



Issue 3

ACT Trade Event

On a cold, wet day at the end of July a number of staff from ARDEX Head Office in Sydney drove to the West Belconnen Leagues Club in the ACT to conduct a trade event where a selection of our unique products were demonstrated in front of a record crowd of tilers, builders and tile shop staff.



Attendees gathered to enjoy food, drinks and then had the opportunity to collect a variety of giveaways including vouchers for over \$1000 in free product that were redeemable at various tile shops

ARDEX Australia pride ourselves in offering support to every individual - installers, contractors and distributors through ongoing training, field support and system recommendations that are backed by a unique range of products which provide peace of mind through their complete reliability.

So, next time ARDEX are holding a trade event in your area we hope you have the opportunity to attend.

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



Eden, NSW Killer Whale Museum

Alan Mallard has been a tiler for over 45 years and in his extensive career has been involved in major projects including supervising the tiling of The Queen Victoria Building and The Powerhouse Museum. In 2002, Alan moved to the South Coast of NSW to semi-retire and had the opportunity to create a masterpiece of the replica lighthouse floor of the Eden Killer Whale Museum.

The light-house floor was designed to commemorate the Commonwealth Centenary - each tile in the mosaic was hand cut for the inner feature which depicts the museums famous killer whale logo and the words Centenary of Commonwealth Commemorative Lighthouse

After tiling 4000 bathrooms in his career, ARDEX Australia would like to wish Alan a very happy semi-retirement and thank him for his contribution to The 'World of ARDEX'.



Pictured above: Alan used Beaumont Tiles Abaflex (ARDEX) because of it's excellent adhesion and off white colour.

www.ardex.com

Location: Western Australia
Project: Albany Entertainment Centre
Architect: Cox Howlett & Bailey Woodland
Builder: Doric Construction
Subcontractor: Commercial Tiling Services WA

Project:
Albany Entertainment Centre

Description:
The Albany Entertainment Centre has been built to replace the Albany Town Hall Theatre as the premier performing arts centre for Albany and the Great Southern Region of WA.

The centre was designed by Cox Howlett & Bailey Woodland Architects who reflected Albany's Maritime history in the design.

Some of the design features of the building presented challenges for the builders and their subcontractors.

ARDEX worked closely with Danny Ambrose from Commercial Tiling Services WA to provide a system recommendation for the internal/external tile installations and waterproofing membranes which took into consideration some unique building products.



Pictured above: The Albany Entertainment Centre is located on the foreshore with views of Princess Royal Harbour and Torndirrup National Park.



Pictured above: The Albany Entertainment Centre is due for completion in August 2011.

Tiles:
The tiles installed are a dark grey, almost black granite installed over polystyrene insulation and a sand/cement screed.

SYSTEMARDEX:
Prior to the installation of the polystyrene blocks, the concrete had to be waterproofed with a fully tanked membrane. Our recommendation was to use ARDEX WPM 002 two part membrane and WPM 265 primer which incorporated bondbreakers and deckweb.

An unbonded sand/cement screed was designed to move independently over the insulative blocks to tolerate movement within the system.

To debond the screed two layers of builders black plastic was applied to act as slip sheets. All depressions were filled and high points ground off to achieve a smooth and level surface. Gaps between the polystyrene blocks were filled with silicone.

The sand/cement screed was mixed at a ratio of 3/1 with WPM 405 polymer added to improve the strength, flexibility and moisture resistance.

As the screed was self supporting it was reinforced with welded wire mesh as per ARDEX technical bulletin 057.

Once the screed was completely dry, WPM 002 was applied prior to tiling. We recommended ARDEX STS 8 combined with ARDEX E 90 additive. ARDEX STS 8 was selected for its high tensile strength and non-slump properties. For the external areas, ARDEX E 90 was added to improve adhesion and flexibility.



Pictured above: The centres design reflects a ships bow and when completed will be like no other in Regional WA.

“This installation is now complete and we are very happy with the system and confident that it will perform well in this application.”

Bayer Innovators Awards

ARDEX New Zealand Technical Manager, Vijay Nair was a top 3 finalist in the Design and Engineering section of the Bayer Innovators Awards. The awards are an annual event held in association with the National Business Review. They showcase the level of expertise that is strived for in New Zealand.

Vijay has been heavily involved in new product development and he invented both the Undertile Butynol and Eco Butynol, both of which are major product progressions in waterproofing membranes.

Congratulations Vijay on this well deserved recognition!

A FRESH NEW LOOK FOR ARDEX BUTYNOL

After being wrapped in the same packaging for the last 20 years, the ARDEX Butynol range has had a packaging revamp. Butynol 1.5mm Dove Grey is pictured below, however a facelift has been given to the packaging for all weights and colours of ARDEX Butynol.

The new look reflects the ARDEX corporate brand standards more accurately and uses the teal blue colour associated with Waterproofing products on each wrap. The colours currently used to define the different types of Butynol have been retained on a bold coloured strip bordering the brand label.

The packaging has changed from a bag to a wrap style, which makes the rolls hold together better in transport.

Look out for the newly packaged Butynol rolls in your storeroom soon!



Pictured above: The new packaging for ARDEX New Zealand Butynol.

GROWING INTEREST IN INDIA FOR ARDEX WATERPROOFING MEMBRANES

Canterbury roofer Michael Hill of Michael Hill Roofing Ltd, travelled to India in June on behalf of ARDEX New Zealand as there is a growing interest in waterproofing membranes in India. The ARDEX Endura branch based in Bangalore requested some training and installation from our New Zealand team. Christchurch based product trainer Mr Lyn Scott was unavailable to assist due to the vast amount of training he is currently completing on the newly launched Eco Butynol, Undertile Butynol and TPO Membranes.

Michael Hill was keen to travel to India and learn how waterproofing is conducted throughout the country. He was required to train the ARDEX Endura staff and local contractors in Butynol installation and detailing. Michael also completed a 300sqm roof in ARDEX Butynol 1.5mm in Dove Grey in Chennai. This is the first Butynol membrane roof in all of India.



Pictured above: Local staff and contractors learning Butynol installation.

Michael said that the experience was immensely enjoyable and that he appreciated the opportunity presented to him by ARDEX New Zealand and ARDEX Endura.



Pictured above: 300m² Butynol roof installation in Chennai.

The ARDEX employees in India were willing to learn and eager to be part of the membrane installation.

Michael enjoyed the camaraderie of the locals and believes he consumed his body weight in curry!

"I was very well looked after by the ARDEX Endura team" he said.



Pictured above: Success! The first Butynol roof in India.

ARDEX WPM 615 TPO Roofing Membrane

- **Eco Friendly Membrane** - Heat reflective and energy efficient roof membrane.
- **No toxic emissions** - No plasticizers or chlorinated ingredients.
- **Lightweight Membrane** - Offering a high variety of installation options for low slope roofing applications.



ARDEX NEW MEMBRANE CREATES A GREENER SPACE FOR THE UNIVERSITY OF NEW SOUTH WALES

The University of New South Wales' Kensington campus had a very specific need – a waterproof membrane for a 1500m² podium that was to support more than 20,000 cubic metres of soil and extensive planting.



Pictured above: Surface preparation.

The podium spanned the car park of the new student accommodation complex and was a significant element of the greening of this predominantly concrete area. The builder, Watpac Limited, stipulated the membrane had to be absolutely impervious to both water and root penetration – the integrity of the product was critical as any leaks would prove extremely costly and labour intensive to retro fix.

The new ARDEX WPM 615 TPO Membrane was specified for the job

due to its innovative seam welding techniques and our approach to quality assurance.



Pictured above: Membrane installation.

The TPO membrane is hot-air welded to deliver a fully secure, consistent seam quality.

This, and the assurance by ARDEX that members of its technical team would be on-site each day, were the key factors in Watpac's specification of the product for the UNSW project.



Pictured above: Walkway formed.

ARDEX WPM 615 TPO, launched on the Australian market last November (2009) is a high performance waterproofing membrane of thermoplastic polyolefin combining polypropylene and ethylene propylene rubber. The scrim-reinforced membrane combines the durability of rubber with the heat welding properties of a thermoplastic in a flexible sheet.

Other features of the TPO membrane are its ease and speed of installation plus its environmental credentials.

The TPO membrane comes in 30 metre sheets, two metres wide and weighs just 1.53kg per square metre. This delivers easier handling than most other waterproofing membranes and a variety of installation options for low slope roofing applications in both refurbishment and new construction projects.

The fact that the membrane offers single ply protection with fast, hot air welded seams delivers a rapid, safe (no naked flames) installation process.

Environmentally, the TPO waterproofing membrane has some definite advantages – its chlorine-free, non-halogenated and plasticizer-free formulation, in combination with the hot-air welded seaming method, produce no emissions harmful to the environment. The membrane can also be easily recycled and has a lower manufacturing footprint than comparable systems.



Pictured above: Area planted.

The 1500m² of landscaping was completed in November 2009 and the students are now enjoying their 'greened' environment while their cars are securely parked in a cool, dry environment beneath.

ARDEX WJ 50 Non Shrink Coloured Wide Joint Grout

- Improved colour consistency - special additive to combat efflorescence.
- Excellent workability - easy to apply and clean off.
- Ideal for use in joints from 5mm up to 50mm.
- Suitable for internal and external, wall or floor applications.
- Suitable for commercial and domestic applications.
- Available in a range of colours.



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 the causes of grout cracking.

Grout Cracking

Grout Cracking is generally indicative of movement in the tiling substrate but there are other reasons to be considered. These include excessive shrinkage within the grout compound, the grout is too thin in the joints, and the joints are too narrow for the grout to fill to full depth. Cracking may include loss of bond to the tile edge.

Movement of the tile substrate may be deflection or it may be moisture related shrinkage (such as drying shrinkage of concrete slabs) or even the expansion / contraction of fibre-cement sheet due to changes in the atmospheric humidity after the sheet installation. Tile grout is typically designed to be placed under compression and in most instances will compress without spalling out of the joint. However in other instances the grout may crack without spalling out of the joint. Where vibration movement is anticipated, the recommendation is to use additives in the grout. However this does not negate the need for providing movement joints in the tiling system in accordance with the recommendations of AS3958.

These joints are to accommodate normal building movements that may lead to cracked grout.

Excessive shrinkage in the grout compound may be due to being mixed and applied when there is a high rate of moisture loss from the system. This is sometimes described as 'plastic shrinkage' and occurs whilst the grout is still wet and uncured. While most grouts are formulated to include a degree of shrinkage compensation, joints that are filled with a very sloppy grout will change volume as the excess moisture evaporates away. The result can be hairline cracking typically along the tile edge.

Where the grout compound is very thin compared to the joint width, very minor movements in the tile system may lead to the grout cracking. In some instances, the grout may be unsupported in the joints due to not having been packed into the joint correctly the first time. Cracking may be in the middle of the joints or may be along the side due to insufficient thickness to achieve a strong bond to the tile.



Pictured above: Tiles and grout cracking.

Narrow joints may also crack even when the grout is mixed correctly. This is due to the porous absorbent body of the tile drawing moisture from the wet grout before the cement hydration has completed and the grout has set. Unglazed tiles (eg. terracotta) and glazed tiles with no glazed edges, or unevenly glazed edges that have an absorbent porous body will cause this problem.



Pictured above: Cracking in the grout.

The result is often a soft grout that may be easily scratched out of the joints. The recommendation in this instance is to pre-wet the sides of the tiles prior to application of the grout. It is good practice for all tiles to be checked for water absorption prior to installation as very porous tiles laid on an absorbent substrate may require at least one surface to be primed prior to adhesive fixing of the tiles.



SYSTEMARDEX
PREMIUM PERFORMANCE

ARDEX K 301 External and Internal Levelling Compound

- Levelling and smoothing compound for repairing and resurfacing concrete floors and sand/cement screeds.
- Quick Drying - walkable after only 2-3 hours.
- Easy to install - 2mm to 20mm in one application.
- Versatile - can be hand mixed or pump applied.
- Suitable for interior and exterior applications.



EFFICIENT SOLUTIONS

The flooring system specified for the refurbishment of an arts centre in Sydney NSW was so modern that the design brief stated it must in no way detract from the artworks.

The 900 square metres of floor space in question encompassed both galleries and foyer, comprising a large concrete slab, previously tiled, that was both chipped and badly damaged. The new floor was to be homogeneous in appearance and provide a 'blank canvas' for future exhibitions and events.

While aesthetics were of prime importance, turn around was key to the overall project – a tight programme of art exhibitions meant there was a window of only eight days between commencement of work and the opening night of the next exhibition.

ARDEX K 301, is a unique cement-based self-levelling internal and external flooring compound that offers a scope of design aesthetics as well as an unprecedented degree of durability.

Poured from wall to wall, internal through to external areas on both new and existing concrete floors it forms a smooth, level concrete surface that, due to

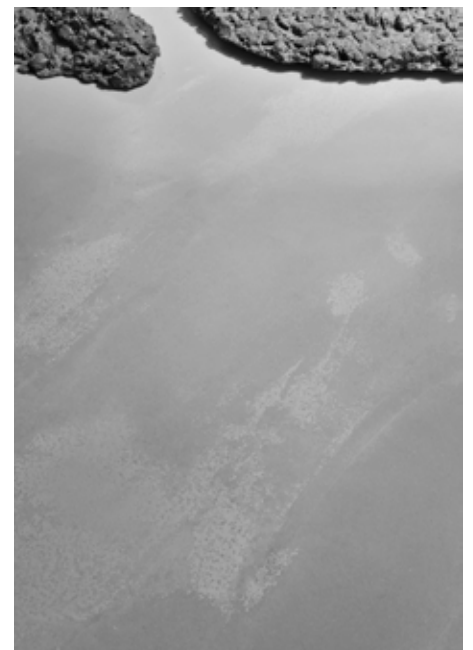
low shrinkage ARDEX technology, eliminates the need for additional control joints. The surface, which is dry and ready to walk on within two to three hours of application, is sealed and then polished using a range of coatings, from matt to high gloss finishes.

ARDEX K 301 is manufactured locally in 20kg size packaging.

Available through our approved distributors, the product surely will solve more of the difficult jobs where other products may have some limitations.

ARDEX K 301 levelling compound is formulated for external applications resisting the effects of sun, rain, heat, cold and even freeze thaw conditions.

Having outstanding durability, ARDEX K 301 is also perfect for wear surfaces in workshops, domestic garages, storage areas, light commercial areas, courtyards and footpaths.



For more information on ARDEX K 301 please contact the ARDEX technical hot line on 1800 224 070 or email techinfo@ardexaustralia.com



LAS Vegas City Centre Complex



The first phase of the Las Vegas City Centre Complex, a \$9+ billion, 68 acre project was completed in December 2009.

Throughout the project approximately 150 truckloads of ARDEX Self Levelling Underlayment including K 15 were installed in several areas such as Aria Resort and Casino, the Crystals Retail and Entertainment complex and the Mandarin Oriental.



During the project competitors approached all contractors involved and despite significant price cutting attempts to undercut the ARDEX bids, each contractor stood firm with ARDEX.

Contractors and installation professionals understand that ARDEX provides best-in-class, reliable, high performance products that reduce time, cost and risk for any type of installation.

ARDEX stands behind its products with the most knowledgeable sales team in the industry, expert technical support, training and unrivalled customer service.

ARDEX K 15

An extremely versatile, rapid drying, self levelling smoothing compound suitable for a wide range of substrates.



ARDEX K 15 can receive most floor coverings in 16 to 18 hours including linoleum, vinyl, carpet, ceramic tiles and quarry tiles. Timber (parquetry and floating) can be installed after 48 hours.



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. WPM 615

2. WJ 50

3. K 301

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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2010 Sun-Herald City2Surf

ARDEX Australia staff ran in the City2Surf again this year to raise money for the Children's Hospital at Westmead - if you would like to join us next year to raise money for this worthwhile cause - give us a call.

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).

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