





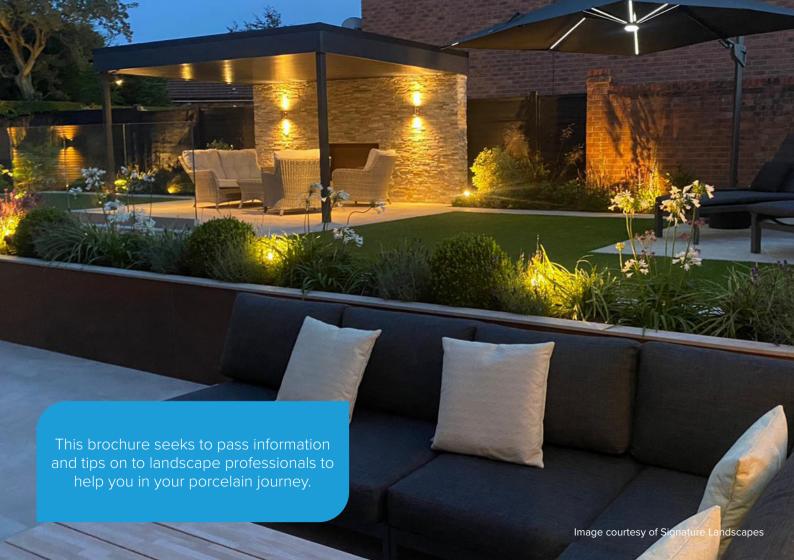
LANDSCAPERS GUIDE

WORKING WITH 20MM THICK PORCELAIN



AQUACUT / TILERS TOOLS

Service Providers of the Year Award Winners, Association of Professional Landscapers



A message from the late Tony McCormack ~ pavingexpert.com

Most of us know the story behind the traditional three-legged stool, a perennial favourite of milking parlours everywhere. By having three legs, they find themselves steady and stable no matter how uneven the ground, whereas a four-legged stool or chair might wobble and rock.

A sound business also relies on three sturdy legs for support and to keep it steady. A passionate leader to drive it forward; a skilled and willing workforce to keep it moving; and trustworthy, reliable suppliers that keep it stocked with all the best tools and materials. No matter how uneven the ground, no matter how challenging the conditions underfoot, these three legs will always provide stability and security.

For me, Aquacut and its associated businesses are the epitome of that vital third leg, the very essence of a supportive partner in your business, providing yourself and your staff with all that's best for the professional installation of porcelain paving.

But it's so much more than that. It's the sheer depth of knowledge they possess from decades serving the trade, plus the commitment to develop new and exciting products, such as the amazing FUGA-PAVE system which provides the bed, the bond, and the jointing for all your porcelain jobs. It's one job, so use one system to ensure compatibility, performance, and a highly competitive price.

Porcelain makes new demands of us as paving installers. There's less wriggle-room than there was with natural stone, trickier cutting than presented by concrete pavers, and far higher expectations from the customers. We all need to 'up our game' and that requires us to have a reliable partner supporting us from the initial setting out to the final wipe-down with a damp sponge, from mixing the bedding to training on how best to cut those awkward fiddly bits that can make or break a job.

And beyond that, the modern customer expects after sales support in the form of cleaning, protecting and basic maintenance. Not only the right products, but the right knowledge, that critical depth of understanding and familiarity with all the latest developments that ensure your business stays ahead of the crowd.

Aquacut can provide all of that, they can be the third leg that ensures your business stays upright, productive and, most important of all, profitable.



INTRODUCTION

With a long history of serving the landscaping sector, Aquacut Group is often approached for advice around processing porcelain and suitability of our tools, equipment and consumables. We are certain of the passion landscapers have for their industry and their thirst for knowledge. In an endeavour to reach more professionals around the country, we decided to create this booklet.

Clients are increasingly choosing 20mm thick porcelain over natural stone or cementitious products with material suppliers reporting that porcelain outsells other products. Discerning clients are turning to porcelain tiles as they offer many advantages, including:

- Tiles come in a huge variety to suit many tastes.
- There are many landscape suppliers offering lots of choice within easy travel distance of most consumers.
- Porcelain is consistent over each tile range, allowing for a more precise installation.
- We have seen images of stunning projects installed by professional landscapers.
- Porcelain is hard wearing and is a low maintenance product, certainly much less than for natural stone and concrete based installations.
- The material is almost (but not absolutely) impermeable. Porcelain can be easily treated to remove stains. Tile cleaning and protection solutions are simple to use, allowing porcelain to be brought back to a just-installed look with ease, year after year.

With increasing use of porcelain in landscaped areas, professional landscapers have recognised they need to:

- Develop their 'porcelain' skills.
- Use the best equipment for handling, processing / cutting, and installing the thick porcelain slabs.
- Understand the best techniques for preparing the beds, the best adhesives, and grouts to use.
- Be able to advise clients on how best to clean and maintain porcelain surfaces, so keeping them looking as good as the day they were installed.

Landscaping in the UK leads Europe. As experience of working with porcelain grows, landscape professionals offer a wider variety of specialist finishes such as starbursts, etched surfaces, bullnose profiles, steps and copings, such as Aquacut Group offers. These added value services liberate clients to realise individuality in their gardens, often creating a stunning 'WOW!' garden.

While demand continues, we will continue to offer demonstration days, supplemented by our increasing video library, accessible on our YouTube channels, but feel free to join our Facebook Group 'LPG Landscape Paving Group' where you can get lots of tips and advice.

STUART MIDDLETON

CONTENTS

01

EXAMINING THE BEST WAY
TO PREPARE THE BED, USING
FUGA-PAVE ABC INSTALLATION
AND GROUT SYSTEM



04

EXPLORING THE DIFFERENT FINISHES THAT CAN BE CREATED IN 20MM PORCELAIN



02

CONSIDERING THE VARIOUS
TOOLS, EQUIPMENT AND
CONSUMABLES



05

INTRODUCING TT PAVING SOLUTIONS



03

INTRODUCING OUR BABILONIA
DIVISION



We intend to continue offering our popular demonstration days throughout the country. Please let us know if you wish to be informed of these. Or even better, why not join our Facebook Group, 'LPG Landscape Paving Group' to get updates on demonstration days as well as new products. We have well over fifteen hundred professional landscape members who are always willing to offer friendly advice when asked. Our technical sales team are available to undertake onsite demonstrations so just give us a call. Feel free to drop in and visit us at our premises at Appleton, Cheshire if you are in the area. We'd be delighted to discuss your projects and we make a great cuppa too!

EXAMINING THE BEST WAY TO PREPARE THE BED, USING THE FUGA-PAVE ABC INSTALLATION AND GROUT SYSTEM

Working closely with landscape professionals and adhesives scientists we developed our FUGA-PAVE ABC system. The first system specially formulated for landscapers. The FUGA-PAVE ABC system is a great improvement on traditional installation and grouting products and is guaranteed too.

In this section we explore:

- 1. HOW TO PREPARE THE BED
- 2. USING THE FUGA-PAVE ABC INSTALLATION SYSTEM PARTS A AND B
- 3. USING THE FUGA-PAVE ABC INSTALLATION SYSTEM PART C, FLEX CH GROUT
- 4. WHY WE WOULD NOT RECOMMEND SAND + CEMENT MORTAR FOR PORCELAIN INSTALLATIONS
- 5. WHY WE DO NOT RECOMMEND BRUSH-IN GROUT FOR PORCELAIN INSTALLATIONS



Full installation instructions are contained on the backs of our FUGA-PAVE bags of products. Please read these carefully. Feel free to call us on **01565 344860** if you have any questions or visit our YouTube video channel - just search for FUGA-PAVE and you'll find a number of instructional videos. You may also get tips on our 'LPG Landscape Paving Group' Facebook group which was specially created for landscape professionals.

1. HOW TO PREPARE THE BED

For a successful application:

Ensure the area to be tiled is above the water table:

- Assess water migration channels and best method to how and where any water will drain after project completion.
- This will avoid any standing water on the tile finish and prevent any drainage towards any buildings.

A lack of suitable drainage can be very problematic for external tiling systems. These include:

- · Cracked tiles.
- Efflorescence discolouration of the grout.
- Staining and patchy appearance incorrect protection and sealing of the surface.
- · Debonding flags.
- Weathering (freeze thaw cycle low temperatures), (thermal expansion - high temperatures).

Assess the material being installed:

- Porcelain.
- · Natural stone.
- · Cementitious products.

Assess weather conditions. Consider the working temperatures for the materials being used. Always protect your work from the elements and weather conditions and ensure all products are set before removing any protection. The foregoing is a summary and elements of the above are discussed in greater detail later in this guide. As ever, please feel free to give us a call on 01565 344860 should you wish to discuss your specific project. There are a number of methods which may be considered for installing porcelain in an outdoor environment, which includes dry-laying tiles using suitable pedestals, the cementitious route used by landscapers for many years when installing natural stone or cementitious flags and the method described in this guide. We suggest a full exploration of the pros and cons of each process is undertaken with your client and a written note is maintained in the project file left behind with the client.

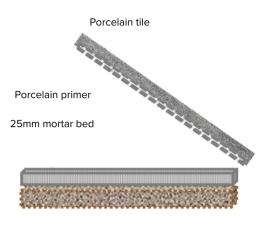


PREPARING THE BED

Professional landscapers know that the secret to long lasting hard landscaping is preparation of the bed. We assume all the required drainage work is installed and prep work for lighting etc. is factored into the plans. In discussions with our landscape friends, we recommend for porcelain installations:

- Dig out / prepare the virgin ground to ensure a solid base.
- Whacker the virgin ground to give a strong foundation.
- Install at least 100mm of hardcore base applied 50mm, whackered then the remaining 50mm and whackered again.

You are now good to start installing your flags with our FUGA-PAVE ABC system.



100 - 150mm compacted hardcore

2. USING THE FUGA-PAVE ABC INSTALLATION SYSTEM PARTS A AND B





PART B HYBRID PRIMER

Formulated to work with Part A. Creates a very strong monolithic bond between flag and mortar.

Easy to apply.

1 bag covers 25m².

Once the bed has been prepared, plan your tiling carefully:

- · Avoid installing in wet conditions.
- Mix Part A Bedding Mortar Mix with three 14 litre buckets of clean sharp / grit sand (this gives a 6:1 mix) using a suitable mixer. Dry mix until perfectly mixed. Add water until you get the consistency you are used to working with.
- Brush the back of the flag carefully to remove all dust.
 Tile manufacturing usually leaves a dusty layer which can weaken any adhesive bonds, so cleaning is very important.
- Follow the instructions on the back of the Part B, then when the flag has been cleaned, apply a thin layer of Part B to the back of the dry flag. The primer and mortar ought to be wet (i.e. not dried out) at application.

- Install the flag using a suitable levelling system such as our VITE system and tap down the flag to ensure the tile is well seated and in contact with the mortar. Check levels / falls.
- Large areas of tiles may require expansion joints to be installed, particularly if there is no room for perimeter movement.
- Ground which could be subject to movement requires the creation of a concrete raft and once allowed to properly cure, the use of an anti-fracture membrane.



There is a large array of different adhesives on the market, so please take care to ensure the adhesive you are considering is suitable for your project. Working with adhesives scientists, we have simplified choice and created our FUGA-PAVE ABC system which has the following attractions:

- FUGA-PAVE Parts A and B are guaranteed.
- Up to 60% stronger than traditional sand + cement installations.
- Permeable system so allowing water to drain through the installation.
- Ought to work out cheaper than sand + cement.
- Eco-friendly with only 20% of the CO2 omissions of sand + cement mortars.
- Easier to use and less digging out necessary, saving time and money.
- Holds the flags very well during installation, no sagging.

3. USING THE FUGA-PAVE ABC INSTALLATION SYSTEM PART C, FLEX CH GROUT

Once the flags have been installed for a week or so during dry weather, the installation ought to be ready for grouting:

- · Kick off the VITE levelling clips.
- · Make sure the grout joints are not wet.
- Follow the instructions on the back of the bag.
- Do not wet the flags as water will run into the joints. (If using our grout on natural stone or cementitious products, seal the material first).
- Prepare your grout and apply using a grout float, making sure the grout is well applied into the
 joints.
- Once dry to the touch, wash off, ideally the same day, using a suitable washboy system such as our very popular Pedalo system.
- We recommend first time users familiarise themselves with our videos on YouTube, just search for FUGA-PAVE and you'll find
 us.



There are lots of grouts for sale and a number of these are just not suitable for porcelain installations. Our FUGA-PAVE Flex CH Grout has the following attractions:

- It creates a strong joint.
- Retains flexibility in case of micro-movements of the flags during hot / cold cycles.
- · Nice clean looking finish.
- · Passes the drop water test so water doesn't wash detritus into the joint (which avoids damage).
- Eco-friendly product.
- · Range of five popular colours.
- Available in 5kg buckets or 20kg bags.
- Naturally antibacterial.
- Suitable for joints up to 20mm wide.
- Easy to clean and maintain.

The British Standard says grout joints for external tiling ought to be 5mm minimum. Using narrower grout joints may lead to insufficient movement capability in the tiles which in turn could result in tiles cracking or tiles lifting / chipping. Clients who demand narrower grout joints ought to be made aware of the dangers of a grout joint which is too narrow, and a record made in the client's file. Cementitious grouts have been used for many years and professional landscapers will be familiar with using those types of products. The benefit is they are cheaper than resin-based grouts. The drawback is cementitious grouts are more prone to allowing water penetration during the early weeks following installation. Also, the colour can be bleached

by UV rays. Our FUGA-PAVE Flex CH Grout is a resin hybrid which is colour fast and passes the dropwater test, so preventing water penetration. It has been well used by landscape professionals and has performed well.

Never grout before the sub-base is dry.

Use the best grout for the job.

Make sure flags are clean before grouting to avoid contaminating the grout.

Mix with water as per instructions on the bag.

Use the correct floats and trowels

Use the correct floats and trowels Don't over-wet when cleaning off.

Use clean water to clean off the grout (see our very popular Raimondi Pedalo system). Visit our YouTube channel to see our demonstrations.

DO NOT GROUT IN HOT WEATHER

JIM'S TOP TIPS

4. WHY WE WOULD NOT RECOMMEND SAND + CEMENT MORTAR FOR PORCELAIN INSTALLATIONS

As well as the many benefits of using FUGA-PAVE detailed in previous pages, there are dangers of using sand + cement mortars:

- Typically, sand + cement mortar is made using a 4:1 mix sand:cement. In laboratory tests we conducted it was clear that mortar created in this way is likely to be impermeable. The risk is that if water can get through the joint, it will sit behind the flag and during freeze / thaw cycles may dislodge the tile.
- A traditional sand + cement mortar will offer only weak adhesion with the porcelain flag, so additives will be required as will the use of an SBR product, adding to cost and complexity. As well as being more expensive, the risks are that SBR can contaminate the face of the flag and be very difficult to remove.
- A labourer may struggle to consistently create a perfect sand + cement + additives mix, so there is increased danger of mixing errors.

5. WHY WE DO NOT RECOMMEND BRUSH-IN GROUT FOR PORCELAIN INSTALLATIONS

Brush-in grouts we have trialled have inevitably created porous joints which means water can penetrate the joint. The dangers are:

- The water could sit behind the flag and 'pop' the tile during freeze / thaw cycles, or during hot weather causing a steam effect.
- As water washes over the porcelain tile (which is impervious), the run-off will tend to push dirt into the joint creating a bedding compost for weeds, blackspot, and algae growth.
- Water in the joint will also expand / contract during freeze / thaw cycles causing the joint to break apart, quickly looking shabby.
- Brush-in joints may not be UV stable causing them to bleach during sunny weather.



CONSIDERING THE VARIOUS TOOLS, EQUIPMENT AND CONSUMABLES

(for working with 20mm thick porcelain)

Porcelain is a very hard material and requires robust equipment to process it. Aquacut's Tilers Tools division (www.tilerstools. co.uk) considers the wide variety of equipment, tools and consumables that are available to help landscape professionals achieve that perfect finish.

There is a wide range of tools, equipment, and consumables to choose from to ensure a high-quality finish and to make the professionals job easier. We supply a wide range of high-quality tools, equipment, and consumables for professional landscapers. Top of the landscaper's list is a high-quality wet saw and accessories. These will enable the landscaper to make straight cuts into porcelain as well as mitred edges for steps and downstands. Accessories include transformer, roller bench, side squares, top-quality diamond blades and dressing stones especially for porcelain. Next comes diamond blades for use with a grinder to achieve small cut-ins.



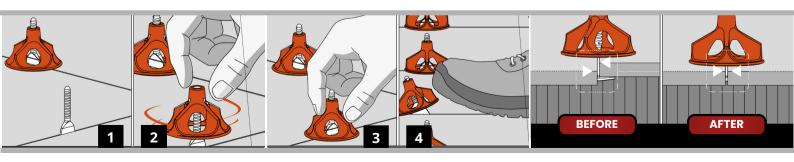
We show examples of the most popular types of equipment, tools, and accessories in the following pages. Tilers Tools has all of these, usually in stock for next day delivery. In the present environment, good landscapers are stuffed with job opportunities, so the thing that most restricts their ability to earn more is the lack of time. Using the right machines and tools ought to save considerable time, so giving back the opportunity to earn more money. Many landscapers we have spoken with are of the view even expensive pieces of kit can earn back their cost in as little as a couple of decent jobs.

Tilers Tools Landscapers VITE Levelling Kits are very popular in the landscaping community as they are ideal for installing thicker porcelain and natural stone from 14mm up to 26mm thick. The VITE Levelling Kit is easy to use and it speeds up the job, removing the risk of lippage between flags which increases customer satisfaction. The 5mm spacers are the most commonly used by professional landscapers.

Our Kit consists of:

- A sturdy bucket to store your VITE in one place.
- 100 no VITE caps which are reusable.
- 300 no 1mm vite clips.
- 200 no 5mm + spacers.



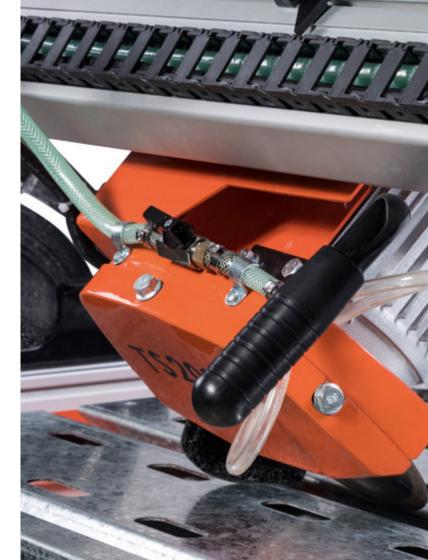


CUTTING

There is a large range of equipment on the market. Landscape professionals are familiar with Stihl saws for cutting natural stone and cementitious slabs, however they are not suitable for cutting porcelain. There are two systems landscapers may wish to consider using in combination when cutting thicker porcelain:

- We recommend using a quality wet saw with a suitable diamond blade for porcelain.
- For cutting in small areas, use a small 115mm or 125mm porcelain diamond blade on your grinder.

A high-quality wet saw ought to be the main cutting machine for porcelain. Tilers Tools' wet saws manufactured by Golz are probably the best-selling wet saws for landscape professionals in the UK. They will cut thick porcelain and stone with ease and can cut mitred joints too for that better finish on steps and risers.



Golz Wet Saws

- Adjustable cutting head to 45 degrees for mitres.
- Embedded cable protection chain to protect the cable from damage.
- Removable water tray.
- Quick-release water pump for quick and easy pump change.
- · Removable cutting table for easy cleaning.
- · Angle stop.
- · Tool-free cutting head locking system.
- Foldable legs and transport wheels and handle for easy transport.
- · Ball-bearing retractable cutting head.
- · Specialised water nozzle for efficient cooling.
- Handle wheel feeding system, easy for long cutting on selected models.



We also offer less powerful machines which are good build quality but are usually bought for thinner porcelain projects. Feel free to call us to discuss the best machines for your needs and any special offers.



Always use the right blade for the material you intend to cut. The small 115mm or 125mm grinder diamond blades for porcelain are ideal for cutting in small cuts. The larger porcelain diamond blades are for wet saw use. Our range of *TT Blades* are the best quality porcelain blades which sell at attractive prices. And don't forget to use your dressing stones regularly to keep your blade in best cutting condition.



JIM'S

Invest in best quality equipment, it will save you time allowing you to earn more money. Always work on a solid platform or workstation.

Use the right tools for the job in hand.

Use a wet saw for cutting porcelain flags.

Use the correct diamond blade especially made for porcelain.

Use a dressing stone after every couple of cuts to keep your blade performing well.

Let your blade do the work, don't force it through the material.

Change the water in the wet saw regularly to avoid recycling slip through the water-cooling system.

Maintain your wet saw and get into the habit of a good end of day clean down process.

Always use a levelling system such as our very popular Raimondi VITE system. It will speed up your work

and increase customer satisfaction.



Image courtesy of Signature Lanc

JIM'S TOP TIPS

Always be safe, wear suitable PPE.

Plan the job carefully and make sure you have the right kit and consumables to hand.

Choosing the correct tools and consumables is vital.

Buy the best quality tools you can afford.

Using the correct machinery saves manpower and the risk of fatigue.

GROUND PREPARATION

There is a wide range of tools and equipment that professional landscapers are investing in to make their jobs easier, faster, and uniformly attractive. Ground preparation machines such as mini or micro-diggers, tracked dumpers, compactors and vibro plates are being bought or hired by those professionals seeking to speed up their job and achieve an attractive finish.

HANDLING

Be safe, save time and effort by using suitable handling systems such as our RV175 Vacuum Cup and Slab Lifters.



cope with even riven tiles and make handling and laying so much easier, thus avoiding contaminating the surface of the flags and avoiding trapped fingers.



Slab lifters help move flags around safely. Iwo-man slab lifters are ideal for those heavier flags. The two man slab lifters can be used in pairs for even safer lifting of large slabs.

INTRODUCING OUR BABILONIA DIVISION

(exciting room in the garden products offered by Babilonia)

Babilonia enables landscapers and designers to source everything they need to create a fully bespoke and luxurious garden room from one supplier.

Our Babilonia division sources or manufactures the best quality goods, designed to enhance garden living. Our products are modern and stylish and are changed regularly to meet emerging tastes and ensure our products remain market leading.

Our products are made to order to your design, ensuring you optimise every bit of space in a garden and meet your client's objectives. We are happy to provide our products and services for partial projects within an already enhanced space such as a new kitchen or new garden furniture.



What makes us different?

Babilonia allows you to source most of your project's requirements from one supplier, saving you considerable time, effort and hassle. Working with Babilonia means you will have one point of contact for all your garden requirements who will provide you with assistance every step of the way.

Not only will we supply the highest quality products, our own fully employed fabricators will finish products to exacting requirements to make finished products unique to you.

Please contact us on 01565 750666 to discuss our standard portfolio or a bespoke design



OUTDOOR LUXURIOUS KITCHENS

We design and build traditional and contemporary outdoor kitchens to suit every style and space. Our bespoke garden kitchens are made to order so they can incorporate custom built units, outdoor kitchen islands, outdoor kitchen bars, pizza ovens, barbecues, and appliances.



MODERN PERGOLAS

Our aluminium pergolas have a minimalist design and will fit perfectly into any environment, creating additional space all year round. The configuration possibilities are almost endless allowing you to select the colour, measurements, slats, doors, lighting, and sensors.



STYLISH SPAS AND POOLS

Babilonia's manufacturer of spas and pools has decades of experience, supplying a complete bespoke design with any size and layout to suit your customer. Products are finished with an extensive range of luxurious mosaics with varying blends and effects.



TRADITIONAL PERGOLAS

Our beautiful oak framed structures are completely watertight and designed to perfectly complement their surroundings in any garden. Like our aluminium pergolas, the oak structures can be freestanding or attached directly onto the side of a building.



HEATING SOLUTIONS

We provide a range of energy-efficient outdoor heaters that provide a cosy snug environment while creating a focal point in outdoor spaces.



STUNNING BESPOKE BALUSTRADES

Our technical experts are on hand to help you implement the perfect balustrade on staircases, decking, balconies, roof areas, ramps, walkways, or just about anywhere in your garden, or internally.



ENHANCED LIGHTING

Babilonia offers a range of outdoor lighting in a wide selection of styles, colours, and power options to allow you to stay in your garden for longer during the winter months and add extra security measures.



ENTERTAINMENT WALLS

Babilonia offers weatherproof TV and sound systems to enhance your outdoor living experience.



BESPOKE FURNITURE AND PLANTERS

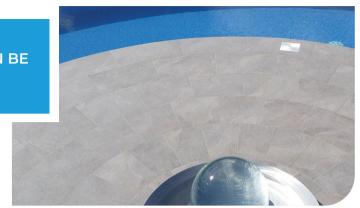
We can create luxury garden furniture and planters of all shapes and sizes to fit in any space. We can clad your furniture to many colours and materials to blend in with your garden style.



Our Babilonia logo has been inspired by an ancient African symbol for Mother Earth

EXPLORING THE DIFFERENT FINISHES THAT CAN BE CREATED IN 20MM PORCELAIN

Aquacut's fabrication division (www.aquacut.co.uk) explores the range of services that are offered to turn porcelain tiles into functional and beautiful building finishes. There is considerable demand from garden designers, landscapers, and clients to fabricate unique, often 'WOW' features in gardens using client's porcelain.



Porcelain is a very hard material which has advantages when considering resistance to deterioration, but the strength of porcelain may make it challenging for landscape professionals to work on site, other than straightforward cuts.

In the last few years, demand for fabrication services has grown with the increasing popularity of porcelain, multiplied by designers' awareness of the complexity and beauty that can be achieved in this material. The following is a list of the most popular special design features commissioned by landscape professionals:

- Waterjet cutting simple and complex shapes.
- Bullnosing edges, either straight or curved. There is a variety of edge profiles that can be offered.
- · Step cladding.
- Anti-slip protection on porcelain surfaces, particularly in demand for steps, ramps, and pools.
- Pool features and drainage grills made from tiles or steel.
- Cutting drip-grooves underneath tiles. Most fabricators have experienced design teams to help clients achieve their bespoke designs, but Aquacut has a very experienced team who can help create bespoke designs.
- Templating challenging shapes, creating CAD files and cutting material to size and shape to give a perfect finish.

- Etching designs into tiles and stone.
- Bonding other materials into porcelain to create unique, long-lasting features.
- House signs created in a range of materials, including customer's own porcelain.
- Highlighting signage or designs with long-lasting specialist paints.
- Creating designs for large external works, for example as commissioned by local government authorities, especially popular in regeneration schemes.

What can be achieved with porcelain is truly limited by your imagination!

LANDSCAPE FEATURES CREATED BY AQUACUT

Aquacut has many years processing stone and concrete materials for landscape professionals but the increasing demand to use 20mm thick porcelain in landscape environments has seen us working closely with our clients to create stunning and functional building finishes.



Remembering those killed at Peterloon Manchester 200 years ago, Aquacut produced numerous inserts such as the hands, hearts, bobbins and reels from a variety of materials.



Aquacut's experienced designers created CAD files from drawings and are proud to have our work on display at St Paul's Cathedral in London.

ETCHING DESIGNS INTO TILE AND STONE

Etching is a specialist technique that removes a measured amount of the surface of the material to create specific effects such as beautiful designs, signage, improve non-slip properties or in combination with the use of specialist paints to create stand-out features in slabs whether in the ground or on walls. Porcelain is particularly good for etching designs, for example go into any Land Rover dealership in the country and you'll see a compass design etched into porcelain tiles on the floor. Aquacut uses different etching technologies to offer the best finish for clients



Etching on its own works best with dark material to give a stronger contrast, however designers have valued the subtlety an etched design in lighter material can show, with the design becoming more or less visible as the viewer moves over the face of the material. Aquacut's specialist paints are developed for exterior and interior applications, and paints with specific RAL colours can be mixed to increase the design's visibility and impact, when combined with an etched surface.

BULLNOSING PORCELAIN AND STONE EDGES

A bullnosed edge can be functional and / or decorative. Functional edges may include for swimming pool nosings to avoid hard corners, step edges to take trip dangers out of an otherwise square edge. Decorative edges may help raise the appearance of a project.

Bullnosed edges are most often seen in:

- Step treads.
- Copings.
- Swimming pool edges.
- Windowsills and various other garden features such as fire pits.



At Aquacut, we offer a wide range of bullnose profiles as shown on the next page. We can achieve bullnosed edges on curved or straight pieces. Curved pieces are more expensive as they need to be achieved using hand-tools. Bullnosing straight as they are processed using multiple head large industrial machines especially made for processing porcelain. It is possible for very simple tile profiles to be achieved on site but that requires investment in specialist tools and equipment that Tilers

Tools can supply.



The **small pencil round** gives the benefits of a rounded edge whilst keeping much of the flat edge.



The **half bullnose** is generally a quarter round circle which has a diameter the thickness of the material.



The **full bullnose** is often used where the face of the material overhangs the riser (vertical) piece.



The **eased profile** curve flows round the whole edge. This is our most popular edge, used in stair treads, skirtings and swimming pool edges.



The **micro bevel** is usually between 2-5mm wide at a 45 degree angle to the face / edge of the material. It is much less obvious but still removes the sharpness of the edge.



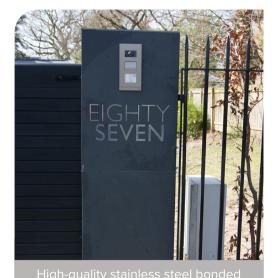
The **45 degree mitre** is used to create a sharp edge, however this can be brittle, so it is often used when bonding two together to create corners.

We recommend you discuss the design requirements with your fabricator. If necessary, the fabricator ought to be able to show samples of their work.

HOUSE AND OTHER SIGNAGE

It is possible to combine materials such as porcelain, stone and metals as well as using specialist techniques such as waterjet cutting, etching, and painting to create distinctive signage which can be functional (such as house signs / directions) or fun / attractive (such as funny sayings).

Designers ought to explore the full range of etching options with their fabricator. Aquacut's range of services enables us to offer the widest range of finishes. Our experienced designers can offer the most imaginative signage for your clients. With decades of experience working with porcelain, our designers will help turn even basic doodles into attractive designs.





High-quality stainless steel bonded into porcelain or stone forms an attractive house sign.

We strongly recommend architects, designers and particularly landscape professionals take time to visit our showroom in Cheshire to gain a greater understanding of what can be achieved, alternatively invite Aquacut's experienced team to visit you with samples to discuss your overall project and design requirements.

Feel free to explore Aquacut's web pages; www.aquacut.co.uk or give us a call on **01565 750666** to discuss your project and how we may be able to help. Aquacut's artisans have many years' experience working with porcelain and our range of services makes us uniquely placed to assist with even the most challenging project.

INTRODUCING TT PAVING SOLUTIONS²

(REMOVE-IT | CLEAN-IT | SEAL-IT)

In this section we look at TT Paving Solutions², our systems and treatment approach, specifically designed for professional landscapers.

- Removing grout haze and stains from tiles after laying, or built-up dirt over time, using our REMOVE-IT products.
- Cleaning and restoring tiles back to that 'just installed' look, year after year using our CLEAN-IT products.
- Sealing and protecting surfaces against stains and easier run-off of water, making regular cleaning effortless by using our SEAL-IT product.

There are several chemical companies out there with various claims for their products. We embarked on a detailed research project to find the best provider of solutions and machinery designed for the landscape environment so we could offer a complete cleaning and maintenance system for professional landscapers. We tested the products against those supplied by other leading chemical manufacturers and TT Paving



Solutions² performed at least as good as those others, and to our high standards in which we set out to achieve.

The purpose of this section is to explain the use and application methods for TT Paving Solutions² and the equipment necessary for the best routine maintenance and extraordinary treatment and care (periodically as needed). These instructions are for all surfaces in porcelain tiles with a view to long-term preservation of the appearance of the material. However, TT Paving Solutions² is also ideal for use on natural stone and cementitious products.

Please feel free to call us on **01565 344860** should you wish to discuss your project



REMOVE-IT

WASHING AFTER LAYING

This is one of the most important stages when installing porcelain, indoors or outdoors. Yet it's often not carried out properly, leading to many problems in the future, and end users becoming dissatisfied with their dull looking tiled areas.

Post installation cleaning is a two-stage process:

- 1. Immediately after grouting when the grout is touch dry, undertake a good wash using clean water. We recommend you use a sensible washboy system such as our very popular Raimondi Pedalo which ensures you do not over-wet the grout during cleaning.
- 2. Use our TT Paving Solutions² cleaner to remove any residual grout haze. We recommend not to wash the tiles or grout joints with any chemicals till at least 72 hours after you have grouted, or in accordance with the manufacturer's specification data sheet, and the grout is fully dried. Avoid using a pressure washer as this can cause damage to newly installed grout lines.

In the event the initial clean does not remove entirely the grout haze, it's important to use a high-quality cleaner to remove any residues, like grout and general dust and dirt. If you only use water, or low-quality chemicals which are not designed to remove these types of residues, you may be left with a grout haze, which is like a white, dusty-looking film. If you seal the tile without cleaning it properly, you will sandwich the dirt between the tile and the sealant and will lock in all that dirt, which will still be visible and may cause the sealer to fail.



LET'S LOOK AT A COUPLE OF BEFORE AND AFTER EXAMPLES



The left-hand photos show the 'before' pictures which illustrate how there can be a haze over the tiles after installation. The right-hand picture shows the tiles after cleaning, as they should be.

On acid-resistant porcelain floors, we recommend our Grout Haze Remover diluted 1:5. It's an acid detergent, but not aggressive, so always check the reaction of the product on a small section of material before proceeding.

For medium to large areas, we recommend using our Macchia and Ventosa machines. The Macchia is designed for scrubbing the tile surface using a suitable abrasive pad. It comes with a solution dispenser and works the solution deep into the material being cleaned. The Ventosa is designed to remove, and rinse clean your tiles, leaving them spotless.

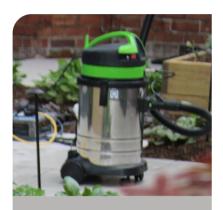
Visit www.tilerstools.co.uk to download our technical data sheets



TT Paving Solutions² Macchia Machine

A rectangular high speed oscillating machine (10x faster than a traditional rotary machine) which cleans and restores the surfaces of tiles and natural stones.

This new machine forms part of the TT Paving Solutions² Complete Cleaning System. The machine uses up to 70% less water and product, allowing for a better and safer environment. Lightweight (20kg), portable, and simple to use compared to a traditional rotary machine. Especially effective when used in conjunction with the Ventosa machine.



TT Paving Solutions² Ventosa Machine

A powerful 1400 watt wet vacuum cleaner with rinse spray jet specifically designed to remove leftover residue after using the Macchia machine. The rinse spray jet feature cleans the tiles, leading to a spotless, vacuum dry

The Raimondi Pedalo washboy kit is ideal for quickly and easily cleaning grout from floors and walls. Its pole sponge enables you to work in an upright position at all times and the pedal eases and speeds the squeezing action. Great for undertaking the first wash after grouting. View our YouTube video to see the Pedalo in action





The BERTA sponge machine speeds up cleaning of the tiles and can clean even epoxy residue after a suitable wash.
The BERTA is a must for professional landscapers who specialise in large installations. See our video of the BERTA in action by clicking here.

JIM'S TOP TIPS

We also recommend using our black / yellow stiff deck brush with its swivel head and long 5 section pole. Helping loosen any stubborn dirt or grout as part as the overall cleaning process system. After the installation clean with fresh water. The grout should be left for at least three days to set before using chemical cleaners.

CI FAN-IT

TT PAVING SOLUTIONS² EVERYDAY CLEANER - PH NEUTRAL ROUTINE MAINTENANCE

To preserve the beauty of porcelain tile surfaces, TT Paving Solutions² highly recommends our Everyday Cleaner for regular maintenance and as it is PH neutral, the cleaner can be used safely by end users at a high dilution ratio (1:200), to keep paving clean and free of dirt and grime.



Our Everyday Cleaner is a pH neutral, highly concentrated everyday cleaner that is 100% biodegradable and can be used on all surfaces and does not harm even the most delicate wall and floor coverings. A little goes a very long way. One litre will cover 1,500m² and there is no need to rinse as it is so diluted (only if used at a 1:200 ratio).

TT PAVING SOLUTIONS² HEAVY DUTY CLEANER REMOVING STAINS AND YEARS OF BUILT-UP DIRT

Our Heavy Duty Cleaner is a high-quality alkaline cleaner, which can be used on porcelain and ceramics to remove those stubborn stains, decaying leaves and years of built-up dirt, grime, and high traffic areas, which the outdoor environment constantly throws at your paving. Bringing your outdoor porcelain tiles back to their natural look as if they were just laid again.



SEAL-IT

TT PAVING SOLUTIONS² UNIVERSAL WATER BASED SEALER

SEAL AND PROTECT AFTER CLEANING

Porcelain tiles are largely impermeable so one of the great attractions is they are much easier to get back to that 'just installed' look. However, porcelain is not entirely impermeable, and it is possible that due to the outdoor environment, stains and marks will sit within the surface of the tiles caused from decaying leaves, heavy foot traffic or rust for example.

To help protect against such stains and make cleaning tiles and grout joints that much easier, we recommend using our high-quality Universal Water Based Sealer, which is eco-friendly. The product is clear, does not change the appearance of the surface of the material and is walkable within a couple of hours. It's simple to apply by using our Applicator Kit & Pad.

Once sealed you will notice water beading on the surface and cementitious grout joints. Any stains or marks will easily clean away after sealing.



REMOVE-IT

Below you will find our remaining REMOVE-IT products which make up our full TT Paving Solutions² line-up. All designed to remove problems that may arise in external paved areas.

TT PAVING SOLUTIONS² EPOXY REMOVER

Our Epoxy Remover is fast acting, a highly effective formula and ready to use. It removes thick stubborn build-up of epoxy, resins and hybrid grouts that are bonded to the face of the tiles. Comes in a 5 litre container and is suitable only on porcelain and ceramic tiles.



TT PAVING SOLUTIONS² RUST REMOVER

Our Rust Remover solution is highly effective at removing those unsightly rust stains from your porcelain tiles and natural stone. Ready to use and starts to work from 15 minutes after application.



TT PAVING SOLUTIONS² ALGAE AND BLACK SPOT REMOVER

Our highly effective outdoor professional Algae and Black Spot Remover is easy to use and fast acting. For use on porcelain, natural stone, and masonry. Used in conjunction with our Macchia cleaning machine and our heavy-duty Scouring Pads, it will remove those patches of algae, black spots and lichens effortlessly.



TT PAVING SOLUTIONS² OIL AND GREASE REMOVER

Our Oil and Grease Remover is specially formulated to remove oily and greasy stains including cooking oils, food fats and general grease stains. Suitable for use on porcelain, marble, granite, limestone, and porous stone. Ready to use and removes even the deepest of grease stains.



TT PAVING SOLUTIONS² EXTREME RESIDUE REMOVER

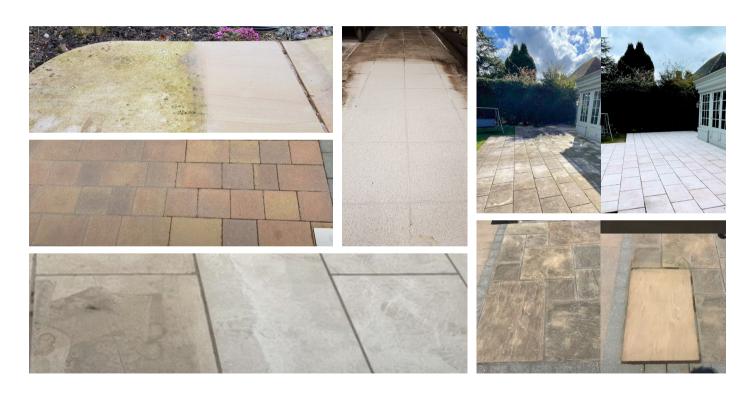
Our Extreme Residue Remover is a non-acidic cleaning powder designed to aid the cleaning process by helping to remove built-up dirt, traffic wear and stubborn marks. Ready to use and simply add water to create a compounding paste and work into the area required by using our Macchia, or for smaller areas, use an abrasive pad.





TT PAVING SOLUTIONS²

BEFORE AND AFTER GALLERY





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 envious 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 three websites:

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

Feel free to browse these, call us on **01565 750666** (Aquacut and Babilonia) or **01565 344860** (Tilers Tools), 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.

CONTACT US

Unit 4A Stretton Distribution Centre
Off Grappenhall Lane
Appleton
Warrington
WA4 4QT

TILERS TOOLS

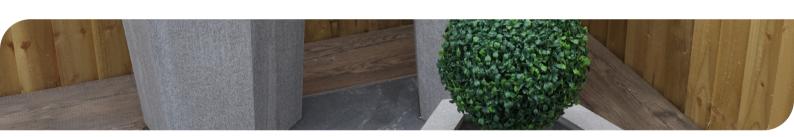
01565 344860 sales@tilerstools.co.uk www.tilerstools.co.uk

AQUACUT

01565 750666 sales@aquacut.co.uk www.aquacut.co.uk

BABILONIA

01565 750666 sales@aquacut.co.uk www.babilonia.co.uk



MEMBERS OF THE FOLLOWING ORGANISATIONS







