

PRESIDENT'S ADDRESS



First up I would like to thank everyone for their support and patience as we work through some changes in the admin cycle of the AIW. We are about to introduce some changes in the way sign up and ongoing yearly subs are dealt with.

We will be creating an online payment system via the website which will make things so much easier for both you as a member and the at the admin end. Bearing in mind majority of admin is done as a voluntary basis and now with Shell as a part time admin angel we are being freed up to get on with other things.

Some of which is being involved with the Victorian Building Authority (VBA), as we are doing online information sessions with the VBA Inspectors so it will help them recognise poor practices in waterproofing. Byron Landeryou (Committee) is presenting on behalf of the AIW on a talk to the ACRA (Aust Concrete Repair Assoc) on

waterproofing concrete which is a topic they are hungry for information on.

As an AIW Member your credentials will precede you if and when it comes to having your work reviewed by a VBA Inspector.

This is of course the same scenario nationally, where each representative in each State Chapter is involved with respective building authority in a number of ways so that the AIW is "at reach" when it comes to questions or issues that might arise and they need advice.

Now that we are starting to see some light at the end of the tunnel from the Covid restrictions, we will be organising events across the country so that our members can get together and talk shop over a cold one and pick up some tips from speakers that we have at the ready to offer their time and knowledge.

Some events will be sponsored by our manufacturing - reseller members so they get an opportunity to not only share valuable knowledge, but offer some good deals on products or equipment to AIW Members.

We are focusing on what we (the Committee) can offer our members. If you have an idea - please let us know. We are all in this together.

AIW logos have come in the spotlight recently and we need to be aware on how and where the logos are to be used. We encourage you to display

the AIW logo on your letterheads, cards, vehicles, etc but care should be exercised in your product marketing. The logo should be alongside your company name but not with a specific product.

The AIW has to remain impartial, and we do not recommend any one product over another and same to be said for members when we are asked who should be recommended for a particular project. We would normally offer a number of contractors that we know will provide a top-quality service.

So, the more we know about what you do the more we can include you (along with others) if asked. Send us your Business Profile so we "know you". We can include you in the newsletter and offer some more exposure. When you send us your business profile, go that extra step and let us know what you want from the AIW.

The Below Ground Guide is slowly coming together and has recently taken a left turn by changing the overall format to make it "doable" with limited resources. More on that as it come to life.

Thank you for reading and looking forward to hearing from you.

Paul Evans
AIW PRESIDENT

CodeMark the cream of the crop

The CodeMark Certification is a voluntary third-party product certification scheme that authorizes the use of products in their intended use to facilitate compliance with Volumes One and Two of the NCC, also known as the Building Code of Australia or BCA. The Australian Building Codes Board (ABCB) is the scheme owner and JAS-ANZ are the administrators of the schemes. Only accredited certification bodies such as SAI Global or Certmark are policing the full process and can issue the certificates.

CodeMark is particularly beneficial to look for the CodeMark certification for:

1. Innovative Products
2. New Products to the Market
3. Products of high risk, which could cause serious damage in case of a failure.

CodeMark is voluntary and not mandatory for suppliers and manufacturers. It is, without doubt, the gold standard of product assessment and certification, and a company has to jump through many hoops to proudly achieve the CodeMark certification.

Let us take it a step back to see what other alternatives we have to bring it back in perspective to the waterproofing industry.

Currently, most companies only have their products tested through an applicable

Australian Standard. For example, a liquid or sheet membrane would get tested through the AS/NZS4858 and/or AS4654 for the waterproofing capabilities.

In general, you would require a NATA (National Association of Testing Authorities) accredited test lab to go through the testing. Interesting to find out that less than 1 year ago there were no laboratories in Australia and New Zealand, which were NATA accredited to carry out the tests for AS/NZS 4858 or AS 4654.1.

Concluding that even neither appraisals nor testing through for example CSIRO or BRANZ, will require to go through NATA accredited test laboratories.

Does it mean anybody could do those tests themselves in their own non-independent test lab? What I mean is that if there are no requirements and if there were no independent test laboratories available for those tests, who does provide evidence of suitability that the product complies with the NCC, that it aligns with the installation guideline, or even that the product is the same as the sample provided in the test report...???

To achieve the CodeMark certification, it takes much more than just one single simple test report. It looks at the scope of the products and evaluates them against the entire NCC. This could quickly result in multiple independent testing such as compression strength or tensile strength for different surfaces. Additionally, it also requires assessments and audits of the manufacturing plants, raw material handling, warehousing, and distribution facilities. In this

audit, which is annual, the certification body aligns everything from the confirmation that the product is consistently manufactured to the 'as tested' technical specification as well as it incorporates the Quality Management and complaints handling. For us, the entire audit, which is annually reviewed, has to take place in our Manufacturing plant in Germany, which can be a costly exercise.

On top of that, the Technical information, Installation manuals, and annual installation site audits are being viewed.

Finally, all the test data, audit results, and technical information are assessed by an independent, unrestricted building certifier (UBC) to evaluate and ensures that the CodeMark Certification of Conformity of the product meets the mandatory building code compliance requirements.

An often-quoted statistic in the Australian waterproofing and insurance industry is: "waterproofing is 1.8% of construction cost but represents 83% of building defect complaints".1

So, without a doubt, the wet area is considered high risk. All of us know the problems we currently face in this environment. It is time to look outside the current Scheme or objective and look deeper into the entire scope that is done through the CodeMark certification. It is time to change, and I strongly encourage all the readers to look for the CodeMark logo wherever you buy your next waterproofing supplies.

Peter Beckmann
DIRECTOR WEDI AUSTRALIA &
NEW ZEALAND

Did you know that our past newsletters can now be found on the AIW website?
Packed full with industry updates and waterproofing best practice tips they are well worth a read.
Check out what you missed under our 'News' tab --> <https://www.waterproof.org.au/newsletters/>

OBLIGATIONS FOR REMEDIAL WORKS

Waterproofers are often required to perform remedial works on buildings which have experienced water protection failure. In most cases these works do not require a building permit from the local council. Typically if you working on an existing building and are called upon to fix the bathroom, laundry, balconies, basements, planter boxes etc. these works will be considered 'remedial', referencing work as 'repairs', 'renewal' or 'maintenance'.

A common misunderstanding is the expectation that remedial works will be 'as new' with the implied full guarantee. This is not the case. The National Construction Code (NCC) provides the guidelines to the objectives and performance requirements, usually referring to an Australian Standard for the works compliance, the most common references being, AS3500.3 - Storm water Drainage; AS4654.2 - External Waterproofing; AS3740 - Internal Wet Areas.

In Victoria, legislation is covered under Building Act 1993 and Building Regulations 2018. Remedial and maintenance works relating to most small projects do not require building permits. This is covered under Schedule 3 - Exemptions, (Vic. Building Regulations 2018) item 3. - repair, renewal or maintenance of part of an existing building. The VBA provides a guide - When is a building permit required? - Practice Note 32-2018

[Practice Note 32 - When is a building permit required? \(vba.vic.gov.au\)](https://www.vba.vic.gov.au/practice-note-32-when-is-a-building-permit-required/)



Each State will have building regulations outlining conditions relating to remedial works and requirements for building permits. In Victoria, this also means that remedial works do not require a compliance certificate (Registered Building Practitioner), with any statement of warranty having exclusions of performance due to the existing building substrate. Customer expectations may need to be managed. However, the 'remedial' market in the commercial and residential sectors is much larger than the 'new build' market. The demand for smaller projects which don't require a building permit is significant and doesn't attract the legal liabilities of a 'new build' project.

David Hepworth
AIW SECRETARY

Standards and the AIW

The Australian Institute of Waterproofing is currently sitting on 2 active Australian Standard technical committees:

1. BD-044 AS3958 Fixing of Ceramic, Natural and Reconstituted Stone Tiles
2. BD-038 AS3740 Wet Areas in buildings

These committees are made up of representatives from various stakeholders across the building industry. These representatives volunteer their time to review, update and improve the quality of a standard. This is carried out to keep pace with changing technologies, innovations and regulations and to set minimum standards to which a building component or process must conform.

So, what are standards?

With the exception of AS 3959-2018 Construction of buildings in bushfire prone, Standards used in the construction industry are voluntary documents that set out specifications, procedures and guidelines that aim to ensure products, services, and systems are safe, consistent, and reliable. Generally speaking, Australian Standards (AS) relate to exact things, such as the technical performance requirements of a waterproofing membrane (AS 4858), minimum fall gradients of a substrate (AS 3740) etc. Standards often contain, methods for testing and the minimum requirements that items have to meet. They are used by building professionals (specifiers, engineers and consultants), manufacturers of materials and systems and contractors.

On their own, most standards are voluntary.

There is no requirement for anyone to comply with standards. However, State and Commonwealth governments often refer to Australian Standards® (AS) or joint Australian/New Zealand Standards (AS/NZS) in their legislation. These generally relate to the safety of consumer products. When this happens, these standards can become mandatory. In the construction industry, Australian Standards are often referenced in contracts. They are considered the 'benchmark of acceptability' and the contractor then has a contractual obligation to follow the Standards.

How do we read an Australia Standard?

The standard has a number of guiding principles that must be understood to fully appreciate what the standard is trying to convey to the reader.



Within a Standard there are a range of Clauses which define the things that must be done to claim compliance with a Standard. The words are the most important element to understand. The process of writing the standard is very precise and requires a thorough understanding of the subject.

Below are a few explanations which may assist with interpreting a standard:

TERMS AND DEFINITIONS

The terms and definitions clause provides definitions necessary for the understanding of certain items contained within the standard.

MANDATORY REFERENCES

Mandatory is a term used to describe a part of the standard which is necessary to conform to in order to claim compliance with a standard. These can take the form of test requirements to be met, records to be kept, materials to be used. They can be as brief as a sentence.

Example: AS 3740:2010

2.2 DESIGN AND INSTALLATION

Waterproofing systems and their installation details shall be waterproof or water resistant as required by the BCA.

NORMATIVE REFERENCES

A normative reference is a term used to describe the actions necessary to conform in order to be able to claim compliance with the standard. These actions are cited in the text in such a way that some or all of their content constitutes requirements of the document. In other words, the text is all important and describes the things that must be done to comply with the standard. Normative is similar to Mandatory, however Normative applies to a whole part or section of the clause which may contain a number of mandatory requirements.

Example: AS 3740:2010

3.4 SHOWER FLOORS

Falls in shower floors shall be sufficient to prevent:

- (a) Surface water from being retained on the shower floor (except for residual water remaining due to surface tension); and
- (b) Water from discharging outside the shower area.

For shower areas with a vertical separation between the shower area and the wet area, such as a shower screen, hob, step-down or water stop, the fall to the waste shall be 1:100.

As a minimum for other shower areas, the fall shall be a minimum of 1:80.

You will see above that this "clause" states a number of "mandatory" sentences required to comply with the "normative" requirements. You will also see that the word "shall" is used 3 times. This word defines the absolute requirement to comply with the sentence.

NOTES

Within the text of a part of a clause within the standard you will also sometimes see reference to a NOTE.

Example: AS 3740:2010

3.9.1.2 Perimeter flashing at floor level openings

The following applies:

- (a) For whole wet area floor waterproofing A water stop that has a vertical leg finishing flush with the top of the finished floor level shall be installed at floor level openings. The water stop shall be waterproofed to the perimeter flashing.

NOTE: for typical bathroom detail for whole bathroom waterproofing, see Figures 3.3(a) and 3.3(b).

Notes are not mandatory items to be followed, they are often a reference to a drawing or some other piece of information which is located within a separate document or an Appendix which provides further information or clarity concerning the clause

or part of the clause. Again, notice how the word "shall" is used in the example.

INFORMATIVE REFERENCES

Informative is a term used to describe a clause, note or appendix that gives additional information, recommendations or guidelines. These can take the form of a NOTE or form part of an Appendix or reference to another document. They are of a non-mandatory nature. The word "informative" will be used directly below the heading of the appendix.

TABLES AND FIGURES

Tables and Figures can be mandatory or informative. Where they are mandatory, they will be cited as such within the clause that refers to a table or figure.

Example:

The performance requirements of the waterproofing membrane "shall" be in accordance with table...With figures in particular other ways may be used to perform the same thing; however, they "shall" comply with the written clause where that clause is deemed as normative / mandatory. In a number of cases figures where they are informative will be described as follows; NOTE: for "typical" bath/ spa wall junctions see figures 3.2(a) and 3.2(b)

The words in the Clause can also make a part of a figure mandatory. For example: AS 3740 – 2010 Clause 3.8 (in part). For insert baths, a water stop shall be installed around the periphery.

NOTE: See Figure 3.2(c)

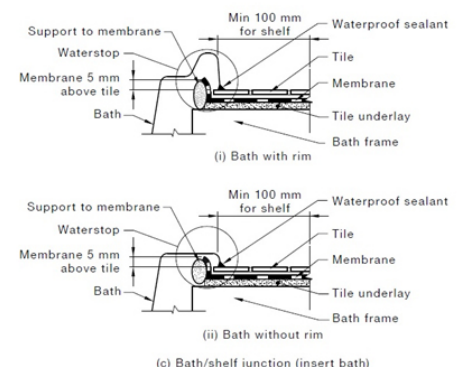


FIGURE 3.2 TYPICAL BATH JUNCTIONS



The wording of the Clause makes the location of the waterstop mandatory. Everything else, such as the position of the tiles or the bath, are for information only and are not mandatory.

APPENDICES (NORMATIVE OR INFORMATIVE)

Often a standard will include appendices and appear at the back of the standard. These provide additional information intended to assist the understanding or use of the document. The appendix will be cited in a clause of the standard, which then directs the reader to further information. *Be careful here*, Appendices can be Normative or Informative.

A normative appendix provides additional "normative" text. In other words, in addition to the clause requirements cited within the body of the standard (which led the reader to the appendix) the cited appendix shall also be followed.

An Informative appendix on the other hand provides the reader with additional non-mandatory information to assist in the understanding or use of the document.

Example:

Informative: see Appendix A for additional information.

Normative: the test method shall be carried out as specified in Appendix.

A short note on the words;

Shall: is used to state that a requirement needs to be followed.

Should: introduces a suggestion or recommendation that is not a requirement.

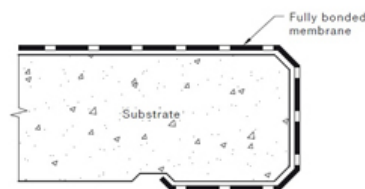
May: indicates that provisions of the Clause are optional.

Example: AS 4654.2 – 2012

2.8.2.1 Roofs and balconies (in part)

For balconies with a fully bonded membrane, the membrane may be terminated at the drip groove.

NOTE: For a typical treatment, see Figure 2.4(b).



(b) Optional balcony edge detail for a fully bonded membrane

FIGURE 2.4 TYPICAL VERTICAL DOWNWARD TERMINATION

Interpretation of standards to enable our members to comply with the requirements of the NCC is an important skill to learn and understand. The above guide provides the reader with some of the insights into how a Standard is written. It is not an exhaustive list of all the terms and conditions of a standard and the reader should assure themselves that they consult with their material suppliers and Standards Australia for further information.

Contributed by:
Karl Wootton and Frank Moebus



Australian Institute of Waterproofing
22 March at 10:39

AIW Member Spotlight: CRF Construction, based in Sydney's north-west, are a highly experienced consulting and contracting firm specialising in Project Management, Building and Construction Contractors.

WATERPROOF.ORG.AU
CRF Construction Group Pty Ltd
Remedial Builders

1
Like Comment Share
Write a comment...
Press Enter to post.

Australian Institute of Waterproofing
22 February

As a consumer, who should you be contacting for building codes related to waterproofing?

WATERPROOF.ORG.AU
State Building Authority Contacts
The following links provide information to State authorities whom act as "Building Code..."

Like Comment Share

Did you know that our past newsletters can now be found on the AIW website?

Packed full with industry updates and waterproofing best practice tips they are well worth a read.

Check out what you missed under our 'News' tab --> <https://www.waterproof.org.au/newsletters/>

Job Profile #003257

BEWARE OF THE HIDDEN!

When a waterproofing job becomes a building job.

As registered builders and waterproofers this is something we can tackle, but if you're not then it's a different story.

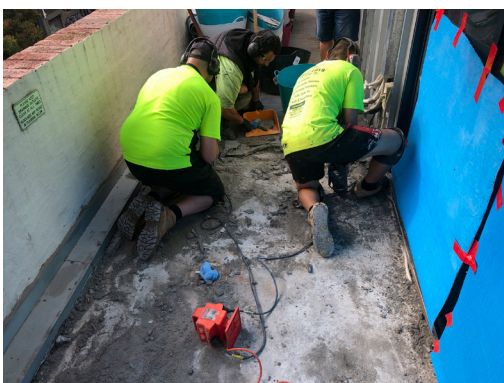
We recently opened up a group of conjoined balconies (4) on an old inner city apartment block that was renovated around 15 years ago as they were all leaking.

We carried out the demolition of tiles and screed which was a tricky one to get rubbish out of so we set up our electric cable winch to drop bucket over the edge.

Once the rubbish was out of the way we proceeded to lift the plywood sheet that had been used as a substrate and found that it was rotten in many places.



The subfloor was also damaged, and the posi-strut joists had to be replaced.



First, we cut in inspection holes to see what we were dealing with. Then, we re-located the plumbing outlets and form strip drain closer to the doorway so we could create falls.



The owners refused to lift the door frame as there was already a step down into the apartments by approx. 10mm (yes- down from balcony height)! The designers and builder had built it that way!

This meant we had to create a step down with extraordinarily little room, so moving the position of drains and forming a strip drain instead of a single puddle flange outlet gave us more scope to move the water.

What we found was a lot of illegal plumbing, with sizes way too small for carrying the water from the above (upper story) balconies which were fed into the same outlet as the lower balconies (that we are working on).

We have now been waiting for over a month while plumbers, engineers, and anyone else with a bright idea looks at it a try to justify illegal plumbing. The body corporate won't spend the money to fix it correctly (yet), so we are waiting.

The word of warning here is - cover yourself if an event such as this ties you up.

We have put in place a clause to cover this in our contract.

Try not to get caught.

Paul Evans
Managing Director - Findlay Evans Waterproofing

MEMBER PROFILE



Maher Radwan is a new Australian forging a new life for himself and his family here in Melbourne. Maher arrived from Iraq where he owned a successful business as a qualified engineer, consultant and installer working on large commercial projects including high-rise buildings, factories, tunnels and bridges. Maher connected with the Australian Institute of Waterproofing as a way of establishing professional connections in his adopted country and continuing his contributions to the waterproofing industry.

Maher, what services you specialise in?

I specialise in installation and consultation services for roofs, foundations, retaining walls, basements and water structures, waterproofing systems and concrete repair and protection.



Tell us about some of the projects you've worked on.

Some of the projects I've worked on include:

- Rotana Hotels in Erbil – Iraq (*installation*)
- PEPSI Factory – Erbil, Iraq (*installation*)
- Marriott Hotel – Erbil, Iraq (*installation*)
- Four Seasons Hotel – Damascus, Syria (*installation*)
- Aleppo Power Station – Aleppo, Syria (*installation*)
- Melbourne Prison (*consultation*)



structures, waterproofing for water tanks, chemical resistant flooring system for treatment rooms for the Aleppo Power Station and, most recently providing consulting services for a prison here in Melbourne.

Tell us about some of your career highlights.

I built a successful company operating throughout the Middle East before coming to Australia. I was proud to be able to 'give back' to the industry by providing high level technical training for engineers and technicians which, in turn, helped them improve their productivity. I was also privileged to be able to contribute to the update of the Syrian engineering standards for use of curing compounds in concrete.

What are your hopes and dreams for your new life in Australia?

My life journey taught me that making money from the business shouldn't be a goal; I had a very successful business in the Middle East and I thought that would protect me and my family. After the war in my country, losing many things there, and coming to Australia I realised that safety is the most important factor in life. My dreams now are to build a stable business in Melbourne, to help my family to stay happy and safe, and to help new immigrants, especially the talented refugees to find their way in Australia. There are a lot of talented new immigrants in Australia who are not recognised because of the language and cultural barriers. I hope I can be the bridge for those talented people who, I think, can add a lot to this great country – a country which took my hand and the hands of many others and gave us a safe life.