

## Large Format Tile: a wide demand for narrow grout joints

Large format tiles are in style, and continue to increase in popularity. One design element that contributes to their popularity is less overall grout area when they are used. While a conventional 3/16-inch to 1/4-inch joint looks very good with large format tiles, sometimes a narrower grout joint is specified, further minimizing the overall grout area. However, this look can only be achieved if some key installation issues are addressed.

The first issue is that narrow grout joints provide less room to allow for variation in tile size. One way to address this issue is through the use of rectified tile. Rectified tile has less dimensional variation, because the edges are ground to achieve more precise facial dimensions than traditional calibrated tile has. This is clearly shown in the 2008 ANSI accredited standard A137.1, American National Standard Specifications for Ceramic Tile, which lists the dimensional requirements for rectified tile, calibrated tile and natural tile (tile that has not passed through a sorting/calibrating machine). It should also be noted that A 137.1 references section 4.3.8 of the ANSI accredited standard A108.02, which states that "the actual grout joint size shall be at least 3 times the actual variation of facial dimensions of the tile supplied." This does not permit the use of narrow grout joints with tiles exhibiting much variation.

### Get to know ANSI A137.1!

Prior to the passage of the 2008 ANSI accredited A137.1 standard for ceramic tile, there was no standard sizing requirements for rectified tile, and even today the international standard for tile (ISO 13006) does not have such a requirement. Unfortunately, some large format tiles on the market promoted as "rectified" do not meet the A137.1 standard, and are only as dimensionally precise as calibrated tile. Therefore if a narrow grout joint is desired, one should be familiar with the 2008 A137.1 requirements when selecting large format tile, especially if it is advertised as "rectified."

### A flat substrate is key

Another key issue to consider when installing large format tile with a narrow grout joint involves the impact of an uneven substrate. First, narrow grout joints provide less room to allow for variation in the layout due to an uneven substrate. Second, with narrow grout joints, lippage due to an uneven substrate is more apparent.

It is critical to have a flat substrate. The TCA Handbook calls for 1/4-inch maximum deviation from planarity every 10 feet. However, one should consider even stricter tolerances when working with large format tile, especially when a narrow grout joint is desired. With larger tiles, the effects of an uneven substrate on the installation are magnified, making it harder to avoid lippage or misalignment. Smaller tiles can better accommodate variation in the subfloor. With larger pieces, layouts contain fewer tiles, and therefore fewer opportunities to make gradual adjustments when compensating for the effects of an uneven substrate.

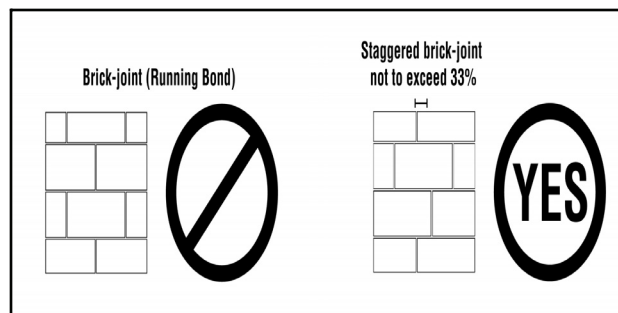
### Setting procedure

Setting procedure is another issue that should be given special consideration when installing large format tiles with a narrow grout joint. Like natural stone, a thick-set mortar bed can be used when installing large format tiles. But more commonly, a medium-bed (thin-set) method with a large notch trowel of 1/2 inch or greater is used. These mortars are formulated with coarser aggregate to provide anti-slump characteristics that resist larger, heavier tile sinking in the mortar. Some medium bed thin-set mortars also utilize innovative technology, such as hollow ceramic microspheres, to improve trowel ability while maintaining anti-slump properties. With flat floors, a full contact mortar can also be considered. These innovative mortars change viscosity as the tile is moved back and forth allowing full contact to be made between the tile and the floor. Even with the development of these mortars especially for the installation of large format tiles, installers need more time, and compensation for such, to achieve a flat installation when tiles are placed closely together.

### Pattern choice reduces lippage

One final issue to consider when installing large format tile is inherent tile warpage. Though such warpage is usually slight, lippage can result when the low spot in one tile is near the high spot in another. This becomes more noticeable as grout joints become smaller or where wall wash lighting is used. Therefore, patterns that have the center of one tile near the end of another should be avoided when installing large format tile with a narrow grout joint. Some examples include running bond (brick) and pinwheel patterns. When opting for these patterns with large format tile, it is important to consider a wider grout joint to reduce noticeable lippage.

In summary, there are a host of issues one should consider to achieve a successful narrow grout joint installation with large format tiles: Using rectified tiles, proper steps to flatten the substrate, an appropriate setting procedure, avoiding patterns that exacerbate lippage, avoiding wall wash lighting and allowing sufficient time and compensation for an installer with experience in such installations.



**August, 2009**

### Bath Accessory Program Updated

As many of you are probably aware, the **New Jersey Porcelain** company closed their factory at the beginning of the year which essentially eliminated our source of supply for traditional glazed bath fixtures. The accompanying price list and product sheet reflects our complete accessory program which is now comprised of three vendors. **Florida Tile** and **Questech** will continue to supply resin and cast stone fixtures which are stocked in their entirety at **CONESTOGA TILE**. Traditional glazed fixtures available from **American Olean** will now be stocked in selected shapes and colors (**American Olean tile products will continue to be available only to those customers in previously serviced sales territories**) as shown on the enclosed price list. Certain shapes and colors from the original NJP offering still remain in stock and are now available at a reduced price based on a 50% trade discount. Contact your customer service representative to confirm availability. Make sure your sales people are always adding fixtures to every shower or bath installation.

### New Products from



#### Schluter - KERDI-DRAIN

The 4" stainless steel grate is now available in KERDI-SEAL-PS 3/4" pipe seal and KERDI-SL valve seal are now included in all KERDI-DRAIN kits purchased by single unit.

Schluter KERDI-DRAIN features a fully adjustable grate that accommodates a wide range of tile thicknesses: 1/4" to 1-1/4".



#### Schluter - KERDI-DRAIN with adaptor kit

Now available for residential applications.

The Schluter KERDI-DRAIN with adaptor kit allows you to convert traditional clamping ring drains to integrated bonding flange drains when removal of the clamping ring drain is not practical. The new residential adaptor kit fits to most commonly used residential clamping ring drains.



#### Schluter - KERDI-SHOWER KIT

The KERDI-SHOWER-KIT is now available with the new 4" stainless steel grate in oil-rubbed bronze.

KERDI-SEAL-PS 3/4" pipe seal and KERDI-SEAL-MV 4-1/2" mixing valve seal are now included with the KERDI-SHOWER-KIT.

The Schluter KERDI-SHOWER-KIT is an all-inclusive package containing each of the integrated family of components required to create a maintenance-free, watertight shower assembly without a mortar bed.

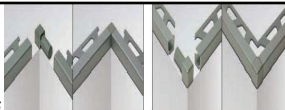


#### Schluter KERDI-SHOWER-KIT without the drain

This kit contains all the elements of the complete KERDI-SHOWER-KIT except the KERDI-DRAIN.



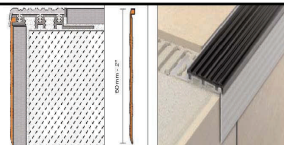
Schluter-QUADEC New sizes 9/16" and 3/4". Schluter-QUADEC is a finishing and edge-protection profile for tiled edges and outside corners of tiled surfaces. The reveal of the profile forms a square outer corner along the surface edge. QUADEC can also be used as an accent within tile fields on both floors and walls. QUADEC allows for modern decorative design and interesting contrasts.



#### Schluter -TREP-TAP

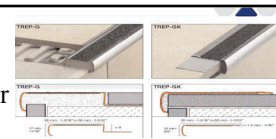
#### Schluter - TREP-TAP

is an anodized aluminum cover profile that integrates with the Schluter TREP-S/-B stair-nosing profiles to conceal the top of the riser.



#### Schluter - TREP- G/-GK

Schluter - TREP-G/-GK are designed to protect tiled stair edges and provide an easily visible, slip-resistant wear surface for durable, safe and visually appealing stair-nosing design. The profiles are made of stainless steel, making them suitable for interior and exterior use in areas subjected to heavy foot-traffic, such as offices or public buildings. The surface features a self-adhesive, non-slip tread with an embedded mineral grain coating, which is available in a variety of colors and can be replaced in case of damage or wear. The exposed surface of TREP-G/-GK is available in two sizes: S - 1-3/16" and B - 2-5/32".



TREP-G has a stainless steel anchoring leg which is embedded in the tile bond coat. TREP-GK is subsequently bonded to existing installations. As such, TREP-GK can be installed as a repair so that existing, damaged stair treads do not have to be replaced.

### Discontinued

#### Edilgres

Himalaya - Entire Series

#### Rex

Rosa Del Deserto 6" x 6" Bullnose All Colors

Rosa Del Deserto 6" x 6" Bullnose Corners All Colors