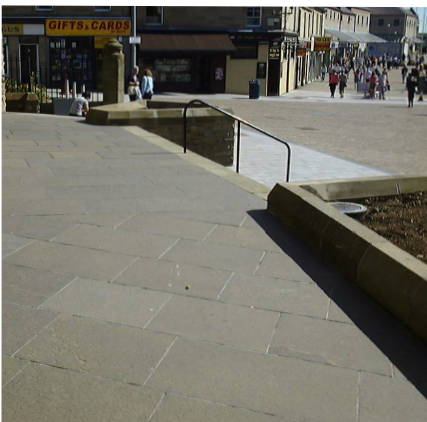


# Guidelines for the maintenance of areas of sandstone paving

Sandstone is a highly sought-after material for paving due to its natural, earthy beauty, high durability, and versatility. Sandstone possesses unique structural and aesthetic properties that make it an ideal choice for public realm landscaping, pathways, and steps.



## Material Properties

Sandstone is a highly sought-after material for paving due to its natural, earthy beauty, high durability, and versatility. Sandstone possesses unique structural and aesthetic properties that make it an ideal choice for public realm landscaping, pathways, and steps. Sandstone is a durable, porous sedimentary rock composed mainly of sand-sized mineral particles (0.06–2 mm), usually quartz or feldspar though it can contain mica, lithic fragments, and other minerals.

### Key properties include:

- **Origin:** Formed over millions of years through the compression of sand and mineral grains. It is primarily sourced from the UK, India, and parts of China and Southeast Asia.
- **Exceptional Durability and Strength:** Sandstone is a hard material, ranging from 6 to 7 on the Mohs scale, that is tough enough to handle high foot traffic and the weight of large vehicles. It is resistant to fracturing and splitting, making it a reliable, long-lasting investment.
- **Naturally Non-Slip Texture:** The riven or grainy surface of many sandstone pavers offers high, natural slip resistance, making them safe for markets, town centres, pathways, and wet environments such as pool surrounds.
- **Porosity (Permeability):** Sandstone is porous, which allows for water to drain efficiently. While this helps in reducing surface water, it also means the stone is susceptible to moisture and staining, requiring regular cleaning or sealing. Weather Resistance: Performs well in exterior environments and resists rain, sunlight, and temperature fluctuations.
- **High Weather Resistance:** Sandstone is well-suited to varied climates. It is generally robust and can endure extreme weather conditions, including rain, frost, and high temperatures, without cracking or losing its structural integrity. Sandstone can “open up” its porosity in continually wet conditions, so consideration should be given to managing water run-off, regular drying, and protect or seal against high traffic combined with high water volumes.
- **Unique Aesthetic Variations:** As a natural product, sandstone features varied tonal ranges—from warm yellows, browns, and reds to cool greys—and natural, non-uniform textures. This gives it a timeless, rustic charm that can brighten or add character to a space.
- **Workability (Cutability):** While durable, sandstone is often easier to cut and carve compared to harder natural stones like granite. This makes it easier to work with when creating specific shapes or intricate patterns, such as circle kits.
- **Environmental Sustainability:** Environmental Sustainability: granite. This makes it easier to work with when creating specific shapes or intricate patterns, such as circle kits.

## Initial Maintenance

Maintenance requirements are minimal under normal service conditions. If necessary, surfaces may be washed with brush and water or using high pressure hoses. If the latter, care should be taken not to blast away sand in joints.

To maintain the integrity of the materials and joints, avoid using high-pressure washers or vacuum cleaners for at least three months; this allows natural sediment to settle and bond. Covered or highly shaded areas will require an even longer waiting period. As an alternative, you may apply a paving or joint sealant to preserve longevity of the materials.

During fixing, or just afterwards, Yorkstone and Sandstone Flooring is generally more hardy than limestone, marble or granite. Its natural constitution lends itself to easy cleaning with a proprietary solution, so any building dirt or leftover reclamation staining may be removed quite satisfactorily with a proprietary chemical solution, if necessary. If you use it before grouting, make sure the surface is well rinsed and bone dry before applying the appropriate impregnator. Before cleaning, identify the contaminant and select the appropriate treatment. Where the contaminant is unknown, test the chosen cleaning method on a small, inconspicuous area first.

Hardscape can supply on request:

- Advice on stain-removal techniques.
- Suitable products.
- Referrals to specialist cleaning companies as appropriate.

Note: Advice and recommendations are subject to the circumstances of specific problems. Removal of stains cannot therefore be guaranteed. Certain cleaning products may be subject to statutory regulations for safe handling and usage (including COSHH and CDM regulations).

## Hazard Identification and Inspection

Regular inspections should assess the following conditions.

### Surface Condition

- Cracked slabs or blocks (hairline or structural cracks)
- Spalling or surface breakdown
- Excessively worn or polished surfaces affecting slip resistance
- Loose paving units or rocking slabs
- Missing units creating hazards

### Level and Alignment

Uneven levels between units (trip hazards)

- Subsidence or settlement indicating sub-base failure
- Heave or uplift (often caused by roots or frost)
- Misalignment or movement from the original layout

### Jointing and Bedding

- Missing or failed joint material
- Widened or eroded joints
- Vegetation growth (weeds or moss)

- Water ingress through joints

### Drainage

- Standing water after rainfall
- Blocked drainage channels or gullies
- Incorrect surface falls directing water away from drainage points

### Edge Restraints

- Displaced or loose kerbs
- Failure of edge restraints causing spreading
- Damaged transitions between surfaces

### Safety and Accessibility

- Trip hazards (generally >15 mm level difference)
- Slip hazards caused by algae, moss, oil or polishing
- Damaged tactile paving at crossings
- Obstructions or poorly positioned street furniture

### Structural Integrity

- Repeated settlement or rocking slabs indicating sub-base issues
- Damage from heavy vehicles or service traffic

### Cleanliness

- Debris build-up affecting drainage
- Oil, gum or chemical staining
- Surface deterioration from salts or chemicals
- Inspection frequency should be determined by site usage, risk level, and local authority requirements.

## Cleaning of Paving

Natural stone paving is very low maintenance once laid. The pointing is the weakest element and may need to be replaced after a number of years. Sweep regularly with a stiff brush to remove dust and detritus. There is a tendency for algae, lichens and mosses to colonise stone paving that is permanently shaded and/or damp. This can be safely removed by a pressure washer. Freshly sawn rough Sandstone, Yorkstone and Caithness flooring will generally require a little more maintenance than reclaimed Sandstone, Yorkstone and Caithness flags. The surfaces of reclaimed flags will be very smooth due to 100 years or more of wear and maintenance before reclamation. There's a number of proprietary solutions that can be used to clean, seal and maintain the appearance of Yorkstone/Sandstone paving units for which Hardscape can advise on.

### Winter Maintenance

During Winter conditions, despite their effective ability to dissolve and loosen ice or snow from cold surfaces, salts and de-icing agents can have detrimental effects to the appearance of sandstone paving. Spalling, scaling or pitting is a common problem that often occurs after the application of de-icing salts over sandstone surfaces. Please consider alternative methods such as regular sand or Calcium Magnesium Acetate (CMA), which are both safe for the materials and the environment. Avoid the use of Rock Salt (Sodium Chloride), Ammonium Nitrates, or Sulphates, as these can corrode and damage the paving.

## Warranty

Sandstone paving is expected to have a service life exceeding 60 years when properly maintained, based on historical performance and Environmental Product Declaration (EPD) data.

A 10-year warranty from the point of purchase is provided to cover material defects and ensure the long-term performance of the paving system.

## Health and Safety

Some of the cleaning methods described above involve the use of chemicals, which may be damaging or dangerous if not used in the correct manner.

It is important that safety warnings issued by the manufacturers of the chemicals should be read carefully and strictly adhered to.

In general, the following precautions should be taken:

- When using chemicals, protective clothing such as gloves, goggles, boots and overalls should be worn.
- Ensure there is adequate ventilation in confined spaces.
- When using flammable materials, ban the use of cigarettes, naked flames and other sources of ignition in the immediate vicinity.
- When diluting acids, always add acid to water and not water to acid.
- Dispose of safely any clothing which is contaminated with chemicals.
- Ensure care is taken not to damage, contaminate or stain any adjoining material.
- Protect personnel operating near the area to be cleaned from any injury or hazard created by the cleaning.
- Whenever possible care should be taken to ensure that the disposal of 'run-off' materials containing chemicals does not harm personnel, animals or any part of the environment.
- Trials should be carried out on a small, preferably inconspicuous, area of paving to determine the effect of the chemicals before treating a larger area.

**PLEASE NOTE** – Any advice, recommendation or representation given by an employee of Hardscape Products Ltd shall not be made liable and therefore acted upon entirely at the Customer's own risk.

