

GRANBY WORKSHOP

Glaze of glory

Granby Workshop uses low-temperature firing and recycled glass to create colourful hand-glazed tile range



Granby Workshop's new hand-glazed tiles are made using recycled glass and a low-temperature firing technique. Image courtesy of Granby Workshop.

- Developed in collaboration with Matter at hand, Granby Workshop's hand-glazed tiles are the first products developed using a low-carbon, high-strength 'devitrified' ceramic.
- Innovative material and low-temperature firing allows for durable, high-performance glass-ceramic tile to be produced with an estimated quarter of the embodied carbon of conventional tiles.
- Tiles are handmade in Liverpool using 80% recycled glass, hand-glazed without using harmful materials such as cobalt or cadmium.
- 10,000 tiles will be applied on the façade of a new Granby Four Streets building in Toxteth, Liverpool, in late summer 2026.
- Designed for interior or exterior use, tiles are [now available](#) to order in five colours: green, yellow, terracotta, aqua and off-white.

GRANBY WORKSHOP

Granby Workshop has been turning waste materials into architectural finishes for over 10 years, using innovative materials and low-energy manufacturing processes that minimise carbon use while optimising aesthetics.

Now available to order, the studio's new range of hand-glazed tiles draws on the process of devitrification – the formation of crystals triggered by impurities within recycled glass – to create a high-performance tile using a fraction of the energy demanded in the creation of conventional ceramics.

The tiles were developed in collaboration with the material-research studio Matter at hand, initially for use on [Fourth Corner](#), a new community café and apartment building in Toxteth, Liverpool.

Developed by the community-led regeneration project [Granby 4 Streets CLT](#) and designed by architecture collective Assemble, the building will be clad in almost 10,000 hand-glazed tiles, drawing on a base colour palette inspired by the red and yellow brickwork that characterises the Granby neighbourhood. It is due for completion later this year.



Hand-glazed tiles are suited to both interior and exterior use. Image courtesy of Granby Workshop.

GRANBY WORKSHOP

Crafted by crystals

Keen to ensure uniformity, glass manufacturers try to avoid devitrification as it can leave a haze effect on the surface of the glass. For Granby Workshop and Matter at hand however, the process proved key to their goal of reducing the resource and energy intensity of ceramic manufacture by lowering firing temperatures.

The innovative material used in the tiles was developed by Dr Lewis Jones in research hosted at Granby Workshop. Based on this foundation, the material has been adapted to a production environment with Granby Workshop. Fine fractions of waste household glass are mixed with natural clays and minerals and then extruded into shape.

The tiles can then be fired to a much lower temperature than conventional ceramics (825°C, compared to 1200°C or more) in Granby Workshop's renewably powered electric kilns. With a normal ceramic, the reduction in firing temperature would result in a porous and brittle tile, but the waste glass triggers a sinter-crystallisation process that transforms it into a highly dense and extremely durable devitrified ceramic. The waste glass softens in the heat and crystals form, resulting in a glass-ceramic material that performs comparably to porcelain stoneware at a fraction of the energy usage.

Coloured by hand

Born from the Fourth Corner project, the new collection is designed for both interior and exterior use, and features a selection of vibrant colours – all created without the use of damaging minerals such as cobalt, lead, cadmium and rare earths, which are often relied upon in ceramics. Through an extensive process of testing and experimentation, Granby Workshop and Matter at hand were able to create vivid pigments using less harmful alternatives.

"We love creating colourful tiles, it's a core part of what we make. But some of the raw materials used to create bright colours can be extraordinarily damaging. As part of the development of our new range of devitrified ceramic tiles, we set ourselves the challenge of creating vibrant colours with pigment recipes that avoid the most damaging minerals."

GRANBY WORKSHOP

While no material is perfect, we focused on common metals like copper and chrome in search of bold blues and greens without resorting to cobalt. For reds and yellows, we explored various forms of iron in place of cadmium and praseodymium.”

– Takiyah Daly, Granby Workshop

The colour of the tiles emerges through a playful hand-glazing process, built up in layers of fine mist, leaving soft-edged impressions that record the hand of the glazer on the surface. This beautiful and highly distinctive surface means that each tile is different and, when combined, they produce varied and overlapping surface patterns that subtly shapeshift across larger surfaces – whether used in a kitchen, bathroom, or on an exterior façade.

Granby Workshop offers the tiles for £270/m² (ex VAT), in dimensions of 9x145x95mm and in a series of five colour blends: green, yellow, terracotta, aqua and off-white. Glazed profiles for corners and edges are available. Bespoke colours and custom tile dimensions can be developed for projects on request.

For more information about the new collection and Granby Workshop, please contact granbyworkshop@zetteler.co.uk



The glazing process means that each tile bears the imprint of the maker's hand on its surface. Image courtesy of Granby Workshop.

GRANBY WORKSHOP

Notes for editors

The hand-glazed collection is available to order from granbyworkshop.co.uk

Hand-glazed Tiles

Recycled UK glass ~ 80%

Natural clays and minerals ~ 20%

Organic cellulose binder <1%

Manufactured frit <2%

Glaze colourants: Fe, Cu, Zr, Sb, Cr, Ti, Zn

Product description

Glazed, extruded devitrified ceramic wall tiles manufactured using a single-firing process. As each tile is glazed by hand and produced in batches, variation in colour, pattern and texture is an inherent characteristic of the product.

Granby Workshop

Granby Workshop is an architectural ceramics and design manufacturer based in Liverpool, producing high-quality ceramics for projects and interiors worldwide. The workshop focuses on refining low-carbon techniques, developing sustainable and recycled materials, and investigating new applications while pushing the limits of traditional manufacturing with a designer-led approach. Its main ranges are produced in-house, often in collaboration with other companies and manufacturers to refine ideas and explore the possibilities of ceramics. Based at Aspen Yard in Liverpool 8, the workshop has been operational since 2015, becoming a Community Interest Company in 2019.

granbyworkshop.co.uk

Matter at hand

Matter at hand is a research-led design studio working across architecture, material science and construction. The studio investigates the materials and processes that shape the built environment, guided by the belief that inventive solutions to the problems at hand can be found in a deeper understanding of the materials and resources around us.

matterathand.org