INDUSTRY GUIDE

building product facilities









Many building products require testing to verify they meet relevant technical standards under applicable Australian building laws or voluntary codes. However, having something tested is not always as straightforward as people might think. It's important that they devote time and effort into understanding what they are trying to achieve and how to go about it.

This guide provides information on choosing and working with an accredited facility for anyone needing to determine conformity of a product with a particular standard, specification or code – be they a manufacturer, importer or supplier.

The objective is to facilitate the supply of conforming products to the market.



why use a NATA accredited facility?

NATA accreditation is about confidence – yours and that of your customers – in the data and information on which you must make informed decisions.

NATA accreditation covers those activities that produce this technical/scientific data and information.

In NATA's vocabulary, accreditation has a very specific meaning.

A procedure by which an authoritative body gives formal recognition that an organisation is competent to carry out specific tasks.

Hence, NATA accreditation is a high-level process of recognising collective, specific and demonstrated competencies. The core of NATA accreditation is the third-party, objective, peer assessment process that, at a scientific and technical level, provides assurance of the facility's capability to produce reliable data from particular analyses. The NATA Accreditation Criteria includes the international standard ISO/IEC 17025, General requirements for the competence of testing and calibration facilities which is used globally for accreditation.

In addition to confidence, NATA accreditation provides you with:



An ability to outsource to an independent, objective authority, the monitoring of facility performance;



International arrangements providing for the mutual recognition of data produced by facilities accredited by NATA and equivalent accreditation bodies globally;



A resource to resolve disputes relating to facility services.



what building product testing activities are accredited by NATA?

NATA accredits testing, inspection, measurements and examinations performed in accredited facilities, mobile facilities or in situ for a range of disciplines and broad array of product types including:



Cementitious materials



Membranes fasteners



Plumbing and drainage fittings



Timber and engineered timber products



Concrete products



Fire detection and protection systems



Gas appliances and fittings



Wall, floor and ceiling panels



Sealants and adhesives



Insulation



Roofing Materials



Windows, doors and related products



Electrical wiring and fittings



Plaster board



Liners and steel products



is the facility accredited for what I need?

A facility's NATA accreditation may not cover every service it provides, so it is important to ask the correct question when seeking to have your product tested.

"Do you hold NATA accreditation for [the specified tests] of [the specific product type]?"

NATA accredited facilities are able to add the NATA endorsement to reports covering accredited activities. As such, it is more straightforward to say that "I want all test results reported to be NATA endorsed".

The results for which an accredited facility has successfully demonstrated practical competence and capability at a NATA assessment are detailed in its Scope of Accreditation.

Scopes are publicly available documents and are the primary source of information for anyone wanting to have something tested or inspected. They are accessible from the NATA website at www.nata.com.au.



limited scopes of accreditation

As such, when checking a facility's scope of accreditation, it is important to clarify any limitations on their capability.

A facility may not have every test, measurement and examination described in a particular standard, code or specification included in its scope of accreditation.

It should be noted that an accredited facility is permitted to include the results of tests or inspections not covered by its scope of accreditation on a NATA- endorsed report, provided any such results are appropriately identified as not being covered by the endorsement. If you need all activities to be performed under the facility's scope of accreditation, make this clear from the start.

For example, some facilities may only have a limited capability with regard to the list of activities specified in a standard. Where one or more activities can be performed validly in isolation – that is, they are not contingent on the product sample already having undergone another examination – NATA may accredit the facility for a subset of the standard, code or specification.

That is why it is so important to specify that "all results reported must be NATA-endorsed".



NATA - endorsement what's the significance?

The NATA endorsement consists of the NATA logo, the facility's accreditation number, and the International Standard with which the facility complies. This will be presented similarly to the following.

Accredited for compliance with ISO/IEC 17025

Accredited for compliance with ISO/IEC 17020

Accreditation number xxxxx

In addition, the following statement may be added for those who require international recognition of the reported results: NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing provider and reference materials producer reports and certificates.



NATA endorsed

VS

unendorsed reports - cost / benefit

NATA requires that all activities described in the scope of accreditation are performed using exactly the same processes and to the same level of confidence, whether reported on a NATA-endorsed report or not.

Some facilities, however, apply a surcharge to issue an endorsed report for commercial or marketing reasons.

For you, as the customer, the NATA-endorsement provides prima facie evidence that the results within the report have been issued under the facility's NATA accreditation. You can have the confidence the tests have been undertaken by competent staff using sound science/ engineering as verified by NATA's peer assessment processes.

Similarly, your own customers and auditors (if your business is subject to some form of external oversight) may share this confidence.



the issue of fraudulent reports

It is an unfortunate fact that falsification and alteration of test reports is a growing issue in markets. We are well past the days of white-out and clumsy edits to critical numerical results, as technology has made extremely "high quality" fakes and alterations nearly undetectable without forensic examination.

If you are going to rely on test reports supplied from somewhere in the supply chain, it is important to exercise care to ensure that the content is legitimate.

Even if you can ascertain the report was produced by the facility from which it appears to have come, you should make additional enquiries to ensure it actually applies to the product with which you are dealing.

Such checks should always start at the source. Verify with the facility that it is, in fact, one of their reports and that the details of the product identified are those of the product being tested.

If doubt remains, contact NATA to discuss other possible avenues to verify the report's legitimacy.





what do l need to specify?

Simply dropping off a product sample at a facility and saying, "I want it tested" is not the best approach – yet it happens.

NATA accredited facilities will happily assist you with defining your needs, but they do need some specific information first.

Once you have ascertained that the facility is appropriately accredited, the next step is to ensure clarity around:

Why you need their services – e.g. one-off investigation, regulatory compliance, ongoing routine production testing, market surveillance etc.;

- Any specifics for sampling your own, or those relating to a standard/ specification;
- What tests and examinations you wish to have performed;
- The standard, code or specification that is applicable to the product;
- Where appropriate, the test method to be used (if the standard, code or specification allows for options);
- Whether the test is for export purposes as this may impact on the selection of test criteria.

This gives the accredited facility a starting point for determining its ability and availability to undertake the work.



test or inspection plans

For products that require a series of tests or inspections and possibly other considerations such as preconditioning, it may be desirable – or necessary – to develop a plan in conjunction with the facility.

Test or inspection plans ensure there is no ambiguity in requirements and are also very useful when:

- Multiple activities have some consequential aspects (if-then-else);
- There may be a choice of specification limits based on the design application of the product;
- There are customer specified conditions accommodated by the standard or specification – e.g. environmental.

what do I do if my requirements change?

Where there is a standing arrangement or contract for samples to be routinely examined – such as under a certification scheme – you need to notify the facility of any changes to the requirements.

Accredited facilities will, however, contact the customer if the sample type changes if the integrity of the sample is in doubt.

Any material change to such a standing arrangement must be made in writing and confirmed by the facility.



why do market surveillance testing or inspection?

Market surveillance examination may be undertaken for a variety of reasons by different players in a market:



 A regulator may wish to check compliance with a regulatory requirement.



A manufacturer/supplier may have a product tested as part of their quality assurance process.



A manufacturer/supplier may suspect their competitor's product is non-compliant with a code or regulation.



 A product certifier may use surveillance testing as part of their certification system.

Testing or inspection is rarely inexpensive (particularly when done properly) so surveillance activities are not usually performed without a good reason – be it driven by competition or the management of risk. The cost can, however, be managed by focusing on those aspects of a product or material that are either suspected of being deficient and/or the aspects that present the most risk should they be non-conforming.

The complexity of some supply chains and the risks associated with putting non-conforming product on the market make undertaking some level of surveillance activities highly desirable and, in many cases, an investment rather than an expense.



what is important with samples, and samples management?

Sample integrity

The best quality testing service available is effectively useless if samples are compromised by:



Poor sample selection/preparation;



Inappropriate storage and transport (e.g. temperature, shock, vibration, water ingress); and



Incorrect identification.

Samples supplied to a facility are supposed to be representative of the product that will be supplied to the market. Compromising the integrity of the samples will waste everyone's time and money.

Supplying the correct amount/number of samples

Some codes and standards, as well as product certification regimes, are specific about the number and size of samples that need to be tested.

Ensuring that you supply the correct amount of material and/or the correct number of samples as this will save angst with the facility and minimise your costs.



"Samples tested as received"

This statement is usually applied to test reports when the facility has not been responsible for the collection of samples. Use of this statement does not, however, remove the responsibility of the facility to test samples that are in a satisfactory condition.

Facilities are required to have procedures covering the acceptance of samples for testing.

If a facility receives a sample that does not meet its acceptance criteria, the facility must contact the customer and ascertain what action to take.

The best option is to provide another sample, but this is not always possible.

In such cases, the testing may be undertaken, but the test report must include comments regarding the nature of the problem(s) with the samples and, where applicable, state that caution is required when interpreting the result(s).

Such caveats may have serious implications regarding the intended use of the report, such as demonstrating compliance with a specified code.



what should I do with test/ inspection reports?

NATA's accreditation criteria detail needs to be included in a report. Regardless, customers should still check any test report received to ensure that:

- It matches the sample(s) provided for testing;
- It references the agreed standard, code, specification and/or test method;
- The results are reported in the manner prescribed by the applicable standard, code or specification;
- Any statement regarding sampling reflects the arrangements as understood by the customer;
- Any additional information that was requested - such as photographs of the test configuration - has been included.

Unless the facility performing the testing or inspection has been involved in the sampling, the report may include a statement to the effect that "samples were tested as received". This indicates that the customer has been responsible for providing the samples to the facility in an appropriate manner.

If the sampling has been performed by another accredited facility or an accredited inspection body, details of the sampling should also have been provided in a NATA-endorsed report.



how should testing or inspection be used in supply decisions?

Testing or inspection is a conformity assessment activity used to determine whether the product or material under test meets one or more defined criteria.

The results of the activity apply to the particular example of the product, or the sample of material, that actually underwent examination.

Basing the supply of a product solely on an initial (type) of test or inspection can be fraught, unless there is also a high level of confidence in the reliability and consistency of production.

In some very specific cases where:

 A sample can reasonably be taken as representative of a defined batch of material (e.g. it is demonstrably homogeneous); and The facility has control of the sampling in accordance with a validated plan;

it may be appropriate to interpret the result as being representative of the batch.

Except for such specific cases, a result is specific to the sample or item(s) actually examined.

As such, the decision to use the result as representative of a larger batch of material or a serially produced product is not one for the facility to make.

Their role is to provide reliable data on which such decisions can be made.



Decisions on how a result is to be used should occur downstream in the supply chain in order to ensure the interests of the purchaser and/or consumer are protected.

Product certification bodies (ideally accredited by JASANZ or a JASANZ MLA Partner) can play an important role in resolving the possible disconnect between individual results and the commercial supply of products.

Many product certification systems incorporate production tests or inspection, and some even include market surveillance in order to ensure that what goes into the market remains compliant with the relevant standard, code or specification.

Even where a certification may be based on an initial or type test, a supplier should consider the product's risk profile and undertake an appropriate level of surveillance testing.



how else can I protect my business?

This ensures that you have evidence of the way the test was performed and your customer can see that the product being examined matches the one you are supplying. If a facility will not provide this additional service, consider seeking another facility.

Unfortunately, not all building products supplied to the market conform to applicable standards, specifications and codes. To ensure yours do, there are some additional points to consider.



Photographs - While good practice, it is not an accreditation requirement for a facility to include

photographs of what is being tested and how the activity is being performed. For complex products - especially where the test setup affects the results or where accurate product identification is important for regulations — include photographs (with close-ups) in your test report as a required part of your test request.



Witnessing - As the facility's customer, you are entitled to ask to witness any activity performed.

Remember that the facility is obliged to protect the information of all clients so, if they are undertaking work for another customer, they will need to shield this from you. Hence, witnessing should be arranged with due notice so that everyone's confidentiality can be protected. Witnessing does not permit you to exert influence over the testing or inspection outcomes.





Product identification and traceability - Not all products submitted for examination are necessarily easy to track and/or may lack any formal identification. You need to ensure that your own records contain adequate information on matters such as the supply chain, batch numbers, and any other information that

will allow you to trace the product once it is in the marketplace. Where a standard or specification requires identification of the item under test to be included in the report, failure to provide such information may delay testing or inspection and could result in a report that certifiers or regulators will not accept.

communication is the key

The key to successfully gaining reliable result data is effective communication between the facility and client.

Mutual understanding doesn't just happen; it must be pursued.

Two particular points to remember:



Initial clarity surrounding the purpose of the request will aid all subsequent discussions and greatly improve the likelihood of obtaining the appropriate services;

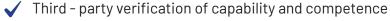


Communication shouldn't be a once-off event – if you have questions after receiving the test report and something seems odd or doesn't make sense, ask.



summary





- ✓ Compliance with international standard for facilities
- ✓ International recognition of results

is the facility accredited for the service I need?

- ✓ Ask the right question regarding NATA Accreditation
- ✓ Check facility's Scope of Accreditation

what do I need to specify?



- ✓ All results to be NATA-endorsed
- ✓ The purpose of the test
- ✓ Applicable standard/specification✓ When you need the results
- ✓ Test methods

what is important with samples to be tested?



- ✓ Collection who, sample plan, amount and number
- ✓ Identification, traceability and labelling
- Maintaining integrity during transport

what should I do with my reports?



- Check that report is clear and complete
- ✓ Make sure report is NATA endorsed
- ✓ Take note of any comments
- ✓ Use the results to benefit your business!



help is available

NATA also recognises that, despite best intentions and a robust accreditation system, things may go wrong. If you are experiencing difficulties with any NATA accredited facility and have not been able to resolve them through direct discussions, it is recommended that you contact NATA to discuss the general nature of any concerns. You should then follow this up with a written account of the issues.

NATA has a comprehensive complaints handling process and treats any issues raised very seriously.

In the Materials, Assets and Product sector, please direct inquiries to:

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Ph: 1800 621 666

Email: diane.hobday@nata.com.au