

VITRIPIAZZA®

Vitrified Porcelain Paving

Guide to Understanding **Vitripiazza**



TALASEY
LANDSCAPING SOLUTIONS

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Welcome

This guide has been produced to outline the properties and characteristics of our Vitripiazza products. We hope this will help our retailers, installers and homeowners, to better understand, use and enjoy our Vitrified Porcelain paving and cladding products.

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What is Vitrified Paving & Cladding?

Talasey's Vitripiazza porcelain paving ranges are produced through the vitrification of its component materials, i.e., clays, feldspar and siliceous sands. These materials are sintered through firing in kilns in excess of 1200°C, compacting the elements which closes the pores giving the porcelain its excellent technical properties that enable it to be the perfect paving and cladding choice for many domestic and commercial projects.

Over recent years, it has become the pre-eminent choice for many garden designers and specifiers. The main source for Vitrified paving has traditionally been Italy, for not only style and choice but an assurance for quality. In more recent years, Turkey has begun to become a developing player in the market; with an emerging industry also in Asian countries such as India. With ever expanding choices and aesthetics, Talasey work with partners world-wide to deliver to you the very latest selections to suit all budgets and aesthetics, with a guarantee of only supplying quality specifications.



Benefits of Vitripiazza

All our Vitripiazza ranges are vitrified porcelain so, not only do homeowners and designers have a huge choice of looks and style for an imaginative and bespoke project, but you can sit back and enjoy a lovely new space with the assurance that you have Vitripiazza products that will last for many years to come. All with the added benefit of having chosen a material type that is the easiest to keep clean.

- **Hard wearing** – Very low water absorption and excellent resistance to everything the weather, the environment and people can throw at it. High resistance to UV, frost, salt and acid.
- **Low maintenance** – It's probably the easiest paving type to keep it looking 'as new'. Its fantastic technical properties mean it doesn't weather as quickly as other paving types and when it does need a general clean, it's so much less effort.
- **High stain resistance** – Vitripiazza has very low porosity meaning that spills and soiling will not stain nearly as easily as other paving products, so don't immediately panic if a glass of red wine gets spilled or a barbecue sausage is dropped.
- **Exceptional strength** – All our ranges are very strong. They are all suitable for use for pedestal installations. We even have choices for driveway use.
- **Good slip resistance** – Every range is categorised as low potential for slip, whether wet or dry.
- **Choice & natural beauty** – despite being man-made, even a trained eye might struggle to spot it. A huge selection of looks; from beautiful replications of difficult-to-get-hold-of natural stone, additionally natural timber effects, through to sleek contemporary urban styles and with numerous pattern connotations across each range, you won't sit there spotting repeats.
- **Bring the outside in** – In addition to our ranges designed for external use, some of our ranges have a complementing 10mm thick specification, textured specifically for internal use. This enables a continuity of floor design from home to garden.
- **Cladding design options** – We have wall cladding options, suitable for internal or external use, that will add that extra finesse to your project.

Choosing Vitripiazza

Quality

All our Vitripiazza paving ranges meet the requirements of BS EN 14411 Annex G - Group Bla. The required testing covers aspects including slip resistance, water absorption, dimensional accuracy, strength and abrasion resistance.

All our ranges are CE and UKCA marked in line with UK Government guidelines and industry standards. Declarations of Performance (DoP) are available on request.

Body Types

Through Full-Bodied The body of the tile colour is consistent with the raw materials used in the manufacturing. This body type is referred to as a "salt & pepper finish". The tile has no surface print, and the colour of raw materials run all the way through the tile. In this type of tile, the colour options are limited but if chipping does occur then it is normally not so visible to the naked eye.

Body Information:

- No digital printing on the upper side of the product, only a salt & pepper body.
- Body colour denotes the top surface finish.
- In this type of porcelain, there is a very limited amount of colour options available.

Colour-Bodied The body of the tile is matched to one similar to the surface print, though once laid as paving this is immaterial. There is little visible difference if there are small chips caused by accidental damage during cutting, handling and install. Keep in mind that porcelain is an extremely dense material, so the chances of chipping are very low. They still go through the same vitrification process, assuring the user of very low water absorbency, high stain resistance and long-term durability.

Body Information:

- Colour match to the surface colour which is visible through the entire product.
- Little visible difference if there are small chips.
- Can still have various finishes such as polished, slip resistant, matte.

Rectified

Our Rectified ranges are accurately machine cut to their nominal size. They are manufactured to industry standard plan size tolerances as a minimum, some ranges are tighter at +/- 1mm. With Rectified, the nominal size will be the same for each batch and each individual project, if you are a regular user.

Design Guidance:

- Our Rectified ranges being square cut edges, allow for tighter joints if desired, with less variation than when compared with Non-Rectified. We would recommend joint widths of between 5mm to 15mm.

Non-Rectified

The edges of Non-Rectified ranges are as fired and moulded; they are sorted into work size batches as they come out of the kiln. Each individual work size batch has industry standard tolerances of +/- 2mm.

To explain further; there are up to ten potential work sizes that your batch could come in. Your batch will be identified as either, work size 1, through to perhaps work size 10. For example, your nominal size may be 600mm x 600mm, but you may receive a batch sorted into work size 1 giving tiles measured nominally at 594mm x 594mm. Your supplier should give you your entire order from the same production batch so it actually makes no difference as you install.

Always check for batch match across packs prior to unpacking.

Design Guidance:

- Whilst the edges are not machined, the edges are still straight due to the high-quality moulds used on the press. We would recommend joint widths of minimum 7mm up to 15mm.



Helping you make the most of your Vitripiazza products

Should you decide to go with Talasey's Vitripiazza porcelain paving & cladding, this next section highlights considerations to make when placing your order, through to enjoying your new space and all the elements to think about in-between.

Things to Consider when Ordering

We have a large network of stockists from whom you can purchase our Vitripiazza products from. To find your nearest stockist, please visit our website at www.talasey.co.uk.

There are a few things to consider when placing your order for Vitripiazza:

- Porcelain products are a little like wallpaper, in that, the production batches are important. As with wallpaper, the same colour and print are used in every production run however there can be a slight shade variation between each production run. Every Vitripiazza range will have its own date of manufacture and/or shade number reference either on the edge of the tile or on the packaging. This forms the batch number or batch date, required for matching products for one project.
- If you have the opportunity, it is recommended that you visit a local stockist of Vitripiazza to see the tiles laid out, where possible. Only selecting from photos, catalogues, or websites is not ideal.
- If you have received a sample piece, please be aware that this is only a small representation of the patterns that you can expect in your consignment. Each range will have a significant number of different pattern connotations to enhance that natural look once laid. Remember, where applicable to the range, the prints are replications of actual pieces of natural stone or wood, so variation is designed in. As discussed above, there will be some shade variation from batch to batch too.
- Consider what the area is going to be used for and who will be using it. For example, all our paving is tested to assure good slip resistance, and categorised as low potential for slip, but some are even better than others.
- Plan your project carefully, firstly, ensure you have enough product to finish the job to avoid potential batch availability issues if you decide to extend the area after receipt of your delivery. We recommend that an extra 10% is ordered as provision for accidental damage, cuts, or even any last minute additions.
- Consider what is involved in installation, for full advice, refer to our Vitripiazza Planning & Laying Guide. Consider who is going to do the work and what equipment is required.
- For certain installations, you may wish to install on pedestals. All of our 20mm thick range of Vitripiazza are suitable for use with pedestals, check our our full range of Pavetuf Adjustable Risers at www.talasey.co.uk.
- Finally, products being delivered direct to site/homeowners will be delivered kerbside. It is important the driver has easy access and manoeuvrability at the delivery site. Please note that the drivers cannot off-load very far from the vehicle so you may need to consider how the products will be moved to the project area.

Speak to our Customer Engagement Team for further advice. We are here to help.

Call: **0330 333 8030** | Email: sales@talasey.co.uk

Or visit the knowledge hub on www.talasey.co.uk

Receiving your Vitripiazza

A few things to remember once you receive your order at the site of installation:

- Before you unpack, ensure you have been delivered matching batches by your supplier. It's important that your shade references match, see our Understanding Batching Guide at www.talasey.co.uk for help identifying the correct information for your chosen product. Loading errors and mistakes in the supply chain are very rare but can very occasionally happen; but it's easy to put right whilst the product is still packed.
- Take care when removing the packaging and banding. Ensure you open the packaging on level ground.
- The product is quite heavy, and some larger pieces can weigh over 25kg. Consider this when arranging the delivery, as you may need appropriate lifting equipment, or an extra pair of hands.
- Take care of edges if stacking the product after unpacking. Do not stack directly onto hard ground.
- If you are a homeowner going away whilst the product is installed, we would recommend that you check the product is to your satisfaction before you go, or ensure your installer clearly understands your expectations.
- Once you receive your shipment of Vitripiazza, inspect all the product. If you have any issues with the delivery, report them straight away to your merchant and do not install the product. Talasey Ltd will not accept any liability for product, deemed unsatisfactory, that is laid.
- Even when your packs are batch-matched, we recommend mixing from all packs during install to ensure that a completely natural blend is achieved.
- After you have unpacked the delivery, consider the environment and recycle the packaging products. There could be wooden crates/pallets, cardboard, , plastic ties and plastic wrapping on the delivery, which should all be recycled, if possible.

Please note that all product sizes, weights and thicknesses stated are nominal.

Health & Safety

HEALTH AND SAFETY MUST BE ADHERED TO. A number of items within our Vitripiazza product range are heavy or awkward in shape to lift. We recommend that when moving pieces over 25kg, more than one person helps in completing the lift. With the larger plan sizes in some of our ranges, its simply not possible for installation to be carried out by one person and in addition, we would recommend you look into hiring or purchasing appropriate vacuum lifting equipment.

Furthermore, we would also recommend that gloves, safety boots with steel toe caps and oil resistant soles, ear defenders and protective clothing should be worn. When cutting our products, it is essential that suitable eye and ear protection is also worn. Always ensure that suitable respiratory protection is worn to avoid the inhalation of dust particles produced by high-speed cutting devices. Training may be needed to operate certain equipment; it is your responsibility to ensure this takes place where necessary.

For further information on Health & Safety, please visit the knowledge hub on www.talasey.co.uk.

It is your responsibility to ensure that you comply with all applicable health and safety legislation and guidelines.



For further information or technical advice call
0330 333 8030
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www.talasey.co.uk

Ready To Go

Our next few pages guide you through some basic installation tips and where to find more detailed advice. Just as importantly, we have some tips on what-not-to-do followed by some General Information on certain potential characteristics and specification advice. Finally, we have our aftercare advice.

Don't forget you can always call our Customer Engagement Team if you require more help.

Once Delivered

Batch match - You should have been supplied with matching batches, resulting in matching shade references and work sizes. On rare occasions, mistakes can happen so we recommend you check before unpacking, so Talasey and your merchant can work together to urgently fix.

Inspect your products - Report any issues to your merchant before you begin installation so we can work with them to resolve the situation as quickly as possible. Do not lay product you are not satisfied with; we will not accept any liability or costs once laid. Don't start your job until all required products are on site.

Going Away? - If you are not going to be around during installation, we strongly recommend you inspect the product before you go, or ensure your installer is clear on your expectations.

Ready to Start

Mix from pallets - To avoid colour banding, remember to mix from as many crates as possible as you go. Predominant shades may vary from pallet to pallet.



Installation

The Five Main Steps To Getting Your Patio Laid



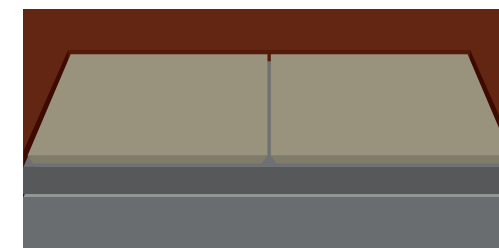
Dig out the ground to required depth.



Compact your sub-base.



Always prime the back of tiles with our Pavetuf Priming Slurry



Always lay on a full mortar bed



Fill joints using one of our great Pavetuf Jointing products. Never butt joint!

For our full detailed Vitripiazza Planning & Installation Guide, please visit the Knowledge Hub on www.vitripiazza.co.uk.

General Information

Jointing/Pointing

For technical specifications and installation guides of the products detailed below, please visit the Knowledge Hub on www.pavetuf.com.

Pavetuf Jointing Grout – Specifically designed for use with porcelain products and is the ideal choice for professionals and DIY'ers. Suitable for joint widths of 3mm to 15mm, at full depth of the tile. Suitable for driveway and pedestrian use. Internal or external use. Smooth finish.



Pavetuf Jointing Compound – Not suitable for porcelain constructions laid on a concrete slab. It is essential the product installation guide is followed when considered for use. Suitable for joint widths of 5mm to 20mm, with minimum 20mm depth required, joints must be struck off to ensure good compaction when installed with porcelain paving. Suitable for pedestrian use only. External use only. Granular finish.



Colour Banding

When installing any type of paving, it is important to mix paving from a number of pallets as it is laid.

Even with batch matched porcelain, it is possible that there may be some very slight shade variation from pallet to pallet. This may only be perceptible in certain conditions and when the install is finished. Mixing as you go creates a blend that is natural to the eye.

We would recommend not starting installation until you have all the required pallets delivered.

Cutting & Cracking Information

Porcelain tiles, including those with a 20mm thickness, can crack during cutting due to several factors related to their composition, the cutting process, and production variability. Below is a summary:

1) Why 20mm Porcelain Might Crack During Cutting

- a) **Brittle Material:** Porcelain is a dense, brittle material that can be prone to cracking under pressure. The thicker the tile, the more stress is required during cutting, which can lead to cracks if the right conditions aren't met.
- b) **Internal Tensions:** During the firing process, porcelain tiles can develop internal stresses or tensions due to uneven heating and cooling. If these stresses are not properly balanced, they can manifest as cracks when the tile is subjected to the forces of cutting.
- c) **Improper Cutting Technique:** If the cutting tool is not properly aligned, or the tile is not supported evenly, the pressure exerted on the porcelain can cause cracks. For example, using an inappropriate cutter or applying uneven pressure can lead to fractures along the tile's surface.
- d) **Hardness Variation:** Porcelain tiles are made from a mixture of clays and other minerals that can vary slightly between production batches. This can lead to subtle differences in hardness, making some tiles more susceptible to cracking than others. Thicker tiles, like a 20mm one, are especially vulnerable to variations in hardness.
- e) **Uneven Glaze or Surface Treatment:** The surface glaze or treatment applied to porcelain tiles may be uneven in some areas, creating weak points that are more likely to crack under pressure during cutting.

2) Variability in Production

Porcelain production involves several complex steps, and small variations can occur from batch to batch, even if the same materials are used. These variations can affect the overall quality and consistency of the tiles, leading to cracks during cutting.

3) Raw Materials

Variations in the quality and consistency of raw materials like clays, feldspar, and quartz can result in differences in the final product's density and hardness.

- a) **Firing Process:** Differences in kiln temperature, cooling rates, and firing times can create internal stresses that vary between tiles and batches, leading to inconsistent tile behaviour when cut.
- b) **Manufacturing Equipment:** Variations in the machinery used in cutting, shaping, and glazing the tiles can also contribute to inconsistent tile properties, making some tiles more likely to crack during cutting than others.

Top Cutting Tips

Choosing the Right Blade

Selecting the correct blade is essential when cutting tiles. Using inferior or inappropriate blades can lead to chipping and breaking, resulting in wasted materials. Choose a good quality continuous diamond tip blade. Cheaper or abrasive diamond blades will chip or shatter the tile as it is being cut. Check the blade you are purchasing is for thicker porcelain tiles as some are designed for thinner 10mm tiles, not all blades are equal.

Keep your blade sharp

Continuous rim blades can become dull. Sharpening your blade brings the diamond particles back to the surface ensuring a smooth cut. Regularly run your blade through a sharpening stone, breeze block or similar concrete block. It is recommended that you should sharpen the blade after every few cuts. A dull blade will force its way through a tile rather than cutting it. This sharpening can extend the lifespan of the blade.

Wet Tile Saw Cutting Method

A wet tile saw is the perfect tool for cutting 20mm thick porcelain tiles. This saw utilizes water as a lubricant, which helps reduce dust and heat buildup, which can otherwise cause thermal shock and lead to cracks.

Angle Grinder Cutting Method

Angle grinders are compact and easy to use. When using an angle grinder, ensure that the diamond blade is securely installed, and hold the tile firmly in place to avoid any movement during cutting. If this is a battery operated machine ensure the battery has a good charge as low power will lead to excessive vibration.

Bench/Bridge Saw

Using a bench/bridge saw with a guide rail offers controlled, precise cutting. The guide rail maintains a consistent blade direction, preventing side-to-side movement that could exert lateral force on the tile. The side-to-side movement increases the risk of tile breakage.

Edge Finishing Detail

Once the cut is complete the sawn edge should be sanded down using specialist diamond polishing pads of different grades. Start with a courser grade and finish off with the finest. Chamfering this edge can minimise the risk of the tile chipping once laid.

Storage of Porcelain

Store tiles flat and in a stable environment before cutting. Tiles that are stored improperly (e.g., standing up or stacked unevenly) can develop internal stresses or deform, making them more likely to crack during cutting. In colder conditions store tiles inside as the cold can lead to the tile being more likely to crack during cutting.

Pre cutting considerations

Consider the Position of Cuts and wherever possible, try to avoid a layout that will create long slender sections of the porcelain tile. These can be problematic during installation and after installation

Measure twice, cut once. If you are using a petrol cutter or angle grinder, place the porcelain tile on a surface that will stop any vibrations eg. A rubber mat or a bed of sand.

Make a first pass over the porcelain

First off, mark the slab. Turn off the water and with low revs, make a gentle pass over the whole of the marked line, scoring the surface and letting the blade do the work. Slow and controlled cuts can reduce the risk of stress buildup. Avoid pressing down, applying pressure can make the tile break.

Make a series of tension cuts

Second, make tension cuts. Put the water feed on and make cuts to the 2 ends of the tile, approximately 50mm in length all the way through. Keep the revs low, and let the blade do the work.

Make the connecting cut

Third, make the connecting cut. Keep the water feed on and the revs low, then gently make several passes until the slab has been cut all the way through.

Stop the Crack Energy

Depending on the shape of cut, a small hole can be drilled in the tile to help prevent the spread of the crack energy spreading. This also can help prevent post installation cracking due to thermal expansion, differential settlement.

Driveways

Our 20mm thick ranges can be used for driveways for trafficking with domestic cars or light vans but they will require installing on an adequate concrete base (minimum 100mm) with a supporting sub-base and construction. The paving should then be bonded to the concrete base using a high-performance cementitious tile adhesive appropriate for this type of traffic. Talasey are unable to give specific adhesive recommendations so seek guidance from the adhesive manufacturer for specific advice.



Swimming Pools

All our Vitripiazza ranges are suitable for use around a swimming pool and have an R11 slip rating.



Understanding Slip Ratings

Every range of our Vitripiazza porcelain is categorised as low potential for slip, whether wet or dry and each range has a Declaration of Performance clearly stating the slip resistance rating.

All external porcelain slabs are tested under EN 14411 standard for slip resistance. There are two main recognised ways the tests are done, the Ramp test giving a "R" rating and the Pendulum test giving a "PTV" (Pendulum Test Value) rating. In Europe the Ramp testing is more commonly used but in the UK the Health & Safety Executive (HSE) has a preference for the Pendulum Test.

Not all porcelain is suitable for external use and the "R" and "PTV" rating may seem a little confusing so here is a broad view to help you understand these:

R Rating	Suitable for
R9	Only for use indoors in areas where the floor is never wet
R10	Typically for use indoors including areas that occasionally become wet, such as kitchens
R11	Ideal for outdoor use including around swimming pools, internally in bathrooms, wet rooms
R12	Ideal for outdoor use including around swimming pools, internally in bathrooms, wet rooms

PTV Rating	Slip Potential
0 to 24	High slip potential
25 to 35	Moderate slip potential
Above 36	Low slip potential

Indoor Use

Check our Portfolio for which ranges are available for order in thinner specifications, designed and textured specifically as indoor tiles.



Dimensions & Specification

As common to our industry, all dimensions stated on our literature, packaging and website are nominal and subject to manufacturing tolerances. Be assured, all are in compliance with BS 14411 Annex G - Group Bla.

Cleaning

As you know by now, one of the main advantages of Vitripiazza is its low maintenance properties and high stain resistance. However, to keep it looking ‘as new’ some looking after may still be required. Don’t forget your joints/pointing are often what will show the weathering first and take away from that shiny new appearance!

We recommend you brush your paved area regularly as well as cleaning it from time to time. Ensure you use a normal bristled brush when sweeping, as wire brushes could damage your pointing and even possibly, scratch the tiles.

Try and keep the area clear of leaves and debris. Be aware, certain leaves and other plant life can stain paving and joints. Some leaves and plant life will leach tannins when they lay on the ground that can discolour paving and standing water. Luckily, with the high stain resistance of the paving, the tannins will usually clean off easily using our Pavetuf Green-Off or Pavetuf Deep Cleaner.

Algae growth is possible on almost any surface, given the right environmental conditions. Again, luckily, its relatively no effort to clean it off. Even less effort if you spray it with Pavetuf Green Off Cleaner, simply spray and leave to work. Green-Off also works on other paved areas, walls and fence panels too, metal signs, basically any man-made surface where algae bloom grows.

Any general soiling associated with an external area will usually wash off by brushing with soapy water or a pressure washer. With pressure washers, take care to look after your joints by trying a small area first and then only spraying with a fan setting to the nozzle, at approx. 30cm-45cm away for the surface. The best, and safest, results with pressure washers maybe gained using one of the rotary patio cleaner heads, if you have one.

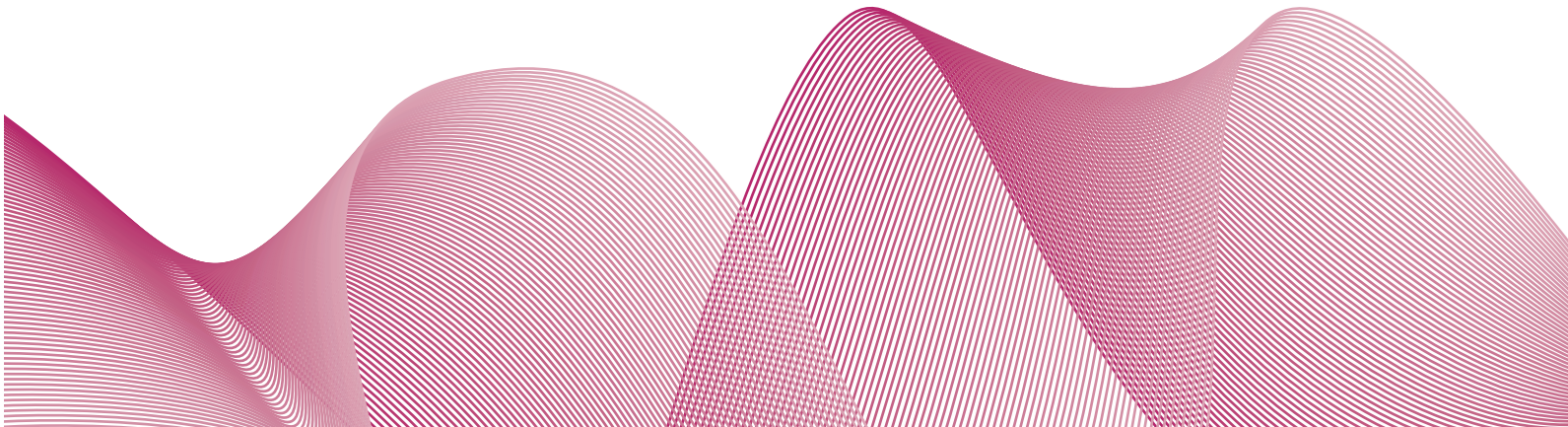
Using the wrong cleaners can damage your investment! Our comprehensive range of Pavetuf specialist cleaners makes cleaning even the most stubborn stains easy. The range boasts twelve different options and has been designed for general everyday use, through to removing specific stains. Visit www.pavetuf.co.uk for further information.



Comparison Chart

	Deep Cleaner*	Resin Bound Cleaner	Green Off Cleaner	Wood Deck Cleaner	UPVC & Fascia Cleaner	Wall & Render Cleaner	Composite Cleaner	General Cleaner*	Rust Remover	Salt Eraser	Porcelain Cleaner*	Sealer & Resin Residue Remover	Cement & Grout Haze Remover
STAINS THAT EACH CLEANER REMOVES	Algae, moss, mildew, fungi		✓	✓	✓	✓							
	Black & White spot lichens		✓										
	Heavy soiling	✓	✓	✓	✓	✓	✓						
	Light soiling	✓	✓	✓	✓	✓	✓	✓				✓	
	Grease & Oil*	✓	✓										
	Leaf & plant staining	✓		✓	✓	✓							
	Bird droppings	✓	✓	✓	✓	✓	✓	✓				✓	
	Efflorescence/salts									✓			
	Rust/iron ore								✓				
	Solvent sealers, paints/varnish												✓
	Mud	✓	✓	✓	✓	✓	✓	✓				✓	
	Atmospheric pollution	✓	✓	✓	✓	✓	✓	✓				✓	
	BBQ grease, oily food stains*	✓	✓										
	Resin based residue												✓
	Cement & grout haze												✓
SIZE	1 litre								✓			✓	
	5 litre	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	

* Can be used internally as well as externally



OUR SERVICE OFFER

The Talasey Team are a large network of individuals, dedicated to delivering outstanding support to our customers. From our Customer Engagement Team, Area Sales Managers and Landscaping Consultants, to our Designer & Installer Network and beyond, we are fortunate to have a loyal support network behind us. This is further supported by our empathetic corporate social principles driven through our activities with our supply chain and community. Since 2004, these assets have been central to building Talasey and they will continue to shape us for years to come.

20 YEARS OF TALASEY



See our website for terms & conditions.

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