



Address: 404 Northumberland Ave, Olievenpoort, Roodepoort Scope: Retirement village development Size: 70 000m²

CHALLENGES FACED





With such a large development across different areas, specialised tiling systems were required to accommodate the requirements of each application area. Additionally, with an ageing population living in the complex, well-crafted tiling and careful installation thereof, was important to avoid any risk of tripping and subsequent injury.

INTERESTING FACTS

Celebration Retirement Estate consists of 2 villages which comprise close to a thousand units. In addition, the development includes a lifestyle centre, 24-hour 30 bed frail care facility, medical consulting rooms, restaurant with extended coffee shop, communal lounge area, library facility, convenience store, hair and beauty salon, indoor heated swimming pool, laundry services and more.





SOLUTION

Tailored multi-level systems for tiling different areas within a large multi-use development.

LOW-DENSITY UNITS

The development includes 166 freestanding houses and simplex cottages within the estate which were tiled with porcelain tiles and cut listello splashbacks on the walls, 600x600mm porcelain tiles on the floors, and porcelain tiles and mosaics in the showers.

FLOORS AND WALLS

Level 1 – Priming system (floors). A slurry priming coat comprising TAL Keymix and TAL Keycoat was applied to all floors at a minimum 2 mm thirkness

Level 2 – Adhesive system. TAL Goldstar 6 was used to fix tiles on all internal and external floors with TAL Goldstar 6 used to fix tiles on the internal walls. The external porcelain floor tiles were fixed with TAL Goldstar 6 modified with TAL Bond for increased flexibility and water-resistance. Where time allowed, TAL Goldstar 18 was used.

Level 3 – Grouting system. TAL Wall & Floor Grout was used on all 'dry' area walls. For areas subject to 'wet' conditions such as the kitchen splashbacks, all suspended floors and external tiles areas, TAL Wall & Floor Grout was mixed with TAL Bond adding flexibility, water resistance and strength to the system.

SHOWERS

Level 1 – Priming system. A slurry priming coat comprising TAL Keymix and TAL Keycoat was applied to the cementitious waterproofing compound to prime the rendered shower cubicles.

Level 2 – Adhesive system. TAL Goldstar 6 was modified with TAL Bond and used to fix tiles to the shower walls whilst TAL Mosaicfix, also modified with TAL Bond, was used for bedding the porcelain mosaic tiles to the shower floors.

Level 3 – Grouting system. TAL Wall & Floor Grout was modified with TAL Bond adding flexibility, water resistance and strength to the shower walls. As TAL Mosaicfix, bonds and grouts in a single operation, the shower floors require no additional grout.







HIGH-DENSITY UNITS

The development includes 307 apartments within the estate which were tiled with ceramic tiles and listellos splashbacks on the walls, 400x400mm ceramic tiles on the floors inside the units and on the external patios and balconies. Ceramic floor tiles and porcelain mosaics were used in the showers.

FLOORS AND WALLS

Level 1 – Priming system. A slurry priming coat comprising TAL Keymix and TAL Keycoat was applied to all external floors and walkways at a minimum 2 mm thickness.

Level 2 – Adhesive system. TAL Professional was used to fix tiles on all 'dry' internal walls and floors. The external floors on ground level patio were tiled using

TAL Professional modified with TAL Bond for increased flexibility and water-resistance. TAL Goldstar 12 modified with TAL Bond was used to tile the balcony floors to accommodate thermal expansion and contraction, whilst the walkways were tiled using TAL Goldstar 18 adhesive.

Level 3 – Grouting system. TAL Wall & Floor Grout was used on all 'dry' area walls. For areas subject to 'wet' conditions such as the kitchen splashbacks, all suspended floors and external tiles areas, TAL Wall & Floor Grout was modified with TAL Bond to add flexibility, water resistance and strength to the system.

SHOWERS

Level 1 – Priming system. A cementitious waterproofing compound was used to prime the rendered shower cubicles.

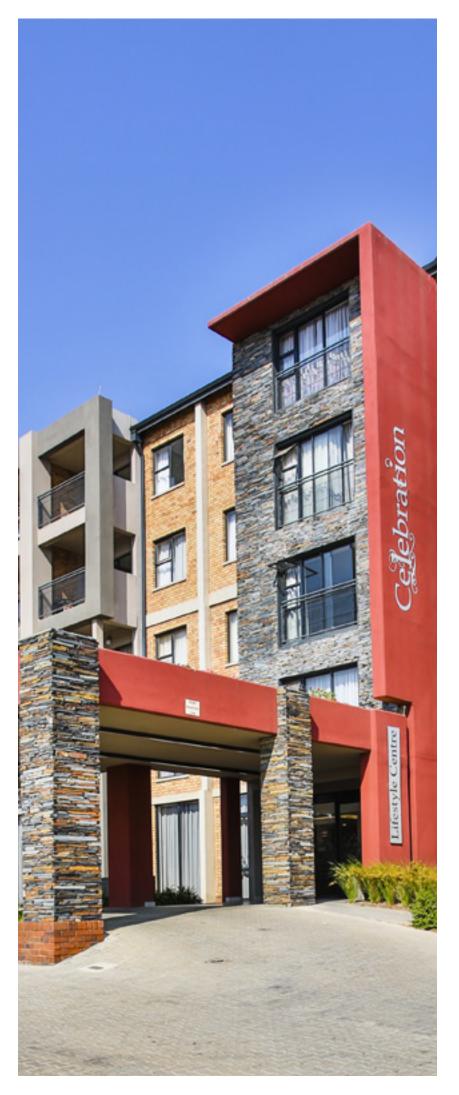
Level 2 – Adhesive system. TAL Goldstar 12 modified with TAL Bond was used fix tiles to the shower walls. TAL Mosaicfix also modified with TAL Bond, was used for bedding porcelain mosaic tiles to the shower floors.

Level 3 – Grouting system. TAL Wall & Floor Grout was modified with TAL Bond to add flexibility, water resistance and strength to the shower wall tile installation. As

TAL Mosaicfix, bonds and grouts in a single operation, the shower floors require no additional grout.







EXTERNAL FEATURE WALLS

Two external walls of the apartment blocks and at the main entrance were tiled with natural stone riven walling in individual strips, or as pre-assembled panels, to create distinctive and attractive feature walls within the estate. As external installations are exposed to building movement, thermal expansion and contraction, as well as inclement weather conditions, particular care must be taken to prime correctly, and to modify the adhesive system to accommodate these challenges.

Level 1 – Priming system. A slurry priming coat comprising TAL Keymix and TAL Keycoat was applied to the two external feature walls of 4 and 6 metres in height.

Level 2 – Adhesive system. TAL Goldstar 6 was modified with TAL Bond was used to fix the individual strips and pre-assembled panels of natural stone riven walling to the façade. This modified adhesive system gives the installation flexibility and water-resistance to counter the expected expansion and contraction of an external installation. This also allows the installation to accommodate movement caused by rain, dew, frost etc.

Level 3 – Joint sealant system. A combination of resilient polyurethane joint sealant material and joint sealant cord was used for sealing the tile panel movement joints and perimeter joints to accommodate the thermal expansion and contraction of an external installation. Using a sealant cord to fill the bulk of the joint before application of the joint sealant, saves cost without compromising the flexibility of the system.

Level 4 – Grouting system. TAL Wall & Floor Grout was modified with TAL Bond adding flexibility, water resistance and bond strength to the installation.



INDOOR SWIMMING POOL

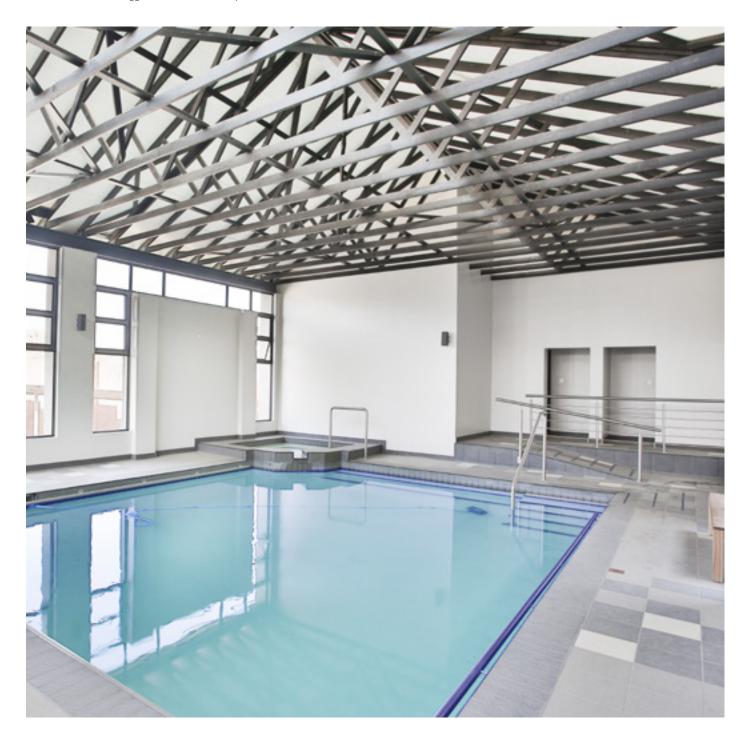
Included in the variety of facilities available within the estate, is a heated indoor swimming pool. Tiles were installed as an aesthetic finish to the pool surrounds, to the pool scumline and as pool copings. If the pH levels of swimming pool water are too acidic, this can cause the grout in the joints to erode over a period of time, calling for the use of a specialist grout sustem.

Level 1 – Priming system. A slurry priming coat comprising TAL Keymix and TAL Keycoat was applied to all surfaces of the pool including a wood-floated screed for the pool surrounds, and a cementitious waterproofing compound at the pool scumline/ pool coping.

Level 2 - Adhesive system. TAL Goldstar 6, modified with

TAL Bond was applied to fix tiles to the pool surrounds, scumline and coping. The modified adhesive allows for movement in the installation.

Level 3 – Grouting system. The grout is very important in this installation as a superficial layer may not provide the required protection against the acids and chemicals in the pool, which will compromise the integrity of this installation. TAL Acid-Resistant Grout was used to fill the tile joints, as it is a quick-setting, cementitious grout suitable for use in mild organic acid situations such as around a pool. TAL Water-Based Epoxy Grout is also well suited to this application, where total imperviousness, chemical resistance or hygienic conditions are required.



TAL is a division of Norcros SA and has been a trusted manufacturer and supplier of the highest quality materials to the construction industry for almost 50 years. Our products are designed for the harsh South African climate and to be fully compatible with each other. The TAL laboratory is the first in Africa to gain ISO 17025 accreditation for 1348:2007 testing (tensile strength of cementitious tile adhesives). We supply free technical Methods and Materials Specifications for projects, and when correctly followed, projects are awarded the TAL 10-year guarantee. When you consider these facts in combination with our commitment to exceptional customer service, technical advice and on-site support, it is clear that TAL is there for you at every level, to help make your project a success – from design to completion.

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