BUILDING PERFORMANCE

Product Assurance Decision Tool

This tool is particularly useful for those who may be importing building products into the Aotearoa/New Zealand market for the first time.

The tool can help you decide the best way to meet your Building Act responsibilities and show your building products or systems comply with the New Zealand Building Code (the Building Code). The tool can also help you to understand the building product information requirements and how you might meet these requirements.

The Ministry of Business, Innovation and Employment (MBIE) originally developed this decision tool following workshops with building consent authorities (BCAs), product manufacturers and suppliers, designers and others in the building industry. It has been updated to reflect building system reforms, including building product information requirements that commenced on 11 December 2023. If you use this as a worksheet the information could:

- > contribute to your business planning
- > help brief a testing specialist
- > help you to apply for further assessment; and
- contribute to the process of collating, producing and disclosing building product information that meets regulatory requirements.

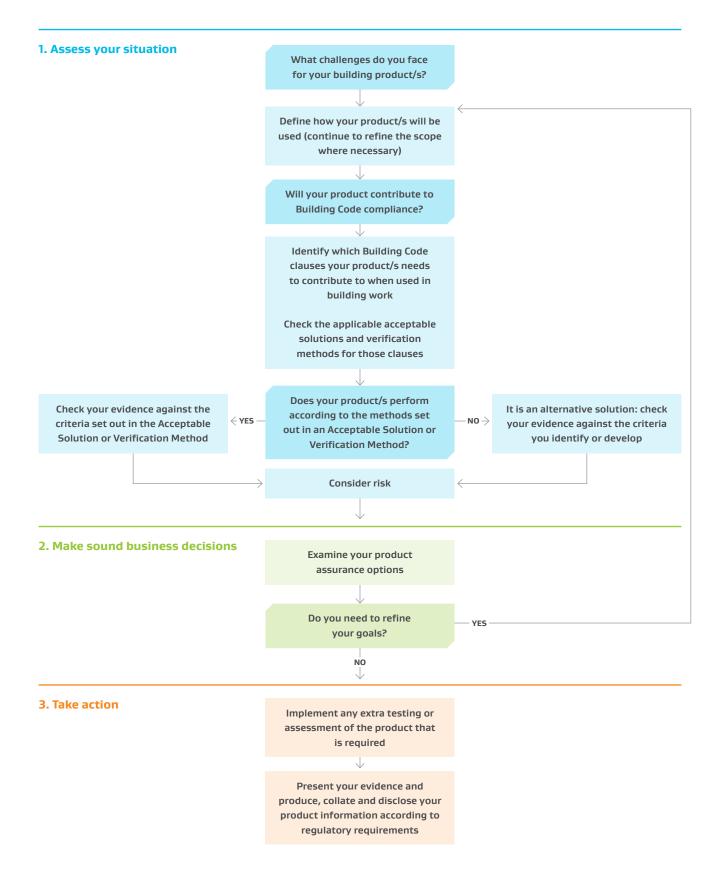
You can find out more about product assurance and building product information requirements on the <u>Building</u> <u>Performance website</u>. The website content adds further information and context to the information contained in this tool including:

- More information about the <u>Building Code</u> and how this applies to your products and systems;
- Tips and tools for deciding if the <u>building product</u> information requirements apply to your building product/s and guidance on preparing and disclosing your building product information;
- Links to <u>information about individuals and</u> <u>organisations</u> that can help you with product compliance, testing and other requirements.



MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT HĪKINA WHAKATUTUKI

Quick Guide to the Product Assurance Decision Process



Step 1: Assess your Situation

Identify your Business Goals and Challenges

What are your goals for your building product or method, and what challenges do you face getting it accepted in the market or achieving Building Code compliance?

i

It is essential to pinpoint these issues before you go any further, so you invest in the most appropriate forms of product assurance.

Answer the following questions:

How distinct, unique or innovative is your product? Is it just an improvement to an existing product line or is it a radically different solution?

Are you having problems getting a foot in the door with trade merchants, designers, builders or consumers? Which groups, and what do you think the problems are?

What is the market size and your share? Is your product likely to be used in a few niche instances or is it possible it will be used universally?

What is the quality of your evidence base for the product? Has the product only been tested overseas or has it been subjected to Aotearoa/New Zealand-specific testing (if applicable)?

Are you facing challenges proving Building Code compliance to BCAs? Are you successfully proving compliance but facing additional costs and delays each time your product is specified?

If you make or distribute a range of building products, are there issues across the whole range or just specific products or zones (eg wind or seismic zones) or uses? What percentage is this of total sales and is it an appropriate use of the products?

Is there anything else causing you extra difficulty, time or expense?

Define How your Building Product will be Used

Before introducing a building product or system to the Aotearoa/New Zealand market, you need to establish how it will be used i.e. its purpose and intended use as this affects what you need to do to show Building Code compliance.

You should also look at your building product in the context of the system it forms part of, not just as an isolated product. For example - for a cladding system you need to consider the cladding itself AND how it integrates with the building wrap, the window system and other aspects of the building envelope.

This is critical when you are deciding which product assurance option to choose.

Answer the following questions:

How will your product be used? (eg as a structural element, as decking, as wall lining etc)

What conditions will it be used in? (eg in earthquake or high wind zones)

Does your Product Contribute to Building Code Compliance?

The Building Code has 37 technical clauses covering such areas as building stability, fire safety, moisture and durability. Check to see if your product or system, when used in building work, contributes to compliance with any of these: this will depend on your product and how you plan to use it.

While not all Building Code clauses will be relevant, you will probably have to satisfy at least three: the performance claimed (eg for a tap, this might be against the performance requirements of clause G12 Water supplies, clause B2 Durability and clause F2 Hazardous Building Materials).

You may come back to this stage and limit your product's purpose and scope of use, so you have to address fewer Building Code clauses. For example, if your product is a decking timber you may decide to limit its use to areas that are not access routes if you have no evidence of its slip resistance. This can make it easier to prove Building Code compliance for a new product, or to seek a product appraisal or certification.



The Building Code describes how completed building work must perform rather than how a building must be built. The Building Code does not prescribe which materials, building methods or products should be used in building work. What this means is any product or system can be used in a building as long as it meets the relevant performance requirements of the Building Code.

Examples of products not covered by the Building Code include kitchen cupboard door handles, architraves and curtain rails. Examples of products covered depending on their use are internal doors (these are covered by the Building Code if they are fire doors or have access requirements, but generally not otherwise).

What Building Code Clauses are Relevant to your Product?

Your notes:

Establish What you Need to Show

You will need to provide evidence to show how your product, when used in building work, contributes to the performance requirements of each relevant Building Code clause. You can do this by:

- providing products that perform according to the methods set out in an Acceptable Solution or Verification Method for a particular Building Code clause; or
- considering other ways to show your product meets the relevant performance requirements; ie providing an alternative solution

MBIE publishes Acceptable Solutions (step-by-step building methods) and Verification Methods (calculations or test methods) relating to specific clauses of the Building Code. Following these documents exactly (along with any tests or standards cited in them) is one way – but not the only way – to show your product/s contribute to compliance with the Building Code. Building designs based on these documents must be accepted by BCAs as Code compliant. To comply fully with an Acceptable Solution or Verification Method, your product must meet all their requirements and you must have evidence to show this. Otherwise, your product will have to follow an alternative solution. Check the Acceptable Solutions and Verification Methods for each of the relevant Building Code clauses. If your product can follow one of these, the criteria it has to meet are clearly set out in these documents. If you have to provide an alternative solution to show compliance with a particular Building Code clause, you need to identify or develop criteria that, if met, will demonstrate compliance with that Building Code clause. You then need to evaluate your product against those criteria. When considering what this might involve, you may find it useful to:

- compare your product against a relevant product standard referenced in an Acceptable Solution or Verification Method.
- compare the product to another document (eg an Aotearoa/New Zealand or overseas standard, other technical information, test results or research).
- > look at in-service history and performance of a similar product within Aotearoa/New Zealand or in similar conditions.
- identify any <u>relevant determinations issued by MBIE</u>. Is there a determination on a situation where a similar product is specified? As determinations relate to a particular case, their application may be limited. However, they do provide sound guidance on the application of the Building Act and Building Code at a particular time.

List which (if any) of the relevant Building Code clauses you believe you can follow an Acceptable Solution or Verification Method for. Summarise your supporting evidence, noting any gaps.

List which (if any) of relevant Building Code clauses you will need to follow an Alternative Solution for. Identify any evidence you already have to demonstrate Code compliance and what additional information you are likely to need.

Understanding what Building Code clauses are relevant to your products will help you collate and produce building product information to meet building product information requirements where your product is a designated building product.

Where your product does not contribute to compliance with the Building Code, you will not be required to meet the building product information requirements. However, where your product does contribute to compliance with the Building Code, you will need to meet information requirements, regardless of whether a Building Consent is required for the building work in which the product is used.

Step 2: Make Sound Business Decisions

Consider Risk

Unless you already have all the evidence you need to show how your product contributes to compliance with the Building Code, your next step is to decide what product assurance options to pursue. An important component of this decision is the risk that your product will not be accepted by the Aotearoa/New Zealand market as Building Code compliant. You need to decide how much time and money to invest in managing this risk and still get an acceptable return.

Your business decision will depend on:

- > Technical factors such as how much the product varies from common practice and from the relevant Acceptable Solutions and Verification Methods, the consequence of product failure, the service and testing history of the product in New Zealand, product durability; and
- Commercial factors such as likely revenue from sales, cost of the appropriate product assurance options, whether the product is new or innovative, how long you expect your product to be in demand, and market perception of your product and of its manufacturer or supplier.

BCAs may also take a risk-based approach to the use of your product. However, their perspective will be different as they will consider its use in the context of a particular building consent application. The more risk the BCAs perceive, the more certainty they will want around Building Code compliance before granting a building consent containing your product.

The following framework may help you consider your product's apparent risk and identify areas where this could be reduced if necessary (eg by providing better installation information or by limiting the situations the product can be used in). In turn, this can help you decide what product assurance options to pursue.

For the purposes of this risk framework, "failure" is defined as failure to meet the relevant requirements of the Building Code.

What is the likelihoo	d of failure?
-----------------------	---------------

Rare	Unlikely	Possible	Likely
Only in exceptional circumstances	Would not be expected	May happen at end of	Might happen in
	to happen in durability	durability lifetime of	durability lifetime of
	lifetime of product	product	product

Factors influencing your product's rating

You should consider a range of factors when deciding where your product or system might sit on this scale, including:

- > **Previous evidence of failure**: have there been any problems in the past with your, or similar, products? Have there been any changes made (eg to installation methods or product components) to reduce or remove this risk?
- > Installation: is the product simple to install, does it require some building knowledge, or can it only be installed by LBPs or company-approved installers? If it requires installation instructions are these clear and readily available?
- > Maintenance: how important is maintenance to the product's performance/likelihood of failure? How likely is the building owner to carry out this maintenance, bearing in mind the product's visibility and accessibility? Does a qualified person need to carry out this maintenance? Are maintenance instructions readily available?
- > **Discoverability**: is the product visible during daily use? During maintenance? Is it likely to fail without warning, or would any impending failure be apparent and able to be fixed?

Your notes:

Ways to reduce this rating

Possibilities include:

- > Making changes to the way the product is produced or installed to mitigate previous problems and or the likelihood of failure.
- > Limiting the product or system's scope of use.
- > Implementing or improving a quality assurance system for the manufacture of the product.
- > Improving your installation or maintenance requirements and information (e.g., for complex products or systems, you might require more controls or oversight on who can install the product).

What is the consequence	What is the consequence of failure?			
Insignificant	Minor	Significant	Major	
No risk of harm to building users	Might cause harm to building users	Causes injury or illness and/or financial loss	Potential loss of life and/ or substantial financial loss	

Factors influencing your product's rating

You should consider a range of factors when deciding where your product or system might sit on this scale, including:

- > Scale of failure: would this be minimal, moderate (e.g., failure would result in a leak/water ingress) or substantial (e.g., failure would render the building uninhabitable)?
- Impact on other building components: would any product failure be isolated, or could it affect other building components? How serious could this be?
- Notice of failure: would there be any warning of failure so that any impact on people's health and safety could be addressed before this was serious or, in an extreme case, to allow people to evacuate before the building collapsed?
- > **Financial loss:** will failure cause any financial loss to the building owner or neighbouring building owners, and if so to what extent?

Ways to reduce this rating

Possibilities include:

- Making changes to the way the product is installed to reduce the severity of the impact if it did fail (eg you could consider specifying more fixings than required for structural framing so that if one were to fail the remaining fixings would provide enough structural support.
- > Changes to product design to put in place a backup system for any failure (eg backup power for life saving systems such as emergency lighting and/or smoke detector systems).
- > Implementing warning systems if possible eg alerts if a smoke detection system has a fault.

Your notes:

Once you have decided the likelihood or consequence of failure you think apply to your product, you can map these against the risk framework below. Consider whether it is worth investing further in this product or what you can do to reduce the level of risk.



Assessing risk is always subjective. This sample framework is only a guide which may assist you in your decision-making process.

Figure 7: Sample Risk Assessment Framework

nrougl	re likely to be assu h technical inform ependent assessm	ation or			
			CONSEC	QUENCE	
		Insignificant	Minor	Significant	Major
	Rare	Very Low	Low	Medium	High
HOOD	Unlikely	Low	Low	Medium	High
LIKELIHOOD	Possible	Low	Medium	High	High
	Likely	Medium	Medium	High	Very High

appraisals or product certification.

Decide on your Product Assurance Options

Review your <u>product assurance options</u> now you have a better idea what you require to show regarding how your product contributes to Building Code compliance and manage risk. In some cases, you might already be following a particular option but want or need to follow another pathway.

Your options include:

- > Technical information. Note that where your product is a designated building product under the Building (Building Product Information Requirements) Regulations 2022 you will need to meet product information requirements. See Step 3 Take Action for further information.
- > Independent testing and assessments.
- > Industry-based schemes.
- > Appraisals.
- > Product certification (Codemark).

What product assurance options have you already pursued and what further steps do you want to take? Remember – the higher the level of risk the more comprehensive product evidence you are likely to have to provide. **Refine your goals if necessary:** which of your building products or systems – or which uses of them – would you get the most benefit from if you have them tested, appraised or certified? These could be the ones with the most customers or those facing the most issues with BCAs.

<u>CodeMark</u> is a voluntary product certification scheme that provides an easily understood and robust way to show a building product or building method meets the requirements of the New Zealand Building Code. A CodeMark certificate must be accepted by BCAs as meeting the requirements of the Building Code provided the certificate is current and the product or method is used in accordance with the details on the certificate.

It is important to understand the differences between CodeMark certificates and appraisals.

Does it make business sense to do any of the following?

Limit the purpose and use of your products (ie where in the country and where on the building they can be used) so they have to contribute to compliance with fewer Building Code clauses. Consider limiting by physical, geographical or environmental zones (e.g., not in high corrosion or high wind areas) or by how they are used (eg not for structural purposes).

Group your products into families (eg you might have fifty different types of fixings but all with the same manufacturing and installation methods). Consider extra product assurance options for only some of these families (eg those that are widely used in a range of circumstances).

Take things one step at a time: eg for a relatively low risk product, you could concentrate on improving your technical information (using the building product information requirements as a base for this) and have this independently assessed before deciding whether you need a product appraisal or product certification. This may prove to be enough for demonstrating Building Code compliance.

 (\checkmark)

Step 3: Take Action

Implement any Extra Product Testing or Assessments

Depending on the product assurance option you have chosen, carry out any extra testing you need or commission an assessment, appraisal, or product certification.

Make sure any test results you do obtain are relevant to Aotearoa/New Zealand conditions and Building Code requirements.

What further product testing or assessment do you need to carry out? Consider whether you need to engage a third party to help with this.

Assemble and Present your Evidence and Other Required Product Information

Well-presented evidence and compliant building product information will assist BCAs and others in the decision chain, such as designers and builders, to understand Building Code compliance claims and other information about your product/s. Building product information is relevant technical information as opposed to marketing material for your product.

Building Product Information Requirements - Steps to Work Through

The <u>Building (Product Information Requirements) Regulations 2022</u> require manufacturers and importers of building products to collate, produce and publish the required building product information. It is important that you take time to understand whether or not the requirements apply to your building products as there are some exemptions to the requirements.

The Ministry of Business, Innovation and Employment (MBIE) has published <u>comprehensive guidance</u> that provides steps you can work through to decide whether you are required to collate and produce and disclose information to the requirements, what information needs to be provided and how the information needs to be disclosed.

As a summary, to understand whether you are required to meet building product information requirements you will need to work through the following steps:

Step 1: Determine whether the building product/s you manufacture or sell are impacted by the regulations.

Step 2: Determine whether you or your organisation meet the definition of a "responsible person".

Step 3: Determine whether you have a class one or a class two designated product.

Step 4: Is your product/s exempt from the building product information requirements?

Step 5: Ensure that the information disclosure requirements are met for your product/s.

Where you import or manufacture a large number of designated building products, a useful rule of thumb when approaching producing and collating your product information is to consider the following:

- > Understand your role and responsibilities under the regulations.
- > Consider which of your products are covered by the regulations and which products are not.
- > Consider where you can group products on one disclosure or where you have products that are sold as a system.
- Look at what information you already have and can just build on, e.g., you may already product technical statements or technical data sheets for your products and can carry out a gap analysis to assess what regulatory requirements these documents currently don't provide. See the <u>MBIE checklist</u> for assistance.
- > Collate and publish your disclosures.

Further Information About the Building Product Information Requirements

The <u>comprehensive guidance</u> published by MBIE gives information about what you must disclose about your building product/s, how that information should be made available, and how to keep your product information up to date.

There are a number of other resources available on the Building Performance website to assist manufacturers and importers to prepare product information that meets regulatory requirements, including <u>examples of product</u> <u>information for a Class 1 and a Class 2 product</u>, <u>templates</u> for manufacturers and importers to use to create product information, and a <u>step-by-step guide</u>.

Get Expert Help if Needed

We recommend that you seek expert help with product assurance and product information compliance if you do not have suitably qualified staff or existing advisors. You may need help with understanding Aotearoa/New Zealand's building regulations, identifying the most appropriate ways to show how your products contribute to Building Code compliance. You may also need assistance with carrying out technical assessments, testing and other specialist advice to support those technical assessments, and assistance with producing and collating compliant building product information.

Consequences of Not Getting your Product Assurance and Product Information Right

As a manufacturer or supplier of building products, you are responsible under section 14G of the Building Act 2004 (the Building Act) for ensuring that your product/s will, if installed in accordance with the technical data, plans, specifications and advice prescribed by the manufacturer, comply with the relevant provisions of the Building Code. You are also responsible for ensuring that the building product information requirements are met.

If you have made claims about your product/s you must be able to substantiate those claims, and the claims must not mislead people. People who are using your product in building work and using your product information must be able to rely on that information when making decisions about specifying a product, assessing the product as part of a building consent application, installing a product and purchasing a product.

It is an offence under section 362VC of the Building Act to make false, misleading or unsubstantiated claims about building products. It is important that you are accurate and reliable in what you say to people assessing your product assurance and product information.

Where product information is not clear or product assurance is not clear, BCAs may struggle to assess the product when it forms part of a Building Consent application. This may hold up the consenting and require the BCA to request further information.

The Building (Building Product Information Requirements) Regulations 2022, which commenced on 11 December 2023, place obligations on New Zealand-based manufacturers and importers of building products, as well as wholesalers, retailers and distributers.

MBIE's chief executive has powers to enforce the duties and obligations in the regulations.

If a person or organisation fails to comply with their obligations under the regulations, MBIE can:

- > Issue a notice to take corrective action. A person or organisation who has been given a notice to take corrective action must comply with it within a specified period. If they do not, they have committed an offence.
- > Issue an infringement notice.
- > Carry out a prosecution.

Section 362VD of the Building Act provides a number of defences.

In certain circumstances MBIE has the power to require parties to provide information and documents to MBIE for the purposes of taking enforcement action under the Building Act. Failure to comply with a request for information and documents is an offence under section 207A of the Building Act.

If a building or any building work fails to comply with the Building Code due to a building product, or is likely to fail, MBIE's Chief Executive can issue a warning about, or ban the use of that building product under section 26 of the Building Act 2004.

You can also contact us for more assistance



Phone: 0800 242 243 **Overseas:** +64 4 238 6362

Hours: 8.30 am to 5.00 pm, NZT, Monday – Friday If you call after 9.00 am NZT we can use Language Line – a free telephone interpreting service – to provide advice and information to non-English speakers.



Postal address:

Ministry of Business, Innovation and Employment PO Box 1473, Wellington 6140, New Zealand



Email: products@mbie.govt.nz **Website:** www.building.govt.nz/BPIR