

World of ARDEX

Issue 2

ARDEX X77 & WA GROUT

This larger than life mosaic, measuring nearly 4 metres long by 1.5 metres high, was completed using ARDEX X77 to adhere the many thousand tiles and ARDEX WA Grout was coloured to match the colours of the tiles.

This mosaic was entered into the Duke of Edinburgh Award in 2010 by James Covic. James, along with his peers, spent a few hours after school each week to work on the mosaic and after nearly two years it was completed.



The mosaic includes the surrounding areas of the school which encompasses Glebe and the inner city of Sydney.

ARDEX Australia are proud to have been of help to James and wish him well in his future endeavours and the Duke of Edinburgh Award.

The 'World of ARDEX' is published quarterly - if you would like a copy emailed/mailed to a friend please call ARDEX Australia on (02) 9851 9166. If we do not have your email address please provide it by emailing: lyn.cridland@ardexaustralia.com

PRODUCT GUIDES

ARDEX Australia recently reprinted our reference guides for ARDEX's wide range of **Waterproofing, Tiling and Flooring** products.



The guides provide an overview for each of our products by focussing on:

- internal/external use
- substrates
- one or two part systems
- number of coats required
- coverage
- colours
- drying times
- size of package
- accessories

If you would like a copy of any of these product guides please call ARDEX Australia on (02) 9851 9166.



www.ardex.com



Company Focus

Company: BAT Tiling
(Bill Adams Tiling)

Location: Queensland

Projects: Oracle, Broadbeach, Gold Coast
Boggo Road, Annerley, Brisbane
Mariners Peninsula, Townsville

Bill arrived in Australia over 45 years ago and, from humble beginnings, has grown his business to now employ over 60 tilers.

BAT (Bill Adams Tiling) is one of Queensland's largest supply and install tiling contractors and has grown over the decades on their philosophy of offering clients, from residential home builders to the largest high rise developers, exceptional knowledge, good old fashioned service, honesty and peace of mind that BAT Tiling only use totally compatible systems that work!

This philosophy has given BAT clients the confidence to be involved in some of Queensland's highest profile projects such as Oracle located at Broadbeach, Boggo Road at Annerley and Mariners Peninsula at Townsville.

Project:
Oracle, Broadbeach.

Project Value:
\$7,200,000

Description:
506 luxury apartments set in twin towers which stand 40 and 50 levels high.

Tiles:
Marble, vitrified & ceramic.

Number Tilers:
BAT Tiling have 48 tilers working on this site.

SYSTEMARDEX:
Waterproofing: WPM002, WPM155.
Tiling: Multiprime, Abacrete, Abaflex, X10, White Grout, Wide Joint Grout, FG8, DS40 (soundproofing).
Flooring: AF266.



Pictured above: Bill Adams sons & grandson from left: Greig, Wayne & Lee.

Project:
Boggo Road, Annerley, KBRB
Ecoscience Precinct.

Project Value:
\$1,600,000

Description:
Development of the old Boggo Road jail site for CSIRO, Department for Planning and Infrastructure and the Environment Protection Authority.

Tiles:
Ceramic and vitrified tiling to wet areas and granite to the circulation and external areas.

Number Tilers:
BAT Tiling have 15 tilers working on this site.

SYSTEMARDEX:
Waterproofing: WPM155, WPM270.
Tiling: Multiprime, Abacrete, D2, Abaflex, Wide Joint Grout and FG8.



Pictured above from left: Dean (Bill's son) and Ziggy (BAT Supervisor)

'When offering our clients total peace of mind there is only one choice - SYSTEMARDEX - totally compatible systems that work.'

Project:
Mariners Peninsula, Townsville.

Project Value:
\$2,800,000

Description:
101 executive apartments.

Tiles:
Ceramic, vitrified and granite.

Number Tilers:
BAT Tiling had 30 tilers working on the site.

SYSTEMARDEX:
Waterproofing: WPM155.
Tiling: Multiprime, Abacrete, Abaflex, D2, White Grout, Wide Joint Grout, FG8, DS40 (soundproofing).
Flooring: AF266.



Pictured above: Mariners Peninsula, Townsville.



Pictured above: Bill Adams, Managing Director (left) and Nick Wilson, Manager, BAT (right)

ARDEX NEW ZEALAND LTD launched two NEW generation waterproofing membranes: ECO BUTYNOL

&

UNDERTILE BUTYNOL

Both products are currently being trialled and potentially modified for the Australian market

ARDEX New Zealand has introduced two (2) exciting new products. Both are based on Butynol, both use a new water based adhesive and both will revolutionise their respective industries.

ECO BUTYNOL

SOLVENT FREE WATERPROOFING MEMBRANE SYSTEM

While Butynol is nothing new, the Eco Butynol is a big step forward. The Butynol behaves the same – it is still the premium external waterproofing product because of its water tightness and long life – but the adhesive is something special!

Water based, no volatile solvents and strong. Eco Butynol is a fully exposed single ply membrane that includes a unique filament base layer that allows for simple adhesion. The system includes ARDEX WPM 09A Solvent Free Adhesive and ARDEX WPM 09C Catalyst. The adhesive works with, or without, the catalyst and the amount of catalyst used can be varied. This gives you flexibility on site so if you need the adhesive to cure more quickly – just increase the catalyst. If it is a hotter day and you need more time – use less, or no catalyst. Another great invention from ARDEX!



Pictured above: Unique ECO Butynol spraying system.

Because Health Matters

Adhered only with solvent free adhesive - no harmful fumes or potential side effects, environmentally friendly and non-polluting.

Reduce Laying Time

Using ARDEX WPM 09C speeds up bond formation. By using ARDEX WPM09A (Adhesive) and ARDEX WPM09C (Catalyst) at the same time, the Eco Butynol will be ready to lay almost immediately. Quick and easy application with a unique GRACO spraying system that provides excellent coverage and cost efficiency.

Enhanced Performance in Variable Conditions

When temperature/humidity is not ideal, use ARDEX WPM09C (Catalyst) to enhance the adhesion process.

Low VOCs - Ideal for Green Building Projects

The low VOCs in the ARDEX solvent free waterproofing membrane system means that the requirements for Green Building projects are met.

WPM 750 UNDERTILE BUTYNOL Waterproof and Tile on the same day!

ARDEX WPM 750 Undertile Butynol is an undertile sheet membrane specifically designed for waterproofing wet areas. The laps and seams are heat welded and the whole system including the waste outlet can be completed and tiled over in the same day. The Undertile Butynol waterproofing membrane system also includes ARDEX WPM 09A Solvent Free Adhesive and ARDEX WPM 09C Catalyst.

Tiling can begin 60 minutes after Installation

No curing time required with this sheet membrane. Quick and easy to install - this is a complete system

including clamp waste outlet.

Thin and Consistent Waterproofing Gauge

Membrane 0.5mm thick over the entire installation. All the strength and waterproofing benefits of standard Butynol.

Heat Weld Corners and Laps

Using a LEISTER Hot Air Gun to weld laps minimises thickness that can occur in seams and laps.



Pictured above: Undertile Butynol laps & seams are heat welded.

Unique Clamp Waste Outlet

No detailing required, a fast and foolproof system.



Pictured above: The entire system, including the waste outlet can be completed the same day.

Promotional Launches took place in Auckland, Wellington and Christchurch over the first week of May. ARDEX WPM 615 TPO was also launched at these events. Initial interest in these products has been considerable and ARDEX NZ is looking forward to the impact that these new generation waterproofing products will have on the New Zealand and international markets.

ARDEX FAÇADE RESTORATION Everything you need from start to finish!

When it comes to façade restoration, ARDEX gives you peace of mind with a system that works. With a range of products including an anti-corrosive primer, high build patch mortar, fairing coat and façade membrane coatings - **ARDEX is your solution to façade restoration.** SystemARDEX is:

- Anti-corrosive primer (B34) - corrosion inhibiting primer for steel reinforcement.
- High Build Patching Mortar (B36) - designed to reinstate damaged concrete surfaces.
- Fairing Coat (B34) - for final smoothing over patched areas.
- External Anti-Carbonation Façade Membrane (WPM330) - complete building protection.



AN ARCHITECTURAL ICON RECEIVES A TECHNOLOGY-RICH FACELIFT

The iconic concrete Bini Dome was built in 1977 and is affectionately called MAC. It has been given a technology-enriched makeover that will give it long-term protection from the elements yet is water-based and low in VOCs (Volatile Organic Compounds).

Created by inflating a circular layer of 300 tonnes of concrete and reinforcing steel between two membranes, the Bini Dome was erected on the school grounds to house a 'multi purpose centre' acting as assembly hall, function centre and sporting facility.

Measuring 36 metres in diameter and standing 11 metres high, the Dome was kept inflated for the first 36 hours while the concrete cured.

While the building is considered a much loved icon by the school community, the external membrane had deteriorated and degraded to the point where water seepage had caused widespread rotting of the polyurethane foam substrate (which acted as an insulation layer) and severe bubbling and staining of the external membrane.

An additional problem was the water that had penetrated the foam insulation could not escape, had accumulated and worked its way down to the ground, causing further mould and rot.



Pictured above: Foam penetrated by water, resulting in rot.

ARDEX Australia was selected as the key supplier of materials for the project, including primer application, waterproof membrane and façade membrane.

Roicorp Services was appointed to carry out the repair and repainting of the external membrane of the Bini Dome, which included removing sections of the existing membrane together with all foam rot in the polyurethane substrate.

All voids, some of which were created by the removal of the existing membrane in the substrate, were filled with both ARDEX B34 and B36 to achieve a smooth even finish. The entire dome was then pressure washed prior to primer application.

The original membrane at the base of the dome showed extreme deterioration – due to general weathering and rising damp – so a trench was dug to expose the footings. ARDEX WPM320 bitumen emulsion waterproofing membrane was applied to the face of the footings and up to and over the flange of the dome. While the surface was extremely damp, this product is recognised for its excellent adhesion to both damp and dry substrates. Roicorp reported the ARDEX WPM320 was easy to apply, low in odour and had excellent adherence. It contains root

inhibitors that repel most root growth without killing the plants.

ARDEX WPM 270 was applied to the retaining wall and the entire exterior of the building. Roicorp found the WPM270 Sheltercoat Solvent Based Primer – a clear primer designed to lock particles on the substrate to achieve maximum adhesion for subsequent coatings impregnated the substrate perfectly and established an excellent key for the application of ARDEX WPM 330 Façade Membrane. The Primer was applied by spray gun to ensure all nooks and undulations were adequately covered.

The external membrane selected was ARDEX WPM 330 (Sheltercoat Façade Membrane) that is an external anti-carbonation, semi-permeable membrane that slows down the penetration of pollutants while allowing any entrapped moisture to evaporate (while preventing any moisture from entering). It has excellent resistance to dirt, with the membrane actually enabling the building to self-clean after rain. ARDEX WPM330 Façade Membrane is also water based, safe to use and low in VOCs.



Pictured above: The Bini Dome after it's technology-enriched makeover.

Additional façade information will be featured in the next issue of the 'World of ARDEX'.

ARDEX WA Easy to use Epoxy Grout & Adhesive

ARDEX has recently introduced WA Grout Adhesive in 'BLACK' to meet the emerging trends in the tiling industry. ARDEX WA (available now in Black, Grey and White) is a solvent free, epoxide resin-based grouting compound and thin bed adhesive for use where chemical resistance is required or where cement-based grouts are not suitable.

ARDEX WA, is especially suitable for use in swimming pools, showers, bathrooms, shops, abattoirs, dairies, hospitals, hydrotherapy and spa baths, sports centres and other specialised buildings where high standards of hygiene and cleanliness are required.

ARDEX WA at a glance...

- Easy to apply and clean off.
- For use in wet areas - providing superior protection against mould and dirt.
- Ideal for immersed conditions.
- For use in joint widths from 2 to 15mm.
- For use where high standards of hygiene, chemical resistance and cleanliness are required.
- Water and frost resistant.
- Solvent free.
- Can be used as a tile adhesive.
- Suitable for wall and floor applications.
- For internal and external use.



Grouting for Good Results

by Graeme Robb
ARDEX Technical Services Advisor

Graeme Robb has been in the tile industry since 1982. Prior to joining ARDEX 16 years ago Graeme spent some time with major players such as Beaumont Tiles and Johnston Tiles. Graeme has held a variety of roles and currently works in the ARDEX Technical Services Team as Technical Advisor in the tiling category. In this issue of the 'World of ARDEX' Graeme discusses how to remove Efflorescence.

Removal of Efflorescence

Where efflorescence has already appeared on grout joints, there are several methods available for removing these deposits. Physical methods such as chipping away

with chisels and the like are not recommended due to the danger of damaging the tiles under the deposits.

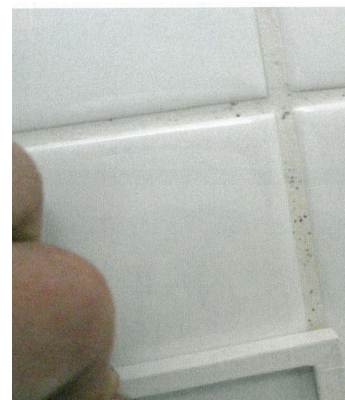
Thin soft deposits may be removed by brushing with a stiff bristle nylon brush and vacuuming up the loosened powder.

Where the efflorescent deposits are thick and still relatively soft, pre-wet the joints and then scrub with a stiff nylon bristle brush. Wash all loosened material away and continue to scrub to progressively remove the deposits. A weak acidic solution such as white vinegar (approx 5% Acetic Acid) will assist in this process.

Thicker harder deposits will require repeated washes with the acid followed by scrubbing to remove.

Alternative acid solutions (eg. weak phosphoric acid) may also be used instead of white vinegar. Thoroughly rinse with water after using acidic solutions.

Pictured below: Pinholes in grouts often lead to grout discolouration, mould and cracking.



PIN HOLES IN GROUT are generally a consequence of excessive mixing with a power mix set at a much higher speed than recommended. Air bubbles become trapped into the wet grout mix and may remain after installation. At the surface these pin holes may become exposed as the grout surface is broken or reduced. The voids can then fill with contaminants and the grout surface may appear discoloured. The recommendation is to avoid excessive mixing and to force the grout into the joints to its full depth so that the grout is compact, this action will minimise bubbles.

ARDEX Feather Finish Cement-Based Finishing Underlayment

Over 50 years ago, the founders of ARDEX in Germany developed products which at that time were a new era in the technology of cementitious flooring compounds such as Ardit Z8, Ardur K15 and Feather Finish.

Today these ARDEX products, and many more, remain the benchmarks in the flooring industry throughout the world.

ARDEX Feather Finish remains an 'unbeatable product' which can offer flooring contractors many benefits including a true feather finish, smooth surface blend and rapid dry application.

ARDEX Feather Finish allows the installation of most types of floor covering in as little as 15 minutes; without the need for priming or the use of a latex additive. ARDEX Feather Finish mixes with water to a creamy, smooth consistency making it a 'No Fuss' product to use.

If you have not tried ARDEX Feather Finish yet, we recommend this excellent product for your next job whether large or small.

ARDEX Feather Finish is available from ARDEX approved distributors near you. Contact ARDEX Australia on (02) 9851 9199 or ARDEX New Zealand on (03) 373 6900 for more information on the product or visit our website: www.ardex.com



Feather Finish

at a glance...

- No liquid latex to add.
- Portland cement-based, will not stain or mildew.
- Never needs priming.
- Recommended by floor covering manufacturers.
- Will allow most floorcovering installation while patch is damp.
- Economical - skim coat up to 6m² per kg.
- No sand or fillers.
- Provides a true featheredge.
- Exceptional bond to:
 - Concrete
 - Wood
 - Terrazzo
 - Ceramic and Quarry Tiles (without priming)

Range of Applications

ARDEX Feather Finish is used to smooth ridges, fill in scratches, gouges and joints and to provide a true featheredge transition over concrete, wood, cementitious terrazzo as well as over ceramic and quarry tiles.

Installation

ARDEX Feather Finish is easily applied to any prepared surface using a steel trowel. Simply apply sufficient pressure to fill all defects and to feather the product into the sub-floor surface.



Pictured above: Applying Feather Finish over tiles for a smooth, even finish.

As soon as the ARDEX Feather Finish can be walked on without damaging the surface (in as little as 15-20 minutes), standard floor coverings such as ceramic tiles, vinyl tiles, sheet and carpeting can be installed.

It is not necessary to leave a minimum thickness of Feather Finish on the substrate. Use the least amount possible to attain the desired smoothness.

Thickness of Installation

ARDEX Feather Finish can be installed from a true feather-edge up to 3mm thick over large areas in one application.

Coverage

The unique formulation of ARDEX Feather Finish is such that its coverage is easily three times that of a sanded product. A 4.5kg unit covers up to 3m² at 3mm. When skimming over concrete, coverage is 10-15m² however over plywood 20-30m² can be achieved.

Packaging

Feather Finish is available in a 10kg bag or 4.5kg pail.

STABILITY PROBLEMS WITH NATURAL STONE TILES

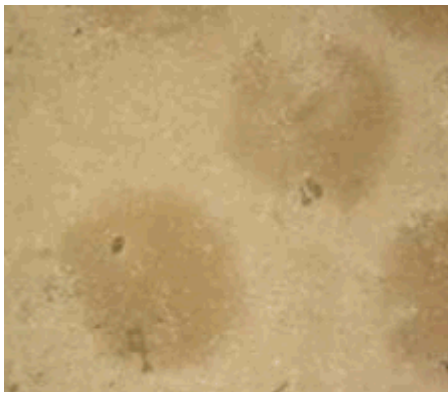
There are exciting choices, new trends and technologies emerging in the tiling industry almost every day. A major focus for innovative companies like ARDEX is to help provide solutions to the challenges brought by these changes.

Natural stone tiles are one of these emerging trends impacting on the market. While these tiles offer great opportunities for distributors and customers alike, they often come with a new set of challenges that require special consideration.

At ARDEX we are seeing two main areas of challenge so we have developed helpful hints and solutions that help you select the right stone package.

Staining In Moisture Sensitive Stone

The most common issue we see is staining in moisture sensitive stone. The stain is caused by moisture migrating from the subfloor, adhesives and grouts into the tile, resulting in permanent (irreversible) discolouration of the stone.



Pictured above: Adhesive show through on spot fixed limestone tiles.

ARDEX has developed a range of adhesives and grouts that greatly reduce the likelihood of any staining problems. The cement based products in the range lock the moisture within the adhesive and grout so it can't seep into the stone.

Products in our Natural Stone range include:

- ARDEX WA100 Two Part Epoxy Adhesive for Natural Stone.

- ARDEX S16/S16W Rapid Hardening & Rapid Drying Tile and Natural Stone Adhesive - with ARDEX E90 Admix for ARDEX Cement based tile adhesives.
- ARDEX MG Rapid Drying Marble and Natural Stone Grout.
- ARDEX ST Neutral Cure and Non Staining Natural Stone Silicone.
- ARDEX SP1 Primer for ARDEX Silicone.

Dimensionally Unstable Stone

The second problem is related to natural stone tiles becoming loose or becoming drummy sometime after being laid. This is caused by the tiles expanding and contracting due to either heat or moisture. In effect, the tile is growing and shrinking and not always returning back to its' original shape and size. This places great stress on the adhesives and grouts.

Some natural stone tiles don't change shape very much - but others do! Two pieces of stone can look exactly the same, come from the same quarry, be the same price BUT they can behave very differently when temperature and moisture levels vary. *The problem is, you can't tell the difference by looking at them!*

While substrate movements (such as drying shrinkage of concrete) may occur, these dimensional changes within the stone tiles are in addition and can be the greater contributing factor to the tiles becoming loose.

However you should confirm that the substrate is suitable for the stone tile installation and follow the recommendations of the adhesive manufacturer and Australian Standards to ensure successful installations.

There is an easy warranted solution. In areas subject to heat and moisture use ARDEX WA 100. For internal areas that are not subjected to heat or moisture then

ARDEX S16 with ARDEX E90 can be used. If you are unsure about this or require an alternate specification please contact ARDEX Technical Services on 1800 224 070.

However if the area is large (generally over 100m²), ARDEX can test the stone and provide a written installation recommendation. These tests take around three weeks to perform and have a fee associated with it. This fee will be refunded and a warranty provided when the ARDEX system is used where deemed necessary.

Our Technical Services Department have published a more indepth paper on these findings. If you require a copy of this paper please contact the ARDEX Technical Services department on 1800 224 070 or email: techinfo@ardexaustralia.com

ARDEX WA100 Two Part Epoxy Adhesive for Natural Stone



ARDEX WA100 is a high strength two part epoxy stone adhesive that exhibits superior bond strength. It is especially designed for fixing natural stone such as marble and granite, including those sensitive to moisture. It can also be used for the fixing and bedding of natural stone on walls, bench tops and stair risers.



SYSTEMARDEX
PREMIUM PERFORMANCE

**ASK THE EXPERTS
ARDEX Technical Services**

ARDEX is committed to providing the highest level of technical support - from product training to customised system recommendations. ARDEX have a dedicated team of technical experts based at our Head Office in Seven Hills to help you at any stage with:

- System recommendations
- Problem investigation

If you need help with anything out of the ordinary, if we don't already have the answer Technical Service will investigate it for you.

The team can be contacted on:

New Zealand:

Toll Free: 08002ARDEX
(0800 227 339)
Email: techinfo@butynol.co.nz

Australia:

Phone: 1800 224 070
Fax: (02) 9838 7817
Email: techinfo@ardexaustralia.com

**Spotlight on ARDEX
Technical Datasheets**

- 1. Façade Restoration**
- 2. WA Grout**
- 3. Feather Finish**

ARDEX Data Sheets provide users with invaluable information for correct installation and mixing procedures for each product.

If you would like any Technical Datasheets, they can be found on our website at - www.ardexaustralia.com or alternatively emailed or mailed to you - please contact Lyn Cridland on (Aust) 02 9851 9166 or email: lyn.cridland@ardexaustralia.com

Training & Professional Development

Please call your local ARDEX office for information on upcoming Waterproofing, Tiling and Flooring workshops.

SALES OFFICE CONTACTS

Your local sales office can help with any requests for Technical Data Sheets, in addition to stock questions, Material Safety Datasheets and pricing.

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Email orders: sasales@ardexaustralia.com



Receive a \$50 Gift Card....

ARDEX would like to hear from our customers about experiences using ARDEX products - if you would like your story published in the 'World of ARDEX' simply mail it with your name and telephone details to the Marketing Department at the Australian or New Zealand Head Office.

When your story is published we will send you a \$50 Gift Card to thank you for participating in the 'World of ARDEX'.

PRIVACY STATEMENT

ARDEX aims to provide its customers with premium products and services. To achieve this, we aim to make efficient use of the personal information we collect or hold.

In doing so, we also want our customers to have complete confidence that any information collected or held will not be mistreated. ARDEX is committed to ensuring all personal information held will remain confidential and have established a Privacy Policy which recognises this. The Privacy Policy can be found on the ARDEX Australia website or alternatively phone (02) 9851 9166 and a copy will be mailed to you.

Further to this, ARDEX will handle all personal information in accordance with the Privacy Policy Act 1988, National Privacy Principles.

If you do not want to receive further editions of the 'World of ARDEX' please complete your name and address details below and return to the Marketing Department, ARDEX Australia, Reply Paid 796, Seven Hills, NSW, 2147 (no postage stamp required if posted in Australia).

Name: _____

Address: _____

State: _____ Postcode: _____

Phone: () _____

Mobile: _____

Email: _____

Pictured left: The ARDEX South Australian Manufacturing plant. ARDEX Australia have manufacturing plants in Sydney, Melbourne, Brisbane, Perth and Adelaide.