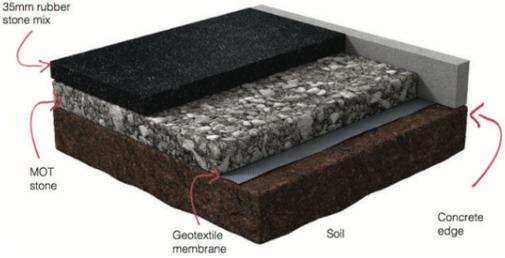


## Paving Types: Selection Guide

	Paving Type	Description	Photo	Pros and Cons	Approximate cost range (per sq m)	Supplier
	<b>Unit Paving</b>					
1	Natural stone flags	A wide range of stone types, of varying colours and textures. Amongst the most expensive materials. Requires a good construction build-up. Many stone types imported from India and China. Some traditional UK stone is available at a cost e.g. York Stone. Used in historic environments. Various finishes e.g. sawn, picked, flame.		Traditional material. High Cost. Sustainability issues. Can be lifted for repairs and re-laid. Requires a good construction build-up as it is prone to cracking. Not for vehicles.	£80+ supplied (without build-up and construction) – cost can vary greatly depending on the type of stone.	Marshalls. Yorkstone Etc.
2	Stone Setts	Traditional material, usually granite or basalt. Used in historic environments for roads. Was commonly used at vehicle entrances. Modern versions are available. Often used as edging or at thresholds. High cost material.		High cost material. Requires skilled people to lay it well. Can be lifted for repairs and re-laid. Durable.	£45+ supplied (without build-up and construction)	
3	Concrete Setts	Unit pavers of varying sizes, colours and textures.		Less costly than natural stone. Wide range of sizes and colours. Some maybe SUDS compliant, allowing drainage between joints (check!).		Marshalls. Blanc de Bierges etc.

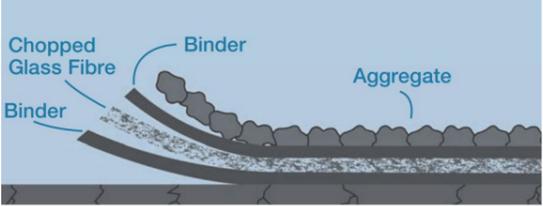
4	Brick Paviours/ block paving	Various colours and shapes. Brick size most common. Vary in cost. Durable and long lasting. More urban appearance.		Some are SUDS compliant with larger joints to allow drainage.		Marshalls. Tobermore. Blanc de Bierges etc.
5	Concrete Flags	Various sizes, colours and textures. More used in residential or commercial settings		Paving pattern can be varied to give different effects. Various colours and textures available. Requires careful construction build-up to provide firm base to avoid bridging and cracking.		Marshalls. Tobermore. Blanc de Bierges etc.
<b>Rigid Paving (Concrete)</b>						
6	Poured concrete	Versatile and long lasting but less forgiving if construction is not done well i.e. will crack and requires a skilled team to lay. Can be imprinted with a pattern (tends to be used for residential work). Requires specialist design input for reinforcement and contraction joints.				
<b>Flexible Paving (Bitumen Macadam based)</b>						
7	Resin Bound Gravel	Used as a wearing course. Requires a bitmac type construction up to base course level. Many aggregate types available. Sometimes possible to specify a cheaper resin which lowers the cost but may change the colour slightly.		Different types of resin available. Some are cheaper but give a slightly different colour finish but can be a money saving choice. Check with the supplier.	£40+ wearing course only	
8	Bitmac w/ resin bonded gravel surface	Bitmac construction with coloured gravel finish applied to the surface as a thin layer. Not as durable as resin bound surfaces. Has the same appearance as a resin bound pavement but will wear more rapidly and show the bitmac beneath.		Must be laid by an experienced team to give a durable surface.	£30+ / sq m for bonded gravel only. Requires a Bitmac or concrete pavement to be laid on.	

9	Coloured asphalt bound macadam	Choice of colours. Can have a similar appearance to resin bound gravel but at lower cost (but not quite as decorative). This is a coloured wearing course laid on a base course and binder course –same as build-up for Bitmac construction. There is a porous option available.			£25 / sq m + for Natratex wearing course only depending on thickness chosen.	e.g. Natratex by Bituchem
10	Bitumen Macadam (also known as Bitmac or Tarmacadam)	The common method of paving footpaths and roads. Black wearing to grey. Relatively long lasting. Many paving contractors.			Prices fluctuate with the cost of oil. Cost depends on depth of construction determined by whether it is foot traffic only or vehicles also type of aggregate used. Approx cost for footpath £46 - £60 / sq m (sub-base, base course, wearing course) excluding edging and excavation.	
<p><b>Rubber composition surfaces</b></p>						
11	Rhyno Pave	Mix of recycled rubber and aggregates. Various colours available.		Relatively unknown as to durability over the longer term.		Surfacing Solutions UK, Woodhams Farm New Barn, Springvale Road, Kings Worthy, Winchester, SO23 7LB <a href="http://www.surfacingolutionsuk.co.uk">www.surfacingolutionsuk.co.uk</a>

12	Rubber Gravel Mix SUDS compliant	Rubber gravel mix, porous. Sold as suitable for cycle routes, footpaths, pedestrian areas.		Reasonably new so longevity uncertain. Slip resistant, permeable, ok for wheelchairs. Available from DCM in three colours: gold, silver, red.		<p>DCM surfaces <b>DCM Projects Ltd</b> Wigan Road Leyland PR25 5XW</p> <p><b>01772 440340</b></p> <p>This is one supplier of their own product. Others may be available.</p>
13	Resin-bound rubber crumb (also known as Wetpour)	Rubber surfacing often used under play equipment. Comes in many colours. 2 layer construction for safety surfaces – base or shock-pad layer and wearing course.		Relatively unknown as to durability over the longer term.		Many installers across the country.
14	Resin-bound rubber mulch	Used under play equipment as a soft surface, also as a mulch around trees in urban areas. Free draining.		Relatively unknown as to durability over the longer term.		Fibrefall

	<b>Self-binding gravels</b> (several types are available from different parts of the country. CEDEC is a manufactured version with a wider range of colours)					
15	Self-binding gravel – CEDEC footpath Gravel (coloured versions: gold, bronze, red, silver, grey, green, amber)	A manufactured self-binding gravel.		Requires a sub-base (e.g. DOT Type 1 or hardcore). Can form a durable, hard surface but there will always be some amount of loose sand or gravel on the surface. Must be laid in the right weather conditions, needing moisture to be applied when rolling. Lay to a camber to shed rain.	One of the more expensive	CED Stone Nearest supplier to Winchester:  Hortus Loci Hound Green Hook, Hamps RG27 8LQ  <b>Tel:</b> 07796 370171
16	Breedon Gravel	A natural gravel, processed to give a uniform product.				
17	Grundon's Coxwell Gravel					

18	Ultitrec by Tarmac	Ultitrec is a recycled product from road arisings and so has an environmental advantage.				
19	Hoggin self-binding gravel. Also called 'As-Dug' or 'Pit-Run'	A natural product. As dug meaning it comes straight out of the ground without processing. Sometimes possible to get screened material to remove large stones but supply is unreliable. Has fines content that makes it self-binding (i.e. clay and sand)		Variable quality. Can contain large stones and varying amounts of fines from load to load. Screened hoggin is not always available and tends to be sold 'as dug'. Produces a hard and durable surface but likely to be some amount of loose gravel or sand over time. Must be laid damp therefore in wet weather to allow the roller to compact properly.	£25 / sq m including build-up. Add extra for excavation and edging.	Comes from south of England where gravel deposits are found but seems to be limited to a few suppliers only. CED Stone
<b>Loose gravels</b>						
20	Gravel with paving grid	Better than loose gravel as the grid contains the stones and to some degree stops them from moving. Size of gravel must be of a size that accommodates the grid.		Provides a firm surface. Free draining SUDS compliant. Can be used for vehicles with the correct construction and type of grid. Has been used in public car parks but signs that it may not last well. Grid can show through the stones. Colour of aggregate can be chosen. Grid can be black or white.	£10+ / sq m for the grid only. Requires sub-base and geotextile.	Bodpave. Ibran. Etc.
21	Loose Gravel	Probably the cheapest method of surfacing. Requires a geotextile beneath to stop weed growth. The stones will migrate beyond the area laid. Should not be used where this would be a problem e.g. playgrounds. Not recommended as a pavement. Can be used as a mulch.		20mm golden gravel		

22	Limestone chippings/scalpings	Frequently used in more rural settings as both a vehicle and pedestrian surface. Allows percolation.				
<b>Special Materials</b>						
23	Fibredec	A material for resurfacing worn bitmac or some self-binding gravel surfaces. Rejuvenates old surfaces by layering on to existing surface, bitumen, glass fibre, bitumen and finally fine gravel. Made and installed by Colas only (large construction company). Has been used on tow paths extensively and has some resistance to flooding. If used on a stone surface (e.g. DoT Type 1) it requires two layers.			£25-£39 / sq m excluding build-up or edgings.	Colas (only contractor licenced to install this product)
24	Bark	Loose bark chips, usually laid on to geotextile, sometimes with edging.		Not long lasting. Moves around and not good for wheel chair users.		Bark easily obtained from landscape suppliers.