



Testing and assurance services for Aotearoa New Zealand's building sector

Alongside our research, BRANZ provides independent, evidence-based testing and assurance services on a commercial basis.

BRANZ's expert assessments are recognised and held in high regard across the building sector – but they are **not** compulsory.

Manufacturers, suppliers and importers choose to test with BRANZ to make sure that their products will be safe and durable in Aotearoa New Zealand's unique climate and seismic environment.



BRANZ is proudly independent. Our primary focus is on the safety, quality and affordability of Aotearoa New Zealand's building practices.

The role of our testing and assurance services

BRANZ's expert assessments give confidence to product suppliers that their materials should perform to the applicable building codes and standards when properly installed and used. These services provide the building system with transparent, evidence-based insights to support informed decision making and reduce business risk.

BRANZ does not approve building products for use in the building and construction industry or as part of a building consent application. Product approvals are the role of the building regulator and building consent authorities.

Instead, we serve as an impartial advisor. We engage with regulators, policy makers and industry stakeholders, to ensure that our research and testing results support effective and practical standards.

Independent expertise for Aotearoa New Zealand conditions

Aotearoa New Zealand needs more quality, affordable building materials in the market. However, it is important that those products are safe, resilient and fit for purpose given our unique climatic, ultraviolet (UV) and seismic conditions.

With extensive testing and building expertise, our scientists, technicians and product auditors are trusted for their evidence-based evaluations. They assess international test evidence and certification against local regulatory requirements and New Zealand's specific environment to ensure products meet current building standards and perform as they are supposed to.

Our team works with product manufacturers, importers and building consent authorities to provide assurance that new innovations will be safe and durable in New Zealand buildings.



Full-service testing and assurance excellence

BRANZ's testing and assurance services are unique in Aotearoa New Zealand. Using our expertise, we assess products for durability, performance, structural integrity, fire testing and safety engineering.

Durability and performance

To meet the New Zealand Building Code, many building elements – such as structural floors, walls and fixings – must be proven to last at least 50 years. BRANZ has New Zealand's most extensive range of specialist equipment to accelerate the ageing process. We can replicate decades of use in just a few months.

We also test in real-life conditions around the country, with 24 BRANZ research and testing sites in highly exposed areas from Northland to Invercargill.

Our New Zealand-specific testing:

- **Exposure to solar and UV radiation:** New Zealand buildings are exposed to a higher level of UV radiation than almost anywhere else in the world. Our 10 UV chambers are essential in understanding the long-term performance of building materials given our place in the world.
- **Corrosion:** Corrosion is a high risk in our coastal areas and particularly affects how paints and metals perform. In the laboratories, we have salt spray chambers for accelerated testing, and we also conduct testing at our exposure sites.
- **Weathertightness:** We have completed extensive research on weathertightness. Using this knowledge, we apply wind and water pressure to materials, replicating expected weather conditions on external claddings.
- **Insulation:** R-values (the flow of heat in a product) are assessed differently in New Zealand than in other jurisdictions. We test insulation products to help ensure they will perform as intended and keep Kiwis warm.

Structural integrity

We assess how building products and systems will perform in earthquakes and strong winds as well as with movement from daily use.

Using a range of high-tech equipment – from shake tables to hydraulic rams – our team will shake, stretch, pull, bend and break products and building systems to assess for flexibility, movement and deflection resistance.

While seismic activity is not unique to Aotearoa, the way we build is different to overseas methods. This means we also test the way the products will be installed and used – including assessing bracing and connections – and provide advice on how to comply with regulations.

Fire testing and safety engineering

While fire safety is an international concern, New Zealand and Australian building standards are unique. BRANZ supports new products entering the New Zealand market to meet the codes through expert advice and testing.

Our internationally recognised experts test how products and systems might resist and react to fire. This includes fire performance of interior finishes and exterior cladding systems and reaction to wildfires.

With our laboratory testing accredited by International Accreditation New Zealand, BRANZ also provides local manufacturers with internationally recognised testing to demonstrate compliance beyond New Zealand. BRANZ has New Zealand's only International Organization for Standardization (ISO) 9705 full-scale testing room and ISO 5660 small-scale testing for the fire safety of interior linings (see page 14 for more about our fire testing capabilities).



Guide to BRANZ's evaluations

BRANZ provides a range of independent and impartial third-party assessment options. These technical opinions act as supporting evidence of compliance with the New Zealand or Australian Building Codes.

Our experts also provide advice on pathways to meet the Building Code as well as evidence of potential risks or product weaknesses to support business health. These trustworthy, independent assessments can assist new products entering the New Zealand market, and we can advise on whether they meet our unique codes and conditions.

BRANZ evaluations are not compulsory. Suppliers who choose to conduct a BRANZ assessment do so because they trust the rigour of our process and the fact that they are held in high regard across industry. Appraisals take time because they test more than just the product – they test the product in place within a system. This gives clients confidence that their products perform to the current Building Code and standards, which supports their standing in the market. And ultimately, that assurance helps protect New Zealand consumers.

- **BRANZ Appraisal:** An independent extensive testing and assessment of a product's scope, limitations and evidence of performance against New Zealand and Australian Building Codes as well as pathways to compliance. It is a technical opinion of a building product or system's fitness for purpose and has been independently verified by BRANZ experts to ensure that the product meets all Building Code requirements.
- **CodeMark:** A technical assessment of whether a product will perform as the manufacturer says it will based on the information supplied. CodeMark products must be accepted by building consent authorities.
- **Bespoke testing and advice:** BRANZ also offers tailored expert testing and advice for all stages of product development and the building process.

2023/24 at a glance

325 fire, materials and structures testing projects completed

167 organisations with products tested by BRANZ

51 insulating glazing products tested – our most requested product test

