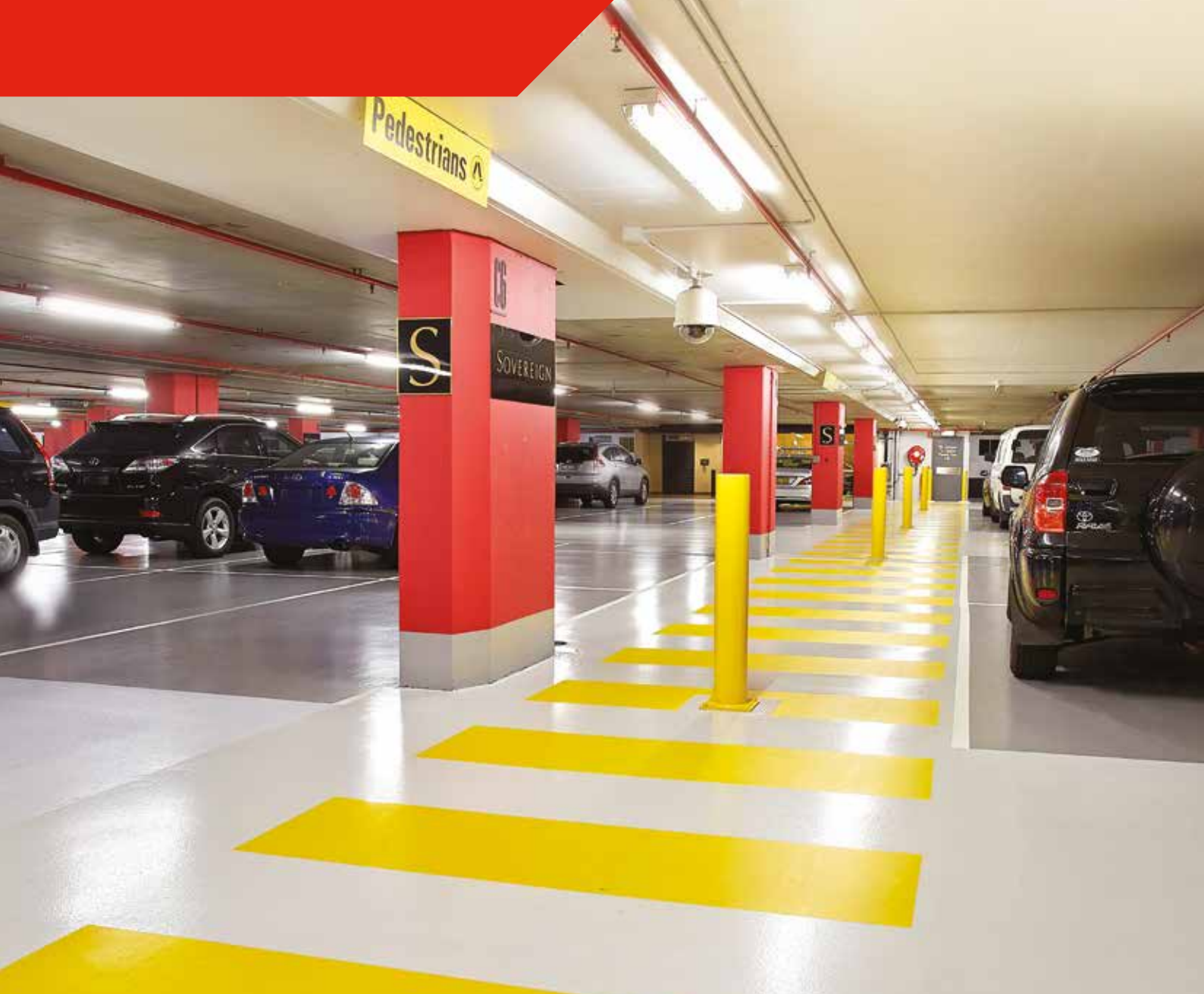




DECKSHIELD WATERPROOFING & COATING SOLUTIONS

A GUIDE TO CAR PARK DECK WATERPROOFING & COATING SOLUTIONS



OUR COMMITMENT

Flowcrete combines an unrivalled range of car park deck waterproofing and coating solutions.

Regardless of any challenges being faced onsite, we have the versatility and breadth of products and knowledge required to provide a fit-for-purpose solution.

For decades, Flowcrete's Deckshield range has supplied the world's largest, most complex multi-storey car parks with high performance deck coating and waterproofing solutions.

This experience makes us uniquely well placed to advise on suitable solutions for car parks that will provide users with a safe, clean and attractive facility and that will provide operators with a long-lasting, reliable and low maintenance structure.

Support Offered

Our commitment to customer support is illustrated by the many services that come part and parcel when working with us, which include:

-  Consultation
-  Site Survey
-  Specification
-  Technical Support
-  Installation Support
-  Warranty & Aftercare
-  AIA approved CPD

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Deckshield car park decking solutions have been designed to meet all the requirements for both new build and car park refurbishments.

Multi-storey car parks are unique structures which are subject to various challenges such as regular wear from vehicular traffic and pedestrian foot traffic, chloride and carbonation chemical attack, weathering and UV exposure.

Many multi-storey car parks have large spans with minimal support, and it is therefore crucial to ensure you have the correct level of waterproofing protection to prevent water ingress and potential corrosion of the structure. Thanks to the tried-and-tested solutions in our specialist car park decking range, you can rest assured that your facility is protected from all of the above challenges for the long term.



Regardless of development, each project can have unique requirements. Flowcrete's Deckshield range has an extensive track record spanning decades working on some of the world's largest, most complex multi-storey car parks.

NEW BUILD

Whether you are looking to build a new multi-storey car park, single level or underground car park, with Deckshield, we have combined multiple waterproofing, crack bridging MMA Polyurethane and epoxy deck coatings to deliver the perfect solution for any car park, anywhere. Our range of systems can be used across exposed decks, internal decks, ramps, walkways and loading bays.

New Build Solutions

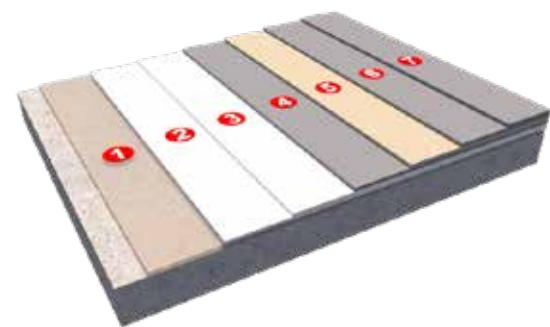
Car parks are subject to unique conditions such as structural movement and water ingress which demand proven deck coating systems. Non-protection of car parks will inevitably lead to long term maintenance

plans, increased costs and in extreme cases, deck failure. Deckshield systems are proven to meet the most stringent of criteria for new build car parks, combining both modern design and safety requirements.



SYSTEM BUILD UPS

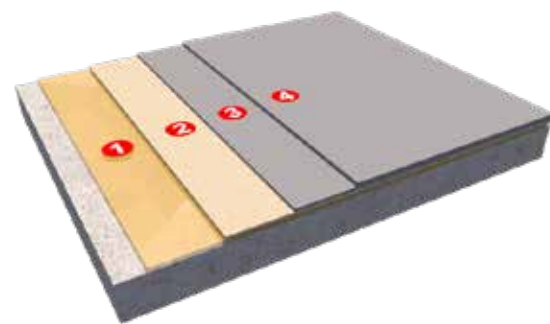
Deckshield Rapide ED



A flexible, non-slip, rapid cure hybrid PU MMA top deck waterproofing system that offers excellent crack bridging properties.

- | | |
|---|--------------------------------|
| 1 Flowfast 101 Standard Primer | 5 Non Slip Aggregate |
| 2 Deckshield Rapide Membrane | 6 Flowfast 319 Flexible Sealer |
| 3 Deckshield Rapide Membrane | 7 Flowfast 319 Flexible Sealer |
| 4 Flowfast 215 Flexible Binder/ Silica Flour 100G | |

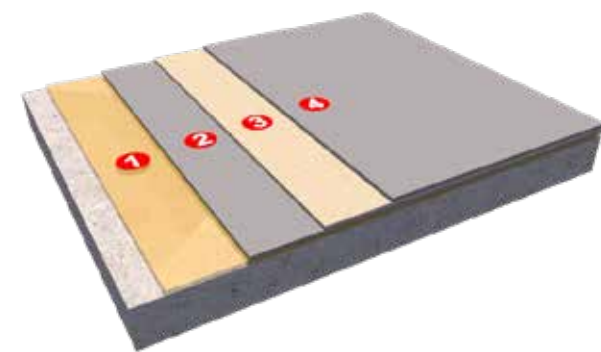
Deckshield ID



A flexible and durable polyurethane for use on intermediate car park decks. Ensuring safety underfoot with enhanced traction.

- | | |
|-------------------------------------|----------------------|
| 1 Flowprime AU | 3 Flowcoat OP |
| 2 Flowprime AU + Non Slip Aggregate | 4 Deckshield UV/UVWB |

Flowcoat OP



High performance, low VOC coloured epoxy coating system designed to create a textured surface in industrial facilities.

- | | |
|--|----------------------|
| 1 Flowprime AU *If Required For Porous Surfaces Only | 4 Non Slip Aggregate |
| 2 Flowcoat OP | 5 Flowcoat OP |

FIND OUT MORE



Rapid Curing:

Fast track application, reducing unwanted downtime on critical projects.



Low VOC:

Compliant with Green Star Design & As Built V1.2-13.1.1B, Green Star Interiors V1.2-12.1.1B



Waterproof:

Complies with AS 4654.1:2012 Waterproofing Membrane standard.



Resistant:

Provides fire, slip, abrasion and chemical and UV resistance.



Slip Resistant:

Positively textured anti-slip surface minimises slip and skid risks.



Durable:

Hard wearing, durable and abrasion resistant protective coating.



Noise Reduction:

Enhanced traction underfoot minimises unpleasant noise from tyre squeal.



Chemical Resistant:

Protects against diesel, fuel, antifreeze, hydraulic fluid, chlorides & battery acid.



Slip Resistant:

Positively textured anti-slip surface minimises slip and skid risks.



Low VOC:

Compliant with Green Star Design & As Built V1.2-13.1.1B, Green Star Interiors V1.2-12.1.1B



Low Maintenance:

Seamless, hygienic finish, which requires low maintenance.



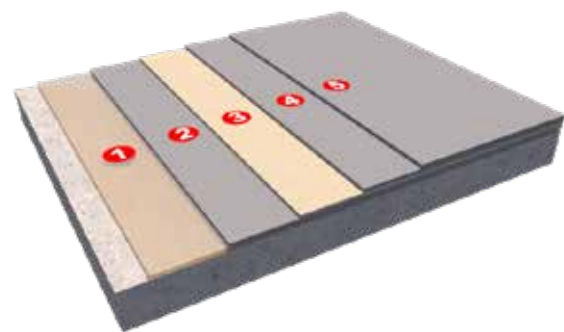
Resistant:

Hard wearing, durable, chemical and abrasion resistant.

More systems available, contact our technical team or enquire via our website. The installation should be carried out by a recommended contractor with a documented quality assurance scheme.

SYSTEM BUILD UPS

Deckshield Rapide ID



A fast cure methyl methacrylate deck coating system for use on intermediate car park decks.

- 1 Flowfast 101 Standard Primer
- 2 Flowfast 215 Flexible Binder
- 3 Non Slip Aggregate
- 4 Flowfast 319 Flexible Sealer
- 5 Flowfast 319 Flexible Sealer

Rapid Curing:
Fast track application, dramatically reducing program time.

Low VOC:
Compliant with Green Star Design & As Built V1.2-13.1.1B, Green Star Interiors V1.2-12.1.1B

Low Maintenance:
Can be overcoated without mechanical preparation.

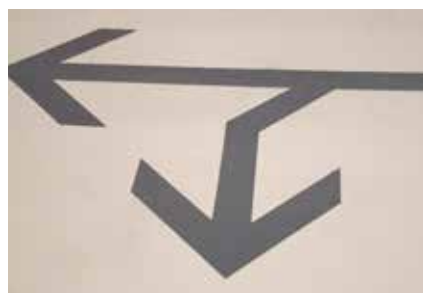
Resistant:
Provides fire, slip, abrasion, UV and chemical resistance.

FIND OUT MORE



LINEMARKING

Whether you're demarcating parking bays, pedestrian walkways, or safety zones, Deckshield UV Linemarker provides a robust solution that resists scuffs, abrasion, and heavy traffic. Its superior formulation ensures that your essential markings remain clear and intact, reducing the need for frequent reapplication and maintenance. The system is designed for ease of application, allowing for sharp, well-defined lines that enhance safety, organisation, and visual appeal.



REFURBISHMENT

Rather than replacing your original deck risking exposing your building to water ingress, why not think about refurbishment to save time and labour? Key qualities of our refurbishment systems are speed of cure and low temperature cure enabling fast installation.

We understand that every deck is different, that is why our waterproofing experts are on hand to provide recommendations best suited to extend the life of your car park. Our systems are also perfect for renovating tired decks, ramps and turning circles.

Refurbishment Solutions

Choosing Polyurethane modified methyl methacrylate (MMA) based coatings is a significant time and labour saver for a refurbishment project, with systems curing and trafficable from 2 hours

after complete installation. Working alongside specialist contractors, we will undertake site surveys and assessments to work with you to find a fit-for-purpose solution for individual project needs.

With our tried-and-tested Deckshield systems, we can upgrade your existing waterproofing and provide an aesthetic upgrade to your car park.



HELIPAD SOLUTIONS

Helipad coating solutions are essential for ensuring the longevity and safety of helipad structures. Flowcrete's resin-based coatings are highly durable, capable of withstanding the heavy loads and impacts associated with helicopter landings and takeoffs. These coatings resist wear and tear, maintaining a functional surface under various weather conditions, including rain, snow, and UV radiation. Additionally, they provide excellent chemical resistance to aviation fuel, hydraulic fluids, and de-icing agents, preventing surface damage from spills and leaks. The anti-slip properties of many resin-based coatings enhance safety for personnel and equipment, particularly in wet or icy conditions.

Helipad Coating Solutions

Resin-coated helipad surfaces are easier to clean and maintain compared to uncoated surfaces, as their smooth, sealed finish prevents the build-up of dirt, debris, and contaminants. This ease of maintenance, coupled with the protection resin coatings offer to the underlying concrete or asphalt, significantly extends the lifespan of helipads and reduces the need for frequent

repairs or resurfacing. Customizable with colours and markings for improved visibility, resin coatings enhance safety during landing and takeoff, especially in low-light conditions. Despite the initial application cost, the long-term savings from reduced maintenance and repairs make resin-based coatings a cost-effective solution for helipad upkeep.

Customisable with colours and markings for improved visibility, resin coatings enhance safety during landing and takeoff, especially in low-light conditions.



WATERPROOF MOVEMENT JOINTS

Movement joints are required to bridge the constructed movement gaps within the structure to bring the decks together in a way that safely absorbs any building movement by temperature-induced expansion or contraction, vibration, traffic flows, dynamic loading, ground settlement or seismic activity.

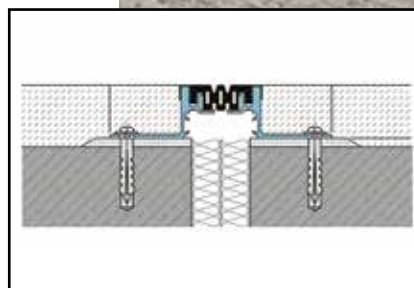
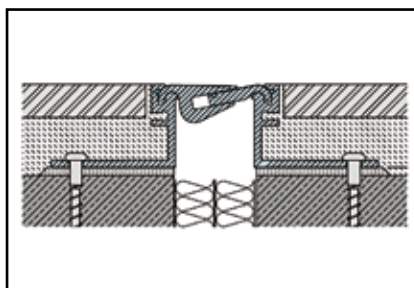
Every Deckshield system on any deck can be used alongside our movement joints in order to build the necessary flexibility and protection from the structural movement into the floor and wall itself.

Movement Joints

Regardless of forces, demands and complexities of a new-build or refurbished multi-storey car park, you can make sure that the structures' movement joints will work with the surrounding materials to

keep the building safe and secure. The versatility of our range means that specifiers and developers can choose movement joints as specific and individual as the building itself.

The versatility of our range means that specifiers and developers can choose movement joints as specific and individual as the building itself.



At Flowcrete Pacific, we pride ourselves on delivering end-to-end flooring solutions tailored to meet the unique needs of the industry. With a focus on quality, innovation and customer satisfaction, our services are designed to ensure every project is a success.

TECHNICAL & SPECIFICATION SUPPORT

Within the car park environment, correct specification of waterproofing and surfacing materials is critical to delivering a long-term, structurally protected and safe facility for car park operators and vehicle owners.

Flowcrete is here to help you make informed product and system choices on your upcoming new build or refurbishment projects.

We offer a range of technical and specification services to support your next project including:

- On-site support, site visits and inspections
- Testing, certifications and warranties
- Detailed drawings
- Building regulatory requirements
- AIA Approved CPD seminars

Certification & Testing

All our proposed systems have been tested to meet the below requirements.

- Compliant with VOC levels in Green Building Council of Australia, Green Star Design & As Built V1.2-13.1.1B and Green Star Interiors V1.2-12.1.1B.
- Fire Tested To: AS/ISO 9239.1-2003.
- Deckshield ED Rapide has been tested in accordance to Australian Standard AS 4654.1:2012 Waterproofing Membrane Systems for Exterior Use and complies with the criteria set out in this standard.
- Flowcoat OP and Deckshield UV (WB) are compliant with APAS 0209 V3 - Class I Conformity



REQUEST A SPECIFICATION

CONCRETE REPAIR SOLUTIONS



EUCLID CHEMICAL

TECHNICAL PROFILE

TYPE:

Clear Satin Silicate Blend

TRAFFIC READY TIME:

24 Hours

DRYING TIME:

@ 25°C, 50% RH 4 to 6 Hours

REDUCTION OF WATER PENETRATION:

RILEM Method 11.4 500%

USAGE/PURPOSE

Euco Diamond Hard is used as a dust-proof, densifier and sealer in the following typical applications:

- Warehouse Floors
- Manufacturing Plant Floors
- Distribution Centres
- Car Parks
- Commercial & Retail Floors

EUCO DIAMOND HARD



EUCLID CHEMICAL

Concrete Densifier & Hybrid Concrete Sealer

EUCO Diamond Hard is a unique blend of silicate and silicate polymers that penetrate into the concrete surfaces and chemically react to provide an increase in the surface density of the concrete. Tremco's Diamond Hard also increase the concrete's durability, abrasion resistance and longevity by reducing water's ability to penetrate the concrete surface and cause damage to the concrete.



Green Star compliant.



Minimises tyre marks.



Reduces concrete porosity to extend concrete life.



Minimal equipment needed allows for a quick and easy installation.

For a full Technical Profile, contact your local Technical Department.

Flowcrete
for the world at your feet

TECHNICAL PROFILE

CONSISTENCY:

ASTM C881	6.4 mm
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POT LIFE:

ASTM C881	13 Minutes
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GEL TIME (60G MASS):

ASTM C881		
Class A - 3°C: 38 Minutes	Class B - 10°C: 20 Minutes	Class C - 24°C: 14 Minutes

BOND STRENGTH:

ASTM C882 - 2 Days		
Class A - 3°C: 19.7 MPa	Class B - 10°C: 22.8 MPa	Class C - 24°C: 24.7 MPa
ASTM C882 - 14 Days		
Class A - 3°C: 19.2 MPa	Class B - 10°C: 28.2 MPa	Class C - 24°C: 27.2 MPa

*Pot life is measured as the workable time of 3.8 L of DURAL HS GEL when mixed at 24°C.

DURAL HS GEL



High Strength Epoxy Gel for Anchoring and Doweling

DURAL HS GEL is a two-component, 1:1 mix structural epoxy designed for repair of isolated substrate defects, anchoring and doweling. Usable in temperatures from 4 to 43°C. Tested per ASTM E488 and E1512, it resists static, dynamic, and wind loads in uncracked concrete for threaded rod and rebar.

- Pick-proof sealant for jails/prisons and kennels.
- General purpose epoxy adhesive.
- Setting of injection ports and sealing cracks for crack injection.

TECHNICAL PROFILE

COMPRESSIVE STRENGTH:

ASTM C109	
3 Hrs: 20 MPa	1 Day: 40 MPa
7 Days: 55 MPa	28 Days: <65 MPa

FLEXURAL STRENGTH:

ASTM C348		
1 Day: 3.7 MPa	7 Days: 6.9 MPa	28 Days: 7.6 MPa

SPLIT TENSILE STRENGTH:

ASTM C496	
7 Days: 2.1 MPa	28 Days: 3.3 MPa

SLANT SHEAR BOND STRENGTH:

ASTM C882		
1 Day: 10.3 MPa	7 Days: 14.5 MPa	28 Days: 19.3 MPa

*Compressive strength results published above are typical based on laboratory testing using 50mm cubes and tested at 11% water. Variations of these results can be expected if alternative sample sizes, or test methodology is used.

VERSASPEED LS100



Rapid Hardening Repair Mortar With Extended Working Time

VERSASPEED LS100 is a single-component, rapid-strength repair mortar for horizontal and form-and-pour projects. Just add water for easy use on 6mm to 150mm thick repairs. It offers fast turnaround, corrosion protection, and low chloride permeability.

- Overcoat with moisture sensitive coatings after 5 hours @ 21°C.
- Suitable for interior or exterior applications.
- Open to light duty traffic in as little as 4 hours.

EUCO QWIKSTITCH



Rapid Setting Polyurethane Hybrid Crack and Spall Repair

EUCO QWIKstitch is a fast-curing, ultra-low viscosity hybrid urethane for concrete crack repair. Mixed with aggregate, it forms a durable mortar ideal for quick pavement repairs, even in temperatures as low as -18°C.

- Low VOC and no solvent odour.
- Can be used for concrete & asphalt repairs.
- Very fast cure time. Can be opened to traffic in as little as 30 minutes.

TECHNICAL PROFILE

COMPRESSIVE STRENGTH (MORTAR):

ASTM C579B		
1.5 Hrs: 28 MPa	24 Hrs: 42 MPa	7 Days: 45 MPa +

COMPRESSIVE STRENGTH (NEAT RESIN):

ASTM D695	
1.5 Hrs: 31.7 MPa	24 Hrs: 34.8 MPa

TENSILE STRENGTH:

ASTM D638	
7 Days: 23.5 MPa	

GEL TIME / WORKING TIME:

2 to 3 Minutes

TACK FREE TIME:

10 Minutes

VOC CONTENT:

19 g/L

EUCO QWIKJOINT UVR



UV-Resistant Polyurea Floor Joint Filler

EUCO QWIKjoint UVR represents a new generation of polyurea technology with features and benefits unlike any other polyurea joint filler on the market. It resists fading from ultraviolet light greater than any existing product. It is a fast setting, semi-rigid polyurea, primarily used for filling construction and control joints in industrial and commercial concrete floors. It can be shaved flush with the floor shortly after placement or up to 24 hours later. It supports and protects joint edges from heavy loads and wheel traffic, reducing spalling of the joint edges.

- Unparalleled UV resistance.

TECHNICAL PROFILE

GEL TIME:

25 - 30 Seconds

TRAFFIC READY TIME:

Light Traffic: 1 Hour	Heavy Traffic: 2 Hours
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SHORE D HARDNESS:

ASTM D2240	34 to 36
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SHORE A HARDNESS:

ASTM D2240	84 to 88
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TENSILE STRENGTH AT 7 DAYS:

ASTM D412	4.6 MPa
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ELONGATION AT 7 DAYS:

ASTM D412	220% to 260%
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ADHESION TO CONCRETE AT 7 DAYS:

ASTM D4541	1.7 MPa
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Finish colours can be achieved in either standardised RAL or AS2700 colour ranges. Our flooring solutions also feature a variety of sand colour options, allowing you to achieve the perfect texture and aesthetic.



At Tremco Construction Products Group (CPG) Australia, we're committed to shaping the future through innovative approaches and sustainable solutions. This commitment is backed up by the fact that we bring together first-class technology with a customer focused approach, along with skills that have been built up over multiple decades within very specialised fields across Asia Pacific, to provide a truly unique service.

Delivering World-Class Construction Product Solutions.

The product brands housed within Tremco CPG Australia cover a wide array of different construction needs and provide a wealth of complex services, support and systems that are rarely found together under one roof.



Sealing, bonding & insulation

Window Insulation, Façade Construction, Exterior Insulation & EIFS, Structural & Inplant Glazing



Passive fire protection

Intumescent Coatings, Sustainable Vermiculite Alternatives



Flooring

Seamless Resin Flooring, Subfloor Preparation, Car Parking Structures & Pedestal Decking



Waterproofing

Potable & Waste Water Industry, Balconies, Terraces, Basements & Foundations



Roofing

Liquid Applied Systems, Felt Systems, Vegetated Roofing & Warm Roofing

The Pacific's leading construction products brands...

TREMCO **Dryvit** **Willseal** **Flowcrete** **Nullifire** **Willbruck**

Vandex **EUCLID CHEMICAL** **DURAM** **NURALITE** **NURAJACK** **OUTRIGHT**

Part of



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