



BEAL Appraisal Process Info Pack

Introduction

The idea of evaluating a building product (having an Appraisal) is one endorsed by Governments in Great Britain, France, the Nordic countries, many European countries, and by non-government national organisations such as the ICC Evaluation Service (of the USA), BRANZ, BEAL and many others. An appraisal is a process by which a) the performance of the materials and the assembly of materials are evaluated (tested) and b) the ongoing risks associated with the use of the materials and assembly of materials are monitored and managed. BEAL also ensure that the design of a system is both practical and relatively easy to install.

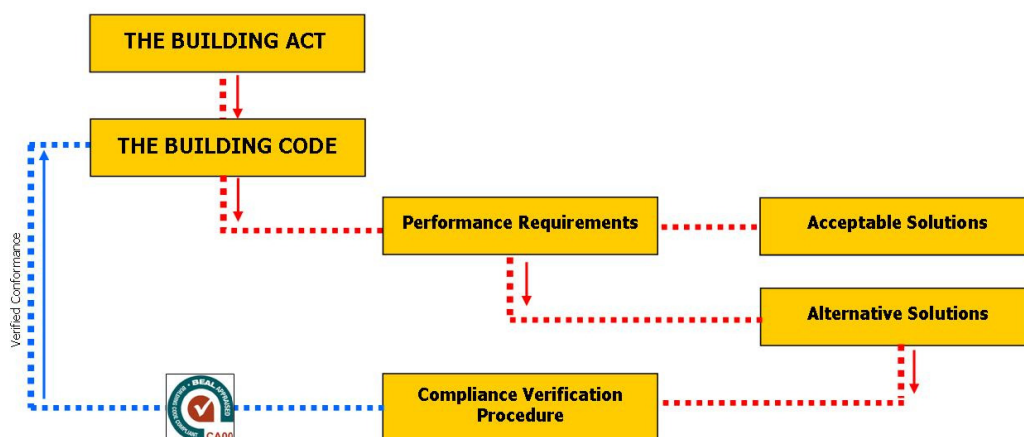
In New Zealand all Building work is governed by **The Building Act**. The Building Act provides for a '**Building Code**' which sets out performance criteria that all buildings, depending on their use, must meet. The Building Code is '**performance based**' meaning it is possible to achieve the performance criteria in many ways. This is intended to encourage innovation in the use of materials, methods and designs.

Demonstrating compliance with a performance based code can be achieved in two ways:

1. By following the compliance paths provided by the Building Act, (i.e. following the requirements of a '**compliance document**')
2. By following a verification process for an '**alternative solution**' which is not described in any compliance document.

Products and systems appraised by **BEAL** use the second method described above to demonstrate a clients product or system complies with the code.

One robust method for verifying compliance with the Building Code is known as the 'Compliance Verification Procedure', which is described in the next section; **Compliance Verification Procedure**.



Compliance Verification Procedure

Context

Consumers, Architects, Engineers and particularly Territorial Authorities all need to know whether or not a building product or system will comply with the New Zealand Building Code when installed according to the manufacturer's instructions. This is a basic requirement for making an application for a building consent as set out in the Building Act 2004 which states: **"All building work must comply with the building code to the extent required by this Act"**

Purpose

The purpose of this Evaluation Procedure is to set out a logical transparent process for determining the compliance of a building product or system with the NZ Building Code, that does not comply with a Government published 'compliance document' known as "Acceptable solutions".

Users

It is intended for use by Territorial Authorities or private Building Certifying Authorities, for manufacturers or importers/distributors, where there is a need to verify compliance, particularly where there are known risks associated with the product or system.

Building Code Requirements

High risk building products and systems, such as cladding systems by way of example, can be evaluated for compliance against all or some of the following Clauses of the NZ Building Code:

- B1 - Structure (usually B1.3.2 and B1.3.3)**
- B2 - Durability (usually B2.3 (a))**
- C3 – Spread Of Fire (usually C3.3.5)**
- C4 - Structural Stability During Fire (usually C4.3.1 and C4.3.2 and C4.3.3)**
- E2 – External Moisture (usually E2.3.2)**
- F2 – Hazardous Building Materials (usually F2.3.1)**
- G5 – Interior Environment (usually G5.3.1)**
- H1 – Energy Efficiency (usually H1.3.1 and H1.3.2)**

It is up to the manufacturer, or importer or distributor to state which clauses of the Building Code the building product will comply with. If they are not sure which clauses need to be complied with, advice from consultants such as **BEAL** must be sought.

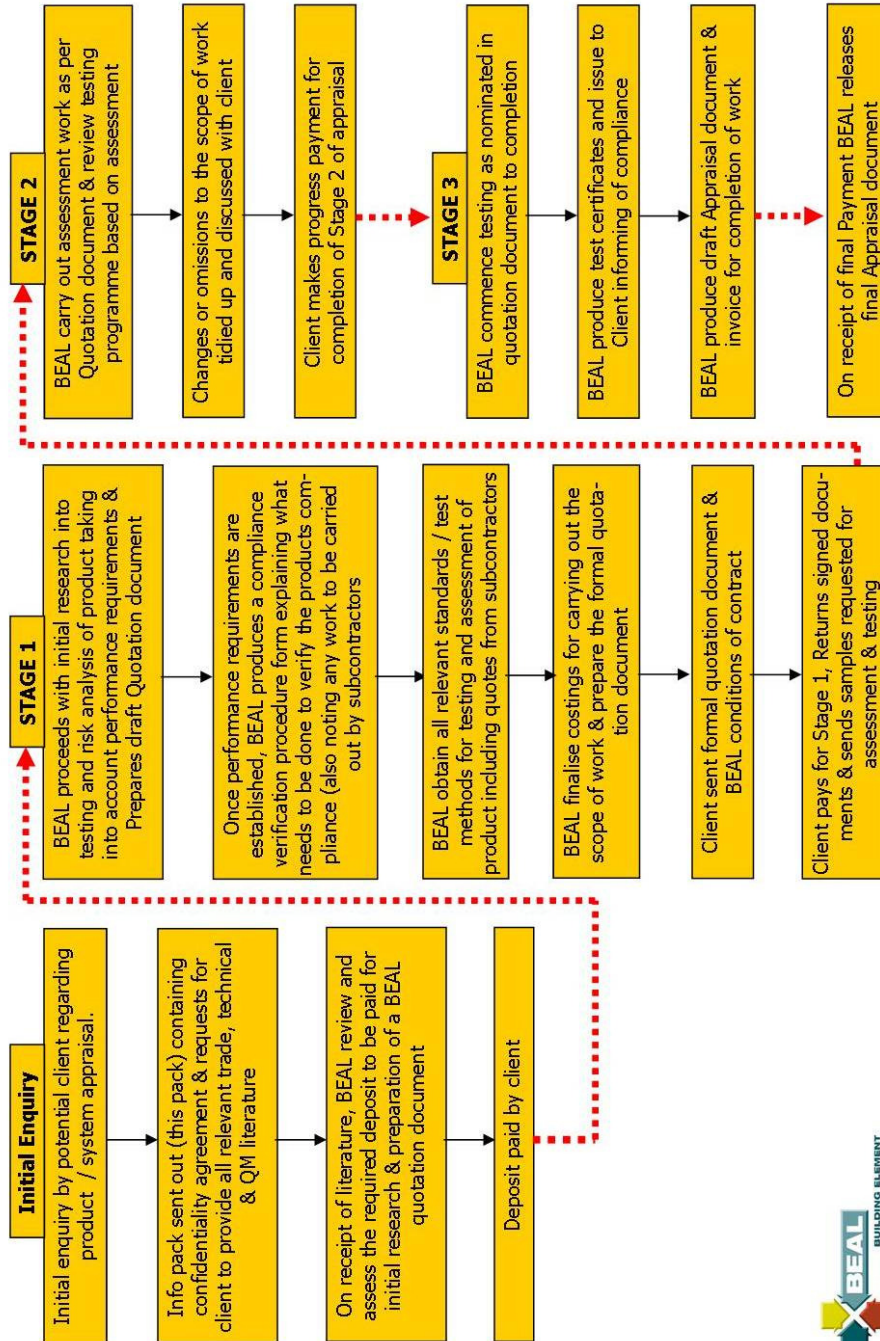
Performance Standards

For each Clause of the Building Code it is essential to use a relevant performance standard or criteria to establish the minimum performance requirements. In New Zealand there are many performance standards, described in New Zealand or Australian Standards and these are usually the most reliable means of establishing minimum criteria. In the absence of a New Zealand Standard other performance criteria must be used, such as use of interim performance standards published by the Building Quality Institute (www.bqi.org.nz). In the absence of either of the above mentioned standards, use of relevant industry organisation performance criteria such as a Code of Practices, may be suitable.

Note: (Though the New Zealand Department of Building and Housing publish 'Compliance documents' as reference documents, care must be exercised when using these as it is known that some documents contain errors or omissions in them or have the potential to mislead. This may have significant legal implications if they are relied upon.)

The next section presents the **BEAL** appraisal process in both graphic and text based form, providing answers and direction to the most frequently asked questions

BEAL Appraisal Process Flow Chart



Frequently asked Questions

How long does an Appraisal take & how much does it cost?

Both appraisal time and cost are dependent on the amount of work and testing that is needed to prove compliance. On payment of a deposit (non-refundable) an initial assessment of what the product or system is claimed to do or perform, and which relevant clauses of the New Zealand (or Australian) Building Code are to be referenced, is carried out. The amount of deposit depends on the nature of the risks associated with the product or system. Once the initial assessment has been completed, a formal quotation document is drawn up and provided to the client for review and acceptance. This initial stage typically takes two to three weeks. The time to carry out the work described in the quotation, depends on how much assessment of the technical information, how much testing, and how much time is required with corrective action requests.

What do I need to provide for an initial assessment of time and costing?

Initially **BEAL** require you to send the following if available:

- copy of the technical manual which usually includes
 - a) a description of the product, its features and benefits, and where it is and is not to be used;
 - b) information about the technical performances of the product or system;
 - c) detailed explanation and drawings showing how the product or components are installed or applied;
 - d) a description of what the owner or builder is expected to do and or provide before the product or system is installed or applied;
 - e) a description of what the installer or applicator is expected to provide and do;
 - f) a check-sheet for the owner or builder to sign to show that they have completed their obligations;
 - g) a check-sheet for the installer or applicator to sign to show that they have completed the work, taking into account any significant risks or issues that may have arisen during the course of the work;
 - h) a copy of the maintenance instructions, if any;
 - i) a copy of the product warranty, if any;
 - j) a copy of the installer or applicator warranty, if any.
- copy of any related trade literature or advice of any web site
- photos of the beginning and completion of the installation/application of the product (preferably digital)
- sample(s) of the product or materials needed to construct/install/apply the product
- copy of any quality management system that covers the product

All product information including technical / trade literature and quality assurance literature will be reviewed as the basis for determining the Scope of Appraisal work. A quotation document will be provided with description of detailed assessment and testing requirements, fees, timetable and samples required.

What do I need to provide for in the way of product / system samples for Appraisal assessment & testing?

Information on the exact quantity and type of samples (either assembled by you prior to sending or as separate components) needed for **BEAL** to complete assessment and testing of your product or system will be written into the formal quotation document which you will receive after initial investigation, risk analysis and performance requirement analysis

If some testing has already been completed overseas will BEAL accept these results as verification of compliance?

BEAL has a written document concerning its policy as to acceptance or otherwise of external data from other laboratories and the like; this can be sent if need be in order for you to confirm whether the data you have is of relevance or otherwise.

How do I know what is required in terms of Quality Management to ensure BEAL's ongoing support of the product or system?

BEAL has a formal document (**TDOC 18 – Your Quality Management System**) outlining what is required in order for BEAL to continue to support your product or system with the appraisal document. TDOC18 firstly explains the need for a quality management system, and then explains what a QMS must have, with questions for you to consider.

Note: (This document is not included as part of this information pack).