



enviro**systems**
environmentally responsible technology



ENVIRO HP SPRAYED SERIES

HIGH PERFORMANCE SPRAYED ELASTOMERS

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ABOUT US

ENVIROSYSTEMS IS THE LEADING MANUFACTURER & SUPPLIER OF CONSTRUCTION CHEMICALS IN AUSTRALIA

Our mission is to minimise the use of damaging harmful solvents and chemicals used in the building industry by creating high performing environmentally sustainable products over a broad range of applications.

Since 2006, EnviroSystems has set the benchmark for quality and innovation for the production of Waterproofing systems, Adhesives, Coatings, Sealants, Flooring and Remedial solutions.

We are a proudly Australian Made and owned brand committed to the supply of the most environmentally sound products of their type. Ongoing consultation with builders, architects and engineers is provided on a collaborative basis to deliver optimum system solutions for a variety of project-specific needs.

From the Sydney Harbour Bridge, to state of the art hospitals, education facilities and tier one residential, commercial and industrial developments, our solutions are preferred by contractors operating across the full spectrum of the construction market.

With offices operating across Australia, our products are available for purchase globally with sales centres in Australia, New Zealand, the Asia Pacific and the Middle East.

We pride ourselves on our high level of quality assurance and continually demonstrate a commitment to, and support of, environmentally responsible technology.

Discover the EnviroSystems Difference Today...

WHY ENVIROSYSTEMS?

- ✓ AUSTRALIAN OWNED MANUFACTURER
- ✓ DESIGNED FOR AUSTRALIAN CONDITIONS
- ✓ LOW VOC, ENVIRONMENTALLY FRIENDLY
- ✓ HIGH PERFORMANCE, LOW RISK PRODUCTS
- ✓ CUSTOM DESIGN & SPECIFICATION
- ✓ IN-HOUSE R&D LABORATORY
- ✓ EXPERT PROJECT-SPECIFIC ADVICE
- ✓ SUCCESSFUL COMPLETION OF ICONIC PROJECTS AUSTRALIA WIDE



OUR SERVICES



RESEARCH & DEVELOPMENT

The fields of science are ever-changing, and we make it our business to be the leader of cutting edge technology ensuring our products outperform and out serve the needs of each and every project.



MATERIALS SCIENCE

With a fully dedicated team of scientists and engineers, we utilise our teams years of experience and expertise to deliver the latest innovations in technology.



LOCAL MANUFACTURING

As a homegrown company, we manufacture our goods locally where they are developed and tested to ensure our products are of the highest quality with the fastest turnaround.



SERVICE & SUPPORT

We pride ourselves not only on the quality of our products but also the comprehensive support available to our customers and clients guaranteeing full-service satisfaction.



INSPECTION & COMPLIANCE

Every product from our range is guaranteed to last. We offer a variety of warranties, backed by compliance and inspection so that you can rest assured that our products are of the highest quality



GLOBAL PRESENCE

With offices operating across Australia, our products are available for purchase globally with sales centres in Australia, New Zealand, the Asia Pacific and the Middle East.



ENVIROSYSTEMS HP SPRAYED SERIES

HIGH PERFORMANCE SPRAYED ELASTOMERS

The practice of ensuring that a structure is waterproof is a fundamental element to the success of any project. EnviroSystems offers a complete range of high performing liquid waterproofing membranes that have been used on a variety of major tier one construction projects globally.

The Enviro HP Series consists of a range of premium spray applied polyurethane and polyurea elastomers that offer ultra-fast curing and superior waterproofing properties backed by extended warranties when applied by accredited applicators.

WHAT ARE ELASTOMERIC POLYMERS?

An elastomer is a polymer with a high viscoelasticity that is often interchangeably used with the term 'rubber'. Thermosetting sprayed elastomers are extremely fast setting and curing (gels in 5-8 seconds), tack free in 30-60 seconds and foot trafficable within minutes.

ADVANTAGES

- ✓ Elastomeric polymer coatings are seamless and provide a robust barrier to water / vapour and physical / chemical attack
- ✓ These coatings are extremely fast track applications
- ✓ Can be applied to a wide variety of substrates
- ✓ High range of service temperatures from -30°C to +150°C
- ✓ Good abrasion and impact resistance, yet remains fully flexible
- ✓ Environmentally friendly, 100% solids with a low VOC content
- ✓ Virtually maintenance free
- ✓ Long life expectancy and proven track record

ENVIRO HP1200

HIGH PERFORMANCE WATERPROOF MEMBRANE



The flagship product in the EnviroSystems range - Enviro HP1200 has quickly become the number one choice in sprayed elastomers with architects, specifiers and tier one builders in the construction industry. Australian made for Australian conditions with a design life of 100 years, Enviro HP1200 is fast curing, has a very low VOC content and is environmentally responsible providing the complete high-performance membrane solution.

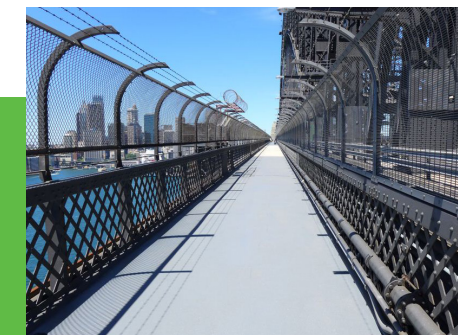
With project references including Melbourne Royal Children's Hospital, Sydney University, Bendigo Hospital, Melbourne Olympic Park, Royal Prince Alfred Hospital, Liverpool Hospital to name a few - Enviro HP1200 is known for its superior performance and has been the product of choice for Federal, State and Local Government bodies recognising the importance of waterproofing critical areas where extended warranty periods are required.

**KARRATHA HEALTH CAMPUS
KARRATHA, WA**



As the largest infrastructure investment in WA's history, the \$207m Karratha Health Campus will transform health services in the region. EnviroSystems was selected to be the supplier of environmentally responsible waterproofing solutions.

**SYDNEY HARBOUR BRIDGE
SYDNEY, NSW**



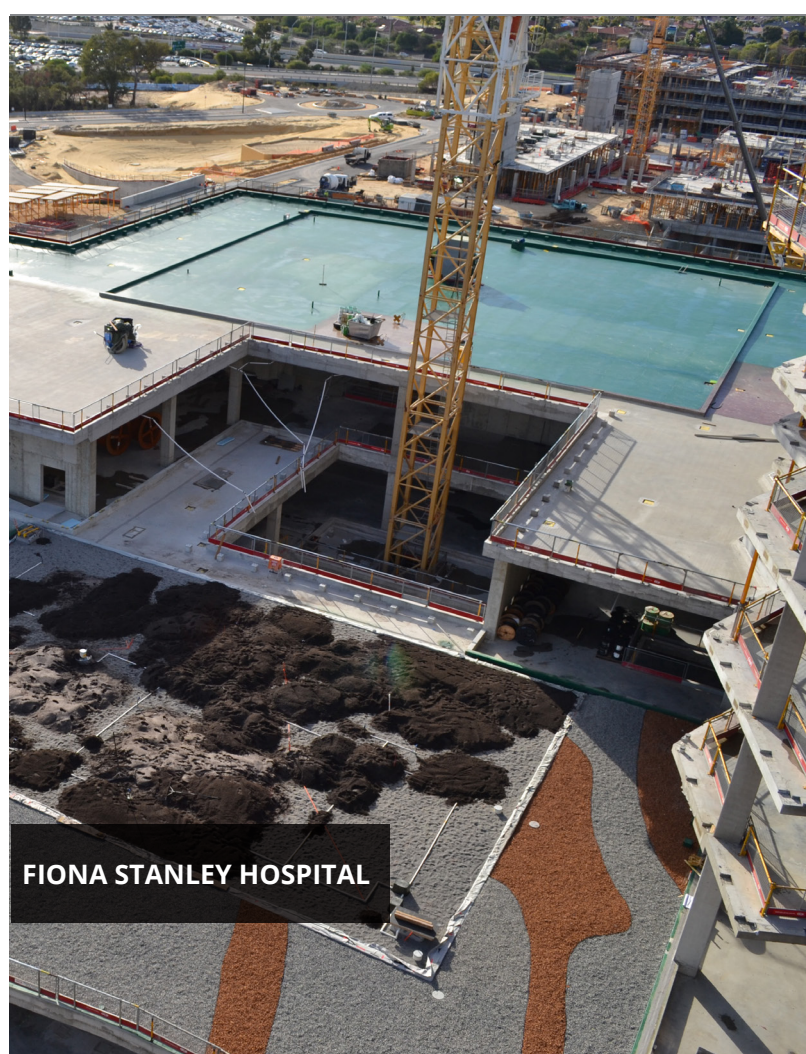
EnviroSystems was contracted to provide a solution to repair and reinstate the cracked walkway and cycle way to the main bridge deck and to prepare and apply a UV resistant trafficable waterproofing system to the exposed cycle way/footway areas.

**NORTHERN BEACHES HOSPITAL
SYDNEY, NSW**



The modern hospital will contain 488 beds, 1,400 car park spaces and a helipad and the total hospital project is valued at approximately \$1 billion. EnviroSystems was selected to supply our Enviro Trafficable System to the Northern Beaches Hospital helipad.

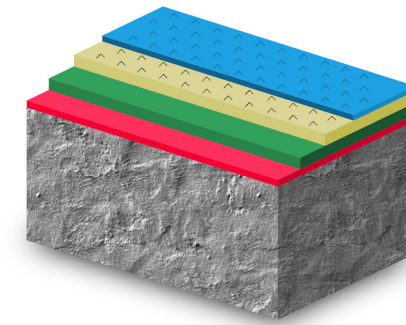
Enviro HP1200 has an unrivalled history across many construction sectors with high profile project references including the iconic Sydney Harbour Bridge, Fiona Stanley Hospital & Bankwest Stadium.



FIONA STANLEY HOSPITAL

ENVIRO HP1200 PHYSICAL PROPERTIES

- Substrate
- Primer
- HP1200
- Aggregate Layer (optional)
- Top Coat (optional)



MIX RATIO (VOLUME)	1:1
COLOUR	Green
DENSITY (KG/M2) AS 1683.4	1060
ADHESION TO CONCRETE (MPA) DIN1048	>1.0
HARDNESS (SHORE A) AS 1683.15.2	80±3
ELONGATION AS1683.11/ISO37	>370%
TENSILE STRENGTH (MPA) AS1683.11/ISO37	>7.9
ABRASION RESISTANCE (MG) AS1683.21	228
CRACK-BRIDGING (MM) ZTV-SIB90	2
DYNAMIC CRACK BRIDGING (MM) ZTV-SIB	0.2
WATER ABSORPTION AS3558.1 (1% MAX)	Pass
ACCELERATION AGE TESTING (5000HRS) DIN EN 1297	Pass
TEAR PROPAGATION RESISTANCE (N/MM) DIN53515/ISO34-1	14
WATER VAPOUR TRANSMISSION (G/M2/DAY) ASTM E96	2
LOW TEMPERATURE WATER TIGHTNESS DIN EN 13897.2005.02	Pass
EXTERNAL MEMBRANE APPROVAL AS4654.1:2009	Pass
INTERNAL WET AREA MEMBRANE AS4858:2004	Pass

MATERIAL DETAILS

- ✓ Two component spray applied
- ✓ Totally seamless & flexible
- ✓ Fast curing, trafficable within minutes
- ✓ Low VOC / solvent free
- ✓ Excellent chemical resistance
- ✓ High abrasion & impact resistance
- ✓ CSIRO tested to Australian Standards

APPLICATIONS

- ✓ Trafficable roof decks
- ✓ Podiums & blinding slabs
- ✓ Marine structures
- ✓ Gas mitigation barriers
- ✓ Underground tanks
- ✓ Green roofs
- ✓ Bund tanks

ENVIRO HP1200 A.C.

HIGH PERFORMANCE WATERPROOF MEMBRANE



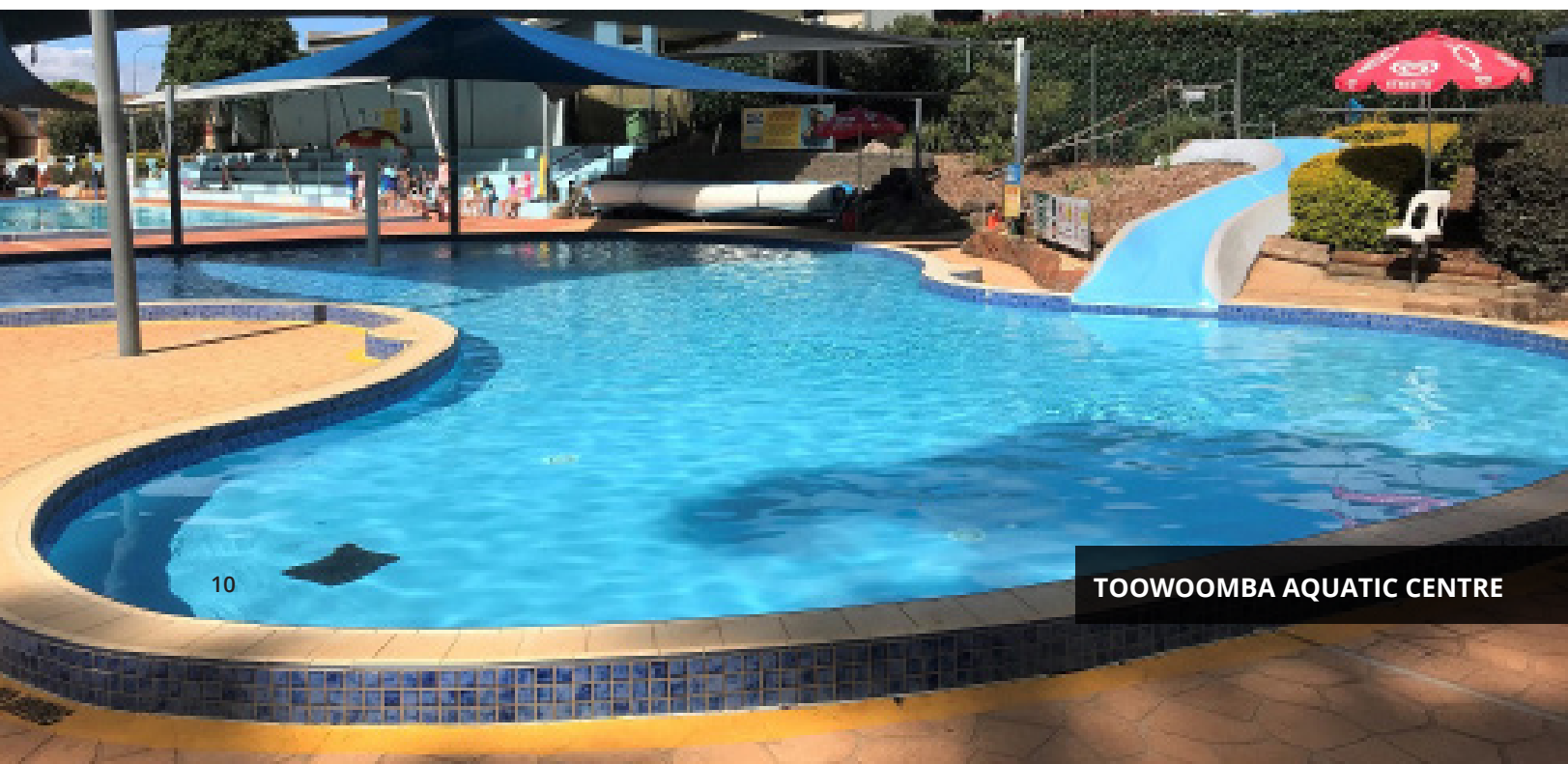
The aliphatic member of the HP Spray Series, Enviro HP1200AC provides all the hallmark performance attributes of the foundation HP1200 product with the added feature of high resistance to long-term UV exposure. This product is ideally suited for swimming pools, lagoons, external steel structures and chemical bund areas where waterproofing, UV stability or an extreme protection coating is required.

MATERIAL DETAILS

- ✓ Two component (1:1 ratio) spray applied
- ✓ Totally seamless & flexible
- ✓ UV Stable
- ✓ Low VOC / solvent free
- ✓ Supplied in made to order colours

APPLICATIONS

- ✓ Swimming pools
- ✓ Green roofs & roof tops
- ✓ Water containment structure
- ✓ Water tanks
- ✓ Retaining walls



ENVIRO HP1200 A.C. PHYSICAL PROPERTIES

MIX RATIO (VOLUME)	1:1
COLOUR	Made to order
POT LIFE AT 50°C	15-20 Seconds
DENSITY (KG/M2) AS 1683.4	0.988
HARDNESS (SHORE A) AS 1683.15.2	90±3
ELONGATION AS1683.11	475%
TENSILE STRENGTH (MPA) AS1683.11/ISO37	16
DIN ABRASION RESISTANCE (MM ³) AS1683.21	220
ANGLE TEAR STRENGTH (KN/M) AS1683.012	71
TROUSER TEAR STRENGTH (KN/M)	39

APPLICATION EQUIPMENT

Graco are known as the 'go to' for plural component sprayed elastomer machines.

- ✓ Recommended for use with Australia's most popular polyurea/polyurethane - Enviro HP Sprayed Elastomer range.
- ✓ Sales & service of E-10HP & E-XP2i offered at EnviroSystems.
- ✓ EnviroSystems can 'teach you how to spray' using both the machines and the flagship Enviro HP Series.



ENVIRO HP1600

HIGH PERFORMANCE SPRAY POLYUREA ELASTOMER



Enviro HP1600 is a next generation pure polyurea with a proven track record in below grade waterproofing and gas mitigation. Spray applied at high pressure using a plural component proportioner, it gels in 8 seconds and cures with a Shore A hardness up to 100. Exhibiting high abrasion and chemical resistance, Enviro HP1600 meets the waterproofing and coating requirements of even the most demanding and challenging conditions.

In addition to exhibiting excellent waterproofing capabilities, Enviro HP1600 is a proven barrier against the ingress of methane and other gases into building structures. With the custom designed Envirosystems Gas Venting System, Enviro HP1600 was installed across the entire footprint of the Crown Towers project in Perth WA, delivering a safe and environmentally responsible outcome.

MATERIAL DETAILS

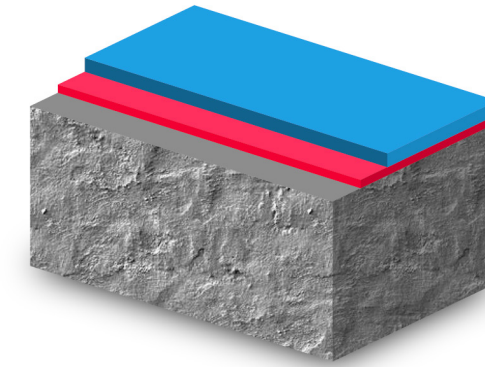
- ✓ Thermosetting polyurea elastomer
- ✓ Totally seamless & flexible
- ✓ Two component (1:1 ratio) spray applied
- ✓ Low VOC / solvent free
- ✓ Excellent durability & chemical resistance
- ✓ High abrasion & impact resistance
- ✓ Fast curing - trafficable within minutes

APPLICATIONS

- ✓ Bridge decks
- ✓ Sewage treatment
- ✓ Blinding slabs
- ✓ Marine structures
- ✓ Gas barrier membranes
- ✓ Chemical bund areas
- ✓ Underground tanks

ENVIRO HP1600 PHYSICAL PROPERTIES

- Substrate
- Primer
- HP1600



MIX RATIO (BY VOLUME)	1:1
MIX TIME @ 20°C	3 seconds
GEL TIME @ 20°C	8 seconds
CURE TIME @ 20°C	85% - 1hour 100% - 7 days
PEDESTRIAN TRAFFIC	16 – 24 hours
HARDNESS (SHORE A) AS1683.15.2	95±5
DIN ABRASION (MM³)	185-190
TENSILE STRENGTH (MPA) AS1683.11/ ISO37	16.5
ELONGATION (%) AS1683.11/ ISO37	185
TEAR STRENGTH (ANGLE) (KN/M) AS1683.12/ ISO34-1	65
TROUSER TEAR RESISTANCE (KN/M)	15
COLOUR	Grey
DENSITY (KG/M³) AS1683.4	1057

SITE Q.A TESTING PROCEDURES

- ✓ Environmental condition testing
- ✓ Electronic pinhole testing (where bonded)
- ✓ Smoke test method (gas leakage)
- ✓ Material sampling logs
- ✓ Dry film thickness (DFT)
- ✓ Adhesion to substrate
- ✓ Visual applicator inspections
- ✓ Manufacturer site inspections

WHY IS TESTING IMPORTANT?

Testing is important to test that the substrate is suitable for coating, the conditions are suitable for coating applications and that the product has been applied correctly to specification. We do this to ensure that the system will not prematurely fail due to poor application and to ultimately demonstrate to our customers that we care about our products.



APPLICATOR ASSURANCE

Application of Enviro HP Series is only conducted in accordance with training provided by Envirosystems and by experienced accredited applicators only.

Our team can provide detailed membrane installation drawings, check only the dedicated application equipment is used, and ensures that manufacturer sign off occurs at critical stages throughout the project.

RISK MITIGATION

- ✓ Accredited to Australian Standards
- ✓ Australian manufactured and supported
- ✓ Simple mixing 1:1 ratio
- ✓ Designed & tested for local conditions
- ✓ Solutions for long term UV resistance (Enviro HP1200 AC)
- ✓ 100% bonded to substrate
- ✓ High elongation
- ✓ Detailed procedures manual & installation drawings
- ✓ Onsite quality assurance



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