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EDITION 03



COATED CORNER

WELCOME

To all Painters, Builders, Specifiers, and anyone else involved with paint – greetings from the team at A&I Coatings!

This newsletter finds us in the depths of winter, and we understand that the cold wet weather is very challenging to painters.

For the interest of our readers, our Research and Development Team is committed to utilizing technology that allows coatings to cure effectively at lower temperatures and in conditions of high humidity. As a result of this research, we now have a high wear polyurethane system (Vitrethane 637) which can be applied in operating coolrooms for floor sealing, non-slip areas, or line marking. Vitrethane 637 also has excellent UV resistance, so there is a coating that will interest some in the dark, dank months!

In this edition, we cover:

- Networking with A&I Coatings
- Case Study - Valley Heights Hardware Store
- Case Study - Canberra Museum Sculpture
- Case Study - Factory Floor, Moss Vale
- Slip Resistant Floor Surfaces
- How to - Applying a façade finish that you can warrant for 15 years or more.

Kind Regards,
The A&I Coatings Team.



NETWORKING WITH A&I COATINGS

On most projects, there will be up to 7 parties of organisations with an interest in the paint used and the painting process. These are:

1. **The Client** – this could be the property owner, facility manager, developer, etc;
2. **The Specifier** – he/she who advises and acts on behalf of the client. This could be an architect, engineer, interior designer, or similar;
3. **The Principal Contractor** – this will typically be a builder, but could also be an engineering firm or project manager;
4. **The Applicator** – who is relied on to apply the required coatings as per the specification provided;
5. **The Stockist** – normally a local paint store that has suitably trained staff who can provide technical and on-site support to the painter as needed;
6. **The Manufacturer** – responsible to discern market needs, and then provide easy-to-apply products which meet these needs.

At A&I Coatings, we make it our business to keep in touch with Specifiers, Principal Contractors, Painters, and Stockists across Australia.

We work transparently with all parties in view of providing an extremely high level of service and coordination on all projects.



For example:

1. We are assisting **architects** (specifiers) daily with selection and documentation of the 'best fit' specifications for their projects;
2. We provide names of local approved applicators to **builders** (principal contractors) as projects near painting stage;
3. We provide training and technical support through and with our **stockists** so that they can properly support their local painters; and
4. We provide our approved **applicators** with details of projects that they may be interested in quoting on;

We believe in networking! We know that it is good for all parties, because we have worked this way in the paint industry for over 30 years. It brings together varied interests and skills, and has the potential to deliver the very best possible results.

It is an International Best Practice function, and we know that it works!

To make sure that you are a part of the A&I Coatings Networking Process, send an email to helpdesk@aicoatings.com today – just say “**Network Me Please!**” and the Help Desk Team will do the rest.



Vitrethane 630 Two Pack Polyurethane used at Bunnings

VALLEY HEIGHTS HARDWARE STORE

Vitrethane 630 Two Pack Polyurethane used to restore tired, faded walls and facades.

The building shown is a 1980 style factory warehouse that has just been overhauled and turned into a smart, new hardware store. Our contribution was the **Vitrethane 630 Two Pack Polyurethane** in deep teal colour used on the fascias and facades.

V630 is ideal for on-site spray applications because it dries extremely fast in the air, which means that the risk of overspray on cars and other nearby sensitive surfaces is greatly reduced. At the same time, it is not difficult to achieve a uniform finish due to the excellent hold up (non-sag properties). This whole building was actually sprayed by one man using an airless spray gun with a wide 11 thou tip.

V630 is very easy to mix, has a long pot life, and is a pleasure to spray. It is a high quality polyurethane with good UV resistance (up to 15 years colour fastness depending on the colour) and very good graffiti resistance.

Finally, **V630** has excellent adhesion and is suitable for direct application to many substrates. For weathered Colorbond, simply prepare with a good wash to remove surface contaminants and chalk, and then the **V630** can be directly applied.

Exterior durability can also be extended very significantly by overcoating with **V630 Clear**, or for maximum UV resistance, use **Vitreflon 700 Clear** over your **V630** colour.

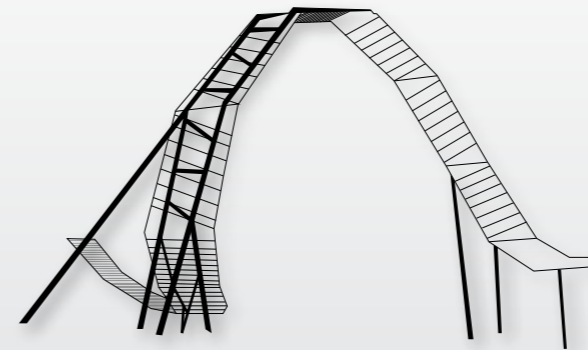
CANBERRA MUSEUM SCULPTURE

This unusual looking sculpture outside the Canberra Museum required some long lasting bright colours and exceptional protection against the Australian elements.

This was achieved on site by priming with Envirothane 2100 and finishing with two coats of Envirothane 8480 in the required colours.

The painter applied the system by brush and roller and, in spite of the limited pot life of these two pack products, found the system easy and safe to use due to the easy spread and low odour.

The anti-graffiti properties of the Envirothane 8480 Fluoropolymer will no doubt be put to good use over the years to keep it sparkling and we look forward to having this on our long list of enduring A&I landmarks.



Colour retention was a prime requirement for the Canberra Museum Sculpture



FACTORY FLOOR, MOSS VALE

The floor of a new manufacturing plant in the Southern Highlands was recently coated with the Envirothane Solvent Free Epoxy System.

Here is a brief pictorial description of the process and products used:

1. The surface was prepared by shot blasting followed by a light grind.
2. The epoxy mixing area was carefully prepared. The surface was primed by applying 1 coat of Envirothane 4111 Solvent Free Clear Epoxy by squeegee at 14m²/L.
3. The 1st coat of Envirothane 4110 Solvent Free Light Grey Epoxy was then applied by squeegee at 14m²/L. Note the squeegee marks at bottom left!



4. The final coat of Envirothane 4110 Solvent Free Light Grey Epoxy was applied by squeegee at 3m²/L then back rolled to maximise uniformity. The heavy application rate used for this final coat ensured that all remaining irregularities were filled beautifully!
5. A walkway was designated at one end of the factory by top coating in one of the company colours.
6. The result: A stunning 3,000 m² expanse of floor! Unfortunately the glossy surface attracting reflection from the roof lights makes photography difficult but the easy-to-clean properties are clearly highlighted.

Contact us for your [Envirothane](#) epoxy system today!





Anti-slip is essential for wash-down areas with falls to drains



Installing a very heavy duty anti-slip system at the Sydney Fish Market

SLIP RESISTANT FLOOR SURFACES - INDUSTRY

In this edition we thought to provide some further user friendly information on the seemingly inexhaustible subject of Slip Resistant Floor Surfaces. In the last issue we dealt mainly with pedestrian trafficked public areas and thought to focus attention here on industry.

Again the important reference point in this regard is the Australian Standard Handbook 197:1999 – An Introductory Guide to the Slip Resistance of Pedestrian Surface Materials.

Before looking at some industrial applications we should understand that slip resistance is influenced by the following factors:

1. The inherent abrasion or 'slipperiness' of the floor surfaces,
2. The nature of the likely pedestrian and vehicular activity,
3. The type of footwear and wheel treads,
4. The angle or slope of the floors, and
5. The likelihood and nature of contamination.

For instance, a floor which might be safe under dry conditions could be hazardous if wet or oily. Of the four test methods described in the handbook for evaluating slip resistance of flooring systems, the laboratory based Oil-wet Ramp Test is recognised as being the most appropriate and realistic method for industrial situations. However, the pendulum test is mostly used for onsite assessments.

In the ramp test, a person supported with appropriate harness and wearing standard rubber work boots, walks down a ramp coated with the test finish on to which a quantity of standard motor oil has been applied. The angle of the ramp is increased until the threshold of safe walking is reached.

The Australian Standard classifies a set of Slip Hazard Classification Groups (R9 - R13) which reflects the typical acceptance thresholds determined by the test. A higher R number indicates that a person could walk safely on the surface at a higher ramp angle.

A German regulation (ZH/1/571), quoted in AS/NZS 4586:1999, relates the R9 - R13 Classification Groups to a wide range of industrial flooring workplace situations. We have included a handy table summary on the right, but readers should refer to Handbook 197:1999 for a more comprehensive list and the relevant Australian Standards.

The following three grades of non-slip media can be used with our products to achieve the appropriate non-slip ratings: EAO46, EAO60, and EAO90.

The General Purpose Specifications on our website require amendments to provide anti-slip ratings so please contact one of our team members for an Area Specific Instruction (ASI) for areas on your project which feature in the chart.



Clearly designated walking areas compliment integral anti-slip systems

Location	Ramp	Pendulum
Cooking oil refinery and fat melting areas		
Slaughter houses and raw meat processing rooms		
Processing areas for fish and delicatessen products	R13	V
Vegetable tinning and production of sauerkraut		
Skinning areas in tanneries and other wet areas		
All ramps which could get wet		
Margarine and cooking oil production and packaging		
Milk, butter and ice cream production and packaging		
Sugar and cocoa production and packaging		
Liquid mixture and wash up rooms in bakeries		
Sausage drying and smoking rooms		
Meat salting and curing rooms		
Poultry processing and cold meat slicing		
Vegetable processing areas		
Kitchens & washing up rooms for more than 100 meals daily		
Fast food kitchens and snack bars	R12	W-V
Cold stores for unpacked goods		
Serving counters for fish		
Meat preparation rooms		
Oil and fat storage		
Wet grinding, moulding and glazing areas		
Meal pickling, hardening and galvanizing areas		
Vehicle inspection pits and aircraft repair hangars		
All areas in waste water treatment plants		
Parking areas for fire engines & equipment washing areas		
Dough, cheese and confectionary production		
Beverage bottling and fruit juice production		
Sterilising rooms		
Kitchens and washing up rooms for up to 100 meals daily	R11	X-W-V
Cold stores for packed frozen goods		
Serving counters for unpacked meat products		
Laundries with washing machines		
Fodder production		
Toilets & wash rooms		
Storage cellars - dry		
Serving counters for meats, smallgoods and bakery products	R10	Y-X-W
Handcraft and woodworking rooms		
Internal car parking areas and garages		
Internal Stairs- dry		
Counter sales areas		
Laboratories	R9	Z-Y-X
Canteens and assembly areas		
Packaging areas - dry		



HOW TO: APPLYING A FAÇADE FINISH THAT YOU CAN WARRANT FOR 15 YEARS OR MORE.

Producing a façade which will withstand the Australian elements is a big ask. Typically, the exposure to UV will break down the colour and compromise the integrity of conventional exterior coatings within a few short years.

Coating longevity is especially important for facades on high rise buildings and hard-to-reach areas and this has prompted much research into ultra UV resistant resins such as fluoropolymers.

While prefinished composite sheets are suitable for many situations, it has been found that site application of premium coatings to some façades is often preferable for economical and other reasons.

We are at the forefront of fluoropolymer technology and confidently recommend our Envirothane 8480 Two Pack Water Based Fluoropolymer for onsite applications where low VOC, ultra durable finishes are required.

Roadside structures are a typical use for E8480 because they usually require anti-graffiti properties and ultimate UV resistance.

The secret to success is to ensure optimum adhesion, so start off with one of our two pack water based epoxy primers – either E2000 for clear or E2100 tinted to colour.



A highway acoustic barrier being coated in our Fluoropolymer



Application of the Envirothane 8480 system in progress on multiple surfaces at a school in NSW.



Bright colours are popular for student common areas.

To maximise your coverage power we can tint your primer to colour. Apply either two coats of E2100 + one coat of E8480 OR one coat of primer and two topcoats of E8480. The main thing is to achieve a total film thickness of at least 180 microns of which at least 50 microns should be the fluoropolymer. Here is an extract from a commonly used specification for an enviro friendly coloured facade.

Surface Preparation

Prepare surfaces thoroughly to provide a clean, dry, etched surface.

Application

1. **Envirothane 2100 Water Based Two Pack Epoxy to Colour.** Mix parts A and B as per instructions in the product data sheet. Thin up to 10% with water if necessary to ensure penetration and keying into the concrete. Apply one coat at a usage rate of approximately 6m²/ litre, and allow overnight dry.
2. **Envirothane 2100 Water Based Two Pack Epoxy to Colour.** Mix parts A and B as per instructions in the product data sheet. Apply one coat at a usage rate of approximately 6m²/ litre, and allow overnight dry.
3. **Envirothane 8480 Water Based Fluoro-Modified Polyurethane to Colour.** Mix parts A and B as per instructions in the product data sheet. Apply a consistent, even coat at a usage rate of 6-7m²/litre. Proper graffiti resistance should be achieved after curing for 12 hours at 15°C. Consult with a technical representative of A & I Coatings to finalise colour and gloss level.

Schools are another typical situation where onsite anti-graffiti facades are required. Various surfaces often become involved here such as doors, CFC sheeting, metal and concrete panels.

We would happily provide onsite support for any façade project – our team is only a phone call away!

A&I Coatings Help Desk:

1800 819 585 • helpdesk@aicoatings.com



Established in 1981, A&I Coatings develop and manufacture a range of customised coatings for use across commercial and industrial applications.

For nearly 20 years, we have engineered premium quality, environmentally responsible solutions for the long term protection, maintenance, and beautification of many local and international landmarks.

Australian owned and ISO 9001 2008 certified, we work together with architects and engineers to fulfil complex project requirements on time and within budget.

> aicoatings.com

> 1800 819 585

Resellers

A&I Coatings strongly supports trusted resellers. We believe in working closely with local paint suppliers to provide the best solutions for specific coating needs.