

# Tile Guide

All you need to know about tiles and installation



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# Hints & Tips

The following are general hints and tips for tiling. If there is any doubt regarding the use of a product always refer to the manufacturer's advice on the a product in question.



Ensure the area to be tiled is clean with all dust and grease removed.

Never tile onto wallpaper; make sure to strip it back to the plaster.

Where possible use a primer (a product to seal the surface prior to tiling) to prevent the adhesive from drying out.

Always begin tiling from the middle of the area or focal point and use cut tiles at the edges.

If a number of tiles need to be cut it may be preferable to use a rail cutter or a water cutter.

The simplest way to cut a ceramic tile is with a tile scribe; simply score the tile along the line to be cut and then snap the tile in two.

Take care when grouting to avoid scratching the glazed surface. It is always best to test the grout in an inconspicuous area first.

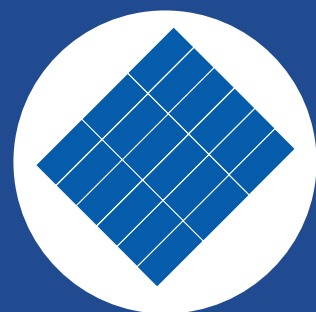
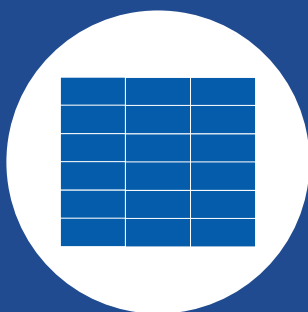
It is recommended to order 10% to 20% extra. This is needed in case of any break-ages during the installation and for the customer to keep spare tiles in case of future damages to their wall or floor.

If you need to drill through ceramic tiles, for example to mount a fixture, you can use a power drill with a masonry drill bit. Placing a piece of sticking plaster over the area to be drilled will help prevent the bit from skidding. For porcelain tiles you will need a good quality diamond tipped drill bit.

It is important to clean, inspect and lay out the tiles before tiling to allow any shade variations to be noticed, accepted or rejected. Even tiles from the same batch can vary in shade. Note: once tiles have been fitted no responsibility for shade variation is accepted.

## When choosing your tiles, have you considered:

- Co-ordinating wall and floor tiles.
- Matching wall and floor tiles for a seamless look.
- Introducing texture into your wall tiling with profile strips, feature tiles and borders to create zoned areas.
- Mixing different sizes for creative effects.
- Producing creative effects by mixing different colour tiles.
- Using tiles instead of carpet in living areas.
- Using metallic strips and borders.
- Cutting up sheets of mosaics to create a decorative strip.
- Using large format tiles to create an illusion of space.
- Using coloured grouts for impact.
- Fixing tiles landscape, portrait, brickbond, herringbone or basketweave to create different looks.



## Calculating the amount of tiles required

**To calculate the number of boxes required use the following steps:**

- Simply use our on-site tile calculator to give you an accurate squared metre amount for your project. Alternatively, follow the below method.

### **Step 1 - Measure**

Measure the surface area that needs to be covered:

- For a rectangular shaped area, measure the length and width of the area in metres and multiply these values together to arrive at the square metre coverage required.
- For an irregular shaped area, try breaking the area into smaller rectangles. Calculate the area of each rectangle as above and add the areas together to calculate the total square metres required. Don't forget to consider doors, windows and fitted units when calculating areas.

### **Step 2 - Add 10%**

We recommend adding an additional 10-20% (depending on the size of the tiles, i.e. 20% for larger tiles) to this total area in order to allow for any cuts or breakages that may occur during the fixing process.

### **Step 3 - Calculate**

Divide the area you need to cover by the square metre coverage of the box of tiles you wish to use. This will give you the number of boxes of tiles required. Round this number up.

## Conversions

Some customers may be using imperial units, in which case the following conversion may be helpful.

### Imperial to Metric

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1 foot = 0.3 metres

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1 yard = 0.91 metres

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1 foot<sup>2</sup> = 0.09m<sup>2</sup>

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1 yard<sup>2</sup> = 0.84m<sup>2</sup>

### Metric to Imperial

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1 metre = 3.28 feet

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1 metre = 1.09 yards

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1 metre = 10.79 feet<sup>2</sup>

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1 metre = 1.20 yards<sup>2</sup>

## Example

You wish to tile the following irregular area, using a tile sold in packs  $0.25\text{m}^2$  each:

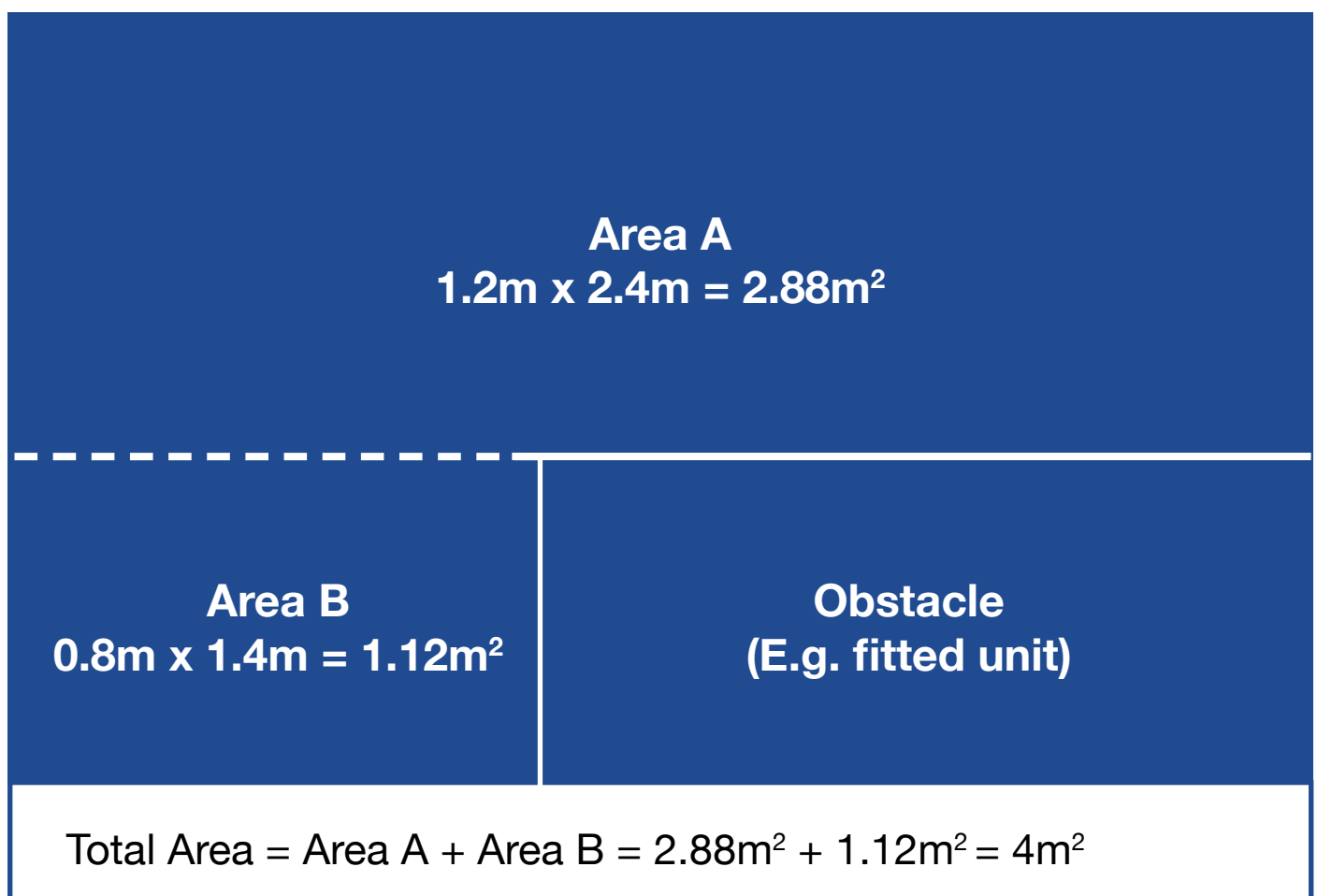
1. The area can be broken down into two rectangles, Area A and Area B.

2. Adding 10% (multiply by 1.1) gives:  $4\text{m}^2 + 10\% = 4.4\text{m}^2$

3. Divide this area by the pack coverage:

$$4.4\text{m}^2 \div 0.25\text{m}^2 = 17.6 \text{ packs}$$

Therefore you will require 18 packs of tiles in order to cover this area.



## Tiling Surfaces

Before tiling it is essential to ensure that the surface is suitable for tiling. Use the table on the following page as a guide to help you identify when this is the case.

Before tiling, the surface must be clean and dry. If the surface to be tiled is new, for example a newly plastered wall, you must ensure that it has dried sufficiently or else the tile adhesive will not set properly.

The below table gives recommended minimum drying times for various surfaces before tiling:

<b>Material</b>	<b>Surface Recommended Minimum Drying Time</b>
Gypsum Plaster Walls	<b>4 Weeks</b>
Cement-sand Render Walls	<b>2 Weeks</b>
Concrete Base Floor	<b>6 Weeks</b>
Screed Base Floor	<b>3 Weeks</b>



# Surface Suitability

Is your surface suitable for tiling? Use this table below.

Surface	Is it suitable?	What to do
Wood	Yes	Overlay wood with tile backer boards and screw at 300mm centres. Then tile using flexible adhesive.
Concrete	Yes	Ensure the surface is clean, dust and grease free. If the surface is uneven use a self-levelling compound before tiling.
Painted Wall	Yes	The walls must be smooth and flake free, to test this use strips of carpet tape or equivalent, leave for 10 minutes before removing. Score the walls to provide an anchor for the adhesive.
Plaster	Yes	Allow 4-6 weeks for new plaster to dry thoroughly and use primer to prevent the adhesive from drying out.
Vinyl	No	All vinyl and glue must be removed from the surface. Then follow the guidelines for the surface beneath.
Wallpaper	No	The wallpaper paste will not be strong enough to hold the tiles in place.
Brick	Yes	The walls must be smooth and sufficiently flat with all bricks fully secured before tiling.
Ceramic/Porcelain Tiles	Yes	Clean the surface and replace any loose tiles before fixing. Leave 24 hours before grouting.

# Installation: Setting out & Fixing tiles

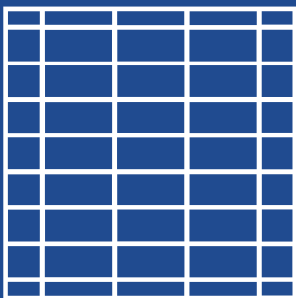
## Setting Out

Setting out is one of the most important procedures prior to fixing tiles. Ensure that the intended layout and design works within the allocated area. Lay the tiles out on the floor to ensure the pattern works and an acceptable finish is achieved. Ensure that the tiles are clean and any protective wax has been removed. Remember that if there are any defects with the finish or colour of the tiles you can still return them at this stage. Returns will only be accepted before the tiles are fixed.

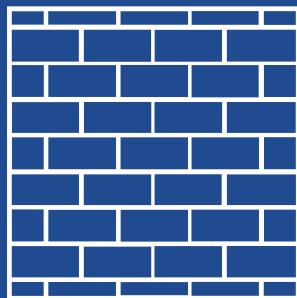
When setting out give special consideration to the location of doorways and windows. Also give thought to the location of fixtures and fittings e.g. wash basins and radiators, when working out the locations of borders and profiles.

## Fixing Techniques

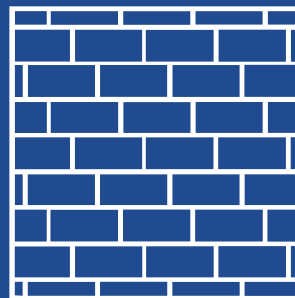
Layout suggestions for tiling include:



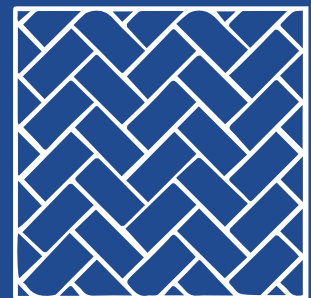
Stack Bond



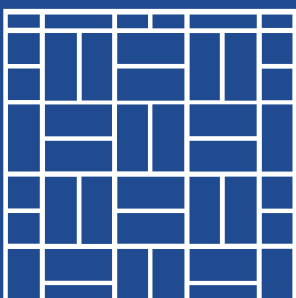
1/2 Bond\*



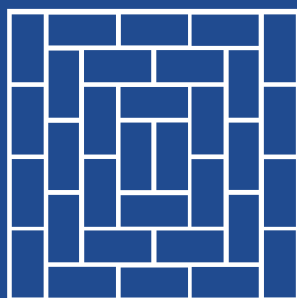
1/3 Bond



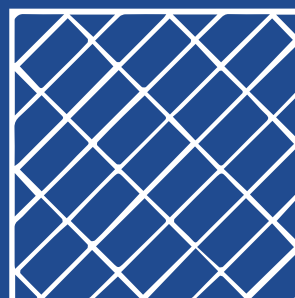
Herringbone



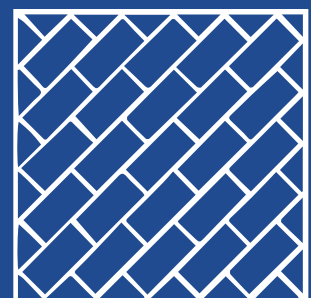
Basketweave



Running Bond



Stack Bond 45°



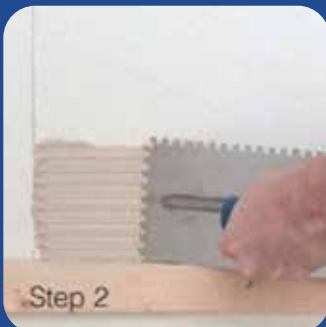
1/2 Bond 45°

\*This laying pattern is not recommended for tiles over 50cm in length. Larger tiles should not overlap by more than one third in order to achieve a flat surface

## Fixing wall tiles



To ensure a level base, set a baton against the wall, one tile above the lowest point of fixing. A spirit level will help ensure it is level.



Spread adhesive onto the wall using a notched trowel, cover no more than 1m<sup>2</sup> at a time and start from the centre of the wall.



Place the tiles into the adhesive using a firm twisting movement so that there is a good, even contact between the tile, adhesive and background. The tiles should be spaced using spacer pegs.



Press grout onto the face of the tiles using a grout float. Push firmly into the joints with the grout spreader.



Remove excess grout with a damp sponge and buff with a dry cloth.

## Fixing Floor Tiles



Beginning from the middle of the floor, spread an area of adhesive with a solid-bed notched floor trowel and firmly press the first tile into the adhesive.



Make sure the adhesive is evenly applied and in contact with the tile and base, this will give long term adhesion and performance. If necessary, re-trowel the adhesive and replace the tile firmly into the adhesive bed.



When the adhesive is dry the floor can be grouted. Spread grout over the tile area, working it well into the joints with a grout float. Remove excess grout with a damp sponge and then buff with a dry cloth.

**When fixing tiles of the following materials special considerations should be taken into account:**

### **Porcelain Tiles**

When fixing porcelain tiles, use polymer-modified adhesives and grouts, especially formulated for the fixing and grouting of porcelain/fully vitrified tiles. The drying and maturing of ready mixed adhesives will be restricted when used with porcelain products and many standard adhesives will not achieve sufficient bond strengths.

### **Glass Tiles and Mosaics**

As with porcelain tiles, glass tiles will generally require a polymer-modified adhesive and grout. White adhesives are normally used to prevent 'show through', check with the manufacturer of the tiles for their recommended adhesive and grout type. Under no circumstances should a dispersion adhesive be used.

### **Natural Stone**

Natural stone is much more porous than ceramic and will need to be sealed before and after the fixing process. For specific details follow the instructions of the sealer manufacturer. White adhesives are normally used to prevent 'show through'. You will also need to ensure that the adhesive and grout you are using are suitable for natural stone products.

# Installation: Cutting, Shading & Tile Maintenance

## Cutting Tiles

In order to tile to the edge of the wall or floor it will most likely be necessary to cut some of the tiles. There are a number of different tools available to do this and a good tile fixer will have access to any tile cutting tools required.

## Grouting Tiles

Care must be taken when grouting rough tile surfaces. It is recommended that the joints are pointed in and excess grout is cleaned off as soon as possible to prevent grout being trapped in the surface of the tiles.

## Tile Scribe

Tungsten tipped scribe for scoring the glaze before snapping the tile. Normally for wall tiles only.

## Tile Cutter

A tool for scoring and snapping tiles to achieve straight cuts. More efficient than using a tile scribe for large numbers of tiles.

## Wet Diamond Wheel Cutter

The diamond wheel will cut all types of tile and is useful for intricate shaped profiles.

## Tile Nippers

Tungsten tipped pliers for shaping curved cuts in both wall and floor tiles. It is always recommended to wear protective goggles when cutting tiles.

## Shading

During the course of manufacture of all tiles and mosaics some variation in shade or pattern may occur. Variations in shading and size may occur between different boxes and batches of tiles.

Do not fix the tiles unless a pleasing blend can be obtained. This can be achieved by mixing tiles from several boxes to ensure a satisfactory blend of colour, texture and pattern. It is essential that tiles are cleaned and examined prior to installation as claims relating to variation that was apparent prior to installation will not be accepted after the tiles have been fixed.

The manufacturer cannot accept any liability for wall or floor tiles which have been fixed. Nothing in these statements will affect the statutory rights of the consumer.

## Tile Maintenance

When cleaning tiles under no circumstances should products be used which are designed to prevent limescale or those which contain acidic chemicals. The use of such products will irreparably damage the surface of the tiles. Spillages should be cleaned up and dried immediately.

Always use cleaners, sealers, adhesives and grouts that are suitable for the material of the tile. The use of incorrect cleaning products can have a detrimental effect on the longevity and appearance of the tile.

# Installation FAQs

## **Will I need special adhesive and grout?**

For wet areas we recommend water resistant adhesives and water impervious grouts suitable for the tile substrate.

## **Does a power shower make any difference?**

We definitely recommend an epoxy grout for power shower areas.

## **How do I seal the bath and shower?**

Either use a proprietary trim or silicone mastic sealant.

## **What size joints do you recommend?**

2-3mm for most wall tiles and minimum 3mm for most floor tiles.

## **How do you cut curved shapes out of tiles?**

Score the tile with a scribe, nibble the tile away. The process is slow, but it pays off in the end.

## **Can I use floor tiles outdoors?**

Only if the manufacturers specify. Normally only unglazed quarry and certain porcelain tiles are suitable.



## **Can I fix floor tiles on the wall?**

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Yes. Just be aware about cutting and the weight (especially if on plaster skim). However we do not recommend using wall tiles on the floor.

## **Can I tile onto tile?**

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Yes as long as the existing tiles are firmly adhering, clean, dry and stable, however we don't recommend it.

## **How do I cut tiles around sockets?**

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There are a number of ways. The best way is to cut the tiles using either a rod saw or nippers and fit the tiles behind the socket. It is best to cut off the electricity to the sockets or ask a qualified electrician before you carry out this procedure.

## **How do you drill tiles?**

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We recommend you use a sticking plaster to mark the position you wish to drill. Use a masonry drill bit with the action on slow speed. Do not use hammer action. For porcelain tiles you will need a good quality diamond tipped drill bit.

## **Are tiles slippery when wet?**

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Yes, like most smooth surface materials they can be slippery especially if the floor is covered in soap and shampoo residues. However, by taking precautions e.g. an absorbent mat, tiles can present an easily cleanable and moisture resistant finish to any bathroom. Slip resistant tiles are also available.

# Glossary Of Terms

## **Field Tile**

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The main tile in any scheme normally with a plain colour or subtle random decoration.

## **Border Tile**

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A highlight tile used to create borders.

## **Feature Tile**

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Decorative tiles designed to co-ordinate with the field tiles.

## **Profile Strips**

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Three dimensional tiles with a moulded shape.

## **Mosaics**

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Small pieces of porcelain, glass, natural stone or metal supplied on a net backing. Can be used to tile full areas or create features.

## **Porous Body / Earthenware**

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Ceramic wall tiles with a water absorption greater than 10% (typically around 16%). Most standard wall tiles are of this type.

## **Vitrified**

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Tiles with a water absorption between 0.5% and 3%, i.e. Quarry tiles.

## **Porcelain**

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Porcelain tiles are a man-made improvement on the densest and most durable granite stone. Fully vitrified tiles can either be unglazed or glazed and are characterised by low water absorption of below 0.5%. They're made from the highest quality raw materials fired to over 1200°C.

## **Glaze**

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A vitreous (glass-like) covering on the face of the tile body which is impermeable.

## **Rectified**

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During production, tiles are cut to tight tolerances giving a straight, shear edge.

## **Work Size**

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The dimensions of the face of the tile, to which the manufactured tile must conform within the specification tolerances.

## **Nominal Size**

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The size that is usually quoted. It is the work size plus the size of the joint between the tiles.

## **Adhesive**

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The material used to adhere the tiles to the background surface.

## **Grout**

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The material used to fill the joints between the tiles.

## **Tile Trim**

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Plastic or metal trim for external corners and window reveals.

## **Trowel**

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An adhesive spreader with notches in the edge. The spreader leaves upraised ribs of adhesive into which the tiles are placed. Different trowel designs are available for wall and floor tiling and different levels of adhesive coverage.

## **Tile Spacer**

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Plastic cross-shaped pegs for spacing wall and floor tiles available in various sizes.