

tal[®]

THE PROFESSIONAL CHOICE

THE POLOFIELDS

WATERFALL



THE SCIENCE
BEHIND
BEAUTIFUL SPACES

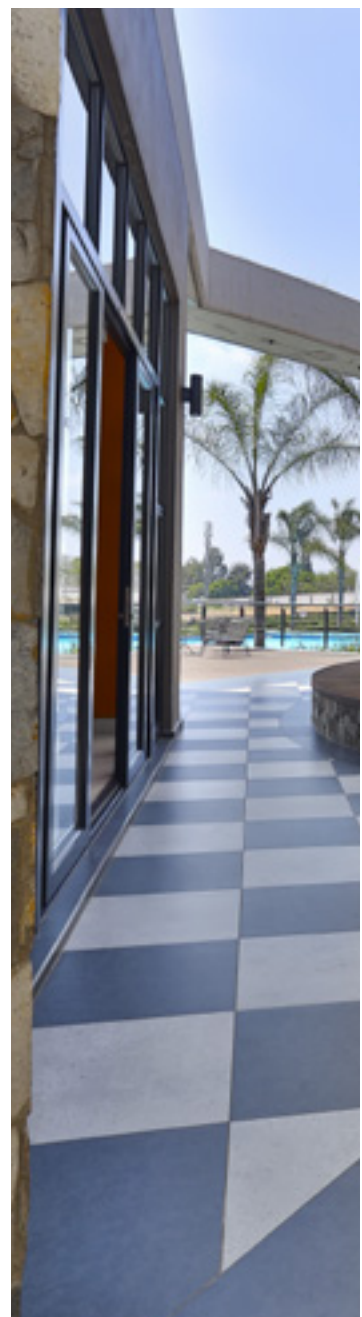
A RESIDENTIAL ESTATE DEVELOPMENT BY BALWIN PROPERTIES IN WATERFALL, JOHANNESBURG

POLOFIELDS ESTATE

TAL specialises in manufacturing the highest quality tile and construction adhesives, so it was no wonder the company's products were specified for the substantial 240 000 m² tiling project at The Polofields lifestyle estate, a stunning haven of luxury developed by Balwin Properties in Johannesburg's sought-after Waterfall area. The Polofields boasts beautifully appointed, fibre-ready, sectional title apartments fully equipped with eco-friendly, advanced-tech appliances throughout.

Integral to The Polofields Estate is the magnificent Lifestyle Centre offering residents an abundance of services, excellent leisure activities as well as sporting facilities such as squash courts, a yoga deck, gym and swimming pool. Well located with superb shopping centres, medical facilities and schools in close proximity, The Polofields is a combination of affordable luxury, convenience and an all-inclusive lifestyle.







TAL Quality

When it comes to tiling installations, TAL has been the leading brand for decades and prides itself on being the hidden element behind countless aesthetically appealing and successful tiling projects. TAL offers a comprehensive, multi-level system solution and by using products from the same manufacturer, TAL not only ensures compatibility and sustainability of the installation, but also one point of reference for on-site technical support that provides peace of mind for both developer and end-user.

From pre-sales to after-sales advice, TAL offers exceptional customer service, and through the company's national technical advisory centre, highly-trained staff are only a phone call away offering free advice on any tiling project, whether large or small.

Environmental Responsibility

Glazed ceramic wall tiles (300 x 600 mm) were fixed onto all interior rendered walls as well as onto the latex or cementitious waterproofing compound on shower walls. Glazed ceramic floor tiles (250 x 500 mm) were fixed onto all exterior woodfloated screeded surface beds such as patios and walkways, as well as staircases and the suspended slabs of balconies, waterproofed with a latex or cementitious waterproofing compound.

Porcelain tiles (600 x 600 mm) were fixed onto interior woodfloated screeded surface beds, suspended slabs, staircases and onto the latex or cementitious waterproofing compound on the shower floors.

Tiles

Since variances in the finished floor levels in the majority of multi-storey buildings often occur, it is imperative that these anomalies are rectified prior to commencement of tiling. The large format tiles (600 x 1200 mm) used in this project, require a totally level substrate to not only prevent tile 'tipping' (the difference in height of corners and edges of installed tiles), but to avoid excessive consumption of the adhesive.

Variances in the interior powerfloated concrete suspended slabs (builds 10 – 40 mm) were prepared by priming with TAL SF Primer, a high penetration, solvent-free primer onto which was broadcast TAL Primer Aggregate sand no. 2, a high quality, well-graded silica sand. TAL SlabPatch Flowable, a high strength, single component, fast-setting, micro fluid concrete, was poured over the suitably prepared and primed floors. TAL Screedmaster, a self-levelling and smoothing underlayment compound, was applied where builds 0 – 10 mm were required. These levelling compounds were used primarily to level floors onto which the large format tiles were to be installed.

Priming

To ensure compatibility and a good bond on the waterproofing systems to showers and balconies, these surfaces were primed with TAL's top quality priming slurry system consisting of TAL Keycoat, a modified latex primer used in a 2:1 mix (by volume) with TAL Keymix, a cementitious powder primer.



Adhesive systems

Since different substrates and tile types require specific adhesives, TAL has developed an extensive range of excellent, user-friendly adhesives that provide the most professional tiling installations. For example, due to exterior tiling installations being exposed to building movement, thermal expansion and contraction as well as inclement weather, TAL can specify a far stronger and more flexible adhesive system compared to that required for an interior installation.

Adhesive systems for fixing glazed ceramic tiles

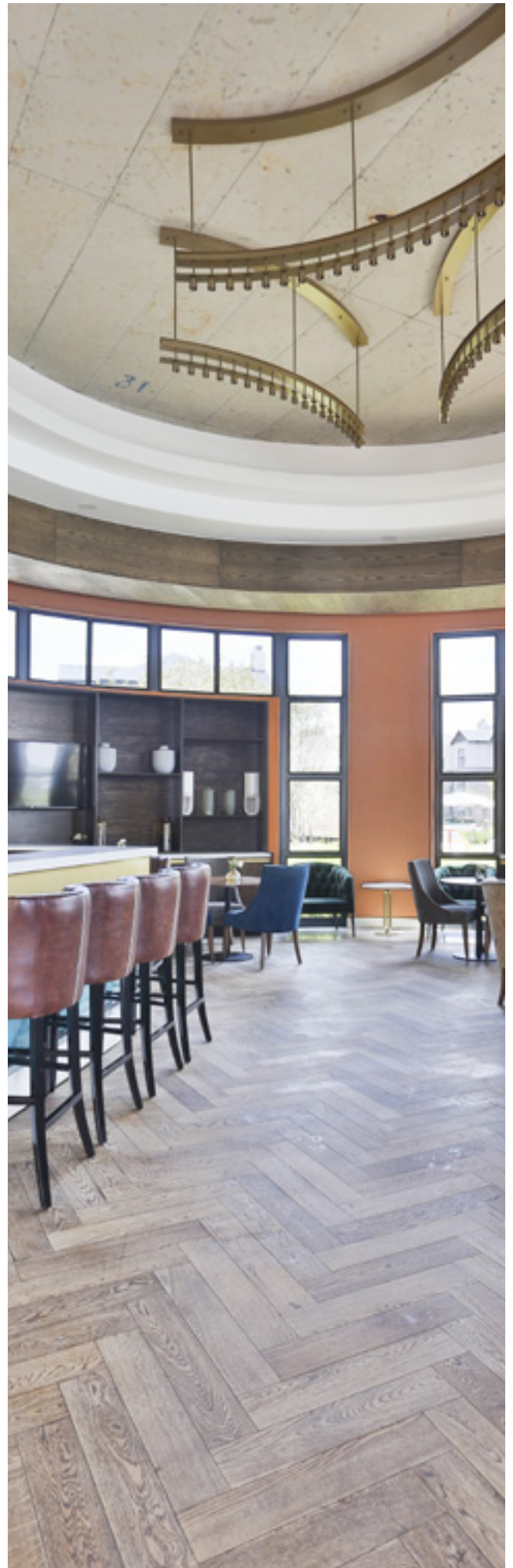
TAL Probond, a flexible, standard-setting adhesive, trafficable after a minimum of 24 hours, was used to fix the glazed ceramic tiles to rendered walls, as well as to the external surface bed patios and walkways, and staircases. The advantage of using this adhesive is that no additives are required, simply mix with clean, cool water, thus alleviating the risk of mixing errors on site.

Adhesive systems for fixing porcelain tiles

A quick-setting, high strength, shrinkage-compensated porcelain adhesive, trafficable after 12 hours, was specified at a minimum thickness of 6 mm, to fix porcelain tiles onto all interior woodfloated screeded surface beds. The same adhesive, mixed with TAL Bond as a water replacement, was specified for the interior suspended slabs, staircases and waterproofed shower floors.

Adhesive system for shower walls and balconies

Although shower walls and balcony floors received ceramic tile applications, the 12-hour quick-setting porcelain adhesive, mixed with TAL Bond was specified for these installation areas. This was due to the impervious nature of the waterproofed substrates on which setting times of conventional (standard-setting) adhesives would be extended.





Grouting

Because grouting is the final process in any tiling installation and forms part of the final aesthetic look, TAL has developed an extensive range of grouts to ensure a professional finish to the project. It is however vitally important that not only the correct grout is chosen, for example rapid-setting, chemically resistant or grout suitable for wide tile joints, but that it is mixed with an additive such as TAL Bond to ensure flexibility and water resistance where required.

One such specialised grout is TAL Super White Wall Grout, a bright white tile grout that provides resistance to moisture ingress and is suitable for filling wall joints up to 3 mm wide. It was used on interior wall areas and mixed with TAL Bond for all splashback areas and shower walls.

TAL Wall & Floor Grout, suitable for filling wall and floor tile joints up to 8 mm wide and with resistance to moisture ingress, was used in all other areas. All floors, including balconies, staircases, patios, and walkways, were grouted with TAL Wall & Floor Grout mixed with TAL Bond to provide increased water resistance, flexibility and strength to the grout.

Movement Joints

Movement joints or 'soft' joints are an extremely important part of any tiling installation as the lack thereof is the major reason for a tiling failure. To prevent such an occurrence, movement joints should be created at required specified distances in both directions and around all perimeters. Instead of grouting, these should be filled with a flexible joint sealant such as TAL Goldstar Sealmaster 1000 Polyurethane Joint Sealer which will buffer the joints and allow for movement.

TAL Goldstar Sealmaster 1000 Polyurethane Joint Sealer is a single component, permanently flexible, moisture-curing adhesive and joint sealant. Exhibiting excellent properties for adhesion between most substrates and materials including materials with dissimilar coefficients of expansion, TAL Goldstar Sealmaster 1000 Polyurethane Joint Sealer is fast-curing and once cured is resistant to shock, vibration and temperature change.

Where practical, to save on time and cost, the bulk of the depth of a movement joint can first be filled with TAL Sealmaster Cord, a flexible, readily compressible, closed-cell polyurethane backing cord available in 6 mm x 100 m rolls which is used as a sponge-like filler in the joint prior to adding TAL Goldstar Sealmaster 1000 Polyurethane Joint Sealer. All movement joints in the project were at least 5 mm wide and extended through the tile and adhesive layers. Movement joints on interior walls and surface bed floors were located in both directions at a maximum of 5 metre centres, and at maximum 3 metre centres for the suspended slab floors. Additional movement joints were located in all internal corners and interfaces on the walls while on the floors they were located around the perimeter and in all vertical corners.

For the same reasons that exterior tiling installations require strong flexible adhesives systems, so too they require movement joints located at closer centres. Movement joints therefore on the patios and walkways were located at a maximum 3 metre centres as well as in all perimeters and vertical corners.

Movement joints in the showers were located around the perimeters of the floors, in all internal corners and interfaces and at maximum 3 metre centres for large areas. On both internal and external staircases, movement joints were located at the stair tread/riser interfaces, in all internal corners and interfaces and at maximum 3 metre centres for large areas such as landings.

The extensive Polofields project is another example of TAL's superb products forming the basis of various, aesthetically pleasing tiling installations throughout the estate and contributing to the steadfast longevity of the buildings.



TAL is a division of Norccros 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 1348:2017 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.

TAL TECHNICAL ADVICE CENTRE: 0860 000 TAL (825) or taltech@tal.co.za • www.tal.co.za

Johannesburg 011 206 9700 | Cape Town 021 386 1810 | Durban 031 579 2263

*TAL, TAL Screedmaster, TAL Keycoat, TAL Keymix, TAL Bond, TAL Screedbinder, TAL Superprime, TAL Goldstar 6, TAL Goldstar 12, TAL Goldstar 18, TAL Professional, TAL Goldflex, TAL Wall & Floor Grout, TAL Waterbased Epoxy Grout, TAL High Traffic Grout, TAL Goldstar Sealmaster 1000, TAL Sealmaster Cord are registered trademarks of Norccros SA (Pty) Ltd. SF Primer and SlabPatch are a registered trademark of X-Calibur International.