

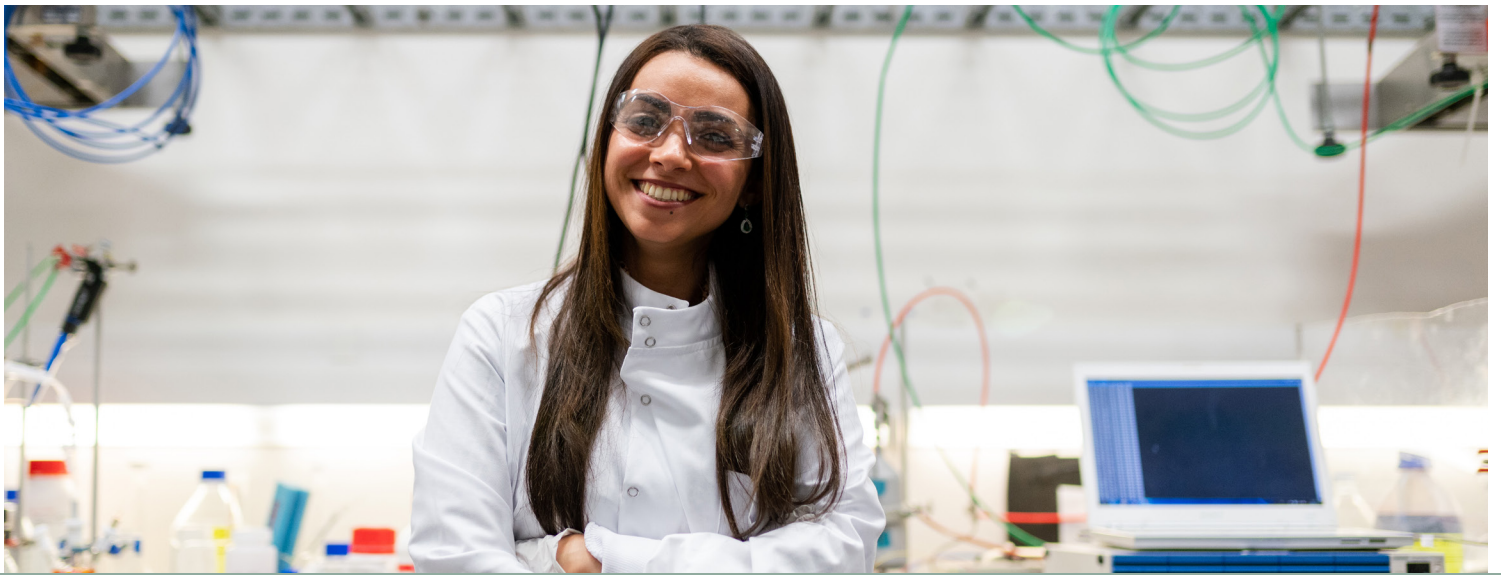


**OUR CENTRE FOR
GEOSYNTHETIC RESEARCH
INNOVATION & DEVELOPMENT**

GEOFABRICS[®]
Sustainable solutions



protect
contain
secure



**WORKING WITH CLIENTS TO
DEVELOP THE RIGHT SOLUTION
FOR EACH PROJECT**



Who are Geofabrics?

Geofabrics® is in the business of building key infrastructure across Australasia and beyond. We are focused on developing new and innovative products and providing our customers with world's best solutions to complete civil projects.

GEOFABRICS

We have been in the business of geosynthetic engineering for over 40 years. Geosynthetic engineering is the use of synthetic materials in civil engineering projects to achieve more cost effective, environmentally sound and safer construction outcomes.

We manufacture and distribute geosynthetic products throughout Australia, New Zealand, and other international markets. We operate in various sectors with expertise in infrastructure including roads, rail, mining, coastal, waste, sports and recreation, renewables, water, defence, aviation and ports.

Our product innovations include Bidim Green geotextiles and Megaflo Green socked slotted drain pipes, both made utilising recycled plastic material and Sorbseal hybrid geosynthetic clay liners with activated carbon for the containment of environmental contaminants.

What does Geofabrics provide?

Our success is based on strong partnerships with clients to solve their engineering problems. Our vision is to be a solution provider, to supply products that demonstrate cost savings, superior technical performance, safer operations and better environmental outcomes.

GEOFABRICS GRID LABORATORY

We supply world-class technical leadership and engineering support through our innovation, research, industry education, design and independent testing services.

Our GRID (Geosynthetic Research, Innovation & Development) laboratory is a specialist facility that works with clients to develop the right geosynthetic solution for each project.

Based in south east Queensland, the laboratory houses a selection of key geosynthetic-specific test equipment.

Testing is aimed at solving the real-world problems that designers, contractors and asset owners find on their site – to ensure the right solution is adopted.

- Analysis is performed according to Australian and International test methods
- Comprehensive test reports are generated, including results, photos, graphs, test conditions and details of the apparatus used
- Research is supported by industry leading suppliers in both laboratory and field trials across America, Europe and Asia

RESEARCH AND DEVELOPMENT

At the GRID, our cutting-edge R&D division is dedicated to pioneering advancements in geosynthetic materials, ensuring we deliver products that are stronger, more durable, and adaptable to a wide range of applications — helping you deliver longer-lasting solutions.

Innovative material development

Our GRID experts focus on creating next-generation polymers, fibres, and composites designed specifically for geotechnical applications. These innovations result in geosynthetics with enhanced UV resistance, improved chemical stability, and superior tensile strength, ensuring your project stands the test of time.

Unmatched durability and performance

Through rigorous degradation and durability studies, we examine the long-term effects of UV exposure, mechanical wear, chemical interaction, and biological factors. This in-depth understanding allows us to help you source geosynthetics that maintain their performance in even the harshest conditions, reducing the need for replacements and improving the longevity of your infrastructure.

Sustainable, eco-friendly solutions

As environmental impact becomes a key focus in every industry, our GRID team leads the way in developing eco-conscious geosynthetics. We are pioneering biodegradable materials and sustainable coatings that not only reduce the environmental footprint of your project but also eliminates harmful by products like microplastics.





FIELD TESTING AND PRODUCT VALIDATION

At the GRID, we offer comprehensive field testing and product validation services to ensure your geosynthetic solution performs flawlessly in real-world conditions. Our rigorous testing process helps optimise product reliability and longevity, giving you the confidence that your selected materials will stand up to the demands of any project.

Real-world performance testing

We go beyond lab simulations with controlled outdoor installations, where geosynthetics are exposed to natural elements such as sun, rain, wind, and heavy loads. This real-world testing, in environments like slopes, embankments, and channels, helps us assess critical performance factors including erosion resistance, permeability, chemical compatibility, and material stability.

Long-term durability insights

Our longitudinal performance analysis involves extended field testing, providing valuable data on how materials perform over time under continuous environmental stress. This is important for high-stakes applications in infrastructure and environmental containment, where durability is a priority.

Continuous product optimisation

We use the results of our field tests to optimise product performance. By fine-tuning material properties, design configurations, and installation methods, we ensure that our geosynthetic solutions meet the highest standards before it is deployed in your projects, delivering long-term value and peace of mind.

LABORATORY TESTING AND ANALYSIS

We provide comprehensive laboratory testing and analysis services that deliver the detailed insights to help you select the right geosynthetics for your project that meets rigorous standards for strength, durability, and environmental performance.

Equipped with state-of-the-art technology, our laboratory performs comprehensive tests that evaluate all critical material characteristics for your specific application.

Comprehensive material testing

We conduct a range of tests to assess the mechanical properties of geosynthetics, including tensile strength, elongation, puncture resistance, and tear strength, this is critical for high-stress environments like roads, landfills, and retaining walls.

Hydraulic and filtration efficiency

Our tests for hydraulic and filtration properties evaluate permeability, flow rate, and clogging resistance to ensure your materials meet key standards, such as ASTM D4716 to ensure efficient drainage in containment applications.

Chemical compatibility and leaching

For projects involving hazardous substances, we perform chemical compatibility and leaching studies to ensure that the selected geosynthetics will maintain integrity when exposed to chemicals, waste, or other aggressive environments, a crucial analysis for mining and landfill containment solutions.

Thermal and UV performance

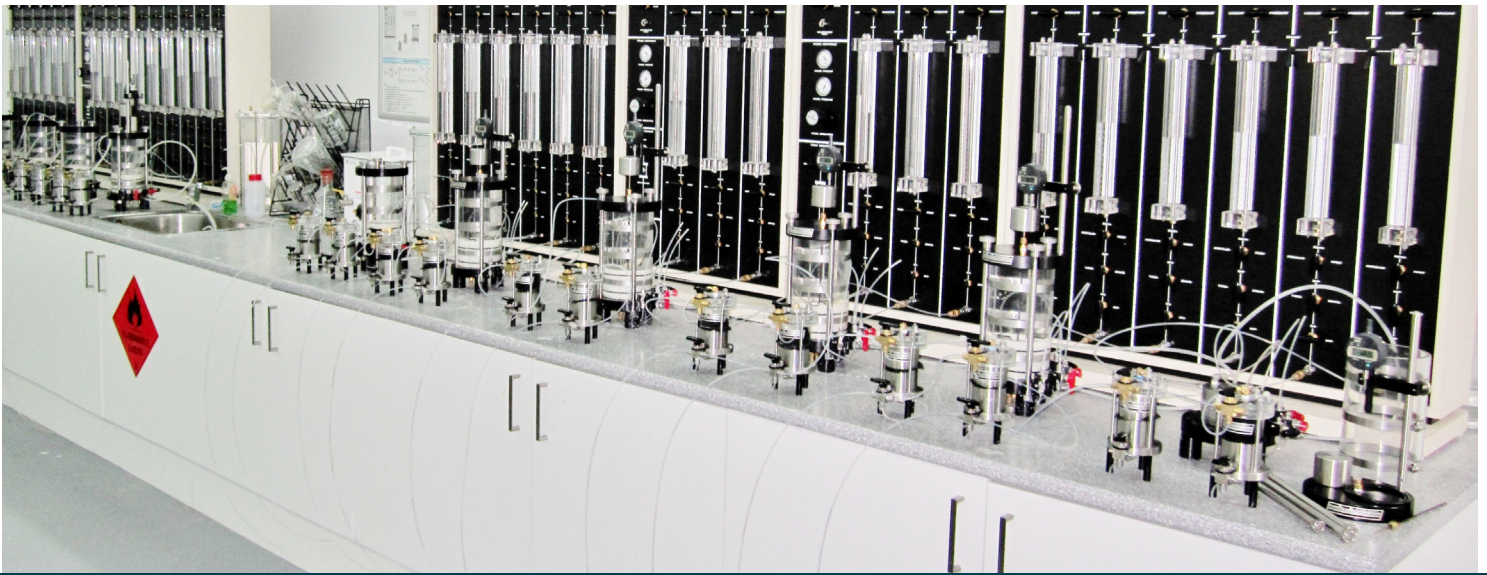
We assess the impact of thermal and UV aging on material properties using accelerated aging techniques. This helps predict the lifespan of materials in exposed applications and informs the best practices for UV stabilisation, ensuring long-term durability.

TRAINING AND EDUCATION

We believe in empowering industry professionals with the knowledge and skills they need to succeed. Our training and education services provide specialised instruction in geosynthetics, ensuring your team stays ahead of the curve and is fully equipped to tackle complex challenges.

Geofabrics Academy

Through our Geofabrics Academy, we offer regular online training seminars where CPD hours can be earned, covering a wide range of topics, including material selection, installation techniques, design strategies, regulatory compliance, and environmental applications. These sessions are designed to enhance your team's expertise and help avoid common installation and handling mistakes in the field.



SOLVING ENGINEERING CHALLENGES WITH REAL-WORLD PERFORMANCE TESTING



GEOFABRICS



Certification programs

Our certification programs establish competency in key areas, such as the installation of geotextiles and understanding material degradation in environmental applications. These credentials help demonstrate your team's proficiency and ensure quality control in your projects.

Customised training solutions

For clients with specific needs, we offer customised training tailored to unique applications, such as hazardous material containment, coastal erosion control, or steep slope stabilisation. We can work closely with you to develop targeted training that addresses the specific challenges of your projects.

INNOVATION AND INDUSTRY COLLABORATION

We foster innovation and industry collaboration to drive advancements in geosynthetics, bringing together researchers, manufacturers, regulatory bodies, and end-users to shape the future of the industry.

Joint research projects

Through collaborations with leading universities and research institutions, we engage in cutting-edge studies on emerging challenges such as PFAS contamination and microplastic pollution. These partnerships enable us to leverage specialised expertise and accelerate the development of innovative solutions.

Product development partnerships

We work closely with manufacturers to co-develop and test new geosynthetic products tailored to specialised markets like mining, oil and gas, and waste containment. Our collaboration ensures the creation of materials with unique properties to meet the evolving needs of these industries.

Regulatory and standards leadership

The GRID proactively contributes to the development of industry standards that enhance safety, sustainability, and performance. Our involvement in testing and material validation plays a pivotal role in establishing benchmarks for new technologies and materials.

SUSTAINABILITY AND ENVIRONMENTAL RESPONSIBILITY

We are committed to driving innovation in geosynthetics with a strong focus on minimising environmental impact and promoting sustainable practices. Our team of experts will help you select the right geosynthetics that provide unmatched strength, durability, and environmental sustainability, helping you deliver superior, long-lasting solutions that protect, contain and secure the physical environment.

Lifecycle analysis for improved sustainability

We help clients assess the environmental impact of their geosynthetics through lifecycle analysis, evaluating everything from production to waste disposal. This analysis identifies opportunities for improving manufacturing processes, sourcing materials responsibly, and optimising end-of-life management to reduce the environmental footprint.

Tackling microplastic pollution

Our research on microplastic pollution focuses on understanding how geosynthetics break down over time and release microplastics into the environment. By analysing wear, degradation, and erosion, we create solutions like improved polymer stabilisation, less abrasive materials, protective coatings, and eco-friendly disposal methods.

Biodegradable and renewable materials

We prioritise renewable and biodegradable materials, particularly for sensitive environments. Our work explores new polymers that deliver high performance in geotechnical applications while safely decomposing in the environment, reducing long-term ecological impact.

Carbon sequestration in coastal and wetland projects

In support of climate goals, our GRID team is actively involved in carbon sequestration initiatives, using geosynthetics in coastal and wetland restoration projects to help capture carbon while preventing shoreline erosion.



MONASH University





PROTECTING THE ENVIRONMENT THROUGH GEOSYNTHETIC RESEARCH AND INNOVATION





AUSTRALIAN-MADE GEOFABRICS

Geofabrics is the only geotextile manufacturer in Australia, with plants in Albury and Ormeau. We pride ourselves on providing unrivalled service to our customers. We can recommend the best geosynthetic product to achieve the objectives of your project and ensure it's available when you need it.

Over 40 years of experience allows our technical staff to provide practical support, based on local conditions. We are proud to have been recognised in the AFR Most Innovative Company list in 2020 with Bidim Green and 2021 with Sorbseal.

With a view to the future, we are committed to improving the sustainability of our business by reducing waste to landfill, lowering our carbon emissions and investing in our people.



VISIT **GEOFABRICS.COM.AU** OR CALL 1300 60 60 20 (AU)
OR **GEOFABRICS.CO.NZ** OR CALL 0800 60 60 20 (NZ)



GEOFABRICS[®]
Sustainable solutions

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