Alchemy Brick EW-ALCACBB: Neutral cure sealants (for example Soudal Low Modulus Neutral Cure Silicone) should only be used with Copper mosaics. Acetoxycure sealants are corrosive in nature and will damage sensitive metals including copper and bronze.

Lava Borders

Because of their crackle glaze, all the Lava Borders (except Lumiere EW-LUMMOSB) will require a solvent-based impregnator (for example Lithofin KF Stain Stop) prior to installation to protect them from pigmented grout residue.

ADHESIVES, GROUT, SEALANTS

Particular care should be taken to use the correct adhesive, grout and sealants. Carefully read manufacturers' information and always follow the manufacturer's instructions.

Mosaics

We recommend a white, rapid setting cement latex based flexible adhesive and non sanded or finely sanded grout are used unless stated otherwise in this guide. No guarantee can be made by Original Style against some minor scratch marks appearing on mosaic tile surfaces even when using non sanded grout. Please always test a small inconspicuous area before installation, following all manufacturers' instructions.

Coloured grouts can be used on our mosaics and they can enhance your installation. Many colours are now available so we suggest you check the range with your retailer. As they may alter the overall appearance of the mosaic colour, we strongly recommend that a small area is tested before installation. Some dark grouts may stain light coloured stone.

Gold and Shell: we recommend Epoxy based primer, Epoxy adhesives and grouts for the installation of the following mosaics: **Mother of Pearl EW-PARMOS, Eastern Light GW-EASMOS and Kasba GW-KASMOS**. A solid bed of adhesive will be required behind these tiles (following the manufacturer's instructions). Failure to implement this may cause gold to tarnish, please test before installation. Cement based adhesives are not recommended.

Glass: As glass is fully vitrified (impervious to water), it is important to choose a latex-based adhesive and grout to suit. A thin bed of adhesive should be used to prevent the adhesive coming through the joints.

We recommend that the following are installed using Epoxy adhesive to both fix and grout: this is called the one step method. **Nobu GW-NBUMOS, Gavroche GW-GAVMOS, Masa GW-MSAMOS, Plaza GW-PLAMOS, Atelier GW-ATEMOS, Holocene GW-HOLMOS, Cenozoic GW-CENMOS, Charleston GW-CHRMOS**.

Transparent, Mixed Blend and Gold Fleck: Some of the mixed blends and gold fleck mosaic sheets contain transparent pieces. Adhesive must be applied evenly. Always use a white latex based adhesive for transparent mosaics (eg Mixed Blends). We advise that the mesh backing behind transparent pieces should be carefully removed before fixing so the mesh is not visible after installation. Failure to do this can lead to the mesh being visible through the tiles in certain lights.

Gold Fleck, Iridescent, Ethereal, Paper and Film Faced: the surfaces and edges of certain individual tiles may be slightly uneven, creased, pitted or chipped. This is an inherent feature of these mosaics. Unless they are sealed first, any pitted surface may become unavoidably filled during the grouting process, resulting in a speckled appearance. We recommend that these tiles are sealed with a protective sealer prior to installation. While thorough cleaning after grouting will remove most of the grout, there may always be some grout remaining within the pinholes or surface creases. The amount of visible grout after installation will depend primarily on the colour contrast between grout colour and tile, and how well the tiles are cleaned after grouting. Please test a small inconspicuous area before installation, following all manufacturers' instructions.

Metal: Unless otherwise stated, use a flexible adhesive with a latex additive and non sanded or finely sanded flexible grout. No guarantee can be given against scratching.

Cuirassier Black EW-CURBB and Steel Cuirassier EW-CURBS: No grouting required.

Aluminium: Stellar EW-STLMOS, Telstar EW-TLSMOS, Torque EW-TORMOS: Use PCS Colastic metal adhesive. No grouting required for **Telstar EW-TLSMOS** and **Torque EW-TORMOS**. Seal with Seal Guard.

Copper: Use a flexible adhesive with a latex additive and finely sanded flexible grout to avoid scratching. Test a small area first.

Mixed mosaics containing stone and glass: Mellow GW-MELMOS, Actamira EW-ACTMOS, Mogao EW MOGMOS, Postojna EW-POSMOS: grout may fill small surface voids (an inherent feature of the stone that is included in these mosaics) and alter their finished appearance. Use Keraquick Latex Plus adhesive and finely sanded grout.

Alluvial GW-ALLMOS, Silurian GW-SILMOS and Cretaceous GW-CREMOS: before installing, seal stone pieces with a penetrating sealer, clean excess away before it dries with a white lint free cloth. Do not oversaturate as some solvent sealers may affect the backing material. Dark coloured grouts may stain the stone pieces.

Mixed mosaics containing metal, stone and glass: Carinthia GW-CRAMOS, Viedo GW-VIEMOS, Zamo GW-ZAMMOS, Valen GW-VALMOS. Care must be taken when installing these mosaics to avoid scratching the metal individual tiles, which are protected by film (see note on protective film). Use Mapei Keraquick mixed with Latex Plus and finely sanded grout. Please test before installation.

Use Epoxy based primer, Epoxy adhesives and grouts for **Rakoram GW-RKOMOS** and **Rena GW-RENMOS**.

Lombok GW-LOMMOS contains metal pieces which are protected by film. Use finely sanded grout to avoid scratching. Seal the bamboo pieces to avoid any leaching into the grout and staining it.

Batu GW-BATMOS, Manaslu GW-MANMOS, Pagai GW-PAGMOS: impregnate grout with Seal Guard.

Self adhesive mosaics Jules Verne EW-JUVEP: Self adhesive mosaics need placing carefully. Once they are adhered to the surface they cannot be moved without damage. No further adhesive or grouting required. Dry areas only.

Stone

Cement-based adhesives can be used for stone mosaics unless otherwise stated.

Use Epoxy based primer, Epoxy adhesives and grouts for **Pastiche EW-PASMOS, Grande Pastiche EW-GRPASMOS, Segovia EW-SEGMOS** and **Jade 2.3 EW-VMJADE**. Mapei Keraquick with Latex Plus adhesive for **Carthage Border (EW-CARTH)**. This also contains mother of pearl pieces which are protected with plastic film. Remove this as soon as the grout is washed off and fill any missing grout. Use HG Marble Neutral Impregnator by wiping on then wiping off. Use finely sanded grout.

Wood, Coconut: (Ceylon EW-CEYMOS, Surabaya EW-SURMOS) Use contact adhesive or Mapei Ultrabond P997 1KT. No grouting required. Use varnish or teak oil to seal the wood if required. Leave for 15 minutes then clean off with a lint-free cloth. Caution must be taken when applying the teak oil as overspill from the roller may affect other surfaces.

Sealing Tileworks Ceramic and Porcelain Tiles

To prevent tiles from staining, all ceramic and porcelain should be sealed with a liquid penetrating sealer prior to installation. Penetrating sealers will fill any exposed pores, making the tiles highly resistant to surface staining; this also makes general maintenance easier. Penetrating sealers do not generally alter the appearance of polished porcelain products since they are designed to only fill the microscopic pores. The slip resistance of the tile will not be affected.

b) SEALING AFTER INSTALLATION

See note above regarding suitability. Walls and floors need at least one layer of sealer after grouting to seal the grout. Make sure you use only new brushes and new, clean, lint-free white cloths for sealing and keep dirt and dust away from the work area.

Floors

After the final seal, avoid walking on the floor until the sealer has set thoroughly (follow manufacturer's recommendations). **Switch off any underfloor heating and wait until the floor cools before applying any sealants.**

13. FIXING TILES

It is essential to first mix tiles and mosaics from different boxes so that variations in colour are blended together thoroughly to give a pleasing design or pattern.

IMPORTANT: Please note, variations in shade and pattern are an inherent feature of ceramics and porcelains. Before fixing you should sort the tiles to give a pleasing combination of colour and effect. Do not fix tiles if an acceptable blend cannot be achieved. No responsibility can be accepted for shading or quality once the tiles have been fixed.

Make sure that, if fixing to a wall that it is able to take the weight of your tiles and adhesive.

Adhesives

For substrates that can expand and contract i.e. wood or floors with underfloor heating, it is important to use a flexible adhesive. This will allow for tiny movements and will stop tiles and grout from cracking. However, some changes of plane will require expansion joints. Always seek professional advice.

Adhesive is also available as standard set or rapid set. Standard set takes up to 24 hours to go off, whereas rapid set can take up to two hours depending on the thickness, temperature and humidity conditions. All tiles should have a 2mm/ $\frac{1}{16}$ " layer of adhesive spread onto the backs before laying, in addition to the adhesive spread on the floor/wall. This method is known as solid bed.

Important Note:

Epoxy adhesive can be difficult to use and because of the nature of Epoxy, can be extremely hard to remove once cured. For this reason, we recommend keeping hot water and a supply of clean sponges at hand to remove excess Epoxy quickly and safely. Emulsifying pads should not be used on glass or metal tiles as they may damage or scratch the surface. Always test Epoxy prior to using with our products.

Control joints

There are numerous reasons for building movement and expansion joints. Divide a larger tiled area into a series of smaller ones with sealant and bond breaker between them. Designers may show points at which joints are needed but these are mandatory where tiles adjoin walls or some other building material and where there is an expansion joint in the substrate, among other circumstances.

Which adhesive and grout?

It is imperative to follow the manufacturers' instructions on the products and, if in doubt, please consult the dealer you purchased the products from or your installer for more information.

Always follow the manufacturer's directions when mixing and applying installation materials. Take special care to note if a product is suitable for interiors and exteriors as well as walls and floors. A recognised adhesive manufacturer will have a range of products, each appropriate to specific substrates.

Certain adhesives are unsuitable for use in wet situations therefore we strongly advise contacting the adhesive and grout manufacturers for their recommendations. Original Style makes no representations as to the fitness for purpose of third party adhesives and grouts.

NB: Not all adhesives, cleaners, grouts and sealers are equally suitable for all types of tiles. Take advice from your supplier.

Applying the Adhesive

Spread adhesive over as much of the wall/floor as you can work on, within about 15 minutes; approximately one square metre /one square yard is usually about right. Spread the adhesive as a solid, even layer (rather than using spots of adhesive) Use a notched trowel to form parallel lines. The thickness should be approximately 3mm/ $\frac{1}{8}$ " for mosaics, 6mm/ $\frac{1}{4}$ " for 152mm/6" ceramic tiles, 8mm/ $\frac{5}{16}$ " for large format wall tile and 8-10mm/ $\frac{5}{16}$ " - $\frac{3}{8}$ " for floors. If you are installing thick tiles, spread a 2mm/ $\frac{1}{8}$ " layer of adhesive on the back of the tiles as well and the surface of the substrate, making sure to always spread the adhesive over the entire back surface of the tile rather than spotting it on, otherwise the tiles may break after installation.

Place the first whole tile on the adhesive, press it down firmly. Earthworks tiles can be tapped gently into place with a rubber mallet.

Check the first tile is straight and level. Now lay the adjacent tiles in the same way, using **spacers** (see note, 'Using spacers') to create an even joint between them.

Using spacers

If spacers are used by inserting them vertically on floors and horizontally on walls (ie they stick out at right angles to the tiled surface) they need to be removed from the joints as soon as the adhesive setting time is achieved. If spacers are left overnight or for long periods to allow the adhesive to dry completely, they may cause damage to tile edges (particularly rectified products in the Tileworks range) as the adhesive contracts and tightens around the spacer. Spacers left sticking out can also be knocked accidentally against tile edges, causing damage and chipping. Avoid walking on floors until spacers have been removed and the tiling is completed.

When you get to the edge of the room, cut the tile to fit the gap. Where floor and wall tiles meet, a neater finish will be achieved if the wall tiles sit over the floor tiles. Leave a gap between the edge of the floor tile and the wall to allow for expansion.

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

During installation of all mosaics it is important to ensure that the adhesive is not applied too thickly, as it may permeate into the grout lines. If this then dries, it can be difficult and time consuming to remove.

Work to the lines you have marked on the walls for centre points and level lines, then begin applying the tiles.

Where there is any chance of movement from the substrate it is important to use a flexible adhesive. This will allow for tiny movements and will stop tiles and grout from cracking. However, some changes of plane will require expansion joints. Always seek professional advice.

Adhesive is also available as standard set or rapid set. Standard set takes up to 24 hours to go off, whereas rapid set can take up to two hours depending on the thickness and temperature and humidity conditions.

When you get to the edge of the room, you can either cut the tiles to fit the gap (if necessary) or leave it until the end of the job, but you must clean away the excess adhesive before it dries for easier installation.

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.

If there are any untilled areas around the edges of the wall you will need to cut the tiles to fit (please see section on Cutting tiles).

Adhesives and Grouts for wet areas

The requirements for adhesives, grouts and sealers differ according to the type of tile used, the background material, and 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.

Although most adhesives and grouts are water resistant in normal situations, they can be further improved using a flexible additive. For power showers we recommend Epoxy grouting. Always seal the grout and tiles after installation, following the manufacturer's instructions.

Adhesives for Earthworks natural stone tiles and mosaics

Cement-based adhesives are recommended for fixing stone tiles using the solid bed method (where adhesive is put on both the reverse of the tile and the floor to produce a solid bed). This is particularly important when installing travertine tiles.

Light coloured adhesives are strongly recommended for fixing paler stone (such as marble and limestone) to avoid staining but also to avoid discolouration through the tile, which can happen due to a chemical reaction between the minerals in the stone and the adhesive.

Dark coloured adhesives are fine for dark stone tiles.

All natural stone tiles should have a 2mm $1/8$ " layer of adhesive spread onto the backs before laying, in addition to the adhesive spread on the floor/wall.

Travertine

All voids on the reverse of travertine tiles should be filled with white adhesive. The entire back of the tile should then be 'battered' with adhesive before fixing.

Translucent stone

For fixing any translucent stone, an SI white flexible cement-based adhesive is recommended.

Limestone

Care must be taken when installing any stone tiles, particularly limestone, on any timber substrate. The surface needs to be strong and rigid with no likelihood of movement, otherwise limestone tiles could suffer damage or cracking.

Pebble mosaics

We recommend that the tiles are laid dry before fixing, so that variations in colour and size are distributed evenly across the installation. Some pebbles may require adjusting slightly so that they interlock with adjoining pebble sheets, the gaps between each pebble sheet should match (as closely as possible) the gaps between individual pebbles. This will ensure that the joins between sheets are not revealed after grouting.

Cement-based water-mix adhesive is generally suitable on masonry substrates where no movement is anticipated. Where slight movement could occur through thermal or pedestrian loads, a modified cement adhesive (probably two-part) should be used as a minimum. It is important that each pebble is embedded in the adhesive. Select a product suitable for the application, use a solid bed trowel and apply no more than about one square metre of adhesive at a time, always wiping off the adhesive residue as you work.

Adhesives for Glassworks glass tiles

For plain glass tiles use a white, cement based latex modified adhesive, such as Keraquick mixed with Latex Plus. For the decorative glass tiles use an epoxy class R1 or class R2 adhesive or a silicone based mirror adhesive. When using a mirror adhesive, the adhesive should be applied directly to the back of the tile, not the walled surface. The tile should be then fixed to the wall.

IMPORTANT NOTE:

Epoxy adhesive can be difficult to use and because of the nature of Epoxy, can be extremely hard to remove once it has gone off. Always remove excess Epoxy adhesive immediately.

It is vital that the adhesive is completely dry before grouting. Any moisture left behind glass tiles can cause the paint backing to deteriorate.

Semi opaque glass tiles need to be fixed with an adhesive that does not shrink and crack as this can be seen when the adhesive dries from the front. Also when installing Glassworks tiles please be aware that any light refraction from other substrates may be visible through the edges of the tiles. We therefore strongly recommend that any voids (corners for example) are fully filled before tiling to avoid this shadowing effect.

Glassworks Cygnus and Andromeda

These tiles have very subtle patterns and so care should be taken to ensure they are fixed with the front face showing.

Fixing Glassworks Splashbacks

Care must be taken when handling your Splashback before and during installation.

Original Style Glassworks Splashbacks have been tested to British Standards BS EN 12150. They are made from toughened (also known as tempered) glass, which is a type of safety glass. Toughened glass should receive the same care as annealed (ordinary) glass. Careless handling and improper installation sometimes causes edge damage, and delayed breakage can occur when edge-damaged tempered glass is subjected to mechanical stress, as in installation. Further, **if cut, knocked or dropped, this material will produce instantaneous total fragmentation. DO NOT under any circumstances attempt to cut or drill a Splashback as it will shatter.**

When you install a Glassworks Splashback next to or within a tiled surface, for example, Original Style Glassworks tiles, you must incorporate silicone expansion joints of 2.5mm $1/8$ " around the perimeter of the Splashback. This will allow for any thermal expansion and contraction. Any change of plane (i.e. internal corners) will also require a silicone expansion joint.

NB: if you are installing a Glassworks Splashback with Original Style Earthworks tiles, always refer to the manufacturer's recommendations when applying silicone, as some silicone products can stain natural stone tiles.

All surfaces must be clean and free from any dust particles or contaminating substances. The surface to which you are fixing the Splashback must be primed 24 hours beforehand and allowed to dry completely.

We recommend that you use a low modulus silicone adhesive. To fix the Splashback to the wall, apply the silicone liberally to the back and also run a continuous line of silicone 10mm $3/8$ " around the back edge perimeter, then press it into position. If you are installing your Splashback with other Glassworks tiles, always use tiles of the same thickness (unless you are trying to achieve a 3D effect). Glassworks tiles can be cut to fit around plugs and wall units. All Glassworks tiles require a minimum 2mm $1/16$ " spacing joint to allow for thermal expansion and contraction.

Scratching

As with all glass products, it is possible to inadvertently scratch your Splashback. We recommend that care is taken during installation. Use masking tape to protect the edges prior to installation. It is always best to purchase new sponges and grouting tools as old tools may have grout residue on them which could scratch your tiles and Splashback.

Adhesives for glass mosaics

For glass mosaics, we recommend using a latex cement-based adhesive with a high polymer content as glass is fully vitrified and therefore impervious to water.

Applying adhesive to mosaics

All surfaces to be tiled should be primed and allowed to dry thoroughly before tiling.

Spread adhesive over as much of the floor or wall as you can work on within 15 minutes – about half to one square metre is usually about right. Spread an even layer of adhesive (about 3-4mm/³/₄" thin-set) using a notched trowel to form horizontal parallel lines. Place the whole mosaic sheet on the adhesive and press it in firmly. Remove any excess adhesive that wells up between the tiles with a damp sponge. Check the mosaic sheet is straight and level. Use a 30cm /12" piece of batten to tamp the mosaics down lightly to achieve a level finish.

Most Original Style mosaics are supplied as sheets on a mesh backing for ease of installations. The mesh side is simply pressed into the adhesive and so does not need removal. However some mosaics have paper or film facings. See below.

Paper faced mosaics – Lagoon Collection

Due to the translucent nature of these tiles, the Lagoon Collection mosaics are paper faced to avoid the appearance of mesh showing through the glass mosaics once installed. Paper faced tiles should be adhered in the same way as glass mosaics, however, unlike mesh backed tiles the paper should face outwards. A white latex, cement-based, rapid setting flexible adhesive is recommended. Adhere a small section at a time. Fifteen to twenty minutes after application of the mosaic sheet, use a damp sponge and warm water to lightly wet the paper until it turns dark. Test a corner of the paper by pulling lightly at a downward angle. If the paper does not peel away cleanly sponge again until it peels away easily. Once the paper has been removed, inspect the installation and straighten any joints not aligned. Should you discover any unacceptable tiles, remove and replace them before the adhesive dries. Always remove the paper as you go, do not wait until all the sheets have been fixed before removing it. Repeat the above process until all sheets have been installed. The Lagoon Collection mosaics are not recommended for floors.

Plastic film faced mosaics - Tropical Collection

The Tropical Collection mosaics are faced with a plastic film and should be adhered in the same way as other mosaics, but with the film facing outwards. A white latex, cement-based, rapid setting flexible adhesive is recommended. The adhesive should be left for at least 24 hours to allow the adhesive to completely set and dry before the film is peeled off. If it is necessary to make slight adjustments to straighten the mosaics before the adhesive sets, then the film can be carefully cut with a sharp knife.

Glass mosaics

Use a thin-set polymer modified latex cement-based adhesive. This must be applied evenly due to the transparent nature of some mosaics. Failure to do this can lead to the adhesive being visible through the mosaics in certain light.

14. 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. Grouting should always be finished flush with the tiled surface.

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

Which Grout?

NB: Not all adhesives, cleaners, grouts and sealers are equally suitable for all types of tiles. Take advice from your supplier.

Always try a small amount before grouting your entire tiled area to check you are happy with the look of the grouted tiles before grouting the complete area.

How to grout tiles

Clean the surface where you are going to tile and allow it to dry before proceeding.

Regardless of the grout colour chosen it is advised that you test a tile prior to grouting to ensure the grout pigment will not contaminate the surface of the tile.

It is very important to mix the grout following the manufacturers' instructions. Once mixed, let the grout stand for two minutes, then apply to the wall/floor using a squeegee working in a diagonal motion across the tiles. We recommend you cover about one metre at a time, then leave for five minutes before removing any excess grout with a squeegee. Wait another five minutes before wiping the tiled surface with a clean sponge. Always check that there are no lines left in the grout.

Once the whole work is completed, leave for two hours, wash down all the tiles with clean water and sponge, and correct any faults.

Important Note:

If using Mapei Ultra Colour Plus Grout, it must be mixed with an electric mixer using 1.0 to 1.1 litres of water per 5kg bag of Ultra Colour Plus. Pour all the water in to the bucket and then add all the grout and mix on a slow setting. Leave

to stand for two minutes and remix. Do not add more water. If the material begins to harden after 15-20 minutes, remix with just the paddle but do **not** add any more water. The grout has a pot life of one hour.

Useful Tip

Always aim to complete whole sections of grouting in one session to ensure an even finish with no colour variation. Wash down with clean water and a sponge every square metre to avoid any excess grout drying on the surface. **Never** grout corners of rooms, these must be grout-free and filled with a suitable silicone to allow for wall/floor expansion.

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 with a damp sponge or cloth and allow it to dry out completely. We also recommend sealing grout seven days after installation with a grout protective sealer, which can be purchased through any reputable tile outlet.

Always test a small inconspicuous area before proceeding.

Always follow manufacturers' instructions.

Use the utmost care when grouting to preserve the beauty of your tiles.

Coloured grout

Please be aware that certain grouts are not UV resistant and will fade when placed in direct sunlight, advice must be sought from the grout manufacturer.

Fixing and Grouting Artworks

Victoria and Albert Mouldings

Due to their shape, Victoria and Albert mouldings are not recommended for use in areas subject to wall movement. It is also imperative that care is taken when grouting these mouldings to ensure that moisture cannot get into the back of them, as this may cause the moulding to crack.

Victoria Mouldings

These should not be used on any wooden surfaces due to thermal expansion of the wood which may crack the moulding. Silicone expansion joints should be incorporated above or beneath these mouldings.

Fixing mouldings to outside corners

To fix the Plain Cornice and other moulded tiles to an outside corner, one end of the tile must be carefully mitred at 45° with a carborundum or diamond edged saw. This has the effect of shortening the surface of the tile in contact with the wall. Therefore, to maintain a consistent vertical joint line, all non-moulded tiles laid above and below the moulding must also be cut to the shorter width. However this does not apply to the skirting and Victoria and Albert external corners which have been specifically designed for use on outside corners.

45° Angle Block



Angle Block



Angle Block shown with Plain Cornice

We recommend this handy 45° Angle Block, which is invaluable for cutting the internal and external 45° angle corners of the Plain Cornice moulding (code 9929), thus ensuring a professional finish. It needs to be used with an electric tile cutting machine with a minimum cutting depth of 75mm/2⁷/₈" , or a carbide tile saw and mitre block (the Cornice moulding sits on top of the angle block and is placed inside the mitre block, then cut with the carbide tile saw). Please note that, as the angle block is made from Plaster of Paris it is water soluble and likely to only last for one or two installations. Always seek professional advice when using cutting equipment.

Fixing Masterpiece tiles

NB: It is recommended that Masterpiece tiles and frames are installed by an experienced professional tiler.

Preparation

Ensure that the surface on to which the tiles are to be laid is sound, ie in good general condition with no flaking paint, loose plaster, wallpaper etc. See preparation section above. The surface should be flat and rigid. Masterpiece tiles are up to 565mm /22¹/₄" long, so it is essential for a good bond that the entire area of the tile comes into close and permanent contact with the wall surface.

Installing the Masterpiece tile

If the Masterpiece tile is to be laid in a field of other tiles, lay most of these first, leaving a space larger than the Masterpiece and frame, equivalent to a whole number of the field tiles. See figure 1.

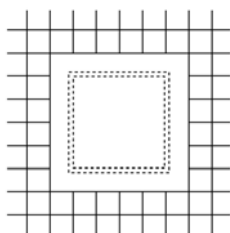


Figure 1

Using a rule and spirit level, mark the outline of the Masterpiece tile, excluding the frame, centrally in the untiled area.

Attach a straight wooden batten firmly to the wall horizontally along and below the bottom outline.

Spread the wall tile adhesive evenly over the outlined area and comb with a 6-8mm/ $1/4$ "- $5/8$ " notched trowel.

Position the Masterpiece tile firmly into the adhesive by sliding it slightly to and fro and apply substantial pressure across its entire surface. Ensure that the Masterpiece tile is correctly positioned, wipe off surplus adhesive with a damp cloth and leave to dry for at least 24 hours without removing the batten. Select an adhesive manufactured to recognised national standards which is appropriate for the particular surface on to which the Masterpiece tiles are to be laid.

Installing the Masterpiece frame

Remove the batten and re-secure it approximately 35mm ($1\frac{3}{8}$ ") lower to support the bottom frame tiles.

Lay out the 8 frame tiles on the floor to establish their correct positions. One at a time, starting with the bottom tiles, fill the cavity of each frame tile with wall tile adhesive suitable for porcelain (see figure 2) and push it firmly on to the wall in the correct position with the lip overlapping the Masterpiece tile, as show in figure 2. To achieve an even better bond it is advisable to apply a narrow line of clear silicone sealant along the underside of the lip. See figure 2.

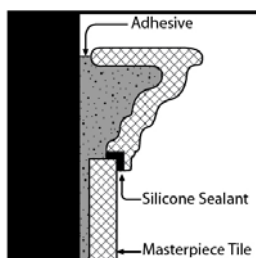


Figure 2

Ensure that all 8 frame tiles are correctly positioned, leaving a space approximately 2mm/ $1/8$ " wide at each joint, wipe off surplus adhesive and sealant with a damp cloth and **leave to dry for at least 24 hours** without removing the batten.

Finishing

Carefully remove the batten and check that all the frames are firmly secured. Cut field tiles to fit the remaining space between the Masterpiece frame and the tile area and lay them in the normal way. Once all the adhesive is dry, grout the entire installation, including the spaces between each frame section. Wipe clean.

General

Handle Masterpiece tiles with extreme care at all times. Each tile weighs up to 5.5kg (12lb) and could cause personal injury if dropped. Masterpiece tiles have a maximum water absorption capacity of less than 3 per cent.

These instructions are intended as a supplement to and not a replacement for the provisions of BS5385: Part 1:1990 or ANSI 108 which set standards for the installation of ceramic wall tiles. Adhesive manufacturers' instructions should also be strictly followed.

Fixing and grouting Earthworks

There are numerous makes and types of grouting compound, so check with your tile retailer for the most appropriate grout for your application.

Cement-based grouts are recommended for grouting stone tiles. Make sure you choose the correct grout for the width of grout joint you want. Honed and polished stones generally have joint gaps of 1-2mm ($\frac{1}{8}$ "), whereas antique and textured tiles tend to have grout joints of 6-10mm ($\frac{3}{8}$ ").

We recommend a flexible fast-set grout for Earthworks stone mosaics.

There are two types of grouting methods; pointing and slurry grouting. 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 and you want to preserve the slightly pitted texture, you are also advised to use pointing.

The pointing method is the most commonly used. This method requires the mix to be thicker in consistency and is applied by working in small areas at a time, applying grout into the joints with a squeegee. The mix is then pressed into the joints firmly and finished off using a grouting tool to give a neat finish. Any excess is removed using a damp sponge and the surface wiped clean.

The slurry grouting method can be used to fill small imperfections in textured tiles and to grout stone mosaics, which would take too long to point. The mix is runnier than normal and is spread across a large area at a time using a spreader. This is usually easier if the tiled area is on a horizontal plane, although this method can be used on the vertical; however more care is needed to ensure the grout goes right into the joint and no areas are missed out. This method is also used where a pitted tile has been fitted and the 'pits' or 'holes' need to be filled in for hygiene or cleaning reasons, for example on a kitchen floor or splashback.

There are many different grout colours. We recommend asking your retailer for a sample of the mixed grout when dry or trying a small amount before grouting your entire tiled area.

Joint widths

We recommend joints of 2-12mm ($\frac{1}{8}$ " - $\frac{1}{2}$ ") 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.

Before grouting, allow the tiles to dry out for a minimum of 24 hours after laying them. Thick layers of adhesive, cool temperatures and other factors can prolong drying.

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

Important note - Honed Travertine and Limestone

Grout should cover the whole tile in order to prevent a 'tram-lining' effect.

Grouting Pebble Mosaics

The grouting should be a wide grout joint for both external and internal installations. Generally grouts are water mixed, but if some flexibility is needed, then a wide joint polymer modified grout will be required. It is important to wait only the interval recommended by the adhesive and grout manufacturer before grouting to minimise dirt getting between the pebbles and avoid the possibility of dislodging them.

Grouting Splitface Venetian Mosaics

We suggest that, before grouting splitface mosaics, these are impregnated with Lithofin MN Stainstop or similar, and left for two hours. Grout as normal with a rapid setting grout. Then these mosaics will require careful cleaning to remove any residue. This can be done with a stiff brush, after which the walls can be washed with clean cold water. In certain situations a propriety grout residue remover could be used once the grout has been cleaned and is completely dry. However, take care to protect any surfaces when using grout removers, as most of these products do contain acids which can damage chrome fittings and stone.

Fixing and grouting Mosaics (including Earthworks stone mosaics)

Metal mosaics and mixed mosaics and borders containing metal

IMPORTANT NOTE: Due to their metallic, conductive nature it is essential that a qualified electrician carries out all electrical work around mosaics made from or containing metal.

During and after installation: Fingerprints and watermarks can be wiped away with a soft cloth or kitchen paper, wipe with a damp cloth then buff dry. pH neutral cleaners will remove most stains and dirt, or use warm soapy water, wipe with a damp cloth and buff dry. Alternatively use a stainless steel cleaner following the manufacturer's instructions. Do not use harsh or abrasive cleaning products, scourers and never use bleach. Do not allow other metals such as steel wool pads to come in contact with stainless steel mosaics, as small metal fragments may enter the surface and start to corrode, resulting in rust spots.

Earth & Fire mixed mosaics

Please note the appearance of certain Earth & Fire Mixed Mosaics may change when wet. This is particularly noticeable in Dias (EW-DASMOS). This is significant if you intend using these mosaics in wet areas. We suggest that you test a sample before installation.

Special precautions for metal and glass mosaics

Before deciding on metal mosaics it is important to consider where they will be used.

As metal can be scratched, we recommend that care is taken when installing metal mosaics and that they are not put in high-risk areas for scratching.

Make sure that the grain of brushed stainless steel is going in one direction, otherwise the sheets will appear to be different colours.

Metal mosaics may be cut, however we do not recommend using metal mosaics on external corners as this will leave a cut edge. This point is especially relevant when using brick-bond metal mosaics.

Use a grout with a fine texture and always use new sponges and grouting tools to avoid scratching. Take care if using Epoxy adhesive as some Epoxy products can scratch. Please be sure to clean all adhesive residues from the tiles. Never reuse a sponge that has been used to clean off adhesive as sand grains can scratch surfaces.

Grouting glass tiles and glass mosaics

Coloured grouts can be used for some glass mosaics; however you should always check that the grout is suitable for use with glass tiles and check with your Original Style retailer, as the colour used may change the appearance of the mosaics. Please be aware that recycled glass mosaics have a slightly pitted surface, so grouting may alter the finish and appearance of the tiles. Use a finely sanded grout to reduce the risk of scratching during installation.

Wipe surplus grout off at once using a damp cloth or sponge. Some Glassworks tiles have a subtle surface texture and once grout is allowed to harden it can be very difficult to remove. This also applies to the plain frosted finish tiles. When you have completed the grouting, run a finishing tool or a piece of dowel along each joint to achieve an attractive, level finish. Special care and attention must be taken with the use of Epoxy Grouts when fixing any Glassworks products. Ensure the tiles are cleaned before the grout sets completely. Do not use the finishing tool when using Epoxy.

Grouting Glassworks decorative tiles

Some Original Style decorative glass tiles require special fixing, as follows:

Equinox tiles

The colour and patina vary within this range and should be considered when installing. Avoid slurry grouting these tiles, finger grout around the tile to avoid getting the grout in the patina.

Iridescent drop-in tiles

Due to the production methods used in creating this range it is important to use a thicker/stiffer consistency of grout to avoid leaching between tile layers. Colour variation is inherent with these tiles which should be considered when planning your tiling. The clear Drop-In tiles can be fixed either side. It is therefore important to achieve the desired effect before fixing. Additionally, please note the level of reflectivity can be influenced by the depth of grout, test before fixing to achieve the desired effect.

Cygnus and Andromeda

These tiles have very subtle patterns and so care should be taken to ensure they are fixed with the front face showing.

Grouting Glassworks Splashbacks

A finely sanded flexible grout or Epoxy resin must be used. We do not recommend coloured grouts unless the adhesive supplier has stated that the coloured grout is suitable for use with glass tiles (please note coloured grouts will change the colour of the glass tiles). However, if you are going to use coloured grouts, we recommend a test area be done first. We recommend a 2.5mm/ $\frac{1}{8}$ " expansion joint around the Splashback.

Grouting La Belle Collection

Lustre Effect Tiles

To ensure the long life of the hand-painted lustre effect on certain tiles in La Belle Collection it is recommended that care be taken when fixing to avoid contact with grout.

In all installations, seal joints with an impervious grout such as BAL Supergrout. If joints are not completely watertight, moisture can be absorbed into the tile body causing stains to show through the translucent glaze. Use an average grout space of at least 3mm ($\frac{1}{8}$ ") to allow for the variations in tile dimensions.

15. CUTTING TILES

It is vital that you use all possible protection when using any cutting instruments/machinery. Always use personal protective equipment (PPE) such as goggles, a dusk mask and gloves as advised by the HSE. You can visit www.hse.gov.uk for further health and safety advice.

You may find that it is necessary to cut individual tiles to fit in small areas. You need to take extreme care when doing this. Always try to keep each cut no less than 38mm/1½”.

Glassworks Splashbacks

Original Style Glassworks Splashbacks are made from toughened (also known as tempered) glass, which is a type of safety glass. **DO NOT under any circumstances attempt to cut or drill a Splashback as it will shatter.**

Cutting mosaics

NB We do not recommend cutting mosaics.

Almost inevitably, at some point you will have to cut or drill a few of your tiles, perhaps to fit around a window or sink, accommodate wiring or to finish off an area where it meets the ceiling or skirting. Where cutting is unavoidable it must be done with the utmost care. Beware of sharp edges after cutting. You will need protective eyewear and gloves.

For all Original Style glass tiles, use a diamond blade designed for glass, or a wet saw. Specialist glass cutters provide the best finish and can usually be hired from your local tool hire centre. Cutters designed for ceramic tiles will work on glass although their blades are coarse and your tiles will end up chipped and misshapen. Score/scribe the reverse of the tile then turn to scribe the front then snap. Smooth sharp edges with a file.

Drilling glass tiles requires great care and patience and needs to be done with a drill and a special diamond tip. The tile must be firmly supported to avoid cracking. Putting a strip of masking tape over the tile will help to stop the drill tip skidding until the hole starts to form. We do not recommend cutting the individual glass mosaic tiles, however the mesh backing can easily be cut using sharp scissors.

Cutting metal mosaics

Metal mosaics can be cut with a water-fed electric cutting machine with a normal diamond blade.

Before deciding on metal mosaics it is important to consider where they will be used. Metal mosaics may be cut, however we do not recommend using metal mosaics on external corners as this will leave a cut edge. This point is especially relevant when using brick-bond metal mosaics. After cutting, finish by carefully filing off any rough edges or burrs.

Drilling Porcelain Tiles

Porcelain is a very hard product, which needs a special drill bit. We strongly recommend that you always use a cordless drill. First mark the centre of the hole to be drilled into the tile with a chinagraph pencil or a sticky adhesive drive pad. Attach the appropriate diamond core bit to the cordless drill. Use water cooling equipment to ensure that there is a constant supply of cold water aimed directly at the drill bit in order to keep the diamond core cool and to help remove any debris that may build up whilst drilling the tile. It is not advisable to try to cool the diamond drill bit by using a hand held aspirator or drilling through a wet sponge. These methods will not keep the drill bits cool enough, and will drastically shorten the life of the drill bit.

If you use a self adhesive drive pad, simply start the drill in a vertical position and the sticky pad will ensure that the drill does not slip. Once you have finished drilling the tile, simply peel off the self adhesive drive pad.

16. CLEANING AND MAINTENANCE

Please note, the use of certain acid based cleaning products may cause some tiles and mosaics to react and change in character. It is advisable to test a new cleaning product on a small inconspicuous area before use.

NB: Not all cleaners are equally suitable for all types of tiles. Take advice from your supplier. However, pH neutral cleaners are suitable for most tiles except those with copper-based glazes.

Cleaning Artworks

Victorian Green tiles have a copper-based glaze which is prone to discolouration by very mild acids often found in the home. To avoid such discolouration they should be cleaned only with pure water and should always be wiped dry immediately after cleaning.

Cleaning Earthworks natural stone tiles and mosaics

Efflorescence

During the drying out process, soluble salts from within the substrate may appear on the surface of natural stone tiles. This can be removed (once all the excess moisture has gone) using an appropriate efflorescence remover but **always** follow the manufacturer's instructions (for example do not use near chrome fittings as these may be damaged). The presence of efflorescence in an existing building may indicate a structural problem, e.g. a defective damp-proof course or a leaking pipe. Any suspected defect should be identified and repaired to avoid further problems.

An over-application of impregnator can sometimes be mistaken for efflorescence. The clouding or 'white haze' of excess impregnator can be removed with HG Spot Stain Remover or Lithofin Wexa.

Acid cleaning agents must **never** be used on natural stone. Use a pH neutral cleaner such as HG Neutral. Sweep or vacuum tiled floors to remove loose dirt and mop occasionally to remove spills and dirt.

Basalt

Basalt tiles do not need waxing, but if you prefer a shine you can apply wax or polyurethane. Basalt should be cleaned on a regular basis to prevent any build-up of dirt, grease residue, soap detergents, etc, and to maintain a clean surface and lessen any slippery conditions. First, clean with clear water and/or a soap free, neutral liquid cleaner. Rinse with clear water then wipe dry to prevent film formation.

Cleaning Glassworks tiles and Splashbacks

Wash glass tile surfaces with clean water or a pH neutral glass or window cleaner. Use a soft lint-free cloth to avoid scratching. **Never** use vinegar to clean Glassworks tiles or Splashbacks as this will affect the grouting.

Cleaning La Belle Collection

Wash down tiled surfaces with either clean water or a neutral detergent. Do **NOT** use abrasive materials or strong acid or alkaline cleaners. Dry off and polish with a dry duster.

La Belle Collection Laurel (Dark Green) and Graphite Glazed Tiles – Special Warning

Laurel tiles and Graphite glazed tiles have a copper-based glaze which is prone to discolouration by very mild acids often found in the home, for example lemon scented soaps. To minimise this, wash the tiles with clean water only and immediately wipe dry. **These tiles are recommended for use in dry areas only and should never be installed in areas such as showers, bath surrounds or basin Splashbacks.**

Cleaning mosaics

Please note, the use of certain acid based cleaning products may cause some of the mosaics featured in this brochure to react and change in character. We recommend the use of pH neutral cleaning products on our tiles unless otherwise stated below.

Glass: wash down glass mosaic surfaces with clean water, a normal spirit or alcohol based glass or window cleaner. Please ensure a soft cloth is used to avoid scratching.

Metal: Fingerprints and watermarks can be wiped away with a soft cloth or kitchen paper, wipe with a damp cloth then buff dry. pH neutral cleaners will remove most stains and dirt, or use warm soapy water, wipe with a damp cloth and buff dry. Alternatively use a stainless steel cleaner following the manufacturer's instructions. Do not use harsh or abrasive cleaning products, scourers and never use bleach. Do not allow other metals such as steel wool pads to come in contact with stainless steel mosaics, as small metal fragments may enter the surface and start to corrode, resulting in rust spots.

Copper: avoid any contact with products containing citric acid or hydrofluoric acid (pool cleaners for example) as this will cause staining.

Gold: we do not recommend the use of acid-based cleaners on products containing gold. Follow the instructions as for glass above.

Iridescence: avoid any contact with products containing hydrofluoric acid (pool cleaners for example) as this will damage the lustre effects.

Ceramic and porcelain

General maintenance and cleaning of ceramic and porcelain tiles varies depending on the surface texture and footfall. General cleaning should be performed with a neutral cleaner diluted to the manufacturer's recommendations. Only pH neutral cleaners should be used. Ceramic and porcelain tiles are usually under 0.5per cent water porosity therefore they have a low absorptive body that inhibits the penetration of contaminants.

All spills should be cleaned up as quickly as possible.

Use only the recommended dilution of pH neutral cleaner. More is not always best; the higher concentration of detergent in the cleaning solution will only make it more difficult to rinse. If the floor is exposed to excessive spills, large amounts of traffic, or if the floor is textured, a stronger cleaning agent may be required. These stronger cleaning agents should be on the alkaline side of the pH scale and generally have a pH of 9 or higher for the initial clean, after which reduce to a pH neutral cleaner. Follow the manufacturer's recommendations at all times when using these products as some may not be suitable for other surfaces in a room i.e. chrome finishes on showers.

Once the detergent has been applied allow it to sit as per manufacturers' recommendations then rinse thoroughly with clean, clear water, vacuum any excess water away and towel dry the floor to eliminate water marks and streaks.

17. LIMITS OF LIABILITY

Limits of Liability

Original Style accepts no liability for the faulty installation of its tiles. In the case of any claim relating to the tiles themselves, Original Style's liability, to the extent permitted by law, is limited to either the replacement of the product or a refund of the cost of the product, and does not extend to cover any consequential loss. Tiles must be inspected prior to installation and claims cannot be considered after the tiles have been installed. Claims must be reported within seven working days from the receipt of the tiles. Tile sizes may vary slightly from the stated nominal dimensions within internationally accepted standards.

Please be advised that installation constitutes acceptance of the quality, colour, size, texture and shade of the tiles. Please note, the use of certain acid-based cleaning products may cause some of the tiles to react and change in character. Original Style warrants that its tiles conform to their description and are fit for their purpose. Original Style makes no other express or implied warranty as to fitness or suitability of the products for particular installations. We extend no guarantees, express or implied, as to wear resistance or maintenance procedures. It is imperative to follow grout and adhesive manufacturers' instructions regarding their suitability with our products. If in doubt please consult the grout/adhesive stockist from whom you purchased the products. Original Style makes no representations as to the fitness for purpose of third party adhesives and grouts.

Please note, the Fixing Guides mentioned above do not apply in the USA. In the USA please follow the recommendations of a reputable adhesive manufacturer and always comply with American National Standards Institution (ANSI) specifications as set out in the Handbook for Ceramic Tile Installation published by the Tile Council of America. Useful links: ctioa.org, tileusa.com