



**Plastics performance and
product development
– testing, problem solving
and cost reduction**

Industrial Research Limited is a New Zealand-based science and technology company with an international focus and reach, offering a broad range of testing services to numerous clients throughout the industrial and government sectors.

The Future Materials and Structures team at Industrial Research is a multi-disciplinary group of highly skilled and experienced scientists and engineers operating within the Imaging and Detecting technology platform with particular focus on the testing, analysis and evaluation of plastic products and materials, using specialised testing equipment.

Key capabilities

- ▶ Access to analytical and materials testing facilities within Industrial Research and outside agencies, including tertiary institutions and other research institutes
- ▶ A multi-disciplined approach to problem solving by utilising a wide range of specialist technical and scientific expertise, resources and information
- ▶ Accurate and timely results with testing being carried out where applicable to recognised national and international standards.

Key expertise

- ▶ Plastic materials identification and analysis
- ▶ Advice on plastic materials selection
- ▶ Mechanical and physical testing of plastic-based materials
- ▶ Testing and evaluation of plastic products.

Industrial Research scientists can provide a comprehensive consultative and testing service for determining the properties and performance characteristics of plastic materials. We can assist with failure investigations and in the development of objective-based test protocols for plastic materials and products.

Services

- ▶ Ongoing analytical and testing of materials and products for clients
- ▶ Technical problem solving and failure analysis
- ▶ Service performance of plastic, including evaluating the effects of temperature and other environmental parameters, chemical and biological attack
- ▶ Batch compounding capability of plastic and natural and synthetic fibres
- ▶ Investigations into biodegradability aspects and degradation of rubbers, plastics and fibres
- ▶ Assistance with development of objective-based protocols
- ▶ Fatigue and static mechanical testing for certification
- ▶ Development and application of computational modelling, simulation and validation techniques for plastic products using finite element analysis
- ▶ In-house access to the latest international technical information and technologies.



Vertical pull-off test
(Photo courtesy EverEdge IP)

For all enquiries please contact the Industry Engagement team on 0508 CALL IRL (0508 225 5475). If calling from overseas phone +64 4 931 3000 or visit the *Contact Us* page on our website.

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