

Clay rooftiles VS concrete

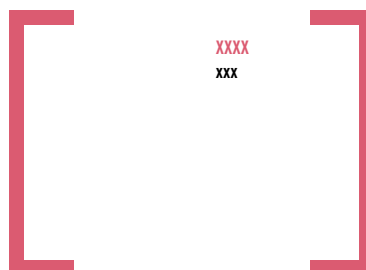
Whether self-building, extending or renovating, the question of what type of roof tile you will use needs to be addressed. Here we run through the pros and cons of clay and concrete products.

There are many ways of covering a roof, but for many people the choice usually comes down to clay or concrete roof tiles.

The decision is often a result of budget, the style of the house, the local area and planning stipulations. But there are other points to take into consideration too, such as how long you plan on staying in the house and the overall style you are aiming for.

The Choice is about more than materials

Whilst we are here discussing the benefits and disadvantages of clay and concrete tiles, be aware



that your choice of roof tile is not just about materials. You will also need to decide what profile you want your tiles to have. Whilst there is a huge range of profiles on offer, from double Roman to large format, the choice most commonly comes down to plain, interlocking or pantile.

- Plain: Fairly compact tiles generally measuring 265mm x 165mm. It takes around 60 plain tiles to cover one square metre and they are laid double lapped.

- Interlocking: Quick to lay (reducing labour costs), interlocking tiles are commonly around 420mm x 300mm and are available to lay at pitches as low as 15°. They overlap and interlock at the sides and are laid in a single lap or a broken bond pattern.

- Pantiles: Used a lot before interlocking tiles became popular, pantiles have an 's' shaped profile. Pantiles are now available as interlocking tiles too.

A notable cost difference

The main reason people choose concrete tiles over clay lies in their affordability. The more time consuming manufacturing process of clay tiles is the main reason behind this. It is also important to remember that within the range of clay products there are different price options. For example, handmade clay tiles can cost up to 50% more than machine-made clay tiles. Also, a machine-made clay tile such as Marley's single camber clay plain tiles cost just 10% more than a concrete equivalent.

"Clay tiles can vary in price but are roughly 20%-30% higher than concrete, but it's important to remember that all the remaining



A mixed blend of Dreadnought's rustic handcrafted tiles, including red, country brown and brown heather. From £500 per 1,000 tiles. dreadnought-tiles.co.uk

WHAT IS MEANT BY MINIMUM ROOF PITCH?

All rooftiles have a 'minimum roof pitch' — this refers to the lowest possible angle they can be laid whilst remaining watertight.

roofing costs are the same whether you use clay or concrete, so the actual saving on the whole roof is considerably less than the 20%," says Dave Sherry, Sales Manager of Dreadnought Tiles. "Concrete is also heavier than clay and may require a different structural arrangement to support the heavier load, which could add to the cost of the roof.

"Innovations in production methods have resulted in more choice for self-builders, with the launch of handcrafted tiles, which have irregularities in shape and texture similar to handmade tiles but at a more competitive price" continues Dave Sherry. "While concrete tiles are less expensive than clay, there is increasingly a greater variety of clay roof tiles for the self-builder to choose from and greater opportunity to find a solution within budget."

At Dreadnought, prices for machine made tiles start at £405 per 1000, while Rustic handcrafted tiles start at £500 per 1000 and Classic handmade tiles start at £772 per 1000 (ex VAT and works).

The character of clay is hard to beat

Whilst the lure of the lower prices of concrete tiles is hard to ignore, so too is the fact that natural clay roof tiles possess a charm and character that is difficult to replicate.

That said, certain concrete products are mightily convincing. Gone are the days when concrete roof tiles looked just like grey slabs stuck up on the roof. These days there are some really convincing clay replicas and, in the case of contemporary homes, where a traditional, rustic

aesthetic is not perhaps integral to the design, concrete is a good option. As Daniel Redfern of Marley Ltd points out, "concrete tiles can offer a wider variety of colours than clay."

The problems tend to come with age. Whilst the appearance of clay will improve over time, that of concrete usually deteriorates.

The colour of many concrete tiles can fade, leaving a once convincing look-a-like exposed as an artificial tile. That said, most concrete roof tiles these days have a coloured core (through coloured) which certainly helps.

"The case for clay tiles over concrete is largely an aesthetic one," says Dave Sherry. "A natural clay roof delivers a character and richness that will last for the lifetime of the tiles, even mellowing and improving over time, while a concrete roof will tend to fade over the years.

"You only have to look around the country at ancient clay roofscapes to appreciate how a clay roof continues to look good for generation after generation."

It is true that achieving the subtle imperfections and varieties in texture, colour and size is much harder with concrete.

Structural longevity is comparable

Whilst the appearance of concrete roof tiles might not withstand the test of time as well as clay, their performance can.

Manufacturers of both clay and concrete tiles tend to offer warranties of at least 30 years, although both can be expected to last at least double this time. It is more likely that the underlay will need replacing well before the tiles.



The difference between handcrafted and handmade tiles

Although techniques vary according to the manufacturer, there are very few handmade tiles that are produced entirely by hand, certainly in any volume. "At Dreadnought our rustic handcrafted tiles are made by machine, but are designed to simulate the appearance of a handmade product, by introducing some variety of texture to the surface of the tile and its bottom edge which gives a softer effect to the roof than a more uniform machine made tile," explains Dana Patrick-Smith of Dreadnought Tiles. "Our Classic handmade tiles also involve machinery for the initial clay preparation and while they are also extruded by machine, they are then shaped by hand to give them that individual character."

CAPTION HEADER
Top: Natural handmade clay tiles from William Blyth were chosen for this self-build project on the coast. A combination of three colours has been used to achieve the character the owners were after. williamblyth.co.uk; Above: Marley's Concrete Plain tile in Old English Dark Red is a convincing clay replica. marley.co.uk

The location of the roof and how well it is maintained affects its longevity in both cases.

Concrete roof tiles absorb more water than clay, meaning they may be prone to staining or mildew. Clay, on the other hand, may crack in extremely cold weather. However, the British climate does not often experience such wildly extreme weather conditions for these factors to be a huge issues when it comes to making your decision.

Keeping the roof clean, free of moss and replacing cracked, missing or damaged tiles quickly will expand the life of the tiles.

Neither is particularly high maintenance

Due to their location, roof tiles need to be able to pretty much look after themselves and thankfully neither clay nor concrete roof tiles require much in the way of maintenance.

Areas of roof that are likely to be regularly exposed to moisture might, over time, grow moss or lichen (on clay perhaps more so than concrete). Ensuring this is removed will prevent damage.

Concrete tiles can be prone to efflorescence

Efflorescence, or 'lime bloom' as it is often referred to often appears as white patches or a lightening in colour — it is often confused with colour fading.

According to the experts at Marley, this efflorescence is a result of the reaction between cement and water and is caused by weather conditions.

Generally, this occurs early on in the life of the tiles and will be removed by rainwater over time, usually within six to 12 months.

Concrete tiles are heavier

In general, concrete roof tiles are heavier than their clay counterparts. Of course, there are exceptions to the rule and certain products are comparable in weight. If opting for a concrete roof tile, check the weight as it could mean your roof structure requires extra support in areas.

Achieving intricate details is also easier with clay. Although concrete tiles are available in a range of sizes and profiles, they tend to be larger than clay, meaning complex details, around chimneys for example, can be harder to get right.

However, the larger format of concrete tiles can also be a benefit, making laying times quicker and labour costs cheaper. Manufacturers of clay tiles are catching up though. Sandtoft's 20/20 clay tile is an interlocking clay tile designed to reduce installation times.

What do you want from your roof?

When it comes to making your final decision there are a couple of important factors to bear in mind. Ask yourself how long you plan on staying in the property. Those building a forever home should seriously consider paying the extra for clay roof tiles.

However, if you are looking to make a quick profit before moving on, a concrete tile makes sense. Opt for the best you can afford to ensure maximum profit.

Those renovating a character property or aiming to create an extension that blends seamlessly with a traditional house really need to be looking at clay tiles — a concrete replica may seem like a good idea, but a few years down

the line it will be glaringly obvious that you have tried to save money on your roof covering.

If you are building from scratch, are trying to stick to a budget, are happy for a more uniform roof covering that can quickly be fitted, a concrete roof tile may well be the best option for you, giving you a durable, long-lasting covering in a really good range of colours and profiles.

Clay vs concrete at a glance...

CLAY

Pros:

- A natural, rustic appearance that will improve over time with colour that won't fade
- Range of sizes to suit all roof types and details
- Range of price options, with machine-made at the cheaper end and handmade at the top
- Long lifespan — some clay tiled roofs laid over a hundred years ago are still going strong
- Low maintenance
- Perfect for traditional builds and renovations

Cons:

- Can crack in extreme cold weather
- Expensive compared to other tile types
- Smaller so more time consuming to lay

CONCRETE

Pros:

- A cost-effective roof covering
- Available in a huge range of colours
- Large format tiles mean fast installation times
- Warranties from 30 years
- A uniform appearance suited to modern homes
- Low maintenance

Cons:

- Heavier than clay so the roof may need support
- Colour fades over time
- Hard to achieve intricate detail