



Paving Methods Installation Guide

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Introduction

The success of any paving project depends not only on choosing the right stone but also on proper installation—including the correct base and preparation. The installation method directly impacts durability, appearance, drainage, and long-term performance.

We've created this basic guide to give you a general understanding of installation methods before selecting your paving materials or installer.

Since the process can involve many grey areas, this guide is designed to help you make informed decisions and ensure your stone is laid correctly to last for years to come. Taking the time to understand these fundamentals will help protect your investment and guarantee lasting quality.

Below are the most common methods we use at Sam the Paving Man, highlighting where each is best suited.

Disclaimer: - While we're happy to offer this guide as general advice, all final installation recommendations must come from qualified engineers and architects. All works should comply with site-specific conditions and relevant regulations.



1 Sand Bedding

Flexible Installation Method

What it is

Suitable material is laid directly on a compacted sub-base with a layer of bedding sand (typically 20—30mm thick). Joints are filled with fine sand or polymeric sand. Joints are butt jointed (edge to edge), and swept with fine sand.



Best for

- Driveways, footpaths, large scale projects
- Projects where some ground movement is expected
- Interlocking paver formats or brick size pavers

Pros

- Cost-effective and relatively quick installation
- Allows for water permeability
- Easy to repair or re-lay sections if needed

Cons

- Less rigid than mortar — may shift over time if not well-contained
- Requires edge restraints
- Not suitable for large format pavers or cobblestones
- Needs more frequent joint maintenance

2

Mortar Bed

Rigid Installation Method

What it is

Stone is laid on a mortar bed (typically a 4:1 sand—cement mix) over a concrete base, often with a bonding slurry — a cement-and-water mixture applied beneath and above the mortar to improve adhesion. Joints are generally filled with grout.

Best for

- High-traffic areas, public spaces
- Courtyards, terraces, pool surrounds
- Large-format pavers, cobblestones or stones with irregular tolerances

Pros

- Strong, long-lasting, and stable
- Minimal movement or shifting over time
- Creates a clean, formal finish
- Easy cleaning maintenance

Cons

- More labour-intensive
- Requires expansion joints and good drainage planning
- Difficult to lift or modify after installation
- Not suitable for thin tiles



3 Thin-Set Adhesive

Tile-Like Installation Method



What it is

Used for thinner pavers or stone tiles over a concrete slab or onto a sand and cement screed. A tile adhesive (modified thin set) is applied directly to the slab and the stone.

Best for

- Balconies, rooftops, internal stone floors
- Areas with existing concrete substrates
- Areas where effloresces is a risk (waterproof top of screed and adhesive to waterproof layer)
- Stair installation

Pros

- Clean and precise
- Great for internal/external transitions
- Suitable for thinner pavers or tiles
- Good for low clearance areas

Cons

- Stone tiles or pavers must be calibrated which is an additional cost and sometimes not possible
- Only works on solid, well-prepared substrates
- Not suitable for very thick or heavy stones
- Backside of stone must be sawn and without sealer to ensure adhesion

4 Permeable Installation Systems

What it is

Uses open-graded aggregates for the base and joints to allow water infiltration through the surface. Usually laid on a 30mm thin gravel layer.



Best for

- Sustainable urban design
- Around trees and natural areas requiring watering permeability
- Sites with drainage issues or stormwater regulations

Pros

- Reduces surface runoff
- Environmentally friendly

Cons

- Requires correct material specification
- Needs more frequent joint maintenance

5 Adjustable Chair or Pedestal System



What it is

A chair system (also known as a support pedestal system) is used in paving to support tiles or pavers above a subfloor or membrane, creating a raised and level surface. These adjustable pedestals, or “chairs,” are positioned at the corners and/or centre of each paver or tile, depending on the span and are adjustable in height.

Best for

- Balconies and raised flooring where drainage and access is required
- Light weight structures

Pros

- No risk for leaching
- Easy access for service maintenance and waterproofing works
- Light weight
- Less material handling

Cons

- Not suitable for vehicular loads or stairs
- Larger format tiles/pavers may require more chairs for additional support
- Open joints may trap debris if not maintained properly
- Material calibration may be required
- Breaking load of tile or paver must be suitable

Leave It to the Experts

Enjoy peace of mind knowing your project is in experienced hands. Our installation teams have decades of expertise, from high-complexity architectural paving to timeless cobbled laneways — ensuring your stone is laid correctly and built to last.

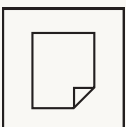
Get in touch with our installation team to discuss your project.



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