



ORIGINALSTYLE

Tiles to Inspire

# Mosaics

## FIXING GUIDE



# Mosaics

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## Introduction

Original Style wall and floor mosaics in a wide range of colours, sizes and finishes, to suit every taste.

### **Using this guide will help you to:**

- Calculate how many mosaic sheets you require
- Prepare and plan for the installation
- Mark out the work area
- Successfully cut mosaic sheets
- Fix and grout the mosaic sheets
- Clean and maintain your finished installation

# Successful tiling

## The key to success is to:

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

Plan the installation

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

Keep the work area clear and clean as you go along

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

This guide is not intended to be a definitive guide to fixing mosaics. If you are uncertain about anything having read this guide you should consult a professional tile installer who is experienced with the installation of mosaic sheets.

We strongly recommend you and your tiler read through this Guide before commencing any work. This fully explains the steps necessary to plan, fix and seal your mosaics and how to maintain them in first class condition for years ahead. If in any doubt please contact our technical department prior to installation as fixing tiles incorrectly can prove costly. Original Style cannot accept responsibility for any faults after mosaics have been fixed, for issues raised in this Fixing Guide once the product has been laid or installed.

## PLEASE NOTE

There are no installation or specification standards for glass mosaic tiles.

It is the purchaser's responsibility:

To check the mosaics by laying them out and viewing them prior to installation. Please be advised that installation constitutes acceptance of the quality, colour, texture, shade and size of the mosaics. This applies even if the home owner is not present during the installation process.

To store products in an 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.

If you are in doubt about anything stated within this Fixing Guide please ask your tile retailer for further information.

# Glossary of tiling terms

<b>Tesserae</b>	The small individual pieces that are mounted on the mosaic sheet
<b>Adhesive</b>	The glue used to fix mosaics to the substrate. There is a wide choice available, so always ask your stockist for advice on your particular project and type of tiles.
<b>Grout</b>	A hardening compound used to seal the joints between the small tesserae. There is such a wide choice available, it is best to seek advice from your stockist on your particular project and type of tiles to be used.
<b>Movement joints</b>	Where tiles meet another surface such as a shower tray; the joint is filled with silicone sealant, not grout, to allow for expansion and contraction. Should be placed according to architect's specifications, over existing joints and any changes in plane such as wall to wall or wall to floor. Movement joints eliminate stress transferring from the substrate and reduce the possibility of the mosaic tesserae cracking or de-bonding
<b>Render</b>	A wall finish made up of sand and cement, usually made up of sand/cement in the ratio of 4:1.
<b>Silicone sealant</b>	A material with elastic and waterproofing properties used to fill movement joints instead of grout.
<b>Slurry grouting</b>	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 joints and no areas are missed out. This method is recommended for grouting mosaic installations.
<b>Stud wall</b>	Internal walls in a home, usually constructed of plasterboard over a wooden framework.
<b>Substrate</b>	Any surface on to which tiles are laid.
<b>Thin set</b>	A layer of adhesive applied to a depth of less than 5mm / ¼"

# The right tools for the job

These tools will help you complete your tiling project to a professional standard. Most are readily available to buy or hire.

<b>Adhesive spreader/ bedding trowel</b>	The notched edge of this tool ensures an even spread of adhesive of an even depth.
<b>Chinagraph pencil</b>	For marking any tiles that need cutting. This will not stain the tiles and will resist being washed away when using a water-fed cutting machine. Never use a felt tip pen as they can leave permanent marks.
<b>Drill bit</b>	A hollow tipped, diamond coated, water fed drill bit is advised. Cut part way through the back and then from the front to meet.
<b>Eye protection, gloves and dust mask</b>	It is vital that you use all possible protection when using any cutting or drilling machinery. Always use personal protective equipment as advised by the HSE. Visit <a href="http://www.hse.gov.uk">www.hse.gov.uk</a> for further health and safety advice.
<b>Gauging trowel</b>	For removing the grout from its container, or the vessel used for mixing the grout. Use it to place adhesive onto a bedding trowel.
<b>Spacers</b>	These small pieces of plastic are inserted between the 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. Choose the same size spacers as the gap size between the small tesserae pieces mounted on the mosaic sheets.
<b>Spirit level/laser level/plumb line</b>	One or more of these tools will be necessary to ensure that your mosaic installation is level and that verticals are straight. A plumb line can be made from a small weight on a length of string.
<b>Sponges</b>	Use to remove grout residue and for smoothing joints. Always use new sponges and grouting tools rather than old sponges and tools which may have adhesive or grout residue which could scratch the mosaics.
<b>Squeegee or rubber trowel</b>	Used for spreading grouting compound into the spaces between the tesserae on the mosaic sheets.
<b>Wooden ruler/tape measure</b>	For accurate measuring. Steel rulers may scratch glass mosaic tesserae.
<b>Scribe and snap straight cutter</b>	Scribe and snap machine for straight cuts. 18mm scribing wheel recommended. Scribe across all the tesserae in the row and then individually snap each tesserae piece. Not suitable for metal mosaics.
<b>Wet cutting disc for glass mosaics</b>	A cutting disc fed with water and specially designed for glass cutting. Has fine industrial diamonds around the disc circumference.
<b>Wet cutting disc for metal mosaics and natural stone mosaics</b>	A cutting disc fed with water just the same as those used for cutting porcelain tiles.
<b>Tile gauge</b>	A device for accurately measuring and shaping your tiles.
<b>Tile nippers</b>	Specialist tool for 'nibbling' away unwanted sections of mosaic tesserae pieces. Not suitable for metal mosaics.

## Selecting your mosaics

This is obviously the most important and enjoyable task. With such a large range of mosaic 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. Please check suitability of the mosaics before ordering and installation. If you are uncertain please ask your Original Style retailer for further information.

### Suitability

Suitability of your chosen tiles is an important factor. Please refer to the suitability symbols for each individual mosaic in the most current Mosaics brochure at [www.originalstyle.com](http://www.originalstyle.com)

All mosaics	Suitable for internal dry walls.
All mosaics	<b>NOT SUITABLE</b> for countertop surfaces as they are susceptible to scratching.
Mesh backed glass mosaics	<b>NOT SUITABLE</b> for submerged conditions or for steam rooms and saunas as only 75% of the mosaic pieces are available for bonding to the adhesive (the rest is mesh and mesh adhesive). This may lead to the tesserae de-bonding. <b>NOT SUITABLE</b> for installation close to extremely high continuous heat sources such as wood burners. The mesh backing and mesh adhesive are not designed to withstand the very high temperatures likely in these conditions.
Paper faced/ film faced glass mosaics	These are suitable for dry/wet walls, also swimming pools, steam rooms and saunas.
Glass pebble mosaics	Suitable for dry/wet walls. Only suitable for bathroom floors, and slip-resistance may not be adequate for use in wet conditions.
Natural stone mosaics	<b>NOT SUITABLE</b> for submerged conditions or steam rooms and saunas <b>NOT SUITABLE</b> for external use as most of our stone mosaics are porous to some extent. If installed outside 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 May fade in UV light. No guarantee can be made against this happening. Some stone mosaics may have minor chips or blemishes. Such relatively insignificant imperfections should be considered normal and not the result of poor/ faulty workmanship. Natural stone mosaics may also be subject to scuffing and scratching.
Mosaics containing or made from copper	<b>NOT SUITABLE</b> for kitchens, bathrooms, showers and wet rooms or exposure to excessive moisture. When exposed to air and moisture the copper may, over time, form a patina of verdigris (a green coating). It is vital that this feature is taken into account when choosing copper mosaics.
Shell mosaics	<b>NOT SUITABLE</b> for pools or excessively wet areas such as wet rooms and steam rooms, although they can be used in showers. Do not place in direct sunlight as this may cause them to fade over time.

# Iridescent mosaics

The appearance and colours of iridescent mosaics change under different lighting conditions and also vary when seen from different angles. We recommend that you ask for samples from your retailer and try them out where you intend installing your mosaics, to make sure you get the look you are after and the most pleasing results.

## Glass mosaics

Glass thickness will have an effect on the colour of the tile when installed.

## Before fixing

Please refer to the latest version of the brochure at [www.originalstyle.com](http://www.originalstyle.com) for special notes regarding suitability, sealing, grouting, cutting and other appropriate information and warnings.

It is important that your tile installer understands any blends or patterns you want, the requirements for surface preparation and protecting newly installed tiles from on-going work. Floors and walls may require expansion joints.

**Tiles are completely inflexible.** With this in mind, it is important to ensure the substrate will not move otherwise cracking or de-bonding will occur. If there is movement in the substrate, we strongly advise that you seek professional advice before proceeding any further.

**Timber and joist floors** are not suitable surfaces for the direct installation of tiles due to the potential for movement (see above). All wooden substrates should be overboarded with cementitious tile backer boards in accordance with the manufacturer's instructions.

If in doubt consult a professional before proceeding.

## Wet areas

When fixing mosaic tiles in wet areas the walls must be fully waterproofed (tanked) prior to tiling. Both Ardex and Mapei supply suitable products for water proofing and these may be purchased from tile dealerships.

## Heat sources

Glass mosaics should be installed a minimum of 3cm from any direct heat source.

## Sharp edges and sharp surfaces

Handle glass mosaics with care especially when being cut or if broken. Ensure that the surfaces do not come into contact with each other or sharp/abrasive objects.

## Before fixing - continued

### Mosaics and borders made from/containing metal

It is essential that a qualified electrician carries out all electrical work around metal mosaics and any borders containing metal. Extreme caution must be taken when using metal mosaics in electric showers and wet room installations. Always consult a qualified electrician before installation.

### Scratching\*

Glass and metal mosaics can be scratched. We recommend that care is taken in installation and that mosaics made from or containing glass and metal are not put in high risk areas for scratching. It is important to use a superfine, non-sanded, or epoxy grout to avoid scratching the surfaces of glass and metal mosaics. Always test a small area before installation. **\*See special notes on specific products on pages 10 and 11.**

### Use of adhesive tape

We do not recommend the use of any kind of tape (even decorators tape) on the surface of any mosaics. Some designs have delicate surface decoration that may be adversely affected by tape adhesive.

## Storage

Please store all Original Style mosaics and any fixing materials such as grouts and adhesives in a cool and dry storage area. **All** mosaics must be dry before installation and Original Style cannot guarantee that any products will be delivered completely dry.

## Expansion joints

At changes of plane such as wall to wall and wall to floor and where the mosaic sheets meet materials of a different type such as shower trays, fill the gap with a neutral cure silicone to form an expansion joint. Silicones come in matching colours to the grout.

Where a large area is to be tiled with mosaic sheets incorporate a decoupling membrane between the substrate and mosaic sheets as an extra precaution against cracking due to expansion and contraction differences between the substrate and the mosaic.

Use spacers between the sheets that are the same size as the gaps between the small pieces on the mosaic sheets.

# Special notes on individual products

## **Glass mosaics**

Glass mosaics and those made of metal/containing metal pieces.

Always try the grout on an unfixed mosaic before grouting the installation to make sure it does not scratch the tile surface. We recommend non-sanded or superfine grouts.

## **Mosaics made from/containing stainless steel**

Make sure that the grain of stainless steel is going in the same direction for all mosaic sheets otherwise it will affect the appearance of the installation. Some metal mosaics have a protective film covering either the whole surface or certain individual pieces. Keep the film in place during installation then carefully peel away. It is important to factor in time needed to peel off the film from some of those with film on individual pieces.

## **Shell mosaics**

Use epoxy primer, white epoxy adhesive and epoxy grout for fixing. Must be sealed before and after grouting. Lithofin KF Stainstop and HG Marble Neutral Impregnator are suitable.

## **Split faced mosaics**

These are for feature walls (dry) and cannot be grouted.

## **Natural stone mosaics (and mosaics containing natural stone)**

Impregnate the clean dry mosaic before and after grouting with LTP Mattstone or Lithofin MN Stainstop to reduce the possibility of staining and water ingress. Light coloured, fast setting, modified, cement based adhesives recommended (C2 F S1). Not suitable for steam rooms and saunas or submerged conditions. Suitable for showers and wet rooms when impregnated.

## **Metal mosaics**

Considerable care needs to be taken when installing Fusion Micro EW-FUSMIMOS, Fusion Macro EW-FUSMAMOS, Telstar EW-TLSMOS and Torque EW-TORMOS as they have very sharp edges. Wear thick protective gloves when handling these mosaics. Some edges will be sharp even after installation. Torque should only be installed in situations where it will not be touched or brushed past as the surface is three dimensional and some edges will be sharp even after installation. Do not install 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. They can be coated with polyurethane, but this may flake in time.

Fix with R2T epoxy adhesive or Mapei Keralastic adhesive.  
No grouting required. Seal with Seal Guard.

## Special notes on individual products - continued

### **Metal mosaics - continued.**

When installing MW-PALMOS (IM-0024702) Pallene Gold Mixed Finish Penny Round Mosaics, MW-TARMOS (IM-0024716) Copper Mixed Finish Penny Round Mosaics and MW-METMOS (IM-0024698) Silver Mixed Finish Penny Round Mosaics, only unsanded grouts should be used. When cleaning, only non-abrasive products/methods should be used. Sanded grouts and abrasive cleaners may cause a change in the appearance of these mosaics.

### **Gold and Shell: Mother of Pearl EW-PARMOS Eastern Light GW-EASMOS**

Use epoxy based primer, epoxy adhesive and epoxy grout. Use solid bed of adhesive behind tiles (following manufacturer's instructions). Failure to do this may cause gold to tarnish, please test before installation. Cement based adhesives not recommended.

### **Eastern Light GW-EASMOS, all Byzantium mosaics**

Use epoxy based primer, epoxy adhesive and epoxy grouts when installing in showers and wet rooms.

### **Ceylon EW-CEYMOS Lombok GW-LOMMOS**

Do not install near heat sources. Mosaics made from or containing wood are subject to natural blemishes such as knots and holes. Seal with varnishes, oils or waxes. We recommend testing various products to achieve the depth of colour you require. Mapei Ultrabond P997 1KT contact adhesive for fixing. No grouting.

### **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 individual stone pieces) and alter their finished appearance. Use Mapei Keraquick with Latex Plus adhesive and a superfine grout.

### **Jules Verne EW-JUVEP**

No adhesive needed as self-adhesive. Do not grout.

### **Pebble mosaics**

These may require the removal and adjustment of individual pebbles so that the sheets interlock to avoid visible grout lines. They can also suffer from iron mineral (red or brown or pink) staining. If this occurs remove the affected pebble from the sheet and replace it with one of a similar size from a spare sheet. Again, this is completely normal for naturally occurring minerals and does not mean it is defective.

# Colour variations and shading

There may be distinctive yet subtle variations in shade to be found in many mosaics included in the range. A single sample tile should not be taken as a completely accurate indication of colour. Some mosaic sheets and individual tiles may have distinctive yet subtle variations in shade, colour and tone, which will be an inherent feature of that particular product. We advise that you open and inspect each carton of mosaics to confirm consistence of shading. Select six random sheets from different cartons to check if there are any shading differences. We recommend that you spend time to achieve the most pleasing distribution of shades before fixing. Differences between batches can be even more marked. For this reason we recommend that you buy all the tiles at one time.

Lay out and mix the mosaic tiles prior to fixing to evenly distribute small variations in shade. Check that the tiles are all from one batch by looking at the labels on the individual boxes. If they are not from one batch they will be replaced. Do not fix the mosaics if you are unhappy with the shade variation or any other quality aspect.

Please be advised that installation constitutes acceptance of the quality, colour, texture, shade and size of the mosaics. This applies even if the home owner is not present during the installation process. No responsibility can be accepted for shading or quality once the tiles have been fixed.

## How many mosaic sheets will you need?

**Calculate the square metre/square foot measurement of the area to be tiled:**

**Wall:** measure the height of your room or the height you will require the tiling to end and multiply by the width.

**Floor:** measure the length of the area to be tiled and multiply by the width.

**The result will be the square metre/square foot measurement of the area to be tiled.**

How to calculate the number of tiles required:

a) 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.

b) An alternative 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 grout gaps, part tiles, wastage and any imperfections by adding at least five per cent to the total for mosaics and ten 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. It can be frustrating to get near the end of the job only to find that you are short of one or two mosaic sheets, especially as colours can vary between different batches.

# Dimensions and coverage

## Mosaics

Nominal mosaic sheet size	Sheets per m <sup>2</sup>	Sheets per sq.ft	Nominal mosaic sheet size	Sheets per m <sup>2</sup>	Sheets per sq.ft
160 x 270mm 6 3/16" x 10 9/16"	43	4	298 x 298mm 11 3/4" x 11 3/4"	11.3	1.1
200 x 200mm 7 7/8" x 7 7/8"	25	2.3	300 x 300mm 11 13/16" x 11 13/16"	11.1	1
208 x 292mm 8 1/8" x 11 1/2"	16.5	1.5	300 x 312mm 11 13/16" x 12 5/8"	10.7	1
232 x 316mm 9 1/4" x 12 1/2"	13.6	1.2	300 x 335mm 11 3/4" x 13 1/4"	10	1
260 x 270mm 10 1/4" x 10 5/8"	14.2	1.3	301 x 301mm 11 13/16" x 11 13/16"	11	1
262 x 262mm 10 5/16" x 10 5/16"	14.6	1.4	302 x 302mm 11 7/8" x 11 7/8"	10.3	1
265 x 254mm 10 7/16" x 10"	14.8	1.4	303 x 287mm 11 15/16" x 11 3/16"	11.5	1.1
270 x 270mm 10 5/8" x 10 5/8"	13.7	1.3	304 x 298mm 12" x 11 3/4"	11	1
271 x 281mm 10 5/8" x 11"	13.1	1.2	304 x 304mm 12" x 12"	10.8	1
272 x 315mm 10 11/16" x 12 3/8"	11.7	1.1	304 x 334mm 12" x 13 1/8"	9.8	0.9
274 x 274mm 10 3/4" x 10 3/4"	13.3	1.2	305 x 265mm 12" x 10 1/2"	10.8	1.1
275 x 292mm 10 7/8" x 11 1/2"	12.4	1.1	305 x 285mm 12" x 11 13/16"	11.5	1
276 x 286mm 10 3/4" x 11 1/4"	12.7	1.2	305 x 300mm 12" x 11 3/4"	10.9	1
279 x 279mm 11" x 11"	12.8	1.2	305 x 305mm 12" x 12" x 3/8"	10.7	1
280 x 300mm 11" x 11 13/16"	11.9	1.1	305 x 310mm 12 x 12 1/4"	10.6	1
285 x 265mm 11 1/4" x 10 7/16"	13.2	1.2	305 x 315mm 12" x 12 1/2"	10.4	1
285 x 285mm 11 1/4" x 11 1/4"	12.3	1.1	306 x 287mm 12 1/16" x 11 5/8"	11.4	1.1
286 x 275mm 11 1/4" x 10 13/16"	12.7	1.2	306 x 306mm 12" x 12" x 5/16"	10.68	1
290 x 275mm 11 3/8" x 10 7/8"	12.5	1.2	307 x 297mm 12 1/16" x 11 11/16"	11	1
290 x 276mm 11 7/16" x 10 7/8"	12.9	1.2	310 x 227mm 12 3/16" x 8 15/16"	14.2	1.3
290 x 290mm 11 7/16" x 11 7/16"	11.9	1.1	310 x 297mm 12 3/16" x 11 11/16"	10.9	1
290 x 305mm 11 7/16" x 12"	11.3	1	310 x 310mm 12 3/16" x 12 3/16"	10.4	1
292 x 276mm 11 1/2" x 10 3/4"	12.4	1.2	310 x 315mm 12 3/16" x 12 1/2"	9.9	0.9
292 x 278mm 11 1/2" x 10 15/16"	12.3	1.1	312 x 300mm 12 1/4" x 11 3/4"	10.7	1
292 x 288mm 11 1/2" x 11 3/8"	11.9	1.1	313 x 313mm 12 3/16" x 12 5/16"	10.2	0.9
292 x 292mm 11 1/2" x 11 1/2"	11.7	1.1	318 x 310mm 12 1/2" x 12 3/16"	10.1	0.9
292 x 310mm 11 1/2" x 12 3/16"	11	1	318 x 318mm 12 1/2" x 12 1/2"	9.9	0.9
294 x 294mm 11 9/16" x 11 9/16"	11.6	1.1	320 x 320mm 12 3/8" x 12 3/8"	9.8	0.9
295 x 295mm 11 5/8" x 11 5/8"	11.5	1.1	322 x 322mm 12 11/16" x 12 11/16"	9.6	0.9
296 x 296mm 11 5/8" x 11 5/8"	11.4	1.1	327 x 305mm 12 7/8" x 12"	10	0.9
298 x 260mm 11 3/4" x 10 1/4"	12.5	1.2	327 x 327mm 12 7/8" x 12 7/8"	9.4	0.9
298 x 286mm 11 3/4" x 11 1/4"	11.3	1	358 x 398mm 14 1/8" x 15 11/16"	7	0.6

## Borders

Nominal border sheet length	Borders per lm	Borders per lin.ft
240mm / 9 7/16"	4.2	1.3
250mm / 9 13/16"	4.0	1.2
267mm / 10 1/2"	3.7	1.2
270mm / 10 5/8"	3.7	1.2
280mm / 11"	3.6	1.1
285mm / 11 1/4"	3.5	1.1
290mm / 11 7/16"	3.4	1.0
300mm / 11 13/16"	3.3	1.0
305mm / 12"	3.3	1.0
310mm / 12 13/16"	3.2	1.0
320mm / 12 5/8"	3.1	0.9
340mm / 13 3/8"	2.9	0.9
385mm / 15 3/16"	2.6	0.9

## Dimensions

Nominal sizes and thicknesses are shown throughout the brochure, visit [www.orginalstyle.com](http://www.orginalstyle.com) for the latest version.

Owing to the high degree of hand finishing of some mosaics, actual dimensions for individual mosaic sheets may vary from these figures and should be treated as a guide only.

All dimensions are subject to a tolerance of  $\pm 2.5\text{mm}$  or  $3/32"$ . When calculating the number of mosaic sheets required, please allow a five per cent allowance for cutting and wastage.

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](mailto:info@originalstyle.com).

# Preparation and Planning - Walls

## Weight

Make sure that the wall substrate is able to take the weight of your mosaics, plus adhesive and grout. Add 3.5 kg/m<sup>2</sup> or 6.4 lb/yd<sup>2</sup> for the weight of the adhesive and grout to the tile weight in kg/m<sup>2</sup> or lb/yd<sup>2</sup> and compare to the weights that the substrate will support:

Wall Substrate	Maximum tile weight	
Gypsum plaster	20kg/m <sup>2</sup> max	37lb/yd <sup>2</sup> max
Plasterboard direct	32kg/m <sup>2</sup> max	59lb/yd <sup>2</sup> max
Sand cement render	40kg/ m <sup>2</sup> max	74lb/yd <sup>2</sup> max
Tile backer boards (polystyrene foam with a cement based lattice outer)	40kg/m <sup>2</sup> max	74lb/yd <sup>2</sup> max
Glass reinforced cement sheets	50kg/m <sup>2</sup> max	92lb/yd <sup>2</sup> max

**ALL walls should be primed before tiling.**

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

**Plasterboard walls** may be suitable for mosaic 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 m<sup>2</sup>. 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 m<sup>2</sup>. 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. Mapei Primer G is a suitable primer for gypsum plaster. 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 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 / approximately 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).

# Preparation and Planning - Walls

## Wet rooms and showers

Mosaic tile sheets suitable for wet walls can be installed 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 reaching the back of the mosaics. The best substrates are normally water resistant boards such as 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 is waterproofed.

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

## Marking out the work area

First, make a tiling gauge. Use approximately 1m/39" length of straight, planed, wooden batten approximately 30 x 20mm / 1½" x ¾" in cross-section. Use a pencil to mark off the length of your tiles, plus the space between them. For instance, if you are fixing tiles that measure 150 x 150mm / 6" x 6" and have gaps between each tile of 2mm / ¼" you will mark every 302mm / 11⅞".

Mark out the work area. You must always check to see whether the ceiling is level first. Aim to position the tiles 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. This is not recommended. 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.

# Preparation and Planning - Walls

## Marking out the work area – continued

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 mosaic sheet and mark the batten. Again, make sure you are not left with small slivers of tesserae 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 mosaic sheet you can begin tiling.

# Preparation and planning - Floors

Before installing any mosaics suitable for floors please read the guidelines below. The satisfactory installation of all tiles and mosaics depends on their application to a sound, level surface and use of the correct adhesive for that surface. Laying directly into wet cement is not recommended.

The secret to a perfectly laid floor is to lay the mosaics 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.

Natural stone mosaics may be wet on arrival so will need to be fully dry and then sealed to prevent staining. To dry lay them out in an aeriated room. Make sure they are fully clean and dry then impregnate (seal) before and after grouting. Lithofin MN Stainstop and LTP Mattstone are suitable.

## 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.

Although mosaics are not as inflexible as tile, it is important to ensure the substrate will not move otherwise cracking or de-bonding may 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](http://www.schluter.com/6_1_ditra.aspx) for further information.

# Preparation and planning - Floors

**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. The laitance (dusty surface) must be removed and special sealers such as Mapei Primer G and Ardex P51 must be used prior to tiling.

**Tiles are completely inflexible.** With this in mind, it is important to ensure the substrate will not move otherwise cracking or de-bonding will occur. If there is movement in the substrate, we strongly advise that you seek professional advice before proceeding any further.

**Timber and joist floors** are not suitable surfaces for the direct installation of tiles due to the potential for movement (see above). All wooden substrates should be overboarded with cementitious tile backer boards in accordance with the manufacturer's instructions. If in doubt consult a professional before proceeding.

**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 mosaics 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.

## **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, ceramic and porcelain floor tiles can be used effectively with underfloor heating systems providing expansion joints are incorporated. These absorb thermal expansion and contraction between the tiles and substrate. Electric underfloor heating will heighten the floor by approximately 5-6mm so this should be planned into your installation.

NB The underfloor heating manufacturers' guidelines must be followed.

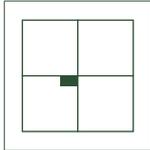
When installing underfloor heating, please note that the adhesive and grout manufacturers' instructions must also be followed. It is very important to obtain all information concerning installation, particularly regarding delay times before and after installation, before the actual work begins. If the 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.

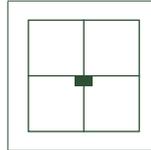
## Preparation and planning - Floors

### Marking out the work area

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.



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



Now lay out the mosaics sheets loosely, allowing for the joints. The joints will depend on what you are trying to achieve and on your choice of mosaics.

### How wide should the joints be?

Floor mosaics must be laid with a grout gap the same as the gap between the tesserae that make up the sheet.

If you are using more than one product, check the thickness of the tiles and mosaics – 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 Marmox or Wedi boards.

The aim is to achieve a pleasing pattern whilst avoiding unnecessary cutting or thin slivers at the edges of the room. It is desirable to maintain whole mosaic sheets in the doorway. If you are tiling through a doorway (i.e. installing 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 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 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.

# Adhesives, grouts and sealants

## Which adhesive and grout?

**NB: Not all adhesives, cleaners, grouts and sealers are equally suitable for all types of tiles. Take advice from your supplier.** Particular care should be taken to use the correct adhesives, grouts and sealants. Carefully read manufacturers' information and always follow the manufacturer's instructions.

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 floors. A recognised adhesive manufacturer will have a range of products, each appropriate to specific substrates.

## 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.

## Glass mosaics

For fixing glass mosaics we recommend a thin-set white cement based, latex modified adhesive type such as Mapei Keraquick with Latex Plus (C2 S2) or an epoxy (R2) type in white such as Mapei Kerapoxy or Kerapoxy Design. In the USA Laticrete Platinum 254 in white with the use of a latex additive is a suitable option. For transparent glass mosaics carefully flatten the ribs in the white adhesive so that the ribs do not show through the mosaic.

**Be careful when selecting modified cement based adhesives for fixing glass mosaics as they may form very strong alkalis when mixed with water. The alkalis may attack some of the backings on the mosaic tesserae.**

## Adhesives, grouts and sealants - continued

### Paper faced / film faced glass mosaics

These have a covering of paper or film on the front surface rather than mesh backing. Some individual pieces are clear/translucent so any mesh backing would show through after installation to spoil the overall look. Use a white, rapid setting, cement based flexible adhesive. Because the film or paper facing is on the front of these mosaics it is difficult to see what they look like. Peel back part of the paper or plastic face on one tile BEFORE fixing to ensure the surface finish is what you expected.

For steam rooms and saunas use white epoxy adhesive and grout.

### Paper faced mosaics

These are suitable for swimming pools, steam rooms and saunas as 100 % of the tesserae are available for contact with the adhesive. For steam rooms and saunas use epoxy adhesive and grout. There are a wide variety of epoxy adhesives/grouts and Mapei Kerapoxy and Mapei Kerapoxy Design are suitable as both the adhesive and grout (one step method). For fixing paper faced or film faced mosaics in submerged conditions Ardex X77 adhesive is suitable when used in conjunction with a reduced water absorption grout (CG2).

Due to their translucent nature they 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 such as Mapei Keraquick with Latex Plus. Fix a small section of mosaics 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 from corner to opposite corner. If the paper does not peel away cleanly sponge again until it peels away easily. If the mosaic sheet starts to come away leave a little while longer to let the adhesive set more.

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.

# Adhesives, grouts and sealants - continued

## Plastic film faced mosaics

Mosaics that are faced with a plastic film 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 such as Mapei Keraquick with Latex Plus. 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 mosaic pieces before the adhesive sets, then the film can be carefully cut with a sharp knife around the appropriate tesserae to allow for adjustment.

If the small pieces of mosaic come off when removing the plastic film it means that the adhesive has not been left long enough to dry. Use a sharp knife and cut small slits in the film to allow more air to the adhesive to speed up the process. When the adhesive is dry, remove the film by peeling it from one corner to the opposite corner.

Some mosaics have a protective film covering either the whole surface or certain individual pieces. Keep the film in place during installation then carefully peel away. It is important to factor in time needed to peel off the film from some of those with film on individual pieces.

Decorative mosaics **Axum EW-AXUMOS, Minoan EW-MINMOS, Tuwana, EW-TUWMOS**  
Remove grout with clean warm water and wet sponge as tiling progresses

## EW-AZTMOS Aztec

ONLY use WHITE unsanded grout as the grout will stay in the fine design lines when cleaned off.

## Stone pebbles

To avoid visible grout lines, some pebbles may require adjusting slightly so that they interlock with adjoining pebble sheets.

## Natural stone mosaics

Use a white, fast setting highly deformable cement based C2FT S1 or S2 type. Mapei Keraquick in white is suitable. This will reduce the possibility of water staining on the surface from the adhesive during the curing process. It will also reduce colour 'show through' on the light coloured stone mosaics.

## Natural stone mosaics, including mixed mosaics containing natural stone

These must be impregnated before and after grouting when the mosaic is fully clean and dry. LTP Mattstone or Lithofin MN Stainstop are suitable impregnators. This is to reduce the possibility of staining and ingress of water.

# Applying adhesive

## Walls

Prime the wall surface to be tiled with an acrylic primer and leave to dry. Then spread adhesive over as much of the wall as you can work on, within about 15 minutes; approximately one square metre /one square yard is usually about right.

Spread an even layer about 4 to 6 mm (1/4") thick using a notched trowel to form parallel lines. Work to the lines you have drawn on the walls for centre points and level lines and then begin to apply the tiles. Firmly place the mosaic sheet into the ribbed adhesive on the wall at the centre point. Place the first sheet on the adhesive, press it down firmly. Check the first tile is straight and level. Now lay the adjacent tiles in the same way, using spacers to create an even joint between them.

When you get to the edges of the room, cut the sheet and or tesserae to fit the gap if necessary and clean away any excess adhesive from the corners. The corners will receive silicone for expansion purposes following grouting. Be careful to keep adhesive off the face of the tiles. Wipe away any surplus with a clean damp sponge as you go.

You may find it necessary to cut individual sheets to fit in small areas. Extreme care should be taken especially when cutting small pieces. See Cutting section.

Spacers that have been used during the fixing process must be removed from the joints before the adhesive set-ting time is reached.

Where the wall tiles meet the floor, a neater finish will be achieved if the wall tiles sit over the floor tiles. Fill with silicone.

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 reduce the possibility of the glass tiles and grout from cracking. However, changes of plane will require expansion joints. Always seek professional advice.

Adhesive is available as standard set or rapid set. Standard set can take 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.

## Floors

For substrates that can expand and contract i.e. wood or floors with underfloor heating, it is important to use a flexible S2 adhesive. 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 layer of adhesive spread onto the backs, in addition to the adhesive spread on the floor. This method is known as solid bed.

## Expansion 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.

## Application

Spread adhesive over as much of the 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 8-10mm for floors.

Place the first whole tile on the adhesive, press it down firmly. Check the first tile is straight and level. Now lay the adjacent tiles in the same way, using spacers (see below) 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 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.

When you have covered the first square metre prepare another area, and so on.

If there are any areas not tiled around the edges of the wall etc you may need to cut the tiles to fit (see Cutting section).

# Grouting

## 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 mosaics before grouting the complete area.

For glass tile grouting we only recommend non-sanded or superfine grouts such as Mapei Keracolor FF or SF to reduce the possibility of scratching. Whichever grout is chosen always try it on an unfixed mosaic sheet before grouting the installation to ensure it does not scratch the tile.

## How to grout

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

Impregnate/seal the tile as appropriate prior to grouting to reduce the possibility of staining.

**NB Regardless of the grout colour chosen we advise that you test a mosaic tile prior to grouting to ensure the grout pigment will not contaminate the surface of the tile.**

## Useful Tips

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 few tiles to avoid any excess grout drying on the surface, as this increases the risk of scratching. Never grout corners of rooms; these must be grout-free and filled with a suitable silicone to allow for wall/floor expansion.

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 and 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. Repeat until the whole area is complete.

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 1-1.1 litres of water per 5kg bag (4¼ cups per 11 lb) 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.

### **Grouting floor mosaics**

Grouting gives a neat appearance to the tiled surface. Grouting should always be finished flush with the tiled surface.

After the final seal, avoid walking on the floor until the sealer has set thoroughly (always follow the manufacturer's recommendations).

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.

### **Grouting recommendations**

Floor mosaics must be laid with a grout gap the same as the gap between the tesserae that make up the sheet.

### **Coloured grout**

Certain grouts are not UV resistant and will fade when placed in direct sunlight. Seek advice the grout manufacturer.

### **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 /floor 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.

# Cutting mosaics

Some cutting of mosaics is unavoidable. Appropriate safety precautions should be always taken when cutting any mosaics. Full personal protective equipment (PPE) for hands and eyes should be used.

For socket and fitting cut outs simply remove the appropriate number of small pieces at the correct position on the mosaic sheet.

In general	A water fed disc specially designed for glass tiles may be used for cutting. The disc is coated around the circumference with FINE industrial diamonds and is made specifically for cutting glass tiles. The disc must be fed with plenty of clean water and the cutting rpm needs to be lower than normal at approximately 1200 rpm. Cut slowly with a low pressure on the glass mosaic tile pieces.
Metal mosaics	Can be cut with a water-fed electric cutting machine with a normal diamond blade
Glass mosaics	These are brittle and need special tools for cutting. For straight cuts on mosaic sheets use a scribe and snap tool fitted with an 18 mm scribing tool. Scribe the line of tile pieces and then individually snap each one in the line.

Specific products	
Beryl GW-BERRRMOS, Ice GW-ICERRMOS, Jager GW-JAGDLMOS, Paragon GW-PARDLMOS, Solitaire GW-SLTDLMOS, Zircon GW-ZIRRRMOS	Cut with mosaic tile nippers with tungsten carbide cutting wheels or electric tile saw for mosaics
Zenith Copper EW-ZENCPMOS, Zenith Silver EW-ZENSLMOS, Golden Nugget EW-GNUMOS, Silver Nugget EW-SNUMOS, Aurelio EW-AURMOS, Orabella EW-ORAMOS, Black Link EW-BKLMOS, Silver Link EW-SVLMOS, Herald EW-HERMOS, Inca EW-INCMOS, Lega EW-LEGMOS, Mayan EW-MAYMOS, Axum EW-AXUMOS, Minoan EW-MINMOS, Tuwana EW-TUWMOS, Aztec EW-AZTMOS	A water fed electric cutting machine with a normal diamond blade
Astral Silver EW-ASTSLMOS , Astral Copper EW-ASTCPMOS	A water fed electric cutting machine with a normal diamond blade, any cut edges will need filing smooth
Ceylon EW-CEYMOS	Can be cut with a jigsaw

# Maintenance and cleaning

Not all cleaners are equally suitable for all types of tiles. We recommend the use of pH neutral cleaning products on our tiles unless otherwise stated below. The use of certain acid based cleaning products, including vinegar, may cause some of the tiles to react and change in character. Avoid using abrasive cleaners as they will scratch the surface of the mosaics.

## **Glass**

Either clean water or a neutral (i.e. not acidic or alkaline) detergent, window cleaning products are suitable. Ensure a soft cloth is used to avoid scratching. Do not use abrasive cleaners as they will scratch the surface.

## **Gold**

Do not use acid-based cleaners on products containing gold. Follow the instructions for Glass above.

## **Iridescence**

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

## **Metal**

Use warm soapy water then wipe with a damp cloth and buff dry. Alternatively use a stainless steel cleaner. Do not use harsh or abrasive cleaning products, scourers or 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 as they will cause staining.

## **Steam Cleaning**

We do not recommend steam cleaners or steam mops to clean our tiles. Steam cleaning may remove or render ineffective any sealer that has been applied, leaving the tiles unprotected.

# Photography

Owing to variations in studio lighting and printing inks, the tile colours shown in the Original Style brochure and website may differ slightly from those of the actual tiles.

## Limits of liability

Before making your choice it is always advisable to ask your Original Style dealership to show you samples.

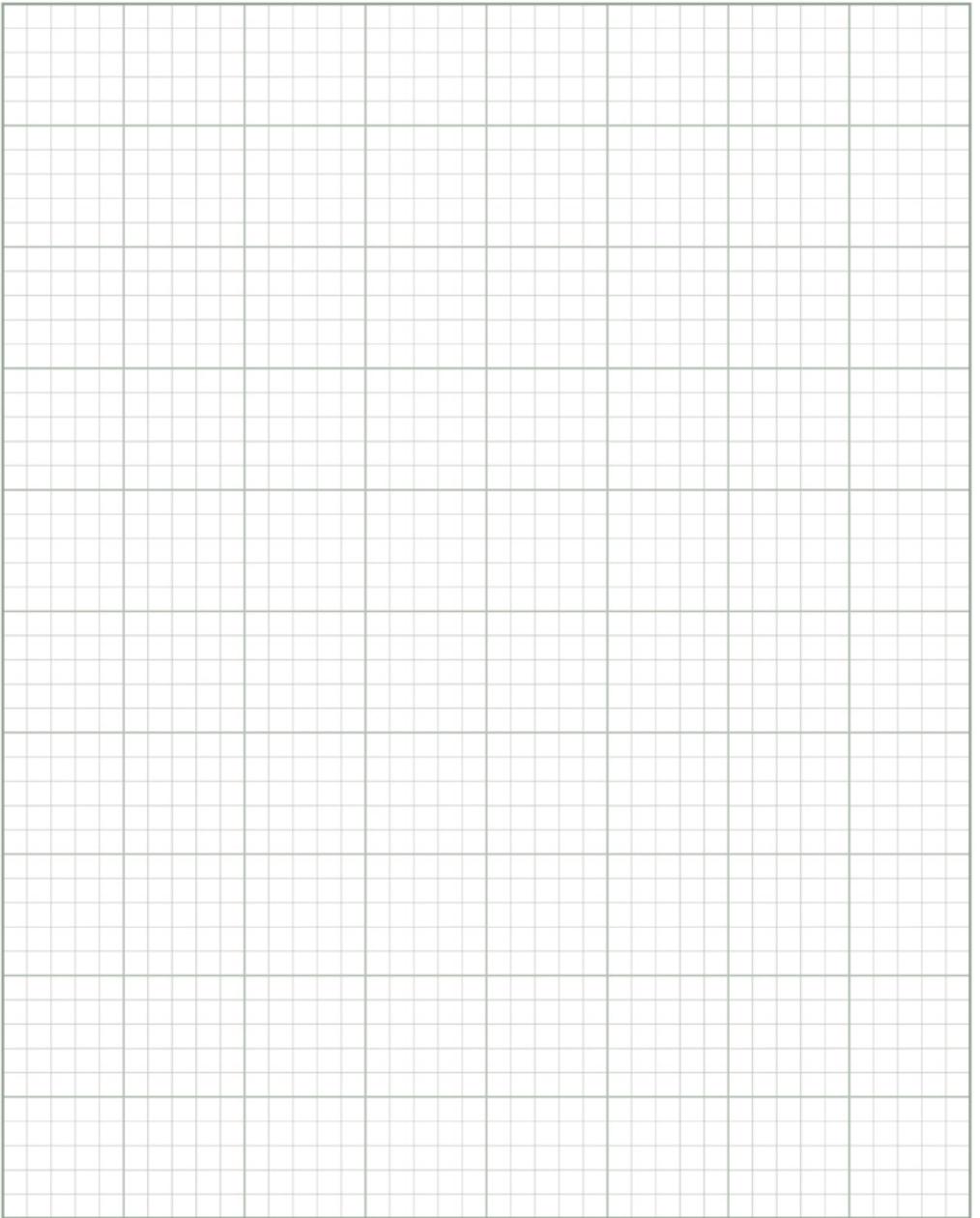
Original Style Ltd. accepts no liability for the faulty installation of its tiles. In the case of any claim relating to the tiles themselves, Original Style's liability, to the extent permitted by law, is limited to either the replacement of the product or a refund of the cost of the product, and does not extend to cover any consequential loss. Claims must be reported within seven working days from receipt of the tiles. Tiles must be inspected prior to installation and claims cannot be considered after the tiles have been installed. Please be advised that installation constitutes acceptance of the quality, colour, texture, shade and size of tiles.

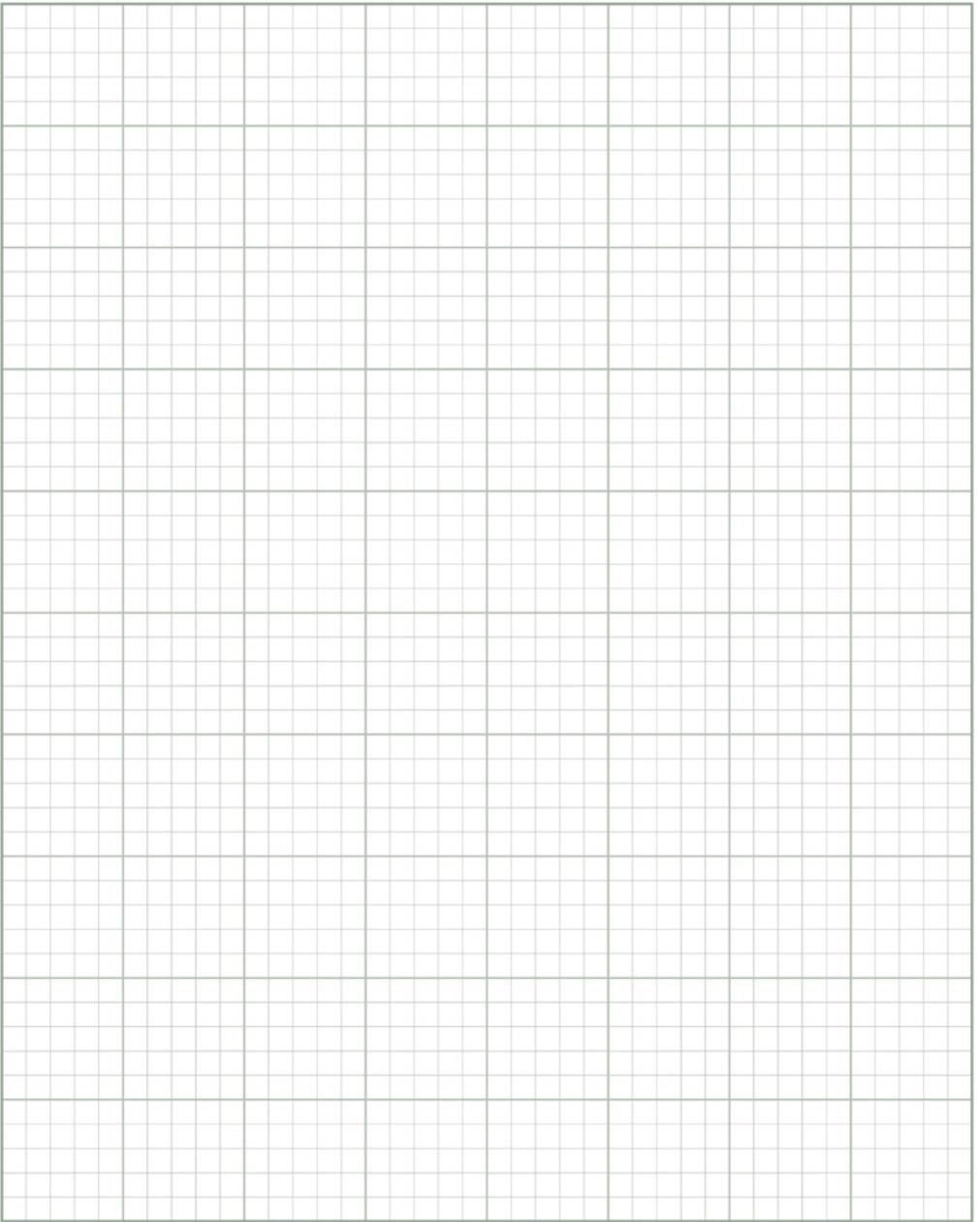
Original Style Ltd. warrants that its tiles conform to their description and are fit for their purpose. Original Style Ltd. makes no other express or implied warranty as to fitness or suitability of the products for particular installations. We extend no guarantees, express or implied, as to wear resistance or maintenance procedures.

Please note, the use of certain acid based cleaning products, including vinegar, may cause some of the tiles to react and change in character. In addition, abrasive cleaners must be avoided as they will scratch the surface of the mosaics.

Please note: In the USA please follow the recommendations of reputable product manufacturers in conjunction with this Fixing Guide, 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](http://ctioa.org), [tileusa.com](http://tileusa.com)









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