

The dawn of a new era for product certification...

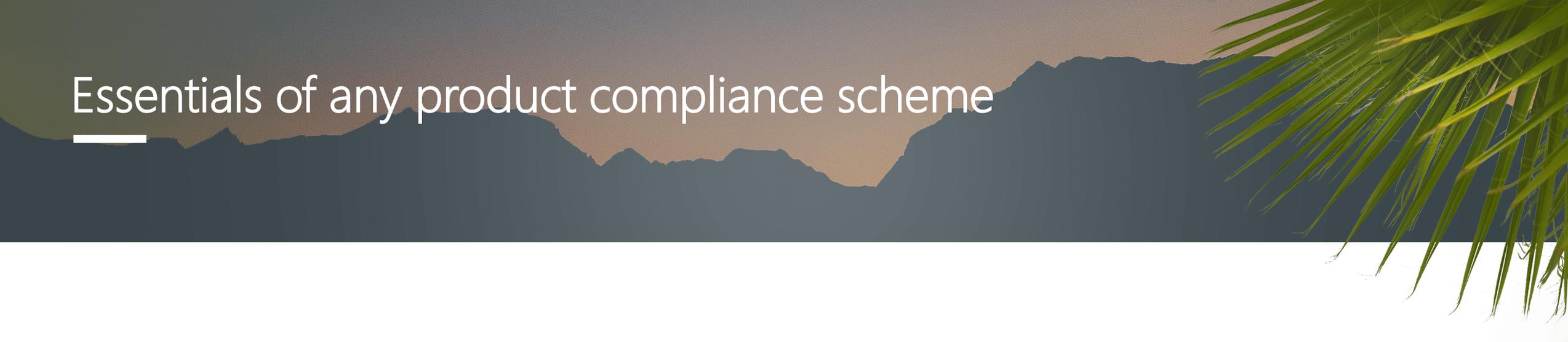
A New Zealand Product Compliance Scheme

Presented by Colin Prouse

Director & Principal Building Scientist at BEAL



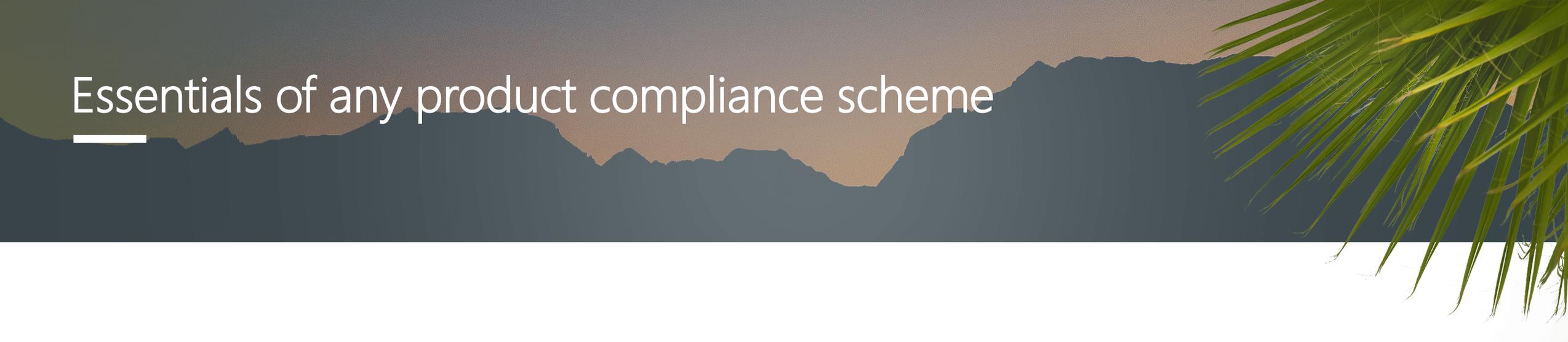
Essentials of any product compliance scheme



Recent events across the Tasman and here in New Zealand have resulted in a loss of confidence and certainty in product approvals and certification

BCAs in particular, need assurance and certainty from any product compliance process or scheme

Essentials of any product compliance scheme



As we all know, the environment in New Zealand presents a number of unique requirements to be sure of providing durable, reliable, safe buildings

These requirements have resulted in the establishment of a unique performance-based 'Building Code' which all building work and products must comply with

For these reasons a 'product compliance scheme' is a valuable mechanism for demonstrating compliance

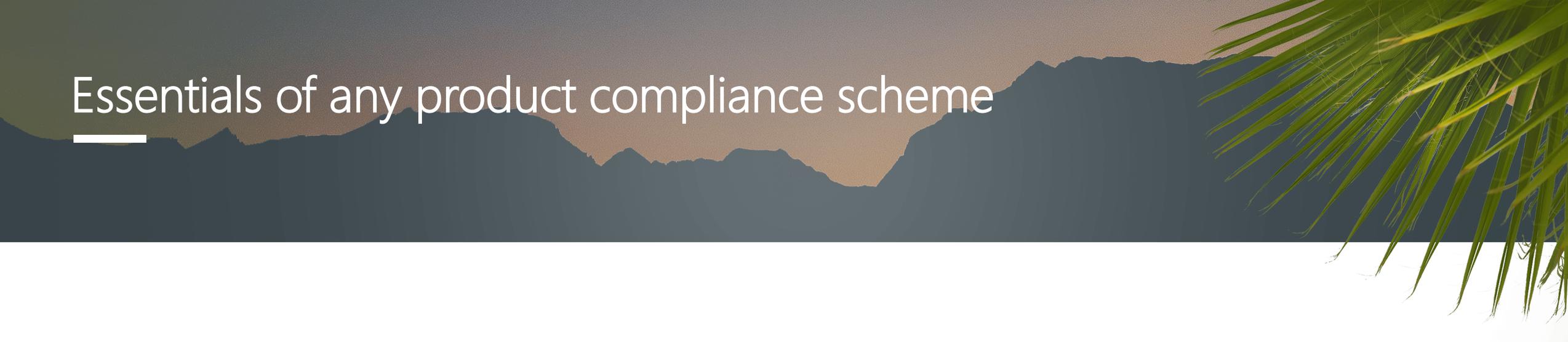
Essentials of any product compliance scheme

Key essentials of any product compliance scheme are:

- Transparency
- Impartiality
- Technical Competence
- Assurance of Consistency

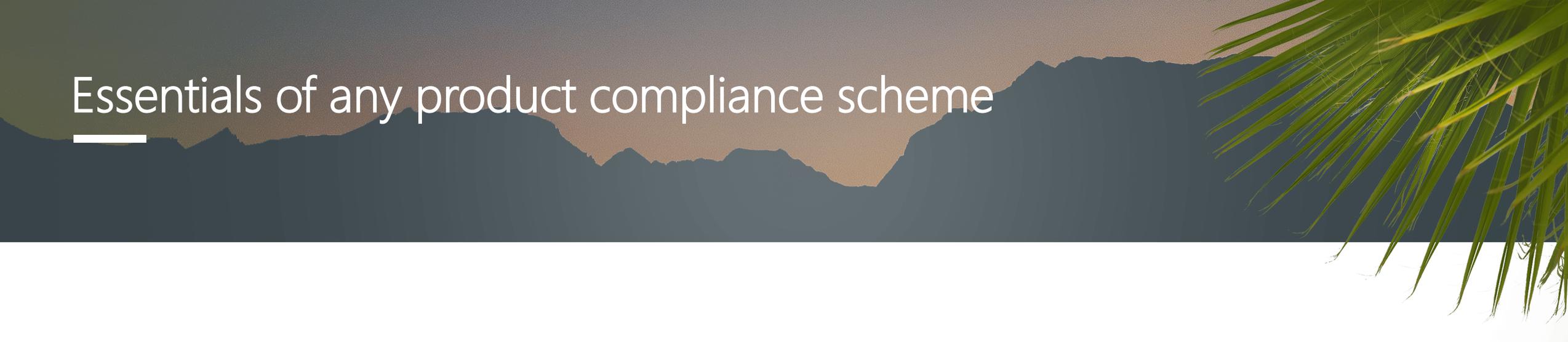
The result of a well designed “scheme”, is ongoing confidence by BCAs, based on reliable information provided to demonstrate compliance

Essentials of any product compliance scheme



The Key essentials...
How are they achieved?

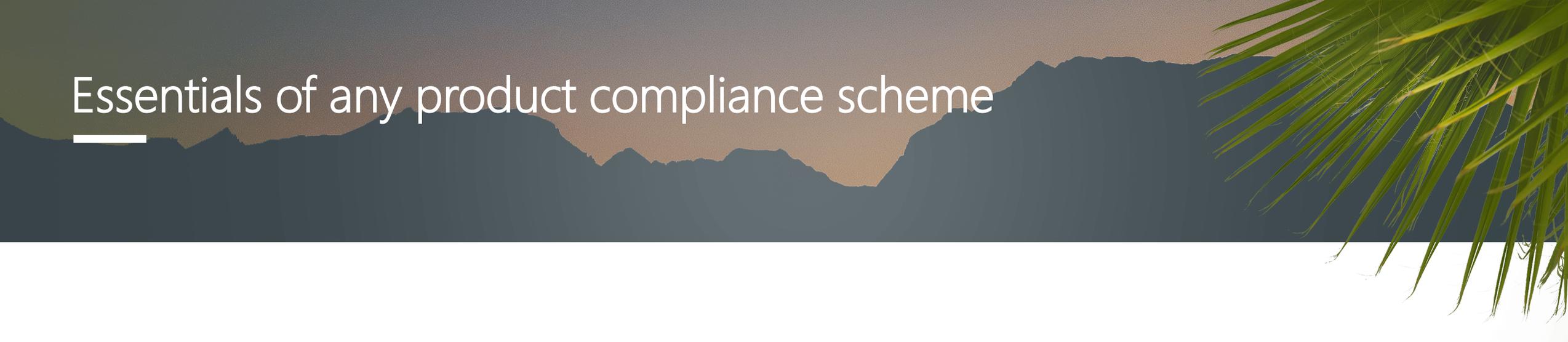
Essentials of any product compliance scheme



'ISO/IEC 17067: 2013 - Conformity assessment -- Fundamentals of product certification and guidelines for product certification schemes' is a starting point

ISO/IEC 17067 provides the fundamentals for the design and content of product certification schemes

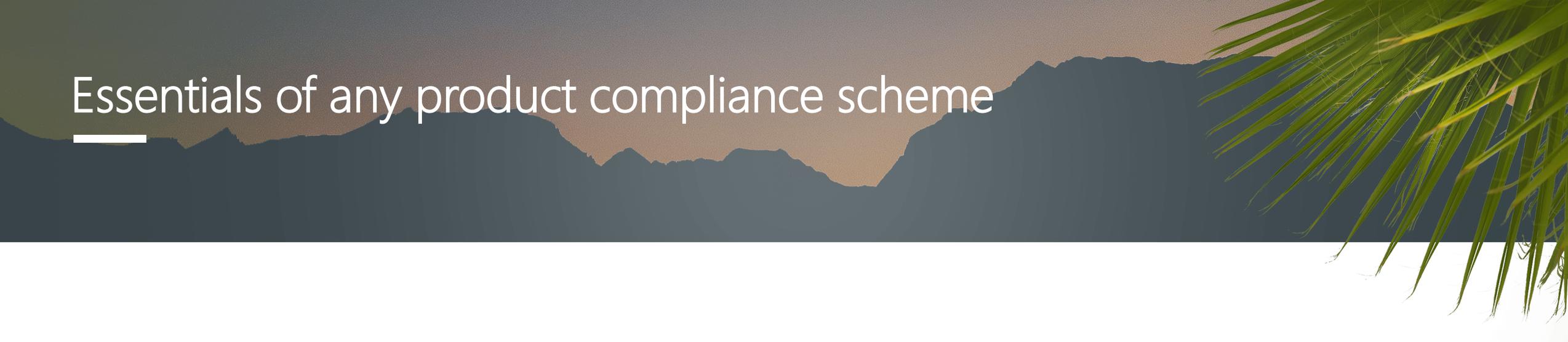
Essentials of any product compliance scheme



'ISO/IEC 17067 describes the certification of products, processes and services through third-party conformity assessments, carried out by 'product certification bodies'

The requirements for third-party product certification bodies, are specified in ISO/IEC 17065

Essentials of any product compliance scheme



'ISO/IEC 17065 describes the requirements for the competence, consistent operation and impartiality of product, process and service certification bodies

The 'scheme owner' nominates how conformance with ISO/IEC 17065 will be demonstrated

Use of ISO/IEC 17067 together with ISO/IEC 17065 ensure the "key essentials of a product compliance scheme" are achieved

Who should be the 'scheme owner'?

Ideally, the owner of any respected product compliance scheme, should be the joint stakeholders, including BCA representation, building and the construction representation and product certification body representation

For the time being, however, the owner and administrator will be BEAL with stakeholders invited to be part of the 'Technical and Scheme Rules Review Committee'

Who should be the 'scheme owner'?

The 'Technical and Scheme Rules Review Committee' ensures the key essentials of Transparency, Impartiality, Technical Competence & Assurance of Consistency are achieved

In this case, BEAL intend appointing an internationally recognised entity to carry out regular audits to ensure conformance with the requirements of a scheme owner as set out in ISO/IEC 17067

The IQM Group is this entity



Who watches the 'scheme owner'?

Consulting

IQM Group is an international management consulting firm that provides innovative solutions for progressive client organisations. Over the last 30 years, IQM has successfully developed and implemented over one thousand business management improvement programs for industry and commerce around the globe. Sustainability and quality strategies have proven to deliver not only competitive edge and consumer satisfaction but also increased financial performance.

Certifications & Audits

IQM Group carries out recognised audits on behalf of DQS AusNZ and other organisations. From Gap Audits to Stage 1 and Stage 2 audits to Certification and then Surveillance and Re-Certification programmes. IQM deliver to internationally recognised best practice standards using ISO 19011:2018. Where an audit is not against an ISO standard, our team provide bespoke methodologies to ensure we deliver what the customer needs.

Training and Professional Development

IQM Group builds on existing employee experience with internationally recognised training courses aimed at delivering new skill sets and knowledge. Building on existing employee experience with new skill sets and increased knowledge results in an outcome of enhanced competency which will increase organisational effectiveness. IQM is a certified provider of internationally recognised courses and programmes.

Who watches the 'scheme owner'?

IQM Group have agreed to carry out audits on compliance of BEAL as a scheme owner and as a third party compliance assessment body, against the requirements of ISO/IEC 17067 and ISO/IEC 17065

The 'Technical and Scheme Rules Review Committee' will receive copies of the audit reports for review and recommendations

Who watches BEAL as an 'compliance certification body'?

IQM Group have also agreed to carry out audits on the compliance of BEAL as a 'compliance certification body', against the requirements of ISO 19011 and ISO/IEC 17021

Again, the 'Technical and Scheme Rules Review Committee' will receive copies of the audit reports for review and recommendations

Who watches BEAL as an 'compliance certification body'?

'ISO 19011 - Guidelines for auditing management systems' is an International Standard that sets forth guidelines for management systems auditing

A 'management system' includes a 'product quality management system' used for the management of quality and risks associated with building products

Who watches BEAL as an 'compliance certification body'?

ISO 17021 is an International Standard that sets forth guidelines for management systems auditing as well as auditor competence

ISO 17021 is referred to in ISO 17065 for the auditing of management systems

Who watches BEAL as an 'compliance assessment body'?

Ontop of the requirements of ISO 19011 and ISO/IEC 17021, BEAL will be required to demonstrate compliance with the requirements of ISO 9001

ISO 9001 specifies requirements for a quality management system when an organization:

- a) needs to demonstrate its ability to consistently provide products and services that meet customer and applicable statutory and regulatory requirements, and**
- b) aims to enhance customer satisfaction through the effective application of the system, including processes for improvement of the system and the assurance of conformity to customer and applicable statutory and regulatory requirements**

What are the key elements of the scheme?

The Key elements of the scheme include:

1. Clear descriptions of the product, plus “Scope of Use and Limitations Statements”

Users of the scheme need to be able to readily understand what the purpose of the product is, where it can be used and what limitations or conditions are applicable

What are the key elements of the scheme?

The Key elements of the scheme include:

2. Who is responsible for the supply and QA of the product

All related parties need to know who is responsible for compliance with the Scheme Rules and New Zealand Building Code

What are the key elements of the scheme?

The Key elements of the scheme include:

3. A description of which 'performance clauses' are relevant and what evidence of compliance has been provided

Under this Scheme, all relevant performance clauses of the New Zealand Building Code are to be described

What are the key elements of the scheme?

The Key elements of the scheme include:

4. A description of the evidence for which compliance has been relied upon, shall be provided

Under this Scheme, a description of key evidence used to demonstrate compliance shall be provided, with reasons where not provided

What are the key elements of the scheme?

The Key elements of the scheme include:

5. A description of the technical and installation manual, with the latest version number, shall be provided

Users must know which is the current version of any technical and installation literature

Manuals shall be required to meet the requirements of a "Product Technical & Installation Manual Guideline" provided by the Scheme owner and subject to review at least annually

What are the key elements of the scheme?

The Key elements of the scheme include:

6. Evidence and maintenance of the supplier's quality plan (with version number) ensuring the management of all important risks up to the point of completed installation

Related parties need assurance that there is a reliable, risk management system in place.

Every quality plan shall describe what evidence from on-site inspections are required, how that is saved and communicated to the relevant parties and subject to review and audit at least annually.

[Note: Organisations with complex products or systems will be encouraged to implement a ISO9001 quality management system]

What are the key elements of the scheme?

The Key elements of the scheme include:

7. Evidence of a properly developed and maintained 'training programme' to ensure all approved supervisors have and continue to receive adequate training about the product

Such 'training programmes' shall be developed in accordance with ISO 10015

ISO 10015 is a guideline that covers the development, implementation, maintenance, and improvement of strategies and systems for training that affect the quality of the products supplied by an organization.

What are the key elements of the scheme?

The Key elements of the scheme include:

8. An independent, 'Technical and Scheme Rules Review Committee' whose role is to ensure:

- Transparency
- Impartiality
- Technical Competence
- Assurance of Consistency

Stakeholders will be invited to be part of the 'Technical and Scheme Rules Review Committee' to ensure transparency on how issues such as criteria for acceptance, new methods of assessment and any complaints, are dealt with

Such mechanisms are described as a requirement in ISO/IEC 17065. The rules for the operation of this committee are described in the Scheme Rules.

Who are the stakeholders?

Typical stakeholders of the scheme include:

Building Consent Authorities
Building & Construction Sector Groups
Manufacturers
Importers & distributors
Testing laboratories
Research organisations
Building product assessment bodies
Training & Educational entities
Related insurance entities
Related Audit and Certification entities

Stakeholders will be invited to be part of the 'Technical and Scheme Rules Review Committee' to ensure transparency on how issues such as criteria for acceptance, new methods of assessment and any complaints, are dealt with

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What does a 'Product Compliance Certificate' look like?



A Product Compliance Certificate



C1814

ISSUED: Nov 2018
EXPIRES: Oct 2019

Product: The Verdus Timber Cladding System
Certificate-holder: The NZ Natural Timber Co. Ltd.



Product description:¹

The Verdus Timber Cladding System is an exterior timber weatherboard system using New Zealand native timbers.

Scope of Use & Limitation Statement:²

- an external environment above ground, with a (seismic) locality factor (Z) of up to 0.42 (Upper Hutt), in a temperate climate, with wind zones up to and including 55m/sec (Extra High);
- the height of buildings shall be up to and including 10m from the finished ground level;
- the system shall use specified timber weatherboards over timber framing incorporating a 'frame protection system' and non-structural cavity battens;
- timber framing shall be constructed as per NZS 3604.
- the system is limited to use in residential housing including Class 1 and Class 2 type construction. i.e stand-alone houses and multi-apartment dwellings ;
- the system shall be installed in accordance with the technical and quality plan literature and supervised by those trained by The NZ Natural Timber Co Ltd.

Applicant:

The NZ Natural Timber Co Ltd
127 Lower Dent Street
Whangarei 0110
TEL: 027 660 0095
www.nznaturaltimber.co.nz



Issuer:

Building Element Assessment Laboratory Ltd.
Tel: +64 233 6661
E-Mail: sales@beal.co.nz
www.beal.co.nz

What does a 'Product Compliance Certificate' look like?



A Product Compliance Certificate



Clauses for which compliance has been assessed by BEAL:³

B1.3.1 & B1.3.3 (a), (b) & (h) The product meets the structural requirements for loads arising from gravity, self weight & wind-loads
B2.3.1 (a) 50 years +, (b), 15 years, B2.3.1 (c), 5 years, and B2.3.2. The product meets the durability requirements for the cladding system including underlay system, battens & fixings and weather-protecting stain
E2.3.2. The product is a ventilated and drained rain-screen system that meets the performance requirements of E2.3.2
F2.3.1. The product is not a health hazard to people.

Evidence relied upon including a buildability assessment:

B1.3.1 & B1.3.3 (a), (b) & (h) Evidence supplied to demonstrate compliance included an in-service history statement plus an engineer's opinion.
B2.3.1 (a) 50 years +, (b), 15 years, B2.3.1 (c), 5 years, and B2.3.2. Evidence supplied included an in-service history statement plus an opinion from a BEAL material scientist⁴
E2.3.2. Evidence supplied included a weathertight Test Report from BTS TR180909 plus an opinion from a BEAL building scientist⁴
F2.3.1 A peer review report dated 12 Oct 2018 has been provided by a building scientist employed by BEAL⁴
Buildability - Buildability Assessment Report 120918 dated 01 Oct 2018.⁴

Title & version of the current Technical & Installation Manual:

The Verdus Timber Cladding System Technical & Installation Manual ver 1.0 available from www.nznaturaltimber.co.nz and the BEAL website www.beal.co.nz

Title & version of the current Building Product Quality Plan* & Site Checklists:

The Verdus Timber Cladding System *BPQP ver 1.0

Requirement for factory audits - where applicable:

NA. Assembly of the appraised system is on site

Requirement for the training and approval of Supervisors:

The NZ Natural Timber Co have a ISO10015 based Supervisor Training Programme** which is subject to review and audit at least 12 monthly by (BEAL)

Requirement for the certificate-holder to have a Register of trained and approved Supervisors:

**The NZ Natural Timber Co have a Register of Supervisors which is subject to review and audit at least 12 monthly

Warranty & maintenance info supplied:

The NZ Natural Timber Co provide a Warranty and Owner Maintenance document on completion of each project

Certificate-issuer QA qualifications and audit requirements:

Building Element Assessment Laboratory Ltd. is assessed annually for compliance against the requirements of the BEAL Product Compliance Certificate 'Scheme Rules' on an annual basis and against the requirements of ISO 17067, 17065 and ISO 17021 by QMS www.qmsgroup.org

Certificate-issuer Professional Indemnity statement:

Building Element Assessment Laboratory Ltd. has Professional Indemnity Insurance that covers the scope of work described in this certificate.

Notes:

- 1 - Please contact BEAL if further information is required.
- 2 - Please contact BEAL if further information is required.
- 3 - Please contact BEAL if further information is required.
- 4 - Please contact BEAL if further information is required.

Key features and benefits of this certificate:

Key features include:

1. A two page layout that provides all essential information,
2. The information is presented in a useful, logical order
3. The information is presented to suit typical building consent application requirements
4. The information is available in text format for ease of BCA use

The BEAL Product Compliance Certificate has specifically been designed for use by building consent officers, as well as for designers and tradespeople

Summary of this presentation:

As stated, recent events across the Tasman and here in New Zealand, have resulted in a loss of confidence and certainty in product approvals and certification'.

Recent events across the Tasman and The BEAL Product Compliance Certificate (Scheme) is aimed squarely at addressing that loss of confidence and certainty

The basis of the BEAL product Compliance Certificate, is a set of Scheme Rules developed in accordance with International Standards and best practice, reviewed and audited by a respected global group of experts

Summary of this presentation:

Certificate-holders will be required to meet a number of requirements, including having an audited Supervisor training programme in addition to the regular annual audit of their risk management system

The BEAL auditors will be trained & approved to International Standards and best practice in order to carry out auditing activities

Summary of this presentation:

Finally, the performance of BEAL as a Scheme Administrator and as a Compliance Assessment Body, will be subject to regular review by an independent Technical and Scheme rules Review Committee

Members of the Technical and Scheme Rules Review Committee will be sure to ensure the Scheme meets both industry and public expectations

Conclusion:



Based on more than 30 years of experience in the building and construction sector, having assessed and approved more than 100 building products, some of which were new and innovative in the New Zealand market, and having instituted a certificate-holder risk management scheme that has resulted in not one major failure, this Product Compliance Scheme has been well thought out

This means that BCA's, users of the certificate and the public at large, including the Government, can be assured of its suitability and reliability over time

Conclusion:

And, with the incorporation of an underwritten indemnity arrangement from BEAL, there is practically virtually no liability attributable to BCA's

End of this presentation ... thankyou.

A New Zealand Product Compliance Certificate

Presented by Colin Prouse

Principal Building Scientist at BEAL

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