

Block Paving

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Block (or brick) paving can be used anywhere. They can be used to great effect as driveways, paths, or patios, or mixed with other paving types to create a unique feature. They are a viable alternative to the more traditional asphalt (tarmac surfaces), and are aesthetically superior to plain concrete.

The design possibilities enabled by the use of these relatively small paving units are limited only by your imagination. If you can “see it in your mind’s eye”, then it can probably be constructed from block paving, such is their versatility and our expertise.

Below is a detailed outline of the brick and block method, what it entails types of blocks, colours, maintenance and our price guide. We can design and construct any paving or driveway project that you might be thinking of, large or small, simple or complex. We are up for the challenge and aim to please.

The Block Paving Process

Types of blocks and bricks

There are two basic types of block paving; the moulded concrete block (CBP – Concrete Block Pavers), and the kiln-fired clay brick, hence the interchange ability of the terms block and brick paving. In the following notes, concrete types are referred to as blocks, and clays as bricks.

However, both may also be known as pavers, pavers, or pervious, as well as some more obscure terms, not all of which are repeatable in polite company!

Concrete Block Paving

Concrete blocks are available in a range of thicknesses, from 40mm to 100mm. There are even 120mm units for exceptional applications, but they are not likely to be found in stock at your local supplier! For domestic use, the 50mm or 60mm units are most suitable. 80mm thick units are used for road construction or where there will be regular vehicle overrun, while the 100mm thick units are for heavy-duty pavements such as those in Freight Yards, Ports and Airports. Given the wide range of products on the market, choosing a block or brick paver for any given project can be a long, complex and fraught process. Following is a brief summary of the main points and we can of course guide you through it.

Amongst the concrete blocks there is an enormous variety of shapes, sizes, colours, and textures now available, with all the major concrete paving manufacturers producing their own versions of the standard rectangular block, and also special shapes, “olde-worlde” looking tumbled or antiqued units, and an ever increasing array of textured blocks.

Typical concrete block

Most rectangular blocks are moulded to a specific size, 100mm x 200mm x 50-100mm, with exactly 50 blocks per square metre, and, because of this standard size, blocks from different manufacturers may be interchangeable, depending on tolerances and position of any spacer lugs. Typical rectangular blocks tend to have one presentable face, although some blocks are reversible, which makes easy work of replacing stained paving. We would always recommend finishing with a professional quality sealer to protect your drive.

The colour of concrete blocks is achieved by the use of concrete dyes, usually some form of metallic oxide. Even the best dyes are prone to some fading in natural daylight and the quality of the dyes is a significant factor in block price; cheaper blocks are usually coloured by cheaper, inferior dyes. The manufacturers rarely entertain any complaints of fading, so choose carefully.

Through-Colour and Face-Mix

There are two manufacturing processes used to produce colour (and, to a lesser extent, texture) in a concrete block: 'through-colour' and 'face-mix'.

The first process, known as 'Through Colour', relies on placing all of the concrete (even though it may be three or more different colours of concrete) into the mould in one operation, and then pressing and compacting to create a unit that has the colour running right through the block, even though it's most likely that only the top surface will ever be seen once the paving is laid.

The alternative is to use a technique known as "Face Mix", in which a no-frill, un-coloured 'base mix' is first placed into the mould, partially pressed and then topped with a high-quality, coloured 'face mix' concrete. The whole is then pressed and compacted before being de-moulded and passed into the curing chamber. There is a delay of only a very few seconds between placing the base and the face, so there is no plane of weakness, and absolutely no risk of delamination between the two. The block cures as one, single, monolithic mass of concrete.

Face Mix technology enables the manufacturer to use cheaper, possibly recycled, aggregates and alternative cements for the backing mix, and to use a much smaller quantity of very high quality fine aggregates, cements and colours in the face mix – reducing costs significantly. However, while there may be cost savings, the production cycle-time for face mix manufacturing is greater than that for the through-colour process, and so fewer blocks per hour can be manufactured.

Both production techniques have their advantages and disadvantages, and some special products, such as tumbled blocks, need to be through-coloured otherwise they would have just one serviceable face. To date, face-mix technology is used far more widely in Ireland, Europe and North America than in the UK.

Clay Pavers

Many of the “house brick” manufacturers produce their own ranges of clay paving bricks. These are generally available as typical, rectangular bricks, although there are now a good choice of size variations, from 60x60mm ‘cobbles’ and 150x150mm ‘setts’ to 300x300mm squares. Custom shapes can be made for specific projects by some manufacturers. Unlike the concrete blocks, most clays are manufactured with 2 presentable faces, allowing them to be inverted to replace stained paving.

The colour of clay bricks is completely natural, not a chemical dye, and so these bricks are not subject to fading as are the concrete types. The use of natural colour allows for a limitless range of reds, browns, buffs, greys, blues and a mass of multi-colour blends. If colour is an important factor in your project, clay bricks are probably the solution.

Laying methods

There are two laying methods that we offer. The most popular is termed ‘flexible paving’, indicating that the blocks or bricks are laid on a sand bed and the joints filled with fine silica sand. Rigid paving refers to, usually, clay bricks laid on a concrete or mortar bed with mortar joints, much as a wall, although on the horizontal plane, rather than vertical. The 2nd option is more durable and will last a lifetime, although is about 30-40% more expensive.

Maintenance

Medium level maintenance is required once laid. Sweep occasionally to remove dust and detritus. If you find green algae building up on them, it can be safely removed by cleaning or by swilling the area with a suitable product to kill the algae, which can then be swept away after a couple of days. Use of a pressure washer should be limited to very dirty pavements and no more than once a year, as the high-power water jet can loosen jointing and damage some of the paving. We recommend that block or brick paving be treated twice a year with a general weed killer, to deter mosses and weeds from setting up residence in the sand joints.

Clay pavers can be prone to algae build-up on the surface, more than the concrete blocks. Should this occur, it should be removed regularly mainly in spring and autumn by cleaning, as it can become quite slippery. This phenomenon can be turned to your advantage in a garden setting, where the clay bricks can ‘age’ dramatically with the appearance of mosses over a single season. There is significantly less algae/moss build-up on regularly trafficked areas.

It’s worth noting that, generally speaking, weeds grow INTO paving, not through it, unless it has been very badly laid. Claims made regarding the necessity of “weed barriers” beneath block paving are spurious and should be treated with caution.

There is a wide range of sealants available to protect the completed paving from colour degradation and oil spillage. The best sealants will repel oils, weak acids, dirt and weeds; the cheap ones are little more than glorified varnish, this is something we can discuss and advise you on should you choose our services. If you have any other queries then please feel free to contact us.

