

# GRAND CENTRAL TOWERS

“Towering over the heart of the revitalised Wooden Town Centre, Grand Central Towers is making its mark on Canberra's skyline. Perfectly located. Breathtakingly designed. A buzzing hive of activity.”



**Grand Towers apartment facade  
(P15 used in Internal wet areas)**

## REQUIREMENT

Requirement was to have Hi Quality – Eco friendly and Green star rated waterproofing system in this 26 and 18 story twin complex with no room for error. Designers and Engineers wanted an extensive Diligence to be carried out prior to selecting The right Waterproofing manufacturer and system.

Product features and Accreditation's were critical aspect in the selection process. Furthermore a Proven and tested history of Waterproofing systems in similar developments.

Requirement was for a quick drying, flexible and Durable system which was Eco friendly and Green star rated.

## SYSTEM RECOMMENDED

Proudly DUROTECH INDUSTRIES was approved as the preferred supplier for all the wet area waterproofing requirements for the development

### **P15 system was used in internal Under tile wet areas**

A modified acrylic urethane membrane. It has been formulated to create a tenacious bond to most surfaces. DURO MASTIC™ P15 forms a tough, flexible waterproof membrane with a high

film strength and exceptional elongation and elasticity, that will expand and contract under normal substrate movement.

### **Duroproof PUM and WBE Hi- Build in Balconies, decks and Podiums as well as Planter boxes**

A two component water based epoxy coating used to prime, seal and coat concrete or masonry surfaces. It cures to a tough chemical and water resistant coating having excellent adhesion to sound concrete.

### **Duroproof PUM**

A tough, durable, elastomeric, single pack, liquid applied, moisture curing, cross-linking, polyurethane waterproofing membrane - usually grey in colour.

## AREA INCLUDED

- Bathrooms and Laundries
- Balconies and decks
- Podiums
- Planter boxes

## CHALLENGES FACED DURING THE PROJECT

Cohesion with other sub-contractors and educating them on post waterproofing care such Tiler's and Plumbers in order to protect the membranes.

Ongoing periodical inspections conjunctly with the sub-contractor and Head Contractor to ensure the system delivery was of high quality and standards.

## OUTCOME

A happy client with the assurance of having waterproofing system backed by a Renowned Manufacturer with a State of Art facility and Australian made products



**Balconies and Entertainment area  
(Green star rated PUM and WBE Hi- Build Epoxy)**

## CASE STUDY

The Building manager required a fast high performance waterproofing system to be applied on the roof top. The coating needed to be Fast, Strong, UV stable and highly resistant to foot traffic.



- **PROJECT**  
Commercial Trafficable Roof Top - Sydney
- **PROJECT COMPLETION DATE**  
March 2018

### The BRIEF ON THE PROJECT

Roofing Area Approx.: 2500 sq metres on a commercial building

The building manager requested a superior performing waterproofing system to be applied on to the rooftop. The requirement was for a strong UV stable and highly resistant to foot traffic waterproofing system. Further more the system itself needed to be fast curing as time was of the essence.

### SYSTEM RECOMMENDED

After consultation with the Durotech team the following system was recommended:

1. **WB Epoxy primer and moisture barrier** (Two component water based epoxy coating used to prime/seal and coat concrete or masonry surfaces).
2. **Duroseal 25 FC polyurethane sealant** (A single component moisture curing polyurethane construction sealant which is a tough, durable PU sealant with good chemical resistance).
3. **Duroproof PPM/SL polyurethane** (A high quality superior performing self-levelling membrane that cures rapidly to form a polyurea/ polyurethane hybrid membrane).
4. **- Duroproof ATC UV trafficable topcoat** (Is a single pack aliphatic polyurethane topcoat providing greater UV protection, colour fastness and anti-chalking properties.)

### APPLICATION

It was applied by brush and squeegee. Due to the Self-levelling abilities of the membrane a squeegee was efficiently used to cover larger areas quickly whilst providing a mirror image.

### OUTCOME

The self-levelling trafficable UV stable polyurethane waterproofing system produced over and beyond the outcome which was required by the manager. They were impressed not only by the qualities of the membrane such as durability and UV stability but also by the overall image of the rooftop. A smooth mirror like image was achieved giving it a superior look.

### UNIQUE QUALITIES OF THE SYSTEM

- Smooth and quality finish
- Long-term durability
- Highly Traffic resistant
- Fast Installations
- Low VOC and Low Odour
- UV stable
- Easy to Use
- Self-levelling qualities
- Australian made and tested



### WHY THIS SYSTEM WAS USED

Some of the reasons the client opted for this system were as follows:

A fast coating system which was proven and tested in the market.

The need to have a UV stable and trafficable system which would provide long term warranties and a good looking roof top.

## CASE STUDY

The Building manager required a fast high performance waterproofing system to be applied on the roof top. The coating needed to be Fast, Strong, UV stable and highly resistant to foot traffic.



### PROJECT

LUXURY WATERFRONT RESIDENTIAL  
DEVELOPMENT TERRACE WATERPROOFING

### PROJECT COMPLETION DATE

MAY 2019

### The BRIEF ON THE PROJECT

Roofing Area Approx.: 4500 sq metres on six Roof Terraces

The building manager requested a superior performing waterproofing system to be applied on to the rooftop. The requirement was for a strong UV stable and highly resistant to foot traffic waterproofing system. Further more the system itself needed to be fast curing as time was of the essence.

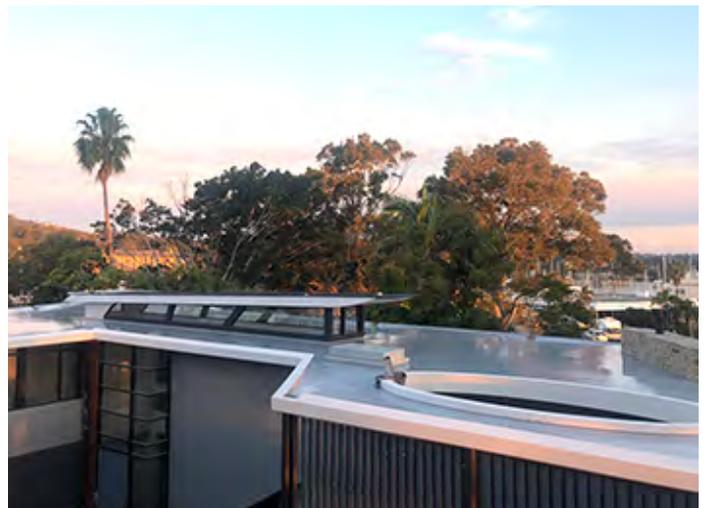
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## CASE STUDY

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- UV stable
- Easy to Use
- Self-levelling qualities
- Australian made and tested



### WHY THIS SYSTEM WAS USED

Some of the reasons the client opted for this system were as follows:

A fast coating system which was proven and tested in the market.

The need to have a UV stable and trafficable system which would provide long term warranties and a well presented Terrace Area.

## CASE STUDY

### The Tallest Residential Tower In Western Sydney - One Australia Avenue



- **PROJECT**  
Sydney, NSW, Australia
- **PROJECT COMPLETION DATE**  
February 2013
- **DEVELOPER**  
Parkview

### PROJECT SPECIFICATIONS

Australia Avenue Olympic village is one of the most prestigious premium buildings in the Sydney Homebush area. Spanning over 2 towers featuring 360 views in Sydney as well as an impressive world class design and beautiful city and bridge views.

### THE DUROSYSTEM PRODUCT RANGE

The tallest residential tower in western Sydney – at 30 storeys high – is to be known as One Australia Avenue and is located in Sydney Olympic Park.

The elliptical glass-walled building will have bronze-coloured bands wrapped around its façade and will be surrounded by 430-hectares of parklands.

Supported, tested and backed by a team of specialist local experts with a combined 40 years of Australia market experience, Durotech was used across a number of applications.

- Water Tanks
- Lift Pits
- Planter Boxes
- Internal Wet Areas
- Plant Rooms
- Balconies
- Podiums
- Roof Tops

With sustainability now the focus of many Tier One construction projects, Durotechs ECO friendly low VOC and green building products proved to be a high-quality environmentally friendly alternative to other waterproofing solutions on the market.



## CASE STUDY

# ALTITUDE

**Parramatta's Tallest Riverfront Residential Tower**  
**330 Church Street Parramatta NSW 2150**



### • PROJECT

Sydney, NSW, Australia

### • PROJECT COMPLETION DATE

February 2017

### • DEVELOPER

Meriton

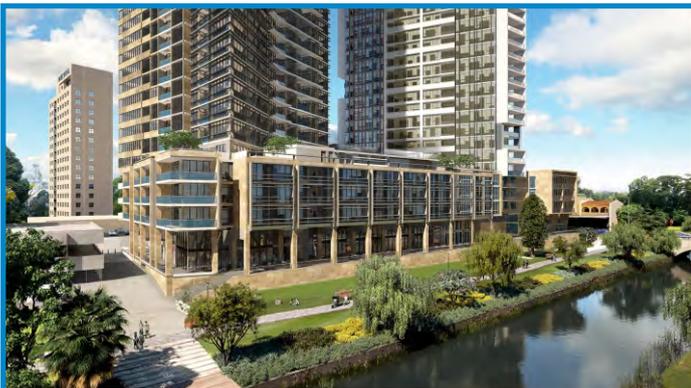
## PROJECT SPECIFICATIONS

Altitude rises over 170m high with 54 levels of luxury apartment living, spectacular views and an unrivalled riverfront location. Live in the heart of the cultural district, surrounded by dining, sporting and outdoor options. Experience the ultimate height of living at Altitude apartments, and enjoy the luxurious fixtures and finishes, designed by award-winning Tony Caro architects.



## THE DUROSYSTEM PRODUCT RANGE

- Duromix Hibuild WBE Epoxy Primer
- Duroproof PPM
- Duromastic P15
- Duroseal 25LM
- Planter Boxes
- Internal Wet Areas
- Plant Rooms
- Balconies



# CASE STUDY

9<sup>th</sup> March 2015

## DUROPROOF BLW - BELOW GROUND FIRE TANK (EXTERNAL SIDE)

### Project:

Morgan Street, Wagga Wagga NSW 2650

### Applicator

Advantage Waterproofing (Durotech Accredited Applicator)

### Membrane System

Duromix WBE Hiubild (Primer), Duroproof BLW (Membrane)



### Procedure

- The project is part of a Multi-Level Commercial Office Building
- Durotech's Accredited Applicator, Advantage Waterproofing cleaned and prepared the Concrete Block Substrate for waterproofing.
- The area was primed with Duromix WBE Hibuild, Two-Part Water-Based Epoxy Primer.
- Advantage Waterproofing then installed Flexible Neutral Cure Silicone Joint Sealant to all wall/floor junctions, and all other joints in the substrate, to accommodate anticipated movement.
- Two coats of Duroproof BLW were applied to the area, with a dry film thickness of 1.2mm maintained throughout.
- Membrane Protection Board was installed to protect the membrane against damage from sharp and aggressive fill.

### Photos



Above: Final Coat of Duroproof BLW (Cured)



Above: Installation of Membrane Protection Board

# CASE STUDY

2<sup>ND</sup> OCTOBER 2014

## DUROMASTIC AC SPORTS COATING – TENNIS COURT

### Project:

104 College Street, Sydney NSW 2000

### Applicator

Eric Pearce (Durotech Accredited Applicator)

### Membrane System

Duromix Epoxycoat (Primer), Duromastic AC Sports (Membrane)



Before(Pic 1)

### Procedure

- The project is on the roof deck of a high rise residential building in Sydney's Central Business District.
- Durotechs Accredited Applicator, Eric Pearce completely removed the existing coating (see pic 1), by high powered concrete grinder to expose the "virgin" concrete.
- The area was primed with Duromix Epoxycoat, Two-Part Water-Based Epoxy Primer.
- A second coat of Duromix Epoxycoat was applied to ensure adequate adhesion of the membrane to the substrate, and to act as a secondary waterproof layer.
- Eric Pearce then installed Flexible Neutral Cure Silicone Joint Sealant to all wall/floor junctions (in the centre of the court) and all other joints in the substrate, to accommodate anticipated movement.
- Two coats of Duromastic AC Sports were applied to the area, with a top coat of Duromastic AC Non-Slip (White) used for line marking.

# CASE STUDY

10<sup>th</sup> OCTOBER 2014

## DUROMASTIC DURAROOOF - SEMI-EXPOSED BALCONY

### Project:

220 Maroubra Road, Maroubra NSW 2035

### Applicator

Galdar Waterproofing (Durotech Accredited Applicator)

### Membrane System

Duromix WBE Hibuild (Primer), Duromatic Durarooof (Membrane)



### Why Does This Require Waterproofing?

External Balconies are subject to water penetration every time it rains. Balconies that are tiles still allow water to enter the substrate through the grout in between tiles. If these areas are not waterproofed before being tiled, water can enter the substrate and leak into areas below. In this instance the balcony would leak onto the balcony of the unit below.

### What Are We Trying To Achieve By Waterproofing?

On this project, it was unclear as to how long the membrane would be left exposed to UV before being tiled over – it may have been up to 12 months before tiles were applied over it. For this reason we needed to find a membrane that was both UV Stable, and suitable for under tile applications. Duromatic Durarooof served both purposes adequately, although a thorough clean of the waterproofing is required before tiling to ensure adequate adhesion to the membrane.

### Procedure

- The project is a balcony of a multi-storey apartment building.
- Durotechs Accredited Applicator, Galdar Waterproofing carefully prepared the concrete substrate by removing all dust, oils and other contaminants.
- The area was primed with Duromix WBE Hibuild, Two-Part Water-Based Epoxy Primer.
- Titan Waterproofing then installed Flexible Neutral Cure Silicone Joint Sealant to all wall/floor junctions and all other joints in the substrate, to accommodate anticipated movement.
- Two coats of Duromatic Durarooof were applied to the area. A total membrane thickness of 1.2mm was achieved throughout. This membrane is fully UV Stable, as well as being suitable for the direct stick method of tiling.

# CASE STUDY

18<sup>th</sup> NOVEMBER 2014

## DUROPROOF BLW – GARDEN ROOF DECK

### Project:

7 Kimo Street, North Balgowlah NSW 2093

### Applicator

Graybuilt Pty Ltd

### Membrane System

Duromix WBE Hibuild (Primer), Duroproof BLW (Membrane)



### Why Does This Require Waterproofing?

Garden Roof Decks are similar in application as planter boxes. As rain water and water from hosing plants on the garden roof deck seeps through the soil, it would hit the concrete substrate and soak through the slab into the living areas below.

### What Are We Trying To Achieve By Waterproofing?

Waterproofing a garden roof deck is obviously to prevent water/moisture from entering the substrate and causing leaks. On this particular project, there is the requirement for added membrane protection, being a Drainage Cell that site on the horizontal portion of the membrane and Drainage Sheet for the vertical sections. This protection is essential to protect the membrane against any loose or aggressive fill that could potentially damage and pierce the membrane.

### Photos



### Procedure

- The project is the roof deck of a residential home.
- The waterproofing contractor, Graybuilt prepared the concrete substrate by removing all dust, oils and other contaminants.
- The area was primed with Duromix WBE Hibuild, two-part Water-Based Epoxy Primer.
- Graybuilt then installed Flexible Neutral Cure Silicone Joint Sealant to all wall/floor junctions and all other joints in the substrate, to accommodate anticipated movement.
- Two coats of Duroproof BLW were applied to the area. A total membrane thickness of 1.2mm was achieved throughout.
- Membrane Protection was later installed prior to filling the deck with soil and plants.

# CASE STUDY

10<sup>th</sup> OCTOBER 2014

## DUROPROOF PPM – EXPOSED ROOF DECK

### Project:

SEASIDE LINKS WOLLONGONG

### Applicator

Hytech Waterproofing

### Membrane System

Duromix WBE Hibuild (Primer), Duroproof PPM (Membrane)



- Located on the corner of Corrimal and Ross Streets adjacent to Wollongong Golf Club, IRT Links Seaside is a modern and contemporary beachside integrated seniors lifestyle and care Community.
- Community features:
  - 154 Lifestyle Community Apartments
  - 153 Care Centre Suites
  - A La Carte Restaurant, bar and café
  - Visitor Parking
- Durotech Industries worked extensively with the Builder, Wideform and Accredited Applicator, Hytech Waterproofing throughout the construction process of this \$110 million dollar project. Durotechs Technical Representatives and our Research and Development department were consistently on site providing periodic inspections at all critical junctions throughout the construction process to assist with Technical Support and ensure that the highest standard of membrane application was maintained.
- Durotech’s ongoing commitment to quality assurance from the specification stage right through to completion has helped to ensure that “Best Practice In Waterproofing” has been maintained at all times on this project.

# CASE STUDY

10<sup>th</sup> NOVEMBER 2014

## DUROMIX ACS-2 - NON-EXPOSED RESIDENTIAL BALCONY

### Project:

6 Baleena Street, Lilli Pilli NSW 2229

### Applicator

Rightway Waterproofing (Durotech Accredited Applicator)

### Membrane System

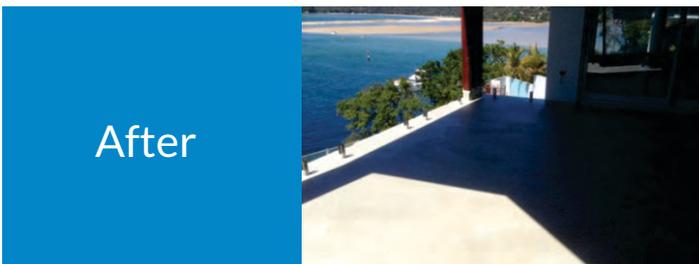
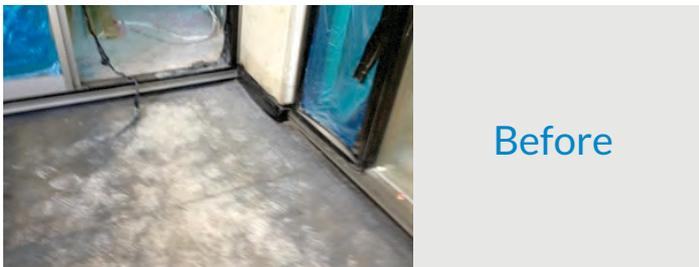
Duromix WBE Hibuild (Primer), Duromix ACS-2 (Membrane)



### Problem

If the balcony was not waterproofed, water would enter the substrate through the grout in the tiles. This moisture would build up and eventually damage the substrate and possibly cause serious damage to the areas below as well as the balcony itself which would remain permanently saturated for extended periods of time.

### Photos



### Procedure

- The project is a residential home on the water at Lilli Pilli.
- Durotechs Accredited Applicator, Rightway Waterproofing carefully prepared the FC Sheet substrate by removing all dust, oils and other contaminants.
- The area was primed with Duromix WBE Hibuild, Two-Part Water-Based Epoxy Primer.
- Rightway Waterproofing then installed Flexible Polyurethane Joint Sealant and Duro Flashing Tape to all wall/floor junctions and all other joints in the substrate, to accommodate anticipated movement.
- Two coats of Duromix ACS-2 were applied to the area. A total membrane thickness of 1.2mm was achieved throughout.
- The membrane system was repeated on the sand/cement screed (with the exception of the flashing tape) for the "Direct Stick" Tiling method.

# CASE STUDY

18<sup>th</sup> NOVEMBER 2014

## DUROMASTIC P15 - INTERNAL WET AREAS

### Project:

220 Maroubra Road, Maroubra NSW 2035

### Applicator

Superb Waterproofing

### Membrane System

Durotech ARW (Primer), Duromastic P15 (Membrane)



### Why Does This Require Waterproofing?

Internal Wet Areas such as bathrooms require waterproofing because water from the showers must be contained so that it doesn't track into other part of the house causing water damage, staining carpet and allowing mould and fungi to develop.

### What Are We Trying To Achieve By Waterproofing?

When Waterproofing a bathroom the main aim is to keep water from showers and baths confined to the Wet Area itself. This is achieved by applying a waterproofing membrane and PVC/Aluminium angles to keep water from the bathroom getting out into other rooms, as well as promoting drainage during construction to promote positive falls to waste outlets within the wet area.

### Photos



### Procedure

- The project is one bathroom of a multi-storey apartment building.
- The waterproofing contractor, Superb Waterproofing prepared the concrete substrate by removing all dust, oils and other contaminants.
- The area was primed with Durotech ARW, Internal Membrane Primer.
- Superb Waterproofing then installed Flexible Neutral Cure Silicone Joint Sealant to all wall/floor junctions and all other joints in the substrate, to accommodate anticipated movement.
- Two coats of Duromastic P15 were applied to the area. A total membrane thickness of 1.2mm was achieved throughout on the floors and turn-ups, with a thickness of 0.6mm achieved on the walls. This membrane is suitable for the direct stick method of tiling and/or under screed.

# CASE STUDY

10<sup>th</sup> OCTOBER 2014

## DUROPROOF PPM – EXPOSED ROOF DECK

### Project:

600 Victoria Road, Putney Hill NSW 2112

### Applicator

Titan Waterproofing (Durotech Accredited Applicator)

### Membrane System

Duromix WBE Hibuild (Primer), Duroproof PPM (Membrane)



### Procedure

- The project is on the roof deck of a multi-storey apartment building.
- Durotechs Accredited Applicator, Titan Waterproofing carefully prepared the concrete substrate by removing all dust, oils and other contaminants.
- The area was primed with Duromix WBE Hibuild, Two-Part Water-Based Epoxy Primer.
- Titan Waterproofing then installed Flexible Polyurethane Joint Sealant to all wall/floor junctions and all other joints in the substrate, to accommodate anticipated movement.
- Two coats of Duroproof PPM were applied to the area. A total membrane thickness of 1.2mm was achieved throughout.

### Photos



# CASE STUDY

19<sup>th</sup> December 2015

## DURO FLASHING TAPE AND DUROMASTIC P15 - WATERPROOFING SHOWER CUT OUTS

### Project:

4 Federation Place, Frenchs Forest

### Applicator

Construction Waterproofing Solutions (Durotech Accredited Applicator)

### Membrane System

Durotech ARW (Primer), Neutral Cure Silicone Sealant & Duro Flashing Tape (Detailing), Duromatic P15 (Membrane)



### Procedure

- The application involved waterproofing a bathroom, which included a cut out in the shower recess.
- Durotechs Accredited Applicator, Construction Waterproofing Solutions carefully prepared the substrate by removing all dust, oils and other contaminants.
- The area was primed with Durotech ARW, Liquid Applied Primer.
- Duro Flashing Tape was installed all joints in the cut out, in conjunctions with flexible Neutral Cure Silicone Sealant which was used both in the joints before the Duro Flashing Tape was installed and again over the edges of the Duro Flashing Tape, to doubly reinforce the tape.
- The cut out received two coats of Duromatic P15, which was applied directly over the Duro Flashing Tape.
- Durotech attended site to inspect the Flashing Tape installation and provide Quality Assurance and Warranty to the client.

### Photos



# CASE STUDY

19<sup>th</sup> December 2015

## DURO TORCH MINERAL - EXPOSED ROOF DECK (WITH FLOOD TEST)

### Project:

85 Tudor Street, Hamilton NSW 2303

### Applicator

Hunter Waterproofing (Durotech Accredited Applicator)

### Membrane System

Durotech Bitumen Primer (Primer), Duro Torch Mineral (Sheet Membrane)



### Procedure

- The project involved applying a torch on membrane to an exposed roof deck, then flood testing the roof for Quality Assurance and Warranty.
- Durotechs Accredited Applicator, Hunter Waterproofing carefully prepared the concrete and blockwork substrate by removing all dust, oils and other contaminants.
- The area was primed with Durotech Bitumen Primer, Liquid Applied Primer.
- Two layers of Duro Torch (3mm base layer, Garden top layer) were applied to the area.
- Durotech attended site upon completion to assist with flood testing the roof deck (in two stages).

### Photos



# CASE STUDY

19<sup>th</sup> December 2015

## DURO TORCH GARDEN - LIFT PIT WATERPROOFING

### Project:

220 Maroubra Road, Maroubra

### Applicator

Titan Waterproofing (Durotech Accredited Applicator)

### Membrane System

Durotech Bitumen Primer (Primer), Duro Torch Garden (Sheet Membrane)



### Procedure

- The project involves several lift pits to a series of apartment blocks in Maroubra.
- Durotechs Accredited Applicator, Titan Waterproofing carefully prepared the concrete and blockwork substrate by removing all dust, oils and other contaminants.
- The area was primed with Durotech Bitumen Primer, Liquid Applied Primer.
- Two layers of Duro Torch (3mm base layer, Garden top layer) were applied to the area.

### Photos

