# Patio Grout - GftK Technology



'The Best 1-part Paving Joint Mortar'

### Application Guidelines with practical tips for success What is GftK's Patio Grout from NCC Streetscape?

**Put simply: "Patio Grout** is unique & the best 1-part paving joint grouting product on the market, designed for Professionals & competent DIY'ers!"

**Patio Grout is** unique and has big advantages – It is easier and faster to apply, because it allows the most efficient and effective use of wet slurry application, which provides optimum self-compaction into the joints, with no additional tooling or finishing required.

**Patio Grout** is also outstanding in comparison with other air-drying, 1-part, paving joint compounds, because of its higher strengths and higher performance.

**Patio Grout** is designed for Professional and DIY use on domestic paving with pedestrian traffic, i.e., for garden patios, pathways, and terraces etc. It is used for grouting most types of external natural stone and concrete paving, including smaller format e.g. setts, cobbles, brick pavers etc., as well as for larger format slabs, and flags.

Patio Grout is suitable for use on both new paving & paving repointing projects.





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### **Technical performance**

Technically, Patio Grout is the 'State-of-the-Art' airdrying, paving joint compound, formulated using a unique, blended polymer, with graded fine aggregates based on alluvial sands. Patio Grout is a 1-Component mortar that is supplied vacuum packed, ready-to-use, with no mixing required on site. The product's unique level of moisture tolerance allows the most efficient and effective use of wet slurry application, giving optimum self-compaction into the joints. No additional tooling, compaction or finishing of the joints is required. As a result, the grouting works are easier to undertake and they can be completed and finished faster, even in wet weather, plus there is also far less cleaning work to do afterwards. The higher strengths and higher performance, significantly increases durability and service life.

### **Technical values**

Density: 1,7 kg/l

Flexural Strength: ca. 9,0 N/mm<sup>2</sup>

Compressive Strength: ca. 18,0 N/mm<sup>2</sup>

Permeability: At a 20% joint ratio, approx. 12 l/m²/min.

### **Paving Joint Dimensions:**

Joint width: Continuous minimum 3 mm, continuous maximum 20 mm.

**Joint depth:** 30mm for optimum performance, min. 25mm when full depth of paving elements is 25mm. For continuous joint widths greater than 15mm, use twice the width for the depth.

### **QR Code for the Patio Grout Product Page**



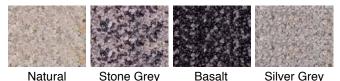


## Easier – Faster - Better

Patio Grout is the 'State-of-the-Art' in 1-component paving jointing, which is because all these greatly improved application characteristics directly impact, and significantly increase the performance values. Specifically this means that Patio Grout achieves compressive and flexural strengths more than 100% higher, with lower e-modulus, and much better strength correlation than other 1-part air-drying, paving joint materials. This also increases internal cohesive strengths in the joint, and most importantly, optimises adhesive bond to the joint sides - All of which are 'Key factors' for achieving durability and a longer service-life. This is because of the increased ability to accomodate and dissipate thermal movement and reduce stress on the bond line, where the adhesive bond is also much higher. The combination of all these superior values gives Patio Grout significant advantages in performance and durability.

**Patio Grout** is completely cement-free, making it kinder to the environment, with no risk of cement run off damage to drainage, plus there is no risk of cement staining to the paving or any adjacent surfaces.

### Patio Grout Colours



**Patio Grout** is available in these four colours, which are fully homogeneous, pre-mixed and supplied in a vacuum-sealed bag inside a sturdy pail, 'ready to use'.

Tip: If the pails have been stood or exposed on site for a

long time prior to use, then we recommend pouring the material back into the pail when the vacuum sealed bag is cut open. This helps to reduce any consolidation and ensure the material is fully homogeneous and consistent for use, plus some people can find it easier to pour the material out from the pail rather than the bag, into piles on the paving.



**Colour Note:** Please be aware that the graded fine sands used in **Patio Grout** are an abundant naturally occurring raw material, which means their base colour can vary. Whilst we endeavour to maintain colour consistency, it is best wherever possible to use pails from the same batch to complete a project. Also, when extending a previous project, be aware that such variances are likely, as well as variations due to the exposure and weathering. The colours depicted on the packaging and on the website are therefore indicative and representative only.



### Application

The following information is an outline, but we strongly recommend that users watch the **Video Guides** and read the **Patio Grout Application Guide** before use. These are both available on our website, and include helpful advice with practical tips for success.



### Preparation: Substructure and bedding:

The supporting structures for paved domestic garden patios, pathways, and terraces should be designed so that they are permeable, for good drainage as well as able to fully support and accommodate the anticipated loadings of the paving and the intended uses for the area. Paving that is bedded into a mortar and jointed is known as 'bound' paving whilst paving laid on sand and butt jointed is 'unbound' paving, e.g. large supermarket car parks.

In the UK it is now generally recommended that 'bound' paving for domestic patios and pathways, should be laid into a full wet bed of permeable bedding mortar on a permeable concrete bed over consolidated fill, e.g. MOT (old UK Ministry of Transport's specification) Type-1, Type-2, or equivalent. MOT Type 1 is a crushed aggregate that is produced to be used and consolidated as a sub-base creating a stable surface for roads, structures, and pathways etc. It can consist of crushed limestone, granite, gritstone, basalt, brick, concrete and masonry hardcore, and is 0-40mm in size. This makes it an extremely strong and durable, free draining material, once it has been compacted. MOT Type 2 is similar, but finer, 0-20mm in size, and used for the same purposes. Generally a concrete mix ratio from around 1:5 to 1:9 (cement to sand/aggregate) is considered permeable and sufficiently strong (from 10 to 25 Mpa compressive strength), to be ideal for paving substructures and bedding mortars. Concrete mixes <1:4 are used for structural concrete e.g. often specified as C30, C40 etc., which are stronger, but not better for paving substructures, as they are not considered sufficiently permeable in this respect, and therefore not recommended for paving substructures.

A simple test to check if the bedding/substructure is permeable, is to pour a glass of water over it, and if it drains away after a few minutes then it is sufficiently permeable. There is a British Standard Series, BS 7533, and Part 101 is a 'Code of practice for the structural design of pavements using modular paving units', which was published in November 2021. The primary focus of this is the design of heavier duty paved surfaces in public and commercial areas, meaning those that are subject to varying degrees of use by significant volumes of pedestrian traffic, and/or different frequency levels of use by cars and different types of commercial vehicles. Unfortunately, the only paving jointing mortars covered in BS7533 at this time, are the cement based jointing materials, both pre-batched and site batched. These are widely used for larger local authority and commercial paving works, where low initial cost is always a major factor, often unwisely. Look at the public and commercial paving near you - how are the joints looking? - Enough said!

Cement based paving jointing materials are always difficult to use, given the vagaries of the British weather. This fact alone means that very often they are not suitable, and/or they require specialist expertise and equipment for their successful use in many paving applications, even assuming good environmental conditions on site etc. However, as BS7533 Part-101 also states on Page 1: *"Users may substitute any of the recommendations in this British Standard with practices of equivalent or better outcome."* 

It is not therefore a surprise, that most of the quality domestic paving in the UK today, is **not grouted with cement based jointing materials**, and this is for very good technical and practical reasons.

It is hoped that a future update and / or Part of BS 7533 will cover the alternative jointing solutions that are specifically designed for these applications, and use in different conditions, and without specialist equipment. This includes the 1-part, air-drying, polymeric sand products, of which GftK's **Patio Grout** is the top

performer. For even higher performance, GftK's range of 2-component, epoxy resin-based products are used, which are the clear state-of-the-art for paving under traffic loadings in driveways as well as public and commercial areas.

There is far more detailed information about all of this on the NCC Streetscape website:

#### https://www.nccstreetscape.co.uk/paving-jointing/ sand-cement-joint-technologies.html

**Falls:** Domestic paving should always be laid to falls to facilitate drainage, meaning the paving is laid with a slope or 'fall' that is normally away from the house to the garden, and/or to another surface water drainage concept, e.g. the paving can be laid with falls to an ACO (or similar) surface water drainage channel system that can adequately accommodate rainfall and any other surface water run-off from the finished paved wearing course. Typically, for riven natural stone and







textured reconstituted stone (concrete) paving, a minimum longitudinal fall, also known as the 'end fall', of 1 in 80 (12.5mm per linear metre), should be provided along the direction of a path or patio, with a transverse or cross-fall of 1 in 40 (25mm per linear metre). These falls must be formed in the supporting substructure and maintained at the new paved surface.

**Note:** For smooth polished, natural stone, e.g., honed stone and external porcelain tile paving, an increased fall of 1 in 60 (16mm per linear metre) is considered best in the longitudinal direction. This increased slope is better to reduce dirt pick-up and/or to reduce slip-hazard risks during wet weather, as even Class R11+ slip resistant paving surfaces can be slippery when wet!.

### Patio Grout: Areas of use

**Patio Grout** is designed for Professional and DIY use on domestic paving with pedestrian traffic, i.e., for garden patios, pathways, and terraces etc. It is suitable for grouting many different types of external natural stone and concrete paving, including setts, cobbles, slabs and flags, plus brick and ceramic pavers etc.

**Patio Grout** is suitable for both new paving & paving repointing projects.

**Patio Grout** is designed to be permeable to assist surface water drainage, which is also in accordance with the strict German Federal Ground Water Protection (GWP) Regulations.

### **Patio Grout: Limitations**

**Patio Grout** is not recommended for use on impermeable, concrete beds, because like all airdrying, I-part jointing compounds, **Patio Grout** can be permanently damaged by frequent waterlogging, i.e. if laid on an impermeable supporting structure / bedding, or with inadequate falls or drainage.

**Patio Grout** is not recommended for use in paved areas with vehicular traffic, such as driveways & parking areas etc. For jointing paved driveways, parking areas, and other areas with vehicular traffic, we recommend GftK's state-of-the-art, 2-part, epoxy resin based paving jointing products, as these provide the ideal solutions.

**Patio Grout** is not designed to absorb any settlement or other ground movement in the substructure.

**Patio Grout** is not suitable for use around swimming pools.

### Structural movement / expansion joints

When there are structural movement joints in the supporting substructure, these must be designed and formed in accordance with standard design & construction principles. Any such joints in the substructure, and/or at the perimeter against other structures, must be brought through the paving and sealed with a suitable elastic joint sealant.

*Note:* This does not refer to the perimeter gaps to other structures or buildings. Please refer to NCC Streetscape for advice on suitable elastic movement joint sealing products on your project.

Weather & environmental conditions: the ambient, paving surfaces, and the material (Patio Grout) temperatures, should all be minimum 5 °C and maximum 25 °C for optimum application. At the limits of this range it can be helpful to store the Patio Grout in warm / cool temperatures for 24 hours before use. Before & during application in lower temperatures (< + ~ 5 °C), cover the area to protect from frost, and in higher temperatures (> + ~ 25 °C), cover the area to protect sun during the application & curing times.

**Repointing Old Paving:** When repointing existing paving it is important to firstly remove all the loose and deteriorated jointing materials and to ensure that the joint arrises are also clean and free of residual mortar. Then ensure that the correct joint widths and depths are clear, ready to be repointed with **Patio Grout**. It is also a good opportunity to thoroughly clean the paved surfaces to remove all accumulated dirt and grime, as well as green growths and 'blackspot' lichen deposits. The best way is to jet wash the surfaces and then scrub in NCC Blackspot & Green Growth Remover, with a stiff yard brush, leave for a few minutes, and then rinse off with clean water. As shown in the Paving Cleaning section **Case Studies & Video Application Guides** page on our website:

https://www.nccstreetscape.co.uk/case-studies.html Now Patio Grout is applied using wet-slurry techniques as outlined below in 'Application – The installation process' and in the videos on our website: https://www.nccstreetscape.co.uk/paving-jointing/ patio-grout.html



**Tools:** You will need a suitable knife or scissors to open the vacuum sealed bags, a long-handled, hard rubber bladed squeegee, a good quality, soft coconut fibre brush, plus a clean water supply hose with a good spray nozzle for control. Tools should be cleaned and rinsed frequently with fresh water during the works. Immediately after the works, washing the tools in warm soapy water will help to remove any final residues of binder, and ensure they are good to go on the next job.





**Porcelain Paving:** There are a lot of confusing myths and misinformation about external porcelain paving and its jointing. These mostly relate to the permeability of the substructure, and preventing water underflow and frost damage, as well as the need for cleaning and sealing these surfaces. As a result, we have tried to clarify these myths and explain the potential issues with the facts, and lots of other useful information, including the demands on porcelain grout from jet-washing, and the details of unique solutions for porcelain paving jointing systems on our website here:

#### https://nccstreetscape.co.uk/type-of-paving-unit/ porcelain-paving-faqs.html



Porcelain Patio pointed with GftK vdw 815plus, the 2-part, epoxy paving joint system **Test Area:** Practical experience has shown that on some sensitive or very porous natural stone (such as honed sandstone), or reconstituted stone (fine coloured concrete) paving, any grout binder / residue can make the surface appear darker or discoloured. This is why we always recommend a test in an inconspicuous area before overall use. If any staining does occur, then this will reduce over time. It is not a defect or any shortcoming in the product, or in the execution of the works. Some darkening of paving elements can also occur due to differential drying out and moisture uptake from the bedding, and this will also reduce over time and is not a defect.

**Pre-sealing natural stone paving before grouting:** For sensitive and/or very porous natural stone paving,



as well as external porcelain paving for different reasons, we recommend pre-sealing the paved surfaces before grouting. This is to reduce the risk of staining from the grouting operation as well as in service, plus to make them easier to clean in future as well. Please refer to the information on the Paving Sealing pages of the NCC website here:

https://www.nccstreetscape.co.uk/paving-sealing. html

**Surface preparation:** Once the newly installed paving is sufficiently sound and hardened to safely walk on, the works can continue, usually a minimum of around 48 hours is recommended, depending on temperature and humidity etc. Once hardened, thoroughly clean

the surfaces to remove all dirt, cement mortar, loose sand, and/or any other materials Also taking care to clean out the joints and ensuring they are clear for the full width and to the required depth (see above 'Joint Dimensions'), and that the side arrises are also free of residual mortar.

Joint ends & terminations: Before starting to pre-wet and grout, check to ensure that all joint ends at paving terminations to lawns or adjacent areas are closed, so that the grout does not flow out of the end of the joints. Open joint ends can be closed by the paving haunching /bedding mortar, but if not, due to aesthetic reasons for example, then the open ends must all be closed with suitable waterproof 'Duct' or 'Gaffer' tape to prevent waste, possible contamination of adjacent areas, and a poor visual finish. Alternatively, the ends can be 'pointed' with Patio Grout direct from the bag/pail using a suitable small trowel. The same applies to steps and coping stones with an overhang, where both the end and the bottom of the slab must be taped. This can also be done using closed-cell, polyethylene joint backing rods, though this method will leave a gap / void at the end when removed.

**Note:** The joint ends should not be closed with an extruded (gun applied) silicone or polyurethane joint sealant, or similar, as these contain plasticisers and/ or oils that can migrate into the paving and stain or discolour the edges, which is then almost impossible to remove without replacing the slabs!



Pre-sealing porcelain tile paving with NCC Porcelain Tile Protector before grouting with GftK vdw 815plus

**Protection of adjacent areas:** Paving is often laid close to windows such as modern patio doors, adjacent to garden features, fencing, lawns, and areas of special planting etc. Therefore, it is important to take appropriate measures to protect these if this has not already been done for the paving installation. This is to avoid any damage to adjacent areas, as well as to prevent any staining of the paving and jointing during installation and curing, by any run-off from plants or fencing for example.





**Application - the installation process** 

**Pre-wetting:** Prior to the **Patio Grout** application, thoroughly pre-wet the paved surfaces with clean tap water to saturation – i.e., until there is no visible absorption continuing, but avoid 'puddling' with pools of standing water etc. Always use clean, fresh tap water!



**Wet-slurry application:** We recommend that you open and work with one pail at a time, and grouting is always easiest with at least two people.

To begin, open the pail and remove the vacuum sealed bag of **Patio Grout**, place it on a stable surface, then cut open the top corner of the bag - around one third across makes it easy to pour.





Pour the mortar onto the wet surface in small piles approximately 200mm diameter, or sufficient for maximum area of just  $4 - 5 m^2$ . Do not pour it all out in one pile, and do not empty the pail before starting to apply, as delay will make application more difficult, and it will also take longer. As the product is air-drying, it is important to keep it wet with the hose once it is poured out in piles on the pre-wet paved surface.



Apply the **Patio Grout** mortar using 'wet-slurry' techniques, which means moving the material across the paved surfaces and into the joints using a soft water jet spray from a controlled nozzle on a hose, and a hard rubber squeegee, working firmly, and diagonally to the



joints, as shown in the product application videos. Continue to work pouring out small piles and using the squeegee and hose, moving the material, helping it to flow and self-compact into the joints. Ensure they are properly filled and topped up as you work. Do not overfill the joints, and always keep the paved surfaces wet throughout the application. You cannot use too much water at this stage, though the nozzle pressure must be controlled and not displace material from the joints.







*Tip:* Remember to use the hose nozzle frequently to rinse your shoes and tools preventing any mortar build-up, which could otherwise lead to tell-tale footprints on the finished surfaces.

Once the joints are correctly and uniformly filled, allow a few minutes for the water to drain through the joints, then carefully clean and remove any surplus mortar from the paving surfaces, using more water in a reduced / finer spray and a dampened coconut-fibre-brush. Be careful not to brush freshly applied mortar out of the joints.



**Working time:** The maximum working time for using **Patio Grout** with the wet slurry method, is approx. 45 minutes at 20 °C, though working in small areas is easier and will be faster overall. Always keep the paved surfaces wet throughout the application process.

**Tooling & Finishing:** No additional tooling or finishing is required to achieve optimum compaction and finishing with **Patio Grout**. However, if a certain finish is required e.g., slightly rebated, or struck at a specific angle, then this can be done after the water has drained, using normal pointing tools. We should repeat that any form of tooling or additional finishing is not required or recommended with **Patio Grout**, plus if/when a special 'struck' finish is required, we strongly suggest a trial be carried out in an inconspicuous area, or with a mock-up, to confirm the parameters. **Chamfered edges:** If the paving elements have chamfered edges, then the material in the top chamfered area of the joint must also be removed as above whilst still wet, to allow correct joint performance. A brush / trowel handle or similar, that fits the chamfered section is usually best for this – as shown in the Patio Grout Application video on our website.

**Curing:** Correct curing is an important part of the grouting process, at an ambient temperature of 20°C and a relative humidity (RH) of 65%, the areas will accept light foot traffic after 24 hours. Therefore, it is important to protect the freshly grouted areas from people, animals, strong sunshine, and heavy rain or water flow, for at least 24 hours, and until they are sufficiently hard. For optimum curing and long-term performance, we always recommend that full opening of the freshly grouted areas for normal use should be after approx. 7 days. A physical mortar strength test can also be carried out to confirm adequate set before the area goes into service. Generally, higher temperatures will shorten the curing period, lower temperatures will extend the time.



Prolonged damp weather during curing may cause some delay in hardening. If the joints are waterlogged in this period, this may impair ultimate strengths and indicates that there is inadequate drainage.

### **QR** Code for the Patio Grout Product Page







### **Patio Grout Consumption:**

The figures given in the Patio Grout Consumption Table below are calculated for a joint depth of 10mm and must be multiplied by the actual depth of the joint for your project i.e. for 20mm joint depth, multiply by x2, for 30mm joint depth by x3.

	Paving unit size (mm)		Approx. kg/m <sup>2</sup> (at 10mm depth) for joint Widths of:			
Type of Paving Units	Width	Length	3 mm	5 mm	10 mm	15 mm
Smaller format paving, e.g. stone setts / cobbles	60	80	1,4	2,3	4,3	6,1
	80	100	1,1	1,8	3,4	4,9
	100	100	1,0	1,6	3,1	4,4
	100	120	0,9	1,5	2,9	4,1
	100	200	0,7	1,2	2,4	3,4
	120	160	0,7	1,2	2,3	3,3
	140	160	0,7	1,1	2,1	3,1
	180	180	0,6	0,9	1,8	2,6
	200	200	0,5	0,8	1,6	2.3
Larger format paving slabs / flags	300	300	0,3	0,6	1,1	1,6
	400	400	0,3	0,4	0,8	1,2
	600	400	0,2	0,4	0,7	1,0

#### Patio Grout Consumption Table (consumption per 10mm depth of joint)

This consumption table refers to areas of both smaller format paving (generally regarded as <300 x 300mm), and larger format paving (typically >400 x 400mm). The uneven shapes and profiles of natural stone setts / cobbles with cropped or riven edges, as well as different paving designs or laying techniques, can also lead to variations in consumption.

Loss and wastage: There are no allowances for loss or wastage included in this table, and an appropriate amount should be added. Professionals usually add around +10%, for loss and wastage according to the site situation.

There is also a Patio Grout Consumption Calculator on the Patio Grout Product Page of our website: https:// nccstreetscape.co.uk/paving-jointing/patio-grout. html

This is designed as a tool for estimating Patio Grout consumption on your projects.

### Packaging & Storage

Packaging: 15kg oblong pails with the mortar in a vacuum sealed plastic bag inside the pails.

Storage: Up to 18 months, if stored in dry and frost-free conditions, and in the original and unopened packaging.

Note: Technically, if any unused material is poured into the pail, covered with at least 50mm of clean water and sealed, then it can be good to use for a few weeks at least. However, as this is all beyond our control, we always recommend that opened bags are used within the specified wet slurry working time of around 45 minutes..

### Maintenance - After care in service:

#### **Paving Cleaning:**

All external paving requires regular cleaning to keep it in good condition and generally this now includes frequent jet-washing along with suitable paving cleaning detergents and clean water. The use of bleach and industrial style cleaners containing sodium hypochlorite is not recommended. This is because these may damage natural stone as well as affecting Patio Grout joint colours. For safer and more efficient cleaning we recommend using NCC's Specialist Paving Cleaning **Solutions** to facilitate the removal of dirt and stains, as well as eliminating, or significantly reducing the need for high pressure water jetting.

Jet wash cleaning: As with all air-drying, polymeric sand paving jointing mortars, Patio Grout filled joints should not be cleaned directly with high-pressure water jetting equipment, such as Karcher, Bosch or similar. Patio Grout filled joints should not be cleaned directly with a high-pressure water jet, despite having higher strengths and better strength correlation than any other 1-part paving joint compound. However, it is not easy to clean paved surfaces without jet-washing the joints, so there are several recommendations and suggestions given in the industry to help with this dilemma, including:

'Only use a domestic power washer'....? 'Only pressure wash lightly' ....? Keep the nozzle 300 / 200 / 150mm (12 / 8 / 6") away from the joint' ....? 'Pressure wash the joints at an angle of more than 45° to the surface' ....? 'Pressure wash the joints with a low-pressure wide

fan jet' ....? On reading these, if you are an experienced paving contractor you might well think: 'Have they ever used a Karcher / Nilfisk / Bosch jet wash and held a lance before ... ?'

However, notwithstanding this, all these suggestions are intended to assist, and they give a very good hint that 1-component paving joint compounds are not designed to be high pressure jet washed.

All this advice should help formulate a plan for cleaning and maintaining the appearance of your paving, whatever your level of experience with such machines. Clearly, it is better to try and minimise any water jetting / jet washing and not jet wash the joints directly, as whatever way you do it, the pressure washing will usually lead to some jointing material

being displaced, particularly when the operator gets distracted or bored. The clear message is to avoid jet washing if you can, and if you do, then take it 'slow and easy' on and around the joints.





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Keeping the original pristine appearance of external paving will always require frequent cleaning to prevent staining and the build-up of dirt and grime. Fortunately, this can be achieved without, or at least with minimal high pressure water jetting, by using NCC's Specialist Paving Cleaning Solutions. These are very effective treatments that can help you guickly and easily remove algae and grass stains, green growths, rust stains etc., as well as to remove general dirt and grime more easily. This is often with just a garden brush and a nozzle on a garden hose - Problem solved. One very important caution, no pressure or chemical cleaning solutions should be applied within 4 weeks of the joints being grouted. There is a lot more paving cleaning information and advice on the Paving Cleaning Solutions on our website here:

https://nccstreetscape.co.uk/paving-cleaning.html





### **Paving Sealing:**

Another way to reduce the need for high pressure water jet cleaning and prevent damage to your patio paving joints, is to use one of **NCC's Specialist Paving Sealing Solutions**.

Using an appropriate sealing system for your patio paving, can prevent and or significantly reduce staining and dirt pick-up, which then also reduces the cleaning requirements, and/or makes the paving cleaning process, including the joints, much easier and faster, as well as being less frequently required. Although we strongly recommend that any spillages are always removed and cleaned away as soon as possible. Depending on the type of paving and sealer, frequently the sealer can also be applied before grouting is carried out, which has several advantages, firstly in preventing, or greatly reducing any possibility of staining by the grout, plus pre-sealing also makes the grouting process easier and faster as the surface pores are filled and suction is greatly reduced.

*Note:* For any sealer application after jointing is completed, it is important to wait at least 4 weeks before applying any chemical sealing solutions over freshly applied **Patio Grout**.

There are many different types of paving and different types of sealers, all of which have different characteristics and advantages, as well as limitations. Therefore, this is also a big subject, but fortunately we have provided extensive information and advice on our website, and we developed a complete range of paving sealers for all types of paving and exposure requirements. Find out more on our website here: https://nccstreetscape. co.uk/paving-sealing.html

#### **Weathering Exposure:** As with all materials used externally and exposed to natural weathering, the Patio Grout mortar will age over time and some discoloration can be expected.

#### Health and Safety

You can download the **Patio Grout** MSDS (Material Safety Data Sheet) from the **Patio Grout** Product pages of our website here:

#### https://nccstreetscape.co.uk/paving-jointing/patiogrout.html

In summary, when using Patio Grout, avoid contact

with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

May cause irritation to sensitive skin. After contact with skin, wash immediately with plenty of soap and water. Wear suitable protective clothing and gloves. Keep away from children. Avoid animal contact (including aquatic life) during the application and curing periods. Pets and small animals should be kept away from the site during and immediately after the application until set hard. Take care when using around ponds and ensure the product does not get into any ponds as uncured can be harmful to fish and other aquatic and pond life. Always wash hands before consuming food. Mixed, cured material is inert and does not require special disposal.

#### Legal:

No direct legal liability can be assumed based on the data in this product application guide or from any verbal advice. Unless this verbal advice is expressly confirmed by us in writing. Our General Conditions of Sale and Supply apply. Always ensure that you have the latest edition of the PDS (product data sheet).







### **Patio Grout Application Guidelines** - A summary from the Patio Grout Pack Label



Important Notes: Before starting the works we strongly recommend that you read our Patio Grout Application Guidelines and watch the Patio Grout Application Videos on our website. (Tou can use the QR code on the side of pail).

As with all paving jointing, the paved surfaces must be sound and fully bonded to the substrate, the paving surfaces must be thoroughly cleaned, and the joints must be open and clear of any debris and/or loose materials.



1. Thoroughly pre-wet the paved surfaces with clean tap water to saturation - i.e., there is no visible absorption continuing.



2. Open the pail and carefully, take out the vacuum-sealed bag and place it on a stable surface.



3. Open the vacuumsealed bag by carefully cutting it across the top with a suitable knife or scissors.



4. Pour the ready-to-use Patio Grout directly onto the wetted surface in small piles. Only pour a few piles at a time, as you work across the surface.



5. Using a squeegee and water from a controlled nozzle, move the material into the joints, working smoothly, firmly, and diagonally across the joints - as shown in the Videos.



6. Continue to work with the squeegee and hose, moving the material, helping it to flow and selfcompact into the joints. Ensure they are properly filled and topped up as vou work.



7. Remove any surplus from the paved surfaces using more water and a damp, soft coconut bristle brush. Take care not to disturb the filled joints.



8. Protect the surface from people, animals, strong sunshine and heavy rain until sufficiently hard (c24 hrs @ 20°C).





Patio Grout - GftK Technology 'The Best 1-part Paving Joint Grouting Mortar'

