# Patio Grout - GftK Technology

'The Best 1-part Paving Jointing-Grouting-Pointing Mortar'



Patio Grout is unique and has big advantages - It is easier and faster to apply by 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 overall 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 external natural stone and concrete paving, including setts, cobbles, slabs, flags and brick pavers etc.

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

# Key Characteristics & Advantages:

- Can be applied in light rain
- Supplied ready-to-use
- No mixing required
- Fast wet-slurry application
- Self-compacting
- No tooling required
- Non-staining
- No oily residue
- Higher strengths & performance





Natural



Basalt



Stone Grey



Silver Grey

Easier, Faster, Better!



UK Distribution & Support by NCC Streetscape: www.NCCStreetscape.co.uk Sales@NCCStreetscape.co.uk Tel: 01257 266696



German Technology from: GftK mbH, Kottenforstweg 3 D-53359 Rheinbach-Flerzheim Germany



### **Application – Preparation**

The following is a brief outline, and we strongly recommend that users watch the **Patio Grout Video Guides** and read the **Patio Grout Application Guide** before use. Both are available on our website, with helpful advice and practical tips for jointing.

**Substrate / Bedding:** The supporting structure and substrate should be permeable and designed to fully support and accommodate the anticipated load in the areas of use. The paving should also be laid with suitable falls to facilitate surface drainage.

It is always best to lay paving elements into a wet bedding mortar on a permeable concrete bed over consolidated fill (e.g. MOT Type-1 or equivalent). Generally a concrete mix ratio around >1:6 (cement to sand / aggregate) is considered permeable and ideal for the substructure / sub-base. Concrete mixes < 1:4 are not generally considered permeable for drainage, and therefore not recommended.

# **Application - Limitations:**

Patio Grout is not designed:

- for use over impermeable, watertight concrete, as like all air-drying compounds, the material could be damaged by frequent waterlogging.
- to absorb any settlement or other ground movement in the substructure.
- for use around swimming pools.
- for use in areas with vehicular traffic.

**Note:** For jointing paved driveways and other vehicular traffic areas, we recommend GftK's 2-part range of epoxy resin based paving joint mortars.

**Movement & Expansion joints:** When there are structural movement expansion joints in or around the substructure, these must be brought through the paving and suitably sealed. NCC can advise on suitable elastic joint sealants.

#### Paving joint dimensions:

- Joint Width: Continuous minimum 3 mm, maximum 20 mm.
- Joint Depth: min. 20mm, for joints wider than 15mm use minimum 30 mm.

**Environmental conditions for application:** the ambient, surface, and **Patio Grout** temperatures, should all be within minimum 5 °C and maximum 25 °C.

**Tools:** A suitable knife, a hard rubber squeegee, a good quality coconut fibre brush, plus a water hose with spray nozzle for control. Tools should be cleaned with water.

**Test area:** On some types of porous and sensitive paving, excess grout residue can sometimes make the surface appear darker or discolour. This is why we always recommend a test on an inconspicuous area before overall use. If any staining does occur, this will reduce with normal weathering over time. This 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 moisture from the bedding, which will also reduce over time and is not a defect.

#### **Application – the Installation Process**

Cleaning & pre-wetting: Once sufficiently hardened, clean the paved surfaces to remove all residual cement mortar, sand, or any other dirt & debris. Clean the joints and their arrises, to ensure they are clear to the required depth. Then thoroughly pre-wet the paved surfaces with clean tap water to saturation i.e., with no visible absorption continuing.

**Open and apply:** Open the **Patio Grout** pail and carefully take out the vacuum-sealed bag and place it on a stable surface, then open the bag by carefully cutting it across the top with a suitable knife or scissors. Pour the readyto-use **Patio Grout** directly onto the wetted surface in small piles (~200mm  $\emptyset$ , or sufficient for ~4 – 5 m²). Only pour a few piles at a time, continuing to do so as you work across the surface. All as shown in the videos.

'Wet-slurry' application: Using a hard rubber squeegee and soft water spray from a controlled nozzle on a hose, move the Patio Grout across the paved surface and into the joints, working smoothly, firmly, and diagonally across the joints – as shown in the videos. Continue to work with 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, and always keep the surfaces wet throughout the application. Once the joints are correctly filled, allow a few minutes for water to drain through the joints, then carefully remove and clean any surplus mortar from the paving surfaces, using more water and a dampened coconut-fibre brush. Take care not to brush freshly applied mortar out of the joints.

**Working time:** The maximum working time to wet slurry apply **Patio Grout** is approx. 45 minutes at 20 °C.

Chamfered edges: If the paving elements have chamfered edges, then the material in the top chamfered area of the joint must be removed for correct joint performance. A brush handle or similar, that fits the chamfered section is usually best for this – see video.

**Curing:** Protect the freshly grouted areas from people, animals, strong sunshine, and heavy rain or water flow, for at least 24 hours, or until sufficiently hard. The final opening of the areas to full use should be after ~7 days, with ultimate strengths after ~28 days. (20 °C / RH 65%). A physical mortar strength test should be carried out to confirm before the area goes into service. Prolonged damp weather during curing may cause some delay in hardening.

Maintenance in service: As with all 1-part paving joint compounds, Patio Grout filled joints should not be cleaned by direct high-pressure water jetting, plus the use of bleach e.g. sodium sodium hypochlorite based cleaners may affect joint colours. For safer and more efficient cleaning we recommend the NCC range of safe modern paving cleaning solutions.









#### **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 multiply by x3.

	Paving unit size (mm)		Patio Grout required in kg/m² (excl. loss & wastage) for 10mm joint depth at a joint width 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

**Note:** 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 included for loss or wastage in this table, and this should be added. Professionals usually add around +10%, according to the site situation

There is also a **Patio Grout Consumption Calculator** on the **Patio Grout** Product Page of our website.

You can follow the QR Code to the page, which is also available on the pack labels for handy reference on site.

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



#### **Technical Performance and Values**

Patio Grout is an outstanding air-drying, 1-component, paving joint compound, due to its higher strengths and better strength correlation than others. Patio Grout also has big advantages because it is easier and faster to apply, which is due to its unique formulation that allows the most efficient and effective use of wet slurry application. This provides optimum self-compaction into the joints, with no additional tooling required. The resulting higher strengths and better performance characteristics, also significantly increase resistance and durability

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.

## Packaging & Storage:

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

Storage life: 18 months, kept dry and frost-free, in



#### **Health and Safety information:**

When using **Patio Grout**, avoid contact with skin and wear safety goggles and protective gloves. Keep away from children. Avoid animal contact (including aquatic life) during the application and curing periods. Mixed, cured material is inert and does not require special disposal. Please also refer to the MSDS (materials safety data sheet), which is available to download from our website. You can follow the **QR code** above (which is also on the pack label) to the **Patio Grout** Product Page.

#### Legal:

No direct legal liability can be assumed based on the data in this product information sheet or from any verbal advice unless this verbal advice is expressly confirmed by us in writing. Our General Conditions of Sale and Supply apply.



