UNDERSTANDING

NON-RECTIFIED PORCELAIN & CERAMIC TILES

We sell both rectified and non-rectified tiles, and it can be important to understand the difference. Rectification is a process applied to porcelain and ceramic tiles designed to improve the size accuracy and lower the need for size variance tolerances.

Variance in sizes of tiles is most often caused by the processes of firing the tiles in a kiln. The extreme temperatures of the kiln cause the tile to expand and contract in unpredictable ways; therefore, it is difficult to ascertain the final size of any tile. The rectification process trims the tile down to a pre-decided final size. For example, a rectified tile that originally measured 603 x 603mm being fired in the kiln may shrink to between 601 x 601mm and 602 x 602mm in size, and then be trimmed down to 600 x 600mm for uniformity and ease of tiling.

Rectified tiles will have a clean, sharply angled edge, whilst non-rectified tiles will have a slightly sloped, softly rounded edge. Rectification happens most commonly to larger format tiles, over 30 x 30cm in size - because the larger the tile, the greater the warping and size variation - and thus greater the need for rectification. For this reason small format tiles, for example 20 x 20cm, are not rectified.

Generally, the tiles can be laid with wider grout joints than would be used for rectified products - this will absorb any difference in size.

However, problems can arise when two products are combined (for example as a chequerboard layout, with two colours) as the tolerances are likely to vary between each product - this is due to natural variation in the base material used for each production run, which will expand and/or contract in different ways, as well as size variation that will occur if the two products are produced on different production lines.

These differences can be overcome with the use of wider and varied grout joint widths. The image below shows Brompton Field Liquorice and Field Milk combined as a chequerboard, using varied width grouter joints. This shows how the effect is largely lost when seen from above.

Credit: Lisa Dawson