In another first for the Gryphon factory, we’re now able to produce rectified tiles – perfectly square, uniformly sized tiles in the Square² range.

When it comes to contemporary design, nothing grabs your attention in a room like a perfectly smooth, flawless surface. Our new range of rectified tiles, Square², allow our customers to get closer than ever before to the ideal of a perfectly uninterrupted tiled wall or floor. The new brand, pronounced ‘square-squared’, will soon be in retailers countrywide.
What are rectified tiles?

In short, rectified tiles are perfectly square, uniformly sized ceramic tiles. Each tile has its edges ground down so that they’re exactly the same size and every edge is cut to a 90-degree angle and chamfered for safe handling.

The great advantage of Square tiles is that they can be laid much closer together, for a near-seamless look. The precise uniformity Ceramic Industries is able to achieve means that grouting lines as narrow as 2mm can be used. For professionals, this is a great leap forward, because they’re able to deliver this virtually uninterrupted look with a product they can rely on for durability and ease of installation.

The look

Combine high-definition printing with rectifying technology and a whole world of design options opens up. For instance, the distinctive look of Carrara marble, which is showing up in design spaces that mix classic and contemporary styles, is now easily replicated on ceramic tiles with inkjet technology. Our high-definition printing can reproduce the dramatic figuring of natural stone, or even urban loft-type screed flooring. Thanks to rectified edges, our customers can lay these precise reproductions close together for a flawless finish.

Large-format rectified tiles like Square allow customers the look and feel of materials that are often costly and tricky to install and maintain. They can have the look of natural stone, wood, cement screed and new fusion styles with all the cost, durability and easy installation and care of ceramic tiles.

Why rectify?

Because ceramic tiles are made from natural materials, there will always be minor differences between them once the production process is complete. Slight differences in the moisture content in the clay, as well as temperature fluctuations in the kiln, mean that tiles in a batch seldom turn out exactly the same size. These small differences aren’t a problem if the grouting lines are wide enough when laying them.

But if you want to lay your tiles close together for a near-seamless look, you need to be sure your tiles are all exactly uniform in size. Rectifying grinds off the imperfect edges of tiles to make sure every single one is exactly the same in its face dimensions, and perfectly square.

Cutting edge equipment

To be able to produce rectified tiles at the Gryphon factory, Ceramic Industries invested R90 million in new plant machinery. Two brand new Italian-made BMR rectifying machines were installed and integrated with our Automated Guided Vehicles (AGVs), Multigecko lifting and stacking equipment, Qualitron machines and Griffon sorting and palletising machine.

Ceramic Industries’ new rectification capabilities will allow us to manufacture a wider range than ever before. Besides the new Square range, we’ll be able to cut existing ranges to any sizes between 170mm and 1 200mm. That kind of flexibility means we’ll be able to respond to new fashions and changes in demand even faster. Current capacity for rectified tiles at Gryphon is 200 000m² per month, but as market demand increases we’ll be able to double that.
• Production process
Square² tiles are formed in the Gryphon factory, then sent to the rectification plant, where they cool for 24 hours. The plant’s large Automatic Guided Vehicle, or AGV, transports the tiles to the Robofloor. Here, automated machinery packs the tiles one-by-one onto the rectification line. The tiles move into the cutting machine, where they’re turned through 90 degrees and broken in two by the tile breaker. They’re turned through 90 degrees again, ready for rectifying.

The Italian-made BMR rectifying machines have a series of wheels with varying grades of abrasiveness arranged from coarse to fine. The first rectifying machine removes 2.5mm per side, or 5mm in total, from two sides and chamfers the edges. The edges are also buffed to a smooth finish. They turn through 90 degrees again, and enter the second rectifying machine to remove 2.5mm from the other two sides.

Next, the tiles arrive at a sizing machine to check their exact measurements. After rectification, the tiles move down the line to be scanned by a Qualitron machine to pick up any defects.

• Tiling techniques
Our range of rectified tiles come in large formats, and the techniques used for tiling are for the most part the same as for MegaTec tiles. Nevertheless, there are a few pointers to keep in mind for rectified tiles.

• Leave enough time
Square²’s precise dimensions allow grouting lines as narrow as 2mm to be used. This kind of fine work requires careful preparation and sufficient time to be set aside for the job.

• Level surfaces
It’s essential to make sure the substrate is as smooth and level as possible. Besides ruining the effect of very small, even grout lines, an uneven surface may produce lippage, where the edge of one tile is higher than an adjacent tile. This is both unsightly and a tripping hazard. Self-levelling screed is a great solution for achieving a smooth, level surface.

• Porcelain-spec tile adhesive
Use a tile adhesive made for porcelain tiles. This type of adhesive is able to support the extra weight of larger formats.

• Back-buttering
Back-buttering is recommended for an even bond. A large 22mm-notch trowel helps spread the adhesive evenly and to the right thickness.

• Suction cups
Square² tiles come in larger formats, which are heavier and trickier to handle than smaller tiles. Make lifting them easier, and make placing them more precise – especially if you’re using narrow grout lines – by using suction cups with handles.

• Levelling system
Screw-down levelling systems take the stress out of levelling tiles, and double as spacers. You can level as you tile instead of having to rely on adjusting with a spirit level.

• Tips for overlapping
If you plan to lay your tiles in a staggered formation, don’t overlap more than one-quarter of the length of the tile. This will ensure you avoid lippage.

• Grout
Choose a grout in a colour matching your tiles’ tones to achieve the near-seamless look.

As our customers embrace the flawless look they see in luxury spaces, in design magazines and online, we expect the demand for the near-seamless look to become more popular. Thanks to Ceramic Industries’ constant investment in new design and production capabilities, we’re able to offer them Square² rectified tile – the easiest way to get that cutting-edge look.
## Sizes available:

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