

TESTING, INSPECTION AND CERTIFICATION FOR BUILDING PRODUCT CONFORMANCE

What

This simple 'how-to' guide is a supplement to the National Building Products Coalition's Building Products Information – Good Practice Conformity Guide- a document that describes good practice behaviours for those seeking and providing building product information in the building products supply chain.

The BPIG is a tool to support improved building product quality and certainty through increasing the availability and use of appropriate building product information. It includes a checklist for sourcing credible and verifiable evidence of manufacturers' /suppliers' claims.

Sourcing credible and verifiable evidence often relies on conformity assessment,¹ which is a set of processes that show a product, service or system meets the requirements of a standard. A key feature of good practice in conformity assessment is the use of impartial and accredited testing, inspection and certification (often referred to as TIC) of products to establish and verify the claims of manufacturers.

Why

In addition to providing the consumer with what they paid for and instilling confidence in the industry, all building work, including plumbing and electrical work, must be shown to comply with State and territory laws to achieve minimum levels of safety and performance. These laws include requirements for products to demonstrate they are fit for purpose and satisfy the provisions of the National Construction Code (NCC).²

[Evidence of suitability](#) in the NCC is the means to establish that a building product (including materials, components and systems) is fit to be used for its intended purpose. The provisions provide six pathways for establishing conformity assessment for building products, and they are presented as equal or interchangeable. However, they are not equal in assessment rigour.

It is essential to consider the level of risk associated with how the product will be used in the building and have this inform the type of evidence that is most appropriate to provide confidence and trust in product conformity.

Guidance on how to do this is provided in the [ABCB's Evidence of Suitability Handbook](#).

Evidence of Suitability pathways [NCC A5G3 (1)]

- a. CodeMark Certificate of Conformity
- b. Certificate of Accreditation
- c. Certificate from a certification body
- d. Report from an Accredited Testing Lab
- e. Certificate/report from a professional engineer or other appropriately qualified person
- f. Another form of evidence.

¹ Defined by ISO/IEC 17000.

² The focus of evidence of suitability for this document is Volumes One and Two of the NCC, but TIC principles also apply to Volume Three and in particular WaterMark.

At the same time electrical and telecommunications products suitability requirements sit outside of the remit of the NCC. Electrical safety matters are regulated separately by each Australian state, territory and New Zealand, with reference to the wiring rules standard AS/NZS 3000:2018; and the Telecommunications Regulations 2021 applying AS/CA S008 requirements for customer cabling products.

How

There are three main methods of conformity assessment³ that can be used individually or more often in combination by a Conformity Assessment Body (CAB):

- 1. Testing** – determination of one or more of a product's characteristics and performance to NCC requirements and against the referenced standards where they exist, performed by an ISO/IEC 17025 accredited test laboratory. This may include testing to an equivalent or more severe test than the NCC nominates.
- 2. Inspection** – the periodic review of products and inspection of manufacturing facilities by an ISO/IEC 17020 accredited inspection body to ensure consistency with products tested and certified.
- 3. Certification** – an impartial third-party evaluation of product claims to demonstrate fulfillment of specified requirements by an ISO/IEC 17065 accredited conformity assessment body (CAB).

In Australia accreditation of those undertaking testing, inspection and certification is provided by the Joint Accreditation System of Australia and New Zealand (JASANZ) and the National Association of Testing Authorities (NATA).⁴ This accreditation is performed to ISO/IEC standards.

The value of accreditation is immense as it allows for trusted impartial validation and declaration of the competence of the bodies undertaking the testing, inspection and certification, which are subjected to audits and the potential for sanction by the accreditation body.

CAB's can provide product conformity schemes offering different levels of assurance and ongoing surveillance (known as scheme Type). CABs will perform their function according to the Type of scheme, the rules contained within it and their scope of accreditation. Accreditation is typically a requirement of product scheme rules.

Some schemes are government owned, such as CodeMark and WaterMark, while some are owned by private organisations and industry bodies. Some may be Australian based, while others are international.

When selecting a scheme to undertake the assessment, or when reviewing the assessment results, the rigour and transparency provided by the scheme Type should be evaluated to ensure it is appropriate to the level of risk associated with the product's used in the building.

In addition to a certificate issued under CodeMark Australia [evidence of suitability pathway NCC A5G3 1) a.], if evidence is to be established through a certificate from a certification body, as per evidence of suitability pathway NCC A5G3 1) c.), they must be accredited by JASANZ. If relying upon a report from an Accredited Testing Laboratory [evidence of suitability pathway NCC A5G3 1) d.], the laboratory needs to be accredited by NATA or an organisation outside Australia accredited to undertake the relevant tests by an authority recognised by NATA through a mutual recognition agreement.).

The NCC contains prescriptive provisions, often in referenced standards, against which products can be assessed to determine if they are fit for purpose. In some cases, however, new and innovative products are developed for which no referenced standard is available. In these circumstances, the NCC provides pathways for product innovation through impartial analysis to determine if it is fit to be used for its intended purpose and against which provisions it is assessed as performing to. This process, which should be performed by an accredited CAB, needs to establish evidence of compliance with nominated NCC Performance Requirements and scope of use (including any limitations).

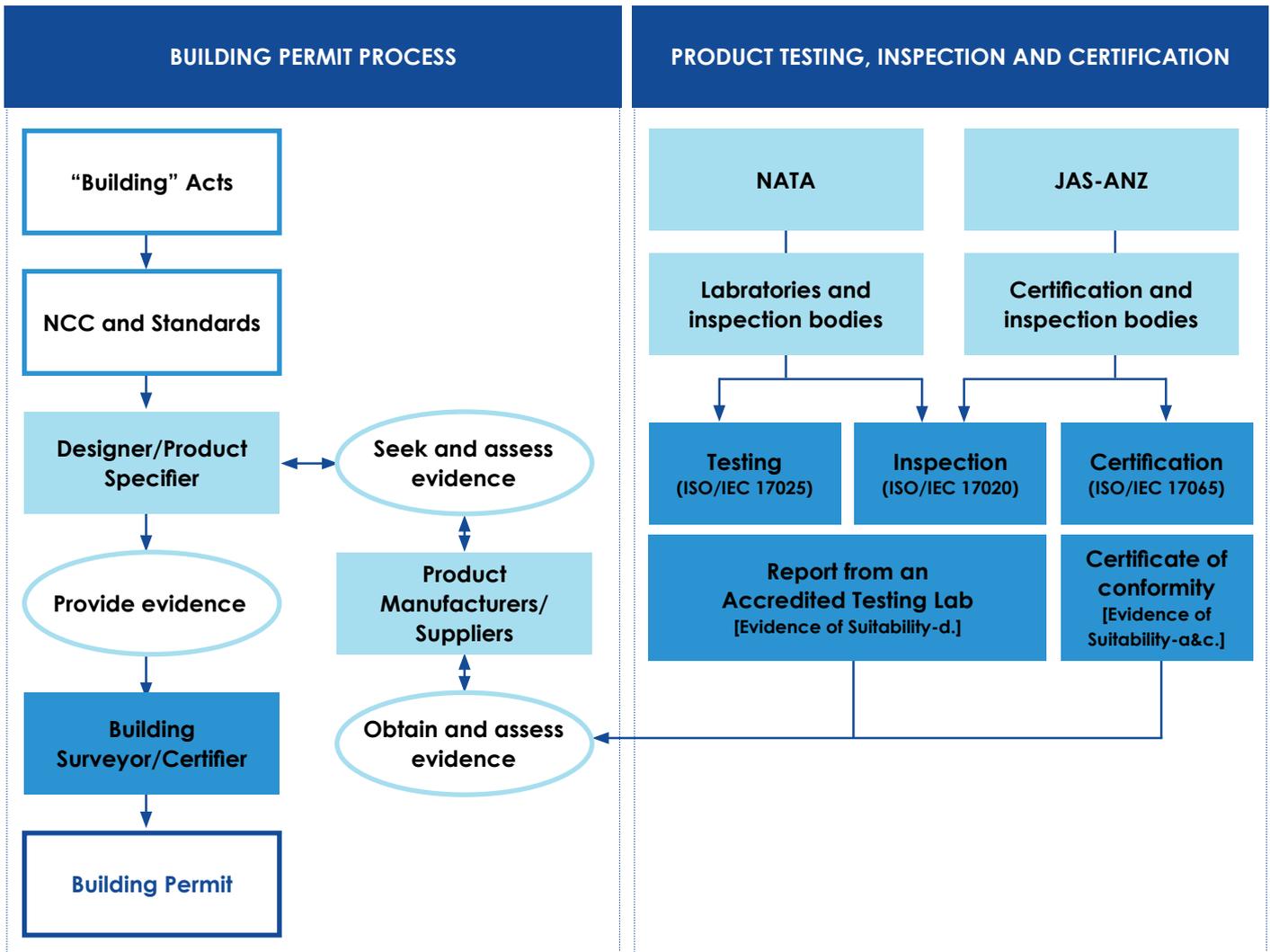
³ These are detailed in the [CASCO \(ISO Committee for Conformity Assessment\) Toolbox](#).

⁴ NATA and JASANZ are signatories to the Mutual Recognition Arrangement of the Global Accreditation Cooperation Incorporated. This is an organisation created by the 2026 merger of the International Laboratory Accreditation Cooperation and the International Accreditation Forum Mutual Recognition Arrangement and provides a framework for trust of testing laboratory data globally.

Testing, Inspection And Certification For Building Product Conformance

In securing appropriate product conformance information, it must be remembered that the purpose is to provide the registered building surveyor/certifier, who has responsibility for determining whether to issue a building permit, the appropriate evidence of suitability (test reports, certificates or other product information) that can be verified to confirm how specified products perform and comply with the NCC and the relevant Australian standards.

The following diagram depicts key features of the Australian building approval and product conformance infrastructure as described:



Disclaimer:

While the National Building Products Coalition has taken every care in preparing this document, it should not be relied upon as the basis of any requirements of the National Construction Code and State and territory jurisdictions as they relate to building work or the use of building products.