



WORKING WITH LARGE FORMAT TILES

A TILERS GUIDE



AQUACUT / TILERS TOOLS

Service Providers of the Year
award winners, Association of
Professional Landscapers



This brochure seeks to pass information and tips onto tiling professionals to help you in your large format journey.

Introduction for Large Format Tile Handling

Tilers Tools is a member of The Tile Association and we do all of the TTA's accredited demonstrations on how to handle and install very large format tiles. Details of the TTA's future courses are available by visiting the TTA website; tiles.org.uk.

As suppliers of the best equipment in the market for working with very large tiles, we are often approached for advice on the best equipment, so we thought we'd create this booklet for our professional tiler friends.

In this brief guide, we look at the equipment available under three headings:

- Handling
- Cutting
- Fitting

We'll also share Jim's Top Tips.

Professional tilers should feel free to give us a call to discuss their project and get the best possible prices for all their tiling equipment needs on 01565 344860.

Tilers Tools is a one-stop shop for all your equipment, tools, consumables, adhesives, grouts, and cleaning solutions for that perfect finish. All stocked in our large warehouse just off the M56/M6 junction.

Feel free to drop-by and pick up what you need, or to discuss your next project.



INTRODUCTION

Very large format tiles over three meters long and one and half meters wide are becoming increasingly common, however there is a shortage of professional tilers willing to fit these tiles.

Very large format tiles are here to stay, and discerning clients are demanding high quality installations. These tiles are usually thin - 6-8mm thick being the norm, so it is important to handle them in a way that minimises flex, otherwise micro-cracks can occur which may become apparent only when cutting and fitting when breakages can result. It is therefore vital that professionals working with very large format tiles invest in the correct equipment and consumables, and adopt the recommended handling, cutting and fitting procedures as laid down by the tile manufacturers.

Tilers Tools works closely with our friends in The Tile Association, and we do all their demonstrations in how to install large format tiles. We have also drawn on the standards established by the highly respected ASSOPOSA which is the Europe-wide equivalent of the TTA, as well as canvassing professional tilers we know who are highly regarded for their work with large format tiles. This booklet should therefore be seen as a best practice guide but tilers ought to canvass advice from the manufacturer of the tiles being worked before they decide how to proceed with their very large format tile project.

Raimondi has developed a great range of tools, equipment, and consumables to assist professional tilers when handling, cutting, and fitting very large format tiles. These tools and market-leading adhesives and cleaning solutions are available from Tilers Tools, the UK's leading stockist of Raimondi equipment, tools, and consumables.

With the correct equipment and some guidance and training, we are confident competent tilers will quickly become much more comfortable working with these tiles. Tilers Tools are conducting a series of demonstration days, free of charge, so please let us know if you wish to be informed of upcoming events or view our website for dates.

There are lots of videos and technical information in our web pages and on our YouTube video channel (search for Tilers Tools and you'll find us).

We very much hope that this booklet is helpful for those embarking on a project installing very large format tiles. Please feel free to circulate the booklet.

STUART MIDDLETON

EXECUTIVE CHAIRMAN, AQUACUT GROUP

ABOUT AQUACUT GROUP

Aquacut has decades of experience shaping and finishing porcelain, stone, and metals to create individually designed, functional and aesthetically pleasing finishes. The company has an enviable reputation for deliverability and quality. Aquacut's bespoke finishes are installed in the premises of many well-known entities around the world, including in the UK.

St Paul's Cathedral
Blackpool Council
Ipswich City Council
Manchester Airport
Heathrow Airport
Harrods

River Island
McLaren Motors
Leeds / Bradford Airport
Old Trafford
Dr Martens
Costa Coffee

Nissan
Seat
Ford
Bentley
Land Rover
Southampton Council

Gatwick Airport
Selfridges
Nandos
Bridlington Council
Mercedes
East Midlands Airport

Aquacut is based in Cheshire in two locations. The fabrication business has two workshops in the market town of Knutsford while the Tilers Tools and Babilonia divisions operate from Appleton, just off the M56 / M6 motorway junction. Aquacut Limited was established in the 1990's and quickly established a reputation for first class services to the landscape, tiling and building sectors. We have two websites:

www.aquacut.co.uk | www.tilerstools.co.uk

Feel free to browse these, call us on **01565 750666** (Aquacut) or **01565 344860** (Tilers Tools and Babilonia), or drop into Appleton for a visit, you'll be made most welcome. Aquacut and Tilers Tools are members of The Tile Association, The Association of Professional Landscapers, and the Horticultural Trades Association.

The Association of Professional Landscapers awarded Aquacut and Tilers Tools their Service Provider and Manufacturer of the Year Award.

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TILES/SLABS

We are social



@TilersTools

HANDLING LARGE FORMAT TILES/SLABS

Easy Move Handling Frame

The Easy Move handling frame is designed for handling large tiles and slabs.

This handy piece of equipment is great for ensuring minimum flex in the tile while removing it from the crate and on location.

The cross-bars add rigidity.

The Easy Move handling frame in combination with the CAM Trolley is ideal for back-buttering tiles.

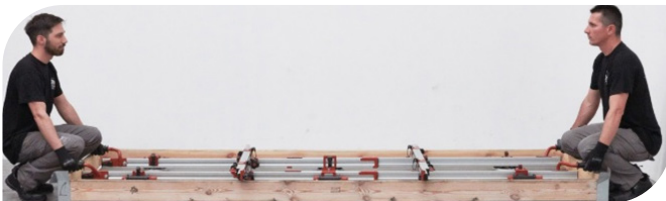
The system also allows easy access to the vacuum cups to ensure the vacuum remains fully engaged, especially important on textured tiles.

The Easy Move handling frame is an essential piece of equipment for ensuring your large slabs remain in one piece as you move them around.



*Wipe down/clean tiles before lifting from the crate.
Always use a handling frame to move tiles around the job.
Adjust the handling frame to size before starting.
Check the vacuum cup from time to time.
Handle/lift tiles safely.*

**JIM'S
TOP TIPS**



WORKING WITH LARGE SLABS - HANDLING

CAM MKIII Trolley

The CAM MKIII is another handy piece of equipment. This tool is specially designed for the transport and handling of large tiles and slabs. However, it is useful for cleaning the slabs and for back-buttering the slabs too.

The equipment is very versatile, a great time-saver and will make your large format tiling job so much easier.

You can see video footage of the Easy Move and CAM MKIII in action [here](#).



WORKING WITH LARGE SLABS - HANDLING

Raimondi RV175

The Raimondi RV175 vacuum suction cup is a tool designed for ease of moving tiles or slabs and it will work on non-porous stone as well as porcelain and composite materials.

The RV175 creates a tight grip, even on textured materials. It is suitable for loads up to 130kg and the vacuum gauge ensures the operator can easily see when the vacuum needs to be replenished.

The suction cup is supported with a heavy duty carry case to ensure the product is protected during transport and spare parts are available to keep it in tip top shape.

The suction cups can be fitted to the Easy Move MKIV.



WORKING WITH LARGE SLABS - HANDLING

BM180 MKII

A strong, flat work surface is vital when cutting, mitring or polishing large format tiles. Raimondi's BM180 benches are market leading in terms of functionality and robust construction and fold up nicely for ease of transport.

The BM180 Modular Bench stocked at [Tilers Tools](#) is easy to assemble/disassemble and, once collapsed, transports and stores easily. The steel structure and anodised aluminium worktop guarantee sturdiness and stability, helping you achieve your best work.

CUTTING

BM180 MkII

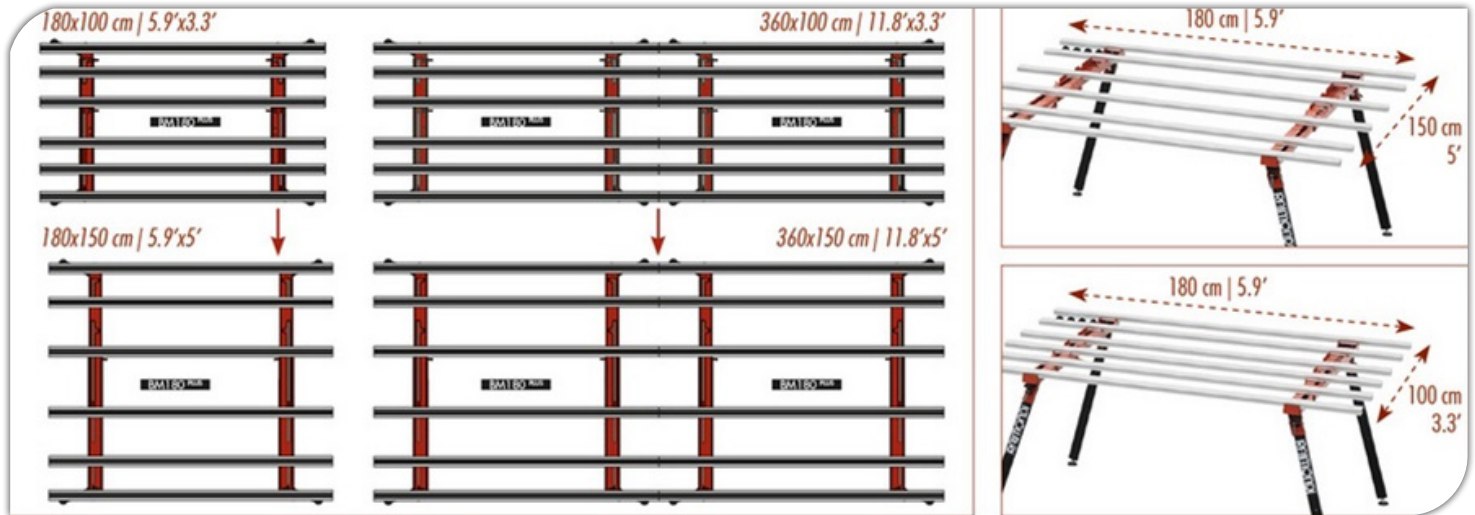
- New folding legs feature
- Now legs no longer need to be removed for storage and for transportation, they can simply be folded up
- No additional costs for this new feature



WORKING WITH LARGE SLABS - HANDLING

Work Benches

It is essential when working with large format tiles that a flat, solid platform is used. The Raimondi BM180 Plus benches can be joined together to give a firm, flat base to work on, cutting down the risk of tiles being damaged when being cut and as a platform for mitring or polishing edges.



JIM'S TOP TIPS WHEN FITTING

JIM'S TOP TIPS

The Easy Move frame should still be used (hung on the CAM ADV trolley) when back-buttering and offering the tile to the surface to be tiled, when possible.

Holes can be drilled using a humid use diamond core drill system. Let the core drill do the work, use it in an oscillating motion with a battery drill and spray water bottle.

When cutting check-outs, always pre-drill the corners of any 90° cuts to reduce the chance of a crack forming at the corner.

Position the suction pads on the Easy Move away from the 90° corner check-outs to minimise stress on the cut area.

As well as cleaning the face of the slab when removing from the crate it is always important to clean the back of the tile before applying the adhesive as dust can cause debonding.

The Power Raizor system can be used for straight cuts, mitre cuts or bullnosed edges.

When applying the adhesive, Jim recommends using a slant notched trowel (10mm) on the substrate and 3mm mosaic trowel on the slab - the rule of 13 applies, so you could use a 9mm and 4mm, if desired.

When applying the adhesive, the serrations should be straight lines parallel with the short edge of the tile. The adhesive on the substrate should also be straight and flow in the same direction as the adhesive on the tile. This ensures the maximum amount of air can escape when fitting.

Use appropriate levelling system, such as our Raimondi Vite, plusv spacers.

Consider using the closer device when positioning the tiles to give an exact grout joint.

Jim recommends using the Volpino vibrating plate to ensure maximum air displacement, alternatively the tile beater (not a mallet).

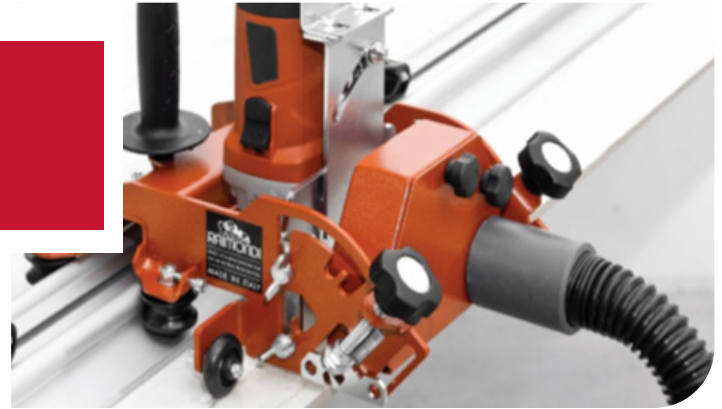
Keep all joints clean and tidy from adhesive.



CUTTING LARGE FORMAT TILES/SLABS

We have a large selection of high quality equipment for cutting your large format tiles.

The Raizor cutting system is attached to the tile with suction cups and comes with a breaker for tiles up to 6mm thick and a plunge scribe with tungsten carbide cutting wheel, all in a padded carry bag. A heavy-duty breaker can be bought to used on thicker tiles. The Raizor cutter can cut tiles up to 3.3m long and an extension can be bought to enable tiles over 4m to be cut.



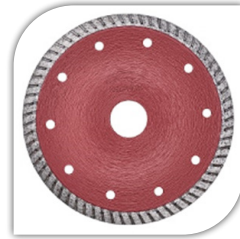
The Power Raizor fits on the Raizor rail and can cut straight cuts, 45° or 180° and a half bullnose 6mm and 10mm. Can be used as a battery grinder and power grinder. Water spray system keeps blade cool. Use only with battery grinder.



WORKING WITH LARGE SLABS - CUTTING



Tile holders for use on the bench. This clamps the tile into place.



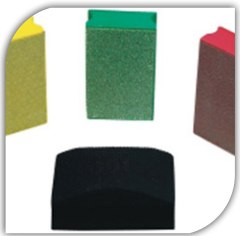
115mm and 125mm continuous rim diamond blade for porcelain.



Heavy duty tile breaker for tiles above 6mm thick.



Core drill bits from 6mm to 100mm diameter. Humid use.



Diamond hand pads for hand finishing.



Diamond pads for use on variable speed

RAIZOR CUTTING SYSTEM

The Raizor cutting system is a special tool designed for cutting large format tiles. Our Raimondi mitre machine (known as the Power Raizor) is operated with a battery-powered grinder and can be used with a water spray or vacuum hose attachments for dust suppression. We also offer the BC45 mitre system that is used free hand without the raizor bar (Fig 1 & 2).



Fig. 1.



Fig. 2.



WORKING WITH LARGE SLABS - CUTTING

LARGE FORMAT TILE CUTTER



LARGE FORMAT TILE CUTTER

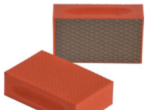
DIE CAST ALUMINUM CUTTING UNIT



FINISHING EDGE

TO CLEAN/FINISH THE TILE EDGE AFTER CUT (IF NEEDED)
TO FINISH THE SIDE OF THE TILE UP TO POLISHING DEGREE

DIAMOND PADS (MANUAL)



DIAMOND PADS (FOR ANGLE GRINDER)



ROUND HOLE CUTTING

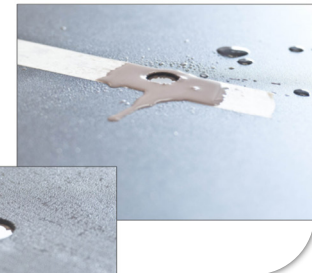
HUMID USE DIAMOND BIT Ø FROM 6 mm (1/4") TO 100 mm (4")

Use with battery operated or standard drill
800/2500 rpm

Shaft mounting interface Ø 10 mm (3/8")

Maximum tile thickness: 22 mm (7/8")

Long life



JIM'S TOP TIPS WHEN CUTTING

JIM'S TOP TIPS

Don't forget your PPE!

Make sure the tiles are on a flat, stable cutting station such as our BM180 benches.

Measure twice, cut once (it's an old one but a true one, and mistakes can be costly!).

Double scribe the ends of the slabs (circa 20mm) and keep cutting stroke under constant pressure and speed - don't stop.

Treat the tiles as glass and don't apply too much pressure.

Scribing wheels don't last forever, play safe and replace wheel regularly to give a clean - edged cut.

Keep the cutting rail clean at all times, particularly important the suction cups.

Use heavy duty breaker for tiles above 6mm and use on both ends till you hear the crack.

When breaking the scored strip, especially along the long length, you ought to have two people working together.

If cutting narrow strips, crack each end and work along the scribe, gently easing the strip from the main body of the tile.

Use a good quality diamond blade for porcelain when using the Power Raizer or grinder.

Use good quality diamond pads for finishing cut edges.

See our videos on our YouTube channel or on our website for more detailed information on these topics! (Search for Tilers Tools).

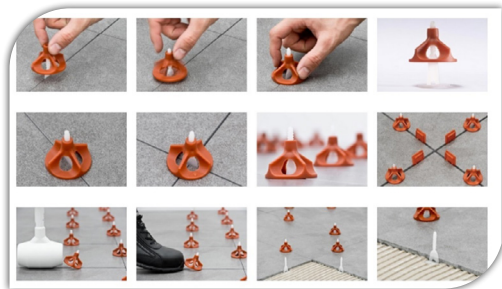
FITTING LARGE FORMAT TILES/SLABS



Use slant ridge trowels when applying adhesive, as these will allow for a better bond.

Remember the rule of 13 - we suggest a 10mm trowel for applying adhesive on the wall or floor and a 3mm trowel for back buttering.

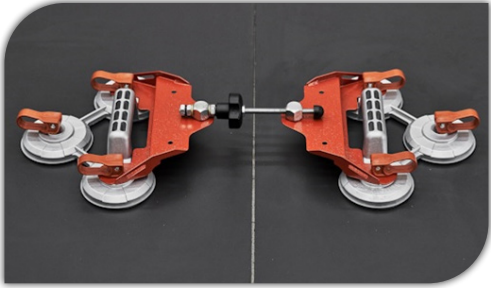
Apply adhesive in straight lines parallel with the short edge.



A suitable levelling system such as Raimondi RLS or the VITE system as shown will ensure a nice level finish.

We are also able to supply a soft washer which can help prevent scratching tile surfaces when applying the levelling system. These are particularly useful on polished surfaces.

WORKING WITH LARGE SLABS - FITTING



Manipulating tiles when applied to the floor or wall can be an issue. The Raimondi closure system can help move tiles to achieve even grout joints.



Use a hand-held vibrating plate such as that the Volpino to expel the maximum amount of air.

A tile beater can also be used, but we do not recommend the use of a mallet!

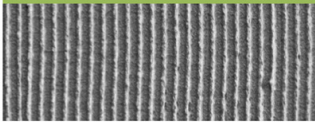
APPLYING ADHESIVE



APPLYING ADHESIVE

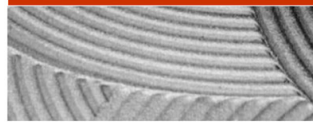
ALWAYS APPLY ADHESIVE CREATING STRAIGHT STRIPES AND AVOID CURVES
Stripes will act as a way for air pockets to escape from under the tile

YES



THE STRIPES HAVE TO BE ALWAYS PARALLEL TO THE SHORT SIDE OF THE SLAB

NO



ON THE FLOOR/FLOOR CREATE STRAIGHT STRIPES HAVING THE SAME ORIENTATION OF THE BACK OF THE SLAB

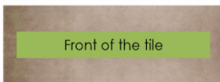
Back of the tile



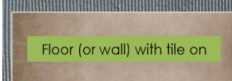
Floor (or wall)



Front of the tile



Floor (or wall) with tile on



JIM'S TOP TIPS

Always use a slant notched trowel which enables more air to be expelled giving a better bond.

Remember the rule of 13, use a 10mm for the wall/floor and a 3mm for back-buttering (or a 9mm and 4mm).

Always work in straight lines parallel with the short edge of the tile.

The adhesive on the floor/wall ought to be applied in the same straight line direction as the back-butter - this also ensure the maximum coverage and minimum trapped air.

Use a levelling system.

Work in pairs.

WORKING WITH LARGE SLABS - FITTING

SLANT RIDGE NOTCHED TROWEL

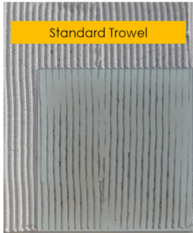
PROVIDES THE BEST COVERAGE (95/97%)
 FAR BETTER THAN STANDARD SQUARE NOTCH (75%-80%)

SIZES:

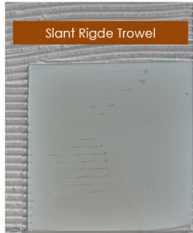
6 mm - 1/4"
 8 mm - 5/16"
 10 mm - 3/8"

DIMENSIONS:
 28x13 cm (11"x5 1/8")

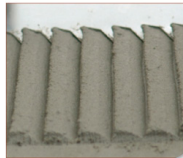
ERGONOMIC RUBBER HANDLE



Standard Trowel

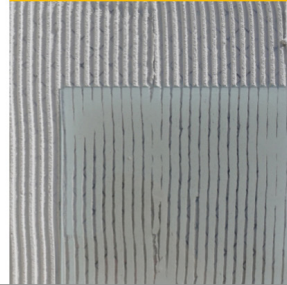


Slant Ridge Trowel



SLANT RIDGE NOTCHED TROWEL VS STANDARD SQUARE NOTCHED TROWEL

Standard Trowel
 COVERAGE 75-80%



Slant Ridge Trowel
 COVERAGE 95-97%



RAI-FIX SYSTEM

British standards require secondary fixing when installing tiles above 3 meters in height when tiles are 0.1m² or greater in size.

We offer a Raimondi RAI-FIX system with stainless steel plates designed for porcelain tiles 6mm or thicker.

Our system has two parts:

- The first is an assembly (supplied with or without grinder and porcelain table blade) which cuts the angled grooves in the back of the tile into which the stainless steel plates are inserted.
- The second is a selection of stainless steel plates of 5mm, 6mm and 8mm. Please note the 5mm steel plates must be fixed into the grooves with a suitable adhesive.



WORKING WITH LARGE SLABS - FITTING

Method:

- Cut groove in the back of the tile.
- Glue steel plate in place if using a 5mm plate.
- After back-buttering the tile and applying the adhesive to the substrate, position the tile in place and then use a fixing method suitable for the substrate.



Cut a groove using our assembly.



Install appropriate steel plate.



Fix steel plate to substrate using appropriate fixings.



Note: the size of the steel plates (5mm, 6mm, 8mm) refers to the extent to which the tongue protrudes from the plate and fits into the tile. All steel plates are the same length and width.

RLS LEVELLING SYSTEM

Use of the levelling system such as the RLS (Fig.1), or the VITE system (Fig.2) is recommended.



RLS – RAIMONDI LEVELLING SYSTEM



Fig. 1

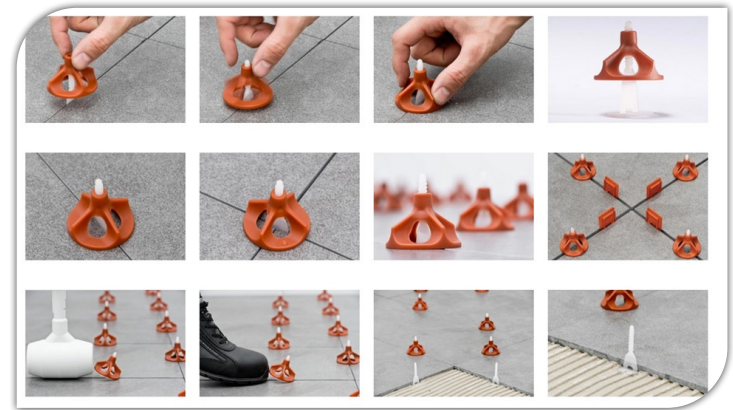


Fig. 2

CONTACT US

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MEMBERS OF THE FOLLOWING ORGANISATIONS

