

A GUIDE TO UNDERSTANDING ENGINEERED & NATURAL STONE SURFACES



Worktop Fabricators Federation
<https://www.worktopfabricators.org/>

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The Selection Process

HOUSE RENOVATIONS AND NEW CONSTRUCTIONS CAN BE A DAUNTING AFFAIR AND YOU MAY NOT KNOW WHERE TO BEGIN IN SELECTING THE MATERIALS FOR YOUR SURFACES.

Once you have the layout of your kitchen or bathroom decided, it is time to start thinking about the material you would like. With so many unique, beautiful and eye-catching natural stones and a growing array of engineered quartz, ceramics & sintered stone on offer, the choice is endless and should be the priority in your design.

Often people aren't aware of the many different surface options available to them so we would always recommend contacting your designer or worktop fabricator to discuss all options in detail prior to ordering so you can ensure you're making the right decision.

To give a general overview of what you can expect with each material we have outlined the worktop types commonly installed in home kitchens for comparison below so you can make an informed decision before you start (please bear in mind this is a general guide only and not all materials under each subcategory will hold the same properties as they will be dependant on their material makeup, surface finish & manufacturer).

	Wood	Laminate	Glass	Acrylic Surfaces	Engineered Quartz	Marble	Granite & Quartzite	Sintered Surface
Natural Imperfections Present Within Material	Yes	No	No	No	No	Yes	Yes	No
Scratch & Abrasion Resistant	Poor	Average	Average	Average	Good	Average	Good	Excellent
Heat Resistant	Poor	Poor	Good	Average	Good	Average	Good	Excellent
Chemical, Acids & Solvent Resistant	Poor	Average	Average	Good	Good	Average	Good	Excellent
Impact Resistant	Poor	Good	Average	Good	Good	Average	Good	Good
Required Maintenance Level	High	Low	Low	Medium	Very Low	Medium	Low	Very Low
Recommended For Outdoor Kitchen Use (UV/Frost Resistant)	No	No	Yes	Yes (certain colours)	Yes (certain colours)	No	Yes	Yes
Hygiene Level	Low	Medium	High	High	High	High	High	High
Preferred Material For Bakers & Chocolatiers	No	No	Yes	No	Yes	Yes	Yes	Yes
Various Edge Details Available	Yes	No	No	Yes	Yes	Yes	Yes	Yes
Is Material Full Bodied (does the vein pattern run through natural edge)?	Yes	Yes	No	Yes	Yes	Yes	Yes	No
Suitable For Large Format Islands Without Joints	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Mould, Mildew & Water Resistant	Poor	Average	Excellent	Excellent	Excellent	Good	Excellent	Excellent

Key Levels

Poor, Average, Good, Excellent
Low, Medium, High
Yes, No

Do's and Don'ts of buying stone surfaces

Do

Use a WFF approved fabricator to manufacture and install your stone requirements. An approved fabricator will seal (if required) and install the surface correctly and who will have the honesty and knowledge to know when a material is not suitable for a particular design or use.

Do

Ensure, if purchasing Engineered Stone, that you choose a reputable brand who manufactures their own material and who understands the entire manufacturing supply chain. Your approved WFF fabricator will be able to advise the best brands available.

Do

Remember that stone is heavy and brittle by nature so must be supported as such. A common occurrence in the industry is movement of supporting structures post installation due to the weight of stone so ensure that your supporting structure is adequate for the weight of stone being installed.

Do

Make sure you refer to the care & maintenance guidelines offered with the product that you are having installed so that you can ensure your worktops will look as good in 10 years time as the day they were installed. If you're unsure about where to find these then speak to your WFF approved fabricator for guidance.

Do

Relax. There are many myths created around looking after stone. The single greatest myth is that it should be bulletproof. Nobody ever said this. We do not expect wood to be impervious to everyday wear and tear, nor do we expect carpets or other surfaces to be bulletproof, all surfaces will wear in different ways. But your WFF fabricator will educate you about how the different surfaces will perform and on how best to look after them further in this guide.

Don't

Buy without viewing the slab (especially if choosing natural stone) or a sample of the product you will be having cut if it is possible to obtain one. If you are worried about product performance and can obtain a sample for testing with a bit of wine, lemon juice or tea etc. then you can ensure you will be happy with the product going forward. Images of slabs are always available, but it is always best to see the stones in real life where possible. Today's cameras are good, but they can change markings, colourings, and depth that can only be seen by the naked eye.

Don't

Get too caught up on prices until you get the final cost from the fabricator or retailer, remember it does not cost a thing to get a couple of quotes of different materials to see what fits your budget.

Don't

Hold back. There is so much choice; it is a shame when people choose the safe option. Indulge yourself, and pick something distinctive, so it becomes an unforgettable part of your home. It's not every day you embark on such a project so make it your own.



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1. Azul Aran Granite kitchen
2. Patagonia Granite kitchen
3. Verde Cristina Marble restaurant feature wall

Once you've made a decision on the material.....a few points to note about how to prepare for your worktop installation and care for your stone surface.....

A COMMON MISCONCEPTION WITHIN THE INDUSTRY IS THAT ANY STONE SURFACE WHETHER IT BE ENGINEERED OR NATURAL IS INDESTRUCTABLE. ALTHOUGH IT'S EXTREMELY HARDWEARING, ELEMENTS OF CARE MUST BE TAKEN

- Ensure all supporting cabinetry is flat and level and there is adequate support in place for the worktops otherwise this can affect jointed areas and the stone itself in the future.
- Read the templating and fitting guidelines offered by your stone installer thoroughly to prepare for your installation and contact them if you are unsure of anything.
- Check the warranty for the material you are purchasing thoroughly to see what will and will not be covered should anything happen in the future. Also check the Care & Maintenance guidance specific to the stone you are installing to see how best to care for it post installation.
- Usually there are multiple trades on-site while your worktops are being installed. Ensure that other trades are aware to be as cautious as you would be with your stone as many cases of damage seen are due to other works being carried out on-site.
- Never stand, sit or apply excess weight on your worktops.
- As a general rule never place hot pans or extreme sources of heat directly onto the worktops as this can cause irreparable damage to the tops, (however premium ceramic and sintered stone tops can withstand direct heat sources).
- As a general rule never allow highly acidic or alkaline substances such as oven cleaner to come into contact with the worktops as this can cause irreparable damage to the tops (however premium ceramic and sintered stone tops can withstand more powerful substances).
- Stone is a heavy material and as such, jointed areas can break due to the settlement of the cabinetry or flooring. The joints can be repaired but you must ensure the cabinetry and flooring will sufficiently support the stone and take the weight of the worktops in order to avoid this occurrence in the future.

Engineered Quartz

ENGINEERED QUARTZ IS A MANMADE MATERIAL. THE MATERIAL IS FABRICATED BY CRUSHING NATURAL QUARTZ MINERALS AND MIXING THEM WITH RESINS, POLYMERS AND PIGMENTS, THEN MOULDING, COMPRESSING AND HEATING TO CREATE THE SLABS.

Not only does this produce a highly durable surface but also eases the maintenance of the surface.

Engineered Quartz comes in a large selection of colour and pattern from plain surfaces, Granite and Marble look-alikes, to bright bold colours, and since it is formed through an engineering process it is much easier to keep up with industry trends. Colours and patterns are always evolving to fit the demands of the market. If consistency and durability are key in your search then Engineered Quartz should be at the top of your list.



01

1. Silestone Posidonia Green kitchen
2. Caesarstone White Attica kitchen



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Each slab will bring
a touch of
individuality and
unique style to your
kitchen.



I What to expect?

- Slight differences will occur between Quartz slabs as the patterns may vary slightly due to particle structure, or due to small spots and faints, that can occur naturally due to the natural minerals that are a part of the Quartz.
- Quartz has a low porosity and does not require the use of surface sealants. Quartz is highly stain-resistant, but as with all surfaces, spills should be removed as soon as possible especially highly coloured food and liquids.
- The Majority of Quartz is not resistant to direct UV (however there are certain colours that are) and therefore should not be used in external settings in direct sunlight. Glass is sufficient in reducing UV rays so damage does not occur indoors.
- Quartz is not resistant to high heat levels so trivets should be used at all times. This sounds odd, but the resins used in the material may be affected by heat.
- Quartz is highly resistant to scratching but we would always recommend a chopping board, knives will become blunt cutting directly on the surface!
- Engineered Quartz is a strong material, but as a worktop, it is only supported at the edges by the kitchen carcass. Joins and cut-outs can be weaker points and the surface is not designed to support the weight of a person. Do not stand or sit on your surface or place very heavy objects on weaker points.
- Dropping a heavy or sharp object onto an Engineered Quartz surface may cause it to chip or crack.



02

I How to care?

- For daily care of your surface wipe with a moist, soft cloth with either a dilute, mild soapy solution (such as liquid dish soap) or a daily Granite and Marble cleaner such as Method, DryTreat Rejuvenata Countertop Cleaner, or Lithofin Easy-Clean (or see WFF approved supplier list). Rinse cloth and wring out then wipe over the surface again to clear any traces of soap. Then buff with a clean, dry microfiber cloth. Always ensure your cloth is clean. Never use highly abrasive cloth or scouring pads (however white soft scourers can be used gently for agitation of stubborn stains).
- It is always advisable to remove a spill as soon as you possibly can, by blotting away with a kitchen towel and then wiping the surface as advised above. The longer the spill sits on the surface the increased risk of it penetrating the surface.
- Avoid using highly aggressive cleaning agents such as oven/grill cleaners and dishwasher polishing agents that have high alkaline/pH levels (pH 8.5 or higher), abrasive scrubs and cleaners that contain either soft or hard abrasive particles and cleaners that contain xylene, toluene, potassium hydroxide or caustic soda.
- The WFF always recommends seeking further cleaning instructions from individual suppliers for their care and maintenance guide.



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1. Caesarstone Black Tempal kitchen
2. Silestone Eternal Calacatta Gold kitchen
3. Silestone Lyra kitchen
4. Silestone Eternal Marquina kitchen
5. Caesarstone Rugged Concrete kitchen

Ceramics & Sintered Stone

CERAMICS & SINTERED STONES ARE ENGINEERED SURFACES PRODUCED BY COMBINING CERAMIC CLAYS AND MINERAL COLOURINGS, PRESSED TO CREATE THE SHAPE, THEN PRINTED ON AND FIRED TO CREATE A LARGE SLAB.

They have extremely practical properties and the manufacturing process enables patterns to be placed on these surfaces through digital imagery. This allows a quick response to the growing demands of new trends within the market.

Ceramics & sintered stones come in a large selection of colour and pattern from plain surfaces, Granite and Marble look-alikes, to bright bold colours, and since it is formed through an engineering process it is much easier to keep up with industry trends. Colours and patterns are always evolving to fit the demands of the market. If consistency and durability are key in your search then ceramics & sintered stones should be at the top of your list along with Engineered Quartz.



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- 1 Dekton Trilium shower
- 2 Neolith Abu Dhabi wall & floor cladding



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I What to expect?

- This material will have high levels of consistency when it comes to colours and patterns. As the appearance is created through digital imagery it can imitate Marble, Quartz, Granite, even concrete, wood and metal.
- This versatile material can be used for outdoor spaces, indoor worktops, flooring, walls and cladding. The slabs arrive in varying thicknesses allowing a sleek look to be created, a deeper work surface appearance can be created by mitring and cladding. 6mm slabs can also be supplied for cladding and flooring.
- The ceramic & sintered surface is non-porous and would not require sealing. With some ceramics & sintered stones, once cut the exposed edges are porous and would need to be treated, some masonry wax colouring may need to be applied too.
- When planning design features, such as draining grooves and mitred edges, we would recommend asking your WFF fabricator to see a sample of the finished result, so you can be satisfied with the finished look.
- In comparison to other surfaces, ceramic & sintered surfaces have excellent heat and scratch resistance; you can safely put hot pans on the work surface or cut directly without a chopping board. However, we would always advise caution.
- Knives, although they may not scratch, could leave a metal transfer instead.
- Ceramic & sintered surfaces are strong, but as a worktop, it is only supported at the edges by the kitchen carcass. Joints and cut-outs can be weaker points and the surface is not designed to support the weight of a person. Do not stand or sit on your surface or place very heavy objects on weaker points.



02

1 Dekton Kira kitchen

2 Neolith Calacatta enclosed clad kitchen

I How to care?

- Ceramic & sintered surfaces are possibly the most hardwearing of all stone options when it comes to staining/acid etching/scratching in a home environment. Always refer to the manufacturers guidelines or contact the approved WFF worktop installer as to what cleaning substances can be used for specific stains but realistically your surfaces should not stain with standard daily use.
- For daily care of your surface wipe with a moist, soft cloth with a dilute, mild soapy solution (such as liquid dish soap) or common cleaning products. Rinse the cloth and wring out then wipe over the surface again to clear any traces of soap. Then buff with a clean, dry microfiber cloth. Always ensure your cloth is clean. Never use an abrasive cloth or scouring pads.
- Further information and advice can be found at <https://www.cosentino.com/en-gb/dekton/> & <https://www.neolith.com/en/>

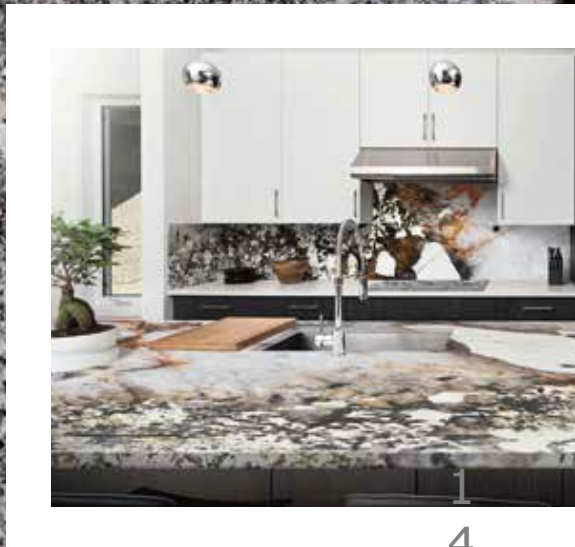


1. Dekton Khalo kitchen
2. Neolith Del Plata bathroom
3. Neolith Retrostone kitchen





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Granite

GRANITE IS AN IGNEOUS ROCK MADE OF MINERALS SUCH AS QUARTZ, MICA AND FELDSPAR AS WELL AS OTHER MINERALS. IT IS FORMED THROUGH THE PROCESS OF SLOW CRYSTALLISATION OF MAGMA BELOW THE EARTH'S SURFACE THAT TRAPS THESE MINERALS IN ITS STRUCTURE.

The formation of this material under high heat temperatures generates its hardness and durability. The variety and abundance in the minerals allow distinctive patterns, textures, and crystals to form. The colour choice is vast from off whites, reds, blues, pinks, and greens. Some are simple with subtle veining or patterns, whilst others offer striking arrangements that look like artistic paintings. Within the spectrum of Granites, there is a range from hard to soft which will affect the care and maintenance of each stone.

One of the most popular choices for worktops, a Granite surface is beautiful and varied as well as durable and functional. Your fabricator will have access to a wide range of the most sought-after Granites from, Brazil, Italy, Africa, India, and China to name just a few sources, bringing you the highest quality materials available in the market.



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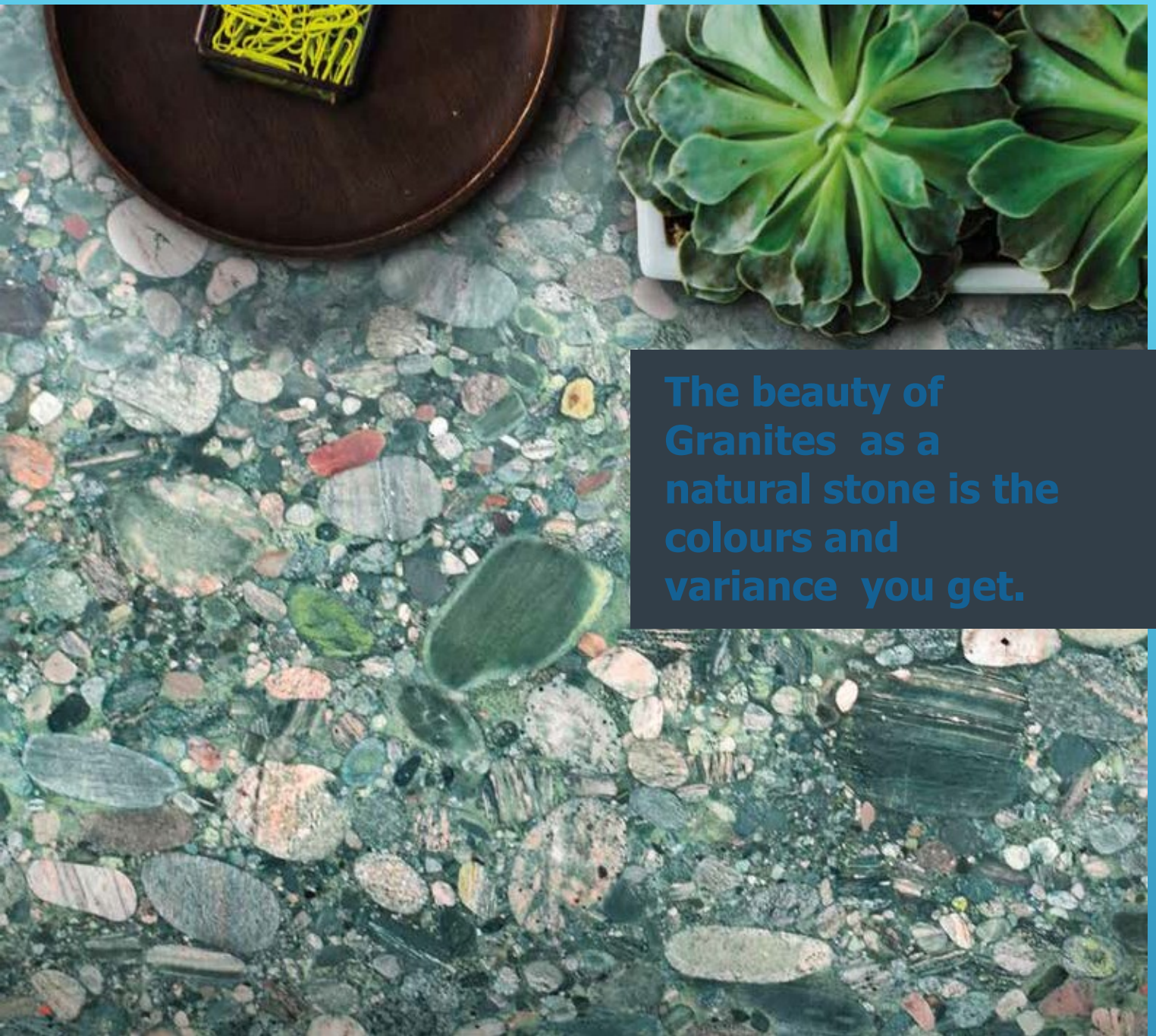
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1. Azul Aran Granite Kitchen
2. Verde Marinace Granite
3. Patagonia Granite Backsplash
4. Rosso Marinace Granite bathroom wall feature



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The beauty of
Granites as a
natural stone is the
colours and
variance you get.



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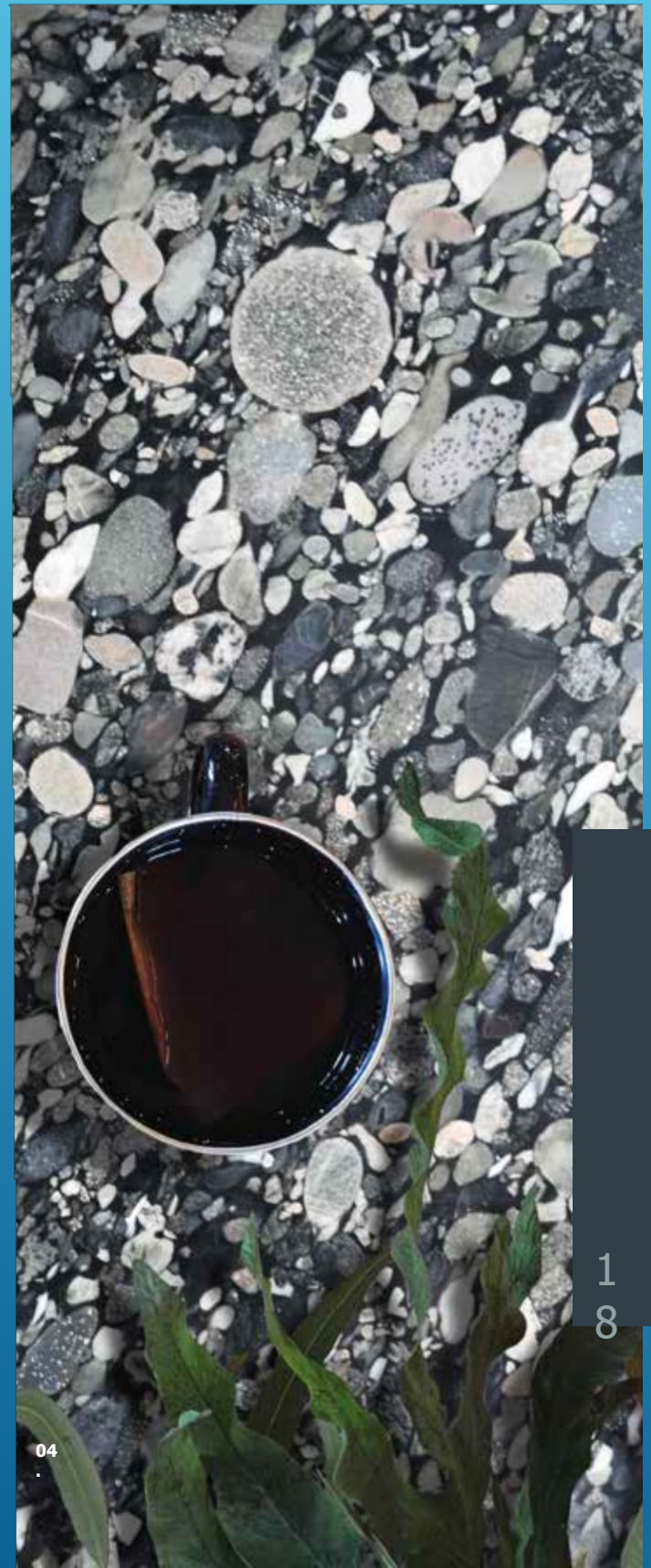
I What to expect?

- When stone importers source a block of Granite from a quarry, that block is cut into slabs. Though each slab will usually be similar in colour, pattern, and texture, it will not be identical; it may vary slightly through the block.
- Your fabricator will aim to cut the slabs to maximise the pattern flow and make sure all-important sections of the slab are used efficiently for your project, ensure you have discussed your personal preferences and requirements with your fabricator before cutting starts.
- A well-sealed Granite surface, that is cared for appropriately, should be relatively difficult to stain, we will discuss the sealing process in the "How to Care?" section.
- Being a natural material Granite can have pits or little holes in the surface where the crystals are very small and do not adhere to the surface, this would be evident during the selection process and would not affect the performance of the surface. In many cases these little pits will be filled by a film of resin, it depends on the stone type. Sometimes these holes are so small they do not take the resin, WFF members aim to source blocks which have less of these features, but from time to time they can occur and they should not be considered an imperfection.
- Granites are divided into soft and hard Granites, most Granites rarely scratch but we would always recommend using a chopping board, chopping directly onto your granite will result in knives becoming blunt. Soft Granite may scratch.
- Though Granites have been formed through high heat temperatures and can withstand a moderate amount of heat, it is still advisable to use trivets as your surface can receive a thermal shock and crack. Only Lundhs Granites have been officially tested to be deemed safe to accept a hot pan directly onto the surface.
- Granite is undoubtedly a strong stone, but as a worktop, it is only supported at the edges by the kitchen carcass, joins and cut-outs can be weaker points and the surface is not designed to support the weight of a person. Do not stand or sit on your surface or place very heavy objects on weaker points.
- Dropping a heavy or sharp object onto a Granite surface may cause it to chip or crack.
- Overtime and with use a build-up of oils and greases will gradually darken the appearance of your Granite surface. This can be revitalised with a deep clean with an appropriate product such as Lithofin Wexa or DryTreat Rejuvinata (or see WFF approved supplier list).



I How to care?

- Natural stone is porous and therefore would absorb substances if untreated; it depends on the type of stone how porous it is. Hard Granite is only very slightly porous, whereas soft Granites will need more sealant. Sealants can either impregnate the surface of the stone filling the capillaries and reducing their absorbency or create a covering film on the surface. A good sealant will stop the ingress of water, oils and other liquids on all-natural stone and this protective layer will only enhance the durability of your surface. Discuss with your fabricator the options of sealant, which is the most suitable to the type of Granite you have chosen and their effect on the appearance of the surface.
- For daily care of your surface wipe with a clean moist, soft cloth with either a dilute, mild soapy solution (such as liquid dish soap) or a daily Granite and Marble cleaner such as Method, DryTreat Rejuvenata Countertop Cleaner, or Lithofin Easy-Clean. Rinse the cloth and wring out then wipe over the surface again to clear any traces of soap. Then buff with a clean, dry microfiber cloth. Always ensure your cloth is clean. Never use an abrasive cloth or scouring pads. Do not use bleach or harsh cleaners. The darker and/or plainer Granite's can be susceptible to visual oil build-up from liquid dish soap so a more specialist cleaner as listed above would be recommended. Certain granites can be pre-treated and we always recommend referring to specific care and maintenance guidelines prior to using any chemicals on these surfaces.
- It is always advisable to remove a spill as soon as you possibly can, by blotting away with a kitchen towel and then wiping the surface as advised above. The longer the spill sits on the surface the increased risk of it penetrating the surface. This is particularly important for acid-based products, e.g. vinegars, citrus, fizzy drinks, wine etc., oil-based substances e.g. butter, cooking oils and strongly coloured foods and liquids e.g. beetroot, red/dark fruits, turmeric, saffron, red wine.
- From time to time, we would advise a deeper clean with a product such as Lithofin Wexa or DryTreat Rejuvenata cleaner (see WFF approved supplier list). It is important to use the product that is best suited to the sealant that has been applied to the stone.



1. Artic Cream Granite Kitchen
2. Verde Lapponia Granite splashback
3. Verde Marinace Granite splashback
4. Black & White Marinace Granite

Marble

MARBLE IS A METAMORPHIC ROCK THAT IS FORMED WHEN LIMESTONE IS SUBJECTED TO HIGH PRESSURES AND HEAT OVER TIME. THIS PROCESS CAUSES THE SHELLS THAT FORMED THE LIMESTONE TO BREAK DOWN AND CRYSTALLIZE.

Marble can add a true elegance to a home and as with other natural stones, they give you a real sense of soul.

Marble is, therefore, harder than Limestone and able to receive a high polish but not as hard as Granite and natural Quartzites, although some hard Marbles and soft

Quartzites have similar properties and need similar care and maintenance. Within the Marble category there is a spectrum of harder and softer Marbles, please be advised of this during the selection process and suitability for use, e.g. a softer Marble is not the best choice for a worktop, but fine for bathroom walls, floors or vanities. Marble like Limestone is still predominantly calcium carbonate. Marbles come in a variety of colours depending on which minerals were present during the process of metamorphosis. In its purest form, it is white in colour but can range from soft pinks, greys and blues, to stronger greens, and reds with elegant veining and unique patterns. The organic beauty and opulence of Marble has made it a popular choice for generations.

Your fabricator will have access to a beautiful range of Marbles in honed and polished finishes, with exquisite patterns and colours, sourced from around the world. They have many contacts and suppliers across the globe, so if you have a particular Marble in mind that is not in our current range they are happy to endeavour to source this for you.



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1. Confusion Marble splashback
2. Carrara Marble splashback
3. Tinos Marble clad kitchen with Carrara surfaces

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I What to expect?

- When stone importers source a block of Marble from a quarry, that block is cut into slabs. Though each slab will usually be similar in colour, pattern and texture, it will not be identical; it is more likely to vary through the block than the average Granite.
- Your fabricator will aim to cut the slabs to maximise the pattern flow and make sure all-important sections of the slab are used efficiently for your project, ensure you have discussed your personal preferences and requirements with your fabricator before cutting starts.
- Marbles are porous materials and therefore would absorb substances if untreated. Marble should always be sealed with an appropriate sealant. If choosing Marble for a high use area such a worktop, they would need to be well sealed and this process repeated at regular intervals. A marble surface is likely to be more vulnerable to stains than most Granites. Choosing a busy pattern is often a good consideration, the patterns of veins and breakouts of colour will allow stains to be disguised and less evident.
- Being a natural material Marble can have pits or little holes in the surface where the crystals are very small and do not adhere to the surface, this would be evident during the selection process and would not affect the performance of the surface. In many cases these little pits will be filled by a film of resin, it depends on the stone type. Sometimes these holes are so small they

do not take the resin, WFF members aim to source blocks which have less of these features, but from time to time they can occur and they should not be considered an imperfection.

- As a softer stone a marble could scratch and we would always recommend the use of a chopping board and be mindful of what is placed directly onto the surface. A honed Marble would make scratch marks less visible.
- Due to its calcium carbonate makeup, Marble is prone to etching. This is the process of acid reacting with the minerals in the surface and creating dull spots known as etches. This is different from a stain as etching is a small corrosive reaction at a microscopic level on the surface which changes the way light refracts off the surface.
- The etching is more visible in rooms with a lot of direct sunlight, a surface that is not in direct sunlight and a honed or textured surface would make etching less visible.
- Although Marble surfaces can withstand a moderate amount of heat, it is still advisable to use trivets for hot pans etc as your surface can receive a thermal shock and crack or it may cause some discolouration to the surface.
- Marbles vary in strength, as a work or vanity top or table consideration should be given to its support, joins and cut-outs can be weaker points and the surface is not designed to support the weight of a person.
- Do not stand or sit on your surface or place very heavy objects on weaker points.
- Dropping a heavy or sharp object onto a Marble surface may cause it to chip or crack.
- A Marble surface is undoubtedly beautiful, but it is not the right choice for everyone. It would require more maintenance and care than a Granite surface, and you would have to live with the odd knock, scratch, stain and etching. However, if you love something with character, soul and timeless elegance and appreciate age and patina as adding to its beauty, then it can make a striking addition to any project.



1. Confusion Marble wall feature
2. Jurassic Green Marble
3. Arabescato Corchia Bathroom

I How to care?

- Natural stone is porous and therefore would absorb substances if untreated; it depends on the type of stone how porous it is. Marble in general, especially soft Marbles are one of the more porous stones. Sealants can either impregnate the surface of the stone filling the capillaries and reducing their absorbency or create a covering film on the surface. A good sealant will stop the ingress of water, oils and other liquids on all-natural stone and this protective layer will only enhance the durability of your surface. A sealant will not fully protect against etching. Discuss with your fabricator the options of sealant, which is the most suitable to the type of Marble you have chosen and their effect on the appearance of the surface. This process would need to be repeated over time to maintain the performance of your work surface. We would recommend DryTreat and Lithofin as they run training and accreditation on their products and offer advice about ensuring the right sealant for your stone.
- ~~Seal daily~~ **Seal daily** create a protective surface wipe with a moist, soft cloth with either a dilute, mild soapy solution (such as liquid dish soap) or a daily Granite and Marble cleaners such as Method, DryTreat Rejuvenata Countertop Cleaner, or Lithofin Easy-Clean (see WFF approved supplier list). Rinse the cloth and wring out then wipe over the surface again to clear any traces of soap. Then buff with a clean, dry microfiber cloth. Always ensure your cloth is clean. Never use an abrasive cloth or scouring pads. Do not use bleach or acid-based cleaners, always check the label.
- It is always advisable to remove a spill as soon as you possibly can, by blotting away with a kitchen towel and

then wiping the surface as advised above. The longer the spill sits on the surface the increased risk of it penetrating the surface.

- The above is particularly important for acid-based products, e.g. vinegars, citrus, fizzy drinks, wine etc., oil-based substances e.g. butter, cooking oils and strongly coloured foods and liquids e.g. beetroot, red/dark fruits, turmeric, saffron, red wine.
- Due to the propensity to etching extra care should always be made in cleaning acid-based spills as quickly as possible. Using coasters, mats and boards to prevent direct contact of acid-based foods or liquids with the surface is strongly advisable.
- You might get scratches and etches in the surface which makes up the patina of the surface as it ages with you. The good thing about soft Quartzites and Marbles is that, in most cases, they can be re-polished in situ to remove scratches and etching, it's a personal choice.
- From time to time, we would advise a deeper clean with a product such as Lithofin Wexa or DryTreat Rejuvenata (see WFF approved supplier list). It is important to use the product that is best suited to the sealant that has been applied.



Natural Quartzite

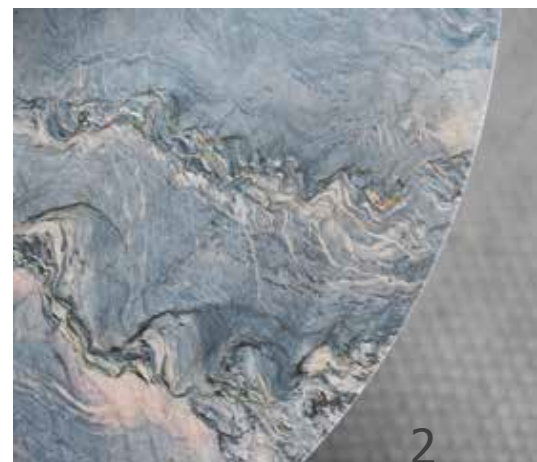
QUARTZITE IS ANOTHER FORM OF NATURAL STONE; IT IS A HARD, NON-FOLIATED METAMORPHIC ROCK THAT WAS ORIGINALLY SANDSTONE, THROUGH A PROCESS OF HEAT AND PRESSURE OVER MILLIONS OF YEARS THE QUARTZ-RICH SANDSTONE RECRYSTALLIZES RESULTING IN A NETWORK OF INTERLOCKING QUARTZ GRAINS.

As with all-natural stones, there is a range within Quartzites of soft to hard and this information must be understood in relation to the stones intended use, care and maintenance.

As the industry leans more towards a marbled look, Quartzites have increased in popularity as it offers the on-trend look with added durability, however, a soft Quartzite would perform more like a Marble.



02



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1. Fusion Wow Light Green Soft Quartzite Kitchen
2. Nuvola Soft Quartzite
3. Fusion Blue Soft Quartzite table
4. Taj Mahal Hard Quartzite splashback
5. Nuvola Soft Quartzite kitchen

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I What to expect?

- When stone importers source a block of Quartzite from a quarry, that block is cut into slabs. Though each slab will usually be similar in colour, pattern and texture, it will not be identical; it is more likely to vary through the block than the average Granite, it varies similarly to Marble.
- Your fabricator will aim to cut the slabs to maximise the pattern flow and make sure all-important sections of the slab are used efficiently for your project, ensure you have discussed your personal preferences and requirements with your fabricator before cutting starts.
- Quartzites are naturally porous materials and therefore would absorb substances if untreated. Quartzites should always be sealed with an appropriate sealant. As referenced above Quartzites range from soft to hard and their care and maintenance would alter accordingly. If choosing a soft Quartzite for a high use area such as a worktop, they would need to be well sealed (if they have not been pre-treated) and this process repeated at regular intervals as the surface is likely to be more vulnerable to stains. A hard Quartzite would perform more like a hard Granite or Engineered Quartz.
- As a softer stone, a soft Quartzite could scratch and we would always recommend the use of a chopping board and be mindful of what is placed directly onto the surface. A honed or satinato texture would make scratch marks less visible. A hard Quartzite would perform more like a hard Granite.
- Being a natural material Quartzites can have pits or little holes in the surface where the crystals are very small and do not adhere to the surface, this would be evident during the selection process and would not affect the performance of the surface. In many cases these little pits will be filled by a film of resin, it depends on the stone type. Sometimes these holes are so small they do not take the resin, WFF members aim to source blocks which have less of these features, but from time to time they can occur and they should not be considered an imperfection.
- A soft Quartzite can be prone to etching. This is the process of acid reacting with the minerals in the surface and creating dull spots known as etches. This is different from a stain as etching is a small corrosive reaction at a microscopic level on the surface which changes the way light refracts off the surface. The etching is more visible in rooms with a lot of direct sunlight, a surface that is not in direct sunlight and a honed or textured surface would make etching less visible.
- Although Quartzite surfaces can withstand a moderate amount of heat, it is still advisable to use trivets for hot pans etc as your surface can receive a thermal shock and crack or it may cause some discolouration to the surface.
- Quartzites are a strong stone, but as a worktop, it is only supported at the edges by the kitchen carcass. Joins and cut-outs can be weaker points and the surface is not designed to support the weight of a person. Do not stand or sit on your surface or place very heavy objects on weaker points.
- Dropping a heavy or sharp object onto a quartzites surface may cause it to chip or crack.
- A soft Quartzite surface is undoubtedly beautiful, but it is not the right choice for everyone. It would require more maintenance and care than Granite or Engineered Quartz surface, and you would have to live with the odd knock, scratch, stain and etching. However, if you love something with character, soul and timeless elegance and appreciate age and patina as adding to its beauty, then it can make a striking addition to any project.





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1. Taj Mahal Hard Quartzite bathroom wall
2. Fusions Wow Light Green Soft Quartzite
3. Fusion Blue Soft Quartzite feature wall

I How to care?

- Natural stone is porous and therefore would absorb substances if untreated. A soft Quartzite is one of the more porous stones. Sealants can either impregnate the surface of the stone filling the capillaries and reducing their absorbency or create a covering film on the surface. A good sealant will stop the ingress of water, oils and other liquids on all-natural stone and this protective layer will only enhance the durability of your surface.
- A sealant will not fully protect against etching. Discuss with your fabricator the options of sealant, which is the most suitable to the type of surface you have chosen and their effect on the appearance of the surface. This process would need to be repeated over time to maintain the performance of your work surface. We would recommend DryTreat and Lithofin as they run training and accreditation on their products and offer advice about ensuring the right sealant for the right stone (or see WFF approved supplier list).
- For daily care of your surface wipe with a moist, soft cloth with either a dilute, mild soapy solution (such as liquid dish soap) or a daily Granite and Marble cleaner such as Method, DryTreat Rejuvenata Countertop Cleaner, or Lithofin Easy-Clean (or see WFF approved supplier list). Rinse the cloth and wring out then wipe over the surface again to clear any traces of soap. Then buff with a clean, dry microfiber cloth. Always ensure your cloth is clean. Never use an abrasive cloth or scouring pads. Do not use bleach or acid-based cleaners, always check the label.
- Remove a spill as soon as you possibly can, by blotting away with a kitchen towel and then wiping the surface as advised above. The longer the spill sits on the surface the increased risk of it penetrating the surface.
- This is particularly important for acid-based products, e.g. vinegars, citrus, fizzy drinks, wine etc., oil-based substances e.g. butter, cooking oils and strongly coloured foods and liquids e.g. beetroot, red/dark fruits, turmeric, saffron, red wine.
- Due to the propensity to etching extra care should always be made in cleaning acid based spills as quickly as possible. Using coasters, mats and boards to prevent direct contact of acid-based foods or liquids with the surface is strongly advisable.
- From time to time we would advise a deeper clean with a product such as Lithofin Wexa or DryTreat Rejuvenata (or see WFF approved supplier list). It is important to use the product that is best suited to the sealant you have used.
- You might get scratches and etches in the surface which makes up the patina of the surface as it ages with you. The good thing about soft Quartzites and Marbles is that, in most cases, they can be re-polished in situ to remove scratches and etching, it's a personal choice.



Decorative Marble

DECORATIVE MARBLE IS OUR TERM FOR MARBLES THAT WE WOULD NORMALLY USE FOR CENTREPIECE STATEMENTS ON FEATURE WALLS AND FLOORS, ARCHITECTURAL DETAILS, COLUMNS OR DECORATIVE FURNITURE.

The majority of these stones are historic Marbles that have been quarried for centuries such as Nero Portoro, Belgian Black, Royal Blue, or Opera Fantastico. These amazing stones have been used in palaces, mansions and grand buildings over the years and are the stones that have created the image of Marble as the most luxurious of surface products available. New to this section are Marbles from China, Africa, the Far East and South America, which have developed as the market for colourful Marbles has expanded beyond traditional European quarries. We do see many clients using some of these more fragile and beautiful materials for work surfaces and would encourage any user to follow their design vision to create a truly special room but would always advise caution if they are thinking that anything in this selection will fall under the durable and practical heading.

As stated above, the majority of materials in this selection will be Marbles, but there will be certain materials without a pigeon hole as their geological make-up is unique compared to a broad classification. These may include Calcites, Sodalites, Haematites and semi-precious stone conglomerates.

1. White Beauty Decorative Marble feature wall
2. Opera D'Arte Decorative Marble
3. Arabescato Cervaiolo Marble bathroom wall
4. Rosso Luana Marble



1. Green Onyx
2. Green Onyx
3. Pink Onyx

Onyx

A TRUE ONYX IS MADE OF SILICA, BUT WITHIN THE STONE INDUSTRY, ONYX REFERS TO A GROUP OF STONES MADE UP OF BANDED CALCITES AND OTHER CARBONATE MATERIALS.

In its make-up it can form in a similar way to Limestone and Travertine, these materials form in beds with 'sedimentary' lines, enabling cutting of the block across or through the vein, allowing greater variance of pattern and colour from slab to slab. The colour spectrum is extensive from greens, reds, greys and pinks with pure white being the most sought after. Onyx is one of only a small selection of natural materials that are translucent, allowing light to pass through them amplifying their natural beauty and adding a further dimension to your design.

In recent years it has become a popular choice in interior design. It has been used as kitchen worktops, flooring, reception desks, bar tops, saunas, and wall cladding among others, however, as with all decorative materials they are very delicate and require more maintenance than the average stone. They will scratch and they will stain, so must be well sealed and cared for with appropriate cleaning products. They will also come with many inherent characteristics that need to be considered when choosing, such as similar pitting described in the Granite, Marble & Quartzite sections previously. As with all softer natural materials they can be restored & rejuvenated over time by professional restorers.



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Limestone

LIMESTONE IS A SEDIMENTARY ROCK THAT IS COMPOSED OF CALCIUM CARBONATE, THE FORMATION OCCURS IN CLEAR, WARM, SHALLOW MARINE WATERS.

It is a soft and porous natural stone that requires care to preserve its neutral coloured beauty. It's mainly used by architects and designers for bathrooms, flooring and fireplaces due to its properties but also because it is easy to cut and shape.

Limestones are usually offered in slab and cut to size tile format. Limestones come in many muted tones, from soft greys, through to creams and warm golden colours.

This colour palette and their relative affordability mean they are a popular material to use all around the home. Limestones are sedimentary, so different cuts will produce different looks. They will have varying amounts of fossils and features in them. These features are to be embraced, and often the more patterned with fossils they are the more forgiving they are in upkeep. However, a highly fossilised Limestone will display a greater variance in appearance between individual slabs and tiles. Limestone is

a more porous stone and needs to be well sealed with an appropriate sealant and repetition of this process over time. It should be cleaned with an appropriate cleaner (see WFF approved supplier list).



Travertine

THIS IS ONE OF THE OLDEST NATURAL STONES USED FOR BUILDING MATERIALS. IT IS A FORM OF LIMESTONE THAT IS DEPOSITED BY HOT MINERAL SPRINGS, THIS PROCESS OF FORMATION MEANS IT HAS LITTLE HOLES RUNNING THROUGHOUT IT.

These holes are either filled with a resin or cement to give a smoother appearance or left open for a more rustic, natural look.

Travertine comes in natural colours such as white, tan, cream, and rust depending on which minerals were present during formation. It can have a concentric or a veined appearance depending on how it is cut.

Travertine is soft and a porous stone so will need to be well sealed with an appropriate sealant with repetition of this process over time. It should be cleaned with an appropriate cleaner (see WFF approved supplier list).

1. Limestone bathroom
2. Split Limestone steps
3. Varied Travertine floor
4. Travertine Light shower

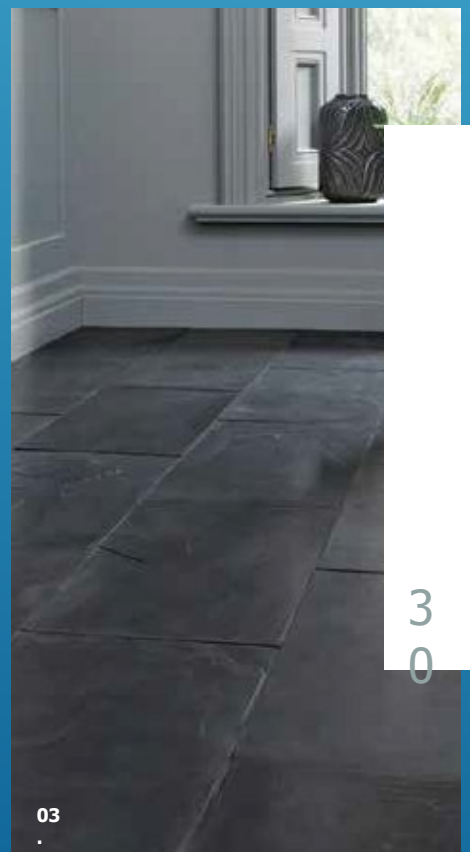
Slate

SLATE IS A FINE-GRAINED, FOLIATED ROCK, FORMED WHEN THE ORIGINAL MATERIAL, USUALLY MUDROCK OR SHALESTONE, CHANGED OVER TIME, AT LOW PRESSURE AND RELATIVELY LOW TEMPERATURE.

As with many natural stones, it varies in hardness. It is a popular material for uses such as flooring, fireplaces and in its harder form for worktops. We supply Italian Black Slate for fire hearths and surrounds; this is softer in its makeup, a typical Slate that you would use in billiard or blackboards.

Slate comes in many colours; the most popular colours are grey in which the shades range from light to dark. However, it is possible to find other colours such as red, green, black, purple etc. depending on the type of iron or raw material present in the rock.

1. Brazilian Black slate shower enclosure
2. Black Slate tiled backsplash
3. Riven Black Slate floor tiles





Produced by the Worktop Fabricators Federation in conjunction with Gerald Cullifords