



A Review of New Zealand Building Consent
Documentation Quality

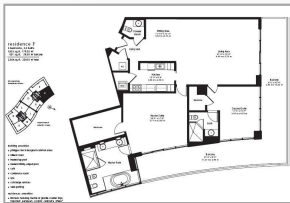
June 2018

Why Conduct the Research?

- Growing pressure on quality & productivity in the New Zealand construction industry
- Declining specification expertise in market
- Anecdotal reports of poor documentation quality for Building Consent applications
- Awareness of use (and abuse) of copied, forged, and out of date specification sections
- Significant time and cost wastage in the consenting process through poor quality documentation

Why Conduct the Research?

To get real data on actual documentation quality of building projects across drawings, specifications, manufacturer's technical information and third party documents in the compliance process



To identify how Masterspec as an industry-owned organisation, can help improve the quality of project documentation, especially in support of the compliance process

Review Methodology

133 sets of documents - The review was quality based but broad enough, in both numbers of sets and in geography, to provide a quantitative indication

7 BCA offices:

Auckland Central,
Takapuna
Manukau
Hastings District
Kapiti Coast
Christchurch
Queenstown Lakes



Review Methodology

Used a standardised template reviewing 5 key areas

- Type of project
- Specification source - a master system, contractor's own system, designer's system
- Specification size and breadth of coverage
- Associated information (appraisals, certificates, producer statements, manufacturers' data)
- Quality of documents (specifications and drawings)

2nd March 2017

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13th February 2017

Specification quality template - Auckland Council, Graham Street

Specifier's name/project name/date:
XYZ Architects, XYZ School, relocatable classrooms, January 2017

Masterspec specification Yes
SmartSpec
Other (e.g. specifier's own)
Mongrel (cobbled together from various sources)

Pro If Masterspec:

- Legitimate (subscriber) Yes
- Used NextGen2 (+ version date)
- Used Link (+ version date) Link - CIL Masterspec 2012 (!!!)
- Not legitimate (i.e. not a subscriber)

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Project type:

- Large/small
- residential
- residential alteration
- commercial/industrial Small commercial (school building)
- commercial/industrial alteration/refurbishment.

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Number of sections: 7
Number of pages: 30

Use of branded sections (and number of branded sections):
Diamond GRP, Marley Rainwater

Use of addenda and type
(Producer statements, BRANZ/other appraisals, PTS, manufacturer's data)
None directly attached

Quality check:

- Hidden text remaining? No
- Tildes remaining/not completed? No
- Selections sections incomplete? No selections sections used
- Unrelated data (generic or branded) not removed? Moderately customised
- And in which sections?
- Other faults:
- Latest version of Masterspec not used (2012 for a 2017 project)
- General comments:
- Mix of Minor and Basic
- Tidy spec but very simple, for a simple project.

On
Go

Qualitative Assessment

GOOD Complete in every aspect, or with only minor faults

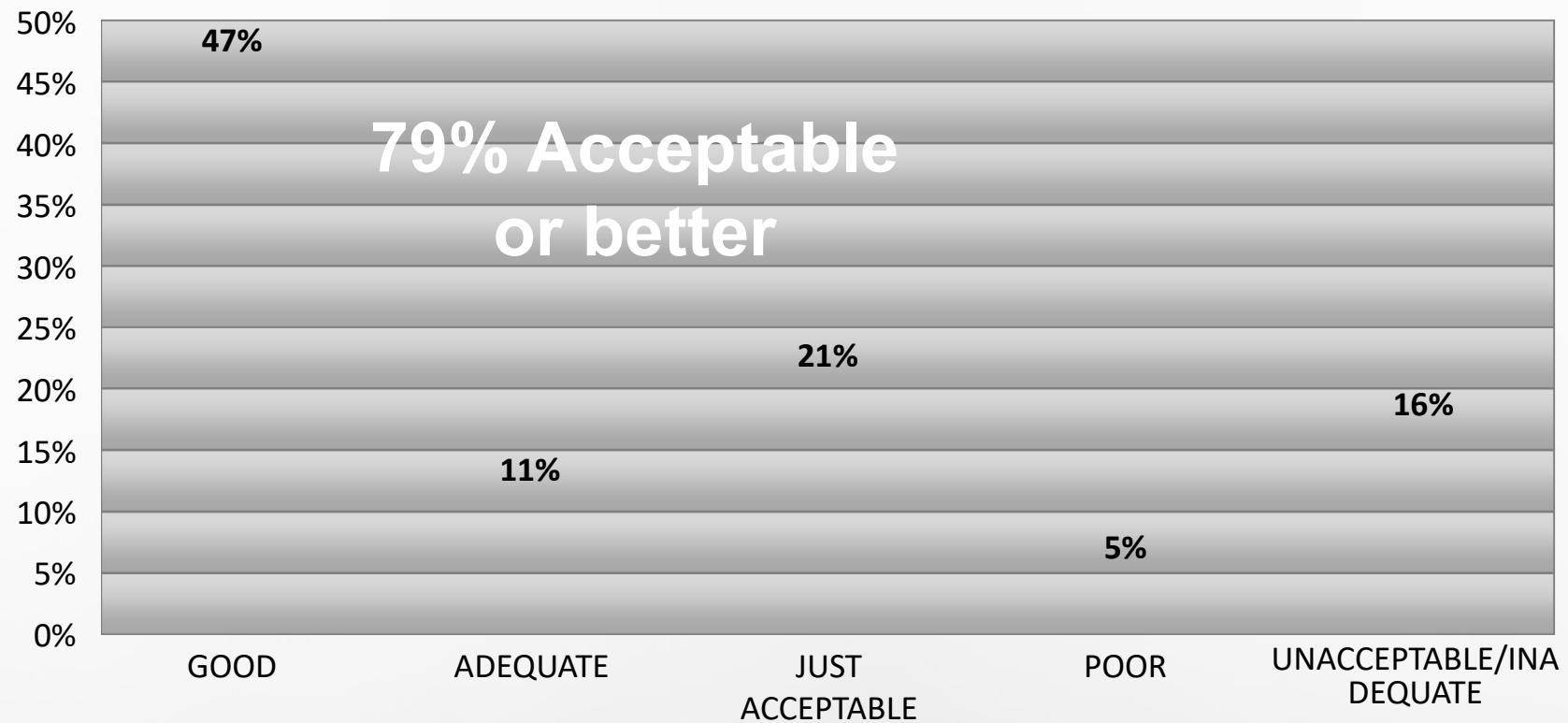
ADEQUATE Reasonable standard but some missing project content & default entries

**JUST
ACCEPTABLE** Included some obviously pirated content but some evidence of customisation

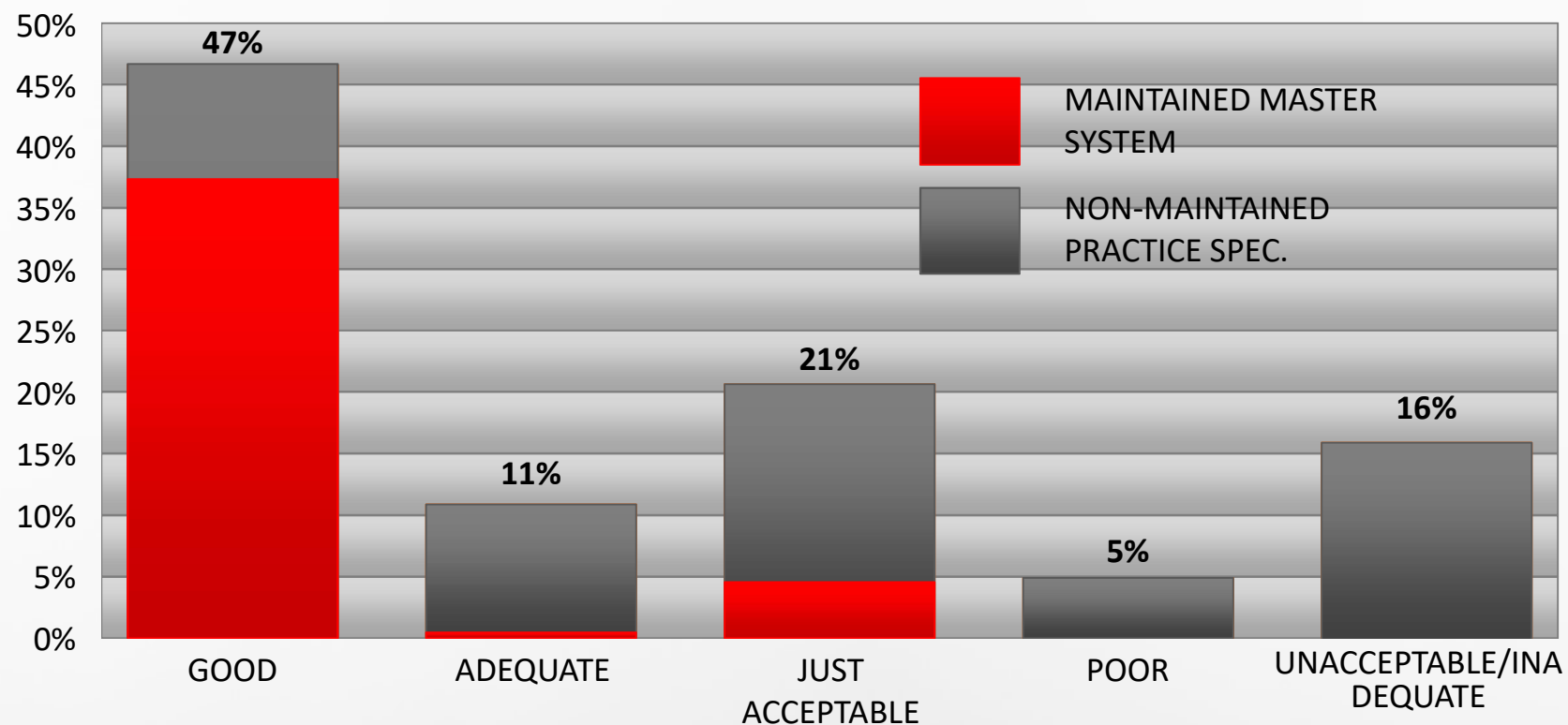
POOR Little or no understanding of the Building Act or Code demonstrated. An extreme example was a 9 page spec for a 2-storied commercial project

**UNACCEPTABLE
/INADEQUATE** Out-dated material pirated from a master systems mixed with clauses/sections collected by a designer over time and not project specific

Overall Quality Assessment

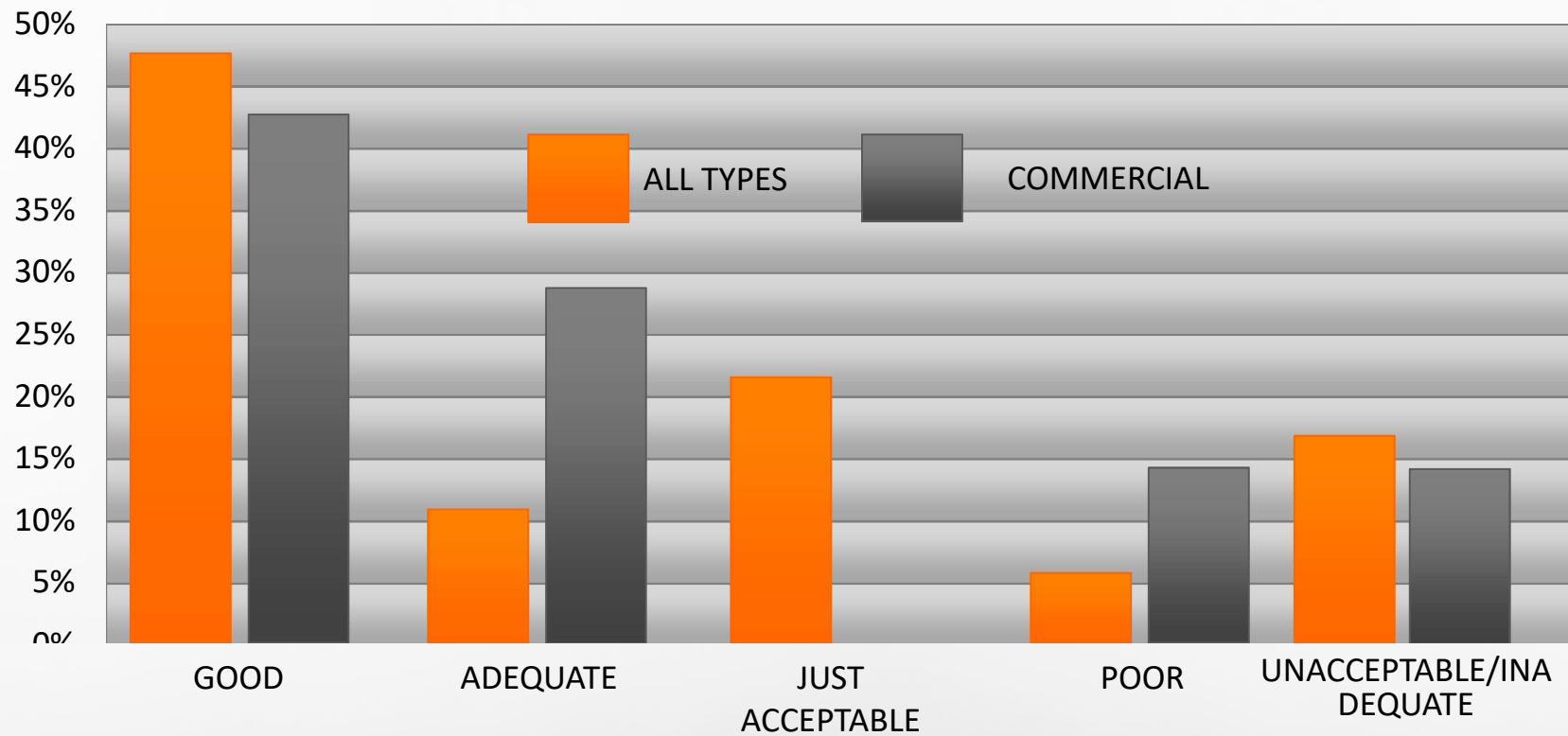


Maintained System Vs Other



Comparison of Project Type

COMMERCIAL VS RESIDENTIAL AND OTHERS



Key issues identified

Principal issues were identified:

1. Lack of understanding of NZ Building Code by some designers
2. Forged and/or out-of-date specification content
3. Non-specific project specifications
4. Too much unstructured bulk of manufacturers' information making it difficult for all stakeholders to ensure relevant information is supplied and can be found
5. Designers unclear how to use manufacturers' information to show product compliance

First Opportunity addressed

Principal issues were identified:

1. Lack of understanding of NZ Building Code by some designers
2. **Forged and/or out-of-date** specification content
3. **Non-specific** project specification content
4. Too much unstructured bulk of manufacturers' information making it difficult for all stakeholders to ensure relevant information is supplied and can be found
5. Designers unclear how to use manufacturers' information to show product compliance

First opportunity – responded to

Masterspec Verification Seal

Instant Identification of
current documentation

TABLE OF CONTENTS

1013 DOCUMENT CONTROL	3
1220 PROJECT	4
1222 PROJECT PERSONNEL	6
1222L PROJECT PERSONNEL - LBP'S	10
1231 CONTRACT	12
1232 INTERPRETATION & DEFINITIONS	13
1233 REFERENCED DOCUMENTS	15
1234 DOCUMENTATION	16
1235 SHOP DRAWINGS	20
1237 WARRANTIES	22
1237A WARRANTY AGREEMENT	26
1247 TRAFFIC CONTROL	29



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Verified spec ID: **159601-98338**

This specification has been produced using Masterspec software and completed on 05/06/2018.

Scan to verify or go to masterspec.co.nz/verify



masterspec

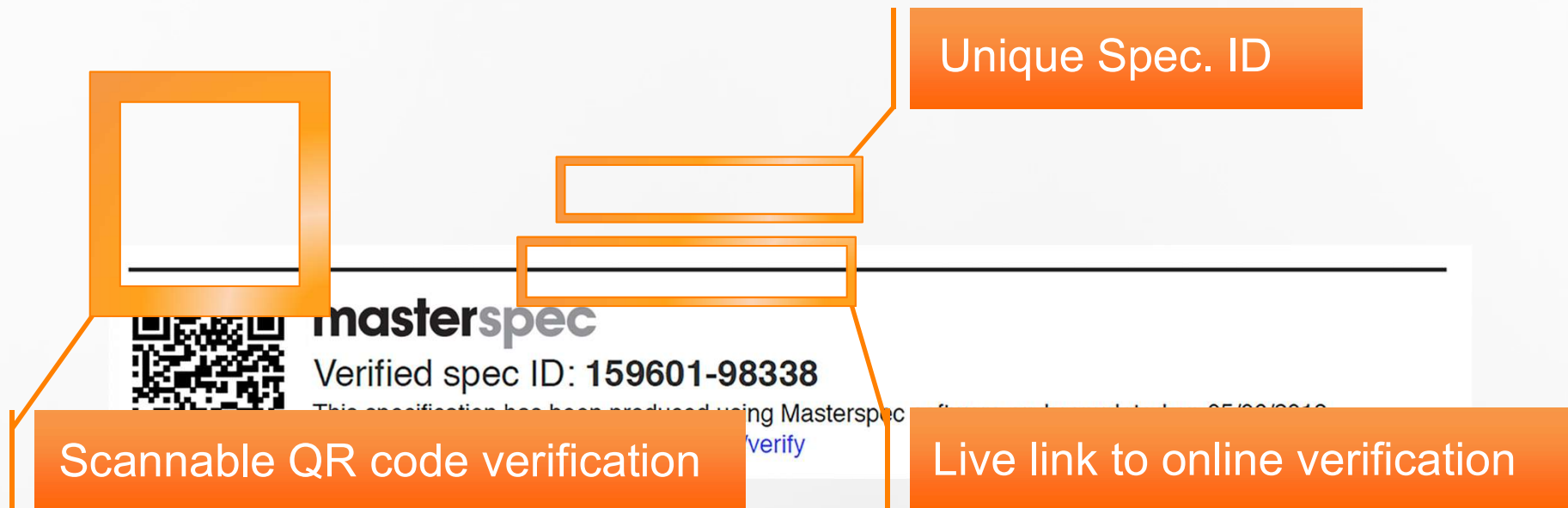
Verified spec ID: 159601-98338

This specification has been produced using Masterspec software and completed on 05/06/2018.

Scan to verify or go to masterspec.co.nz/verify

First response - implemented

Masterspec Verification Seal – Unique authentication markers



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Verification Seal

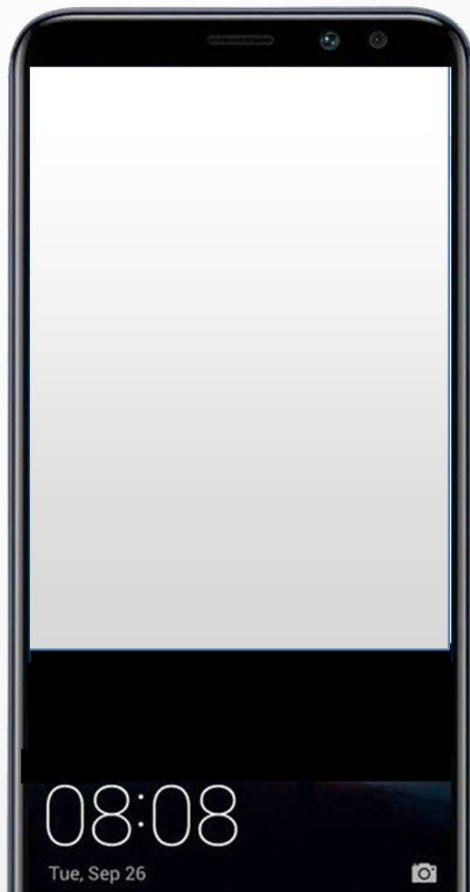
Verification Seal – Online authentication

masterspec

ed spec ID: **159601-98338**

ification has been produced using Masterspec software and completed on 05/06/2018.

verify or go to masterspec.co.nz/verify



Verification Seal

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BIM Resources	+
Technical Resources	+
Other Resources	-
DINZ	
CIC Guidelines	
LBP Cert of Design	
Masterspec Project Forms	
Spec Authentication	

Verify the Authenticity of a Specification

Masterspec provides up-to-date specification resources and tools which project designers use to create project-specific documentation.

To ensure that the specification you have is:

- Up-to-date, i.e. has been prepared with the latest Masterspec resources.
- Project specific, i.e. the design has confirmed appropriate customising for the project.

To validate your specification, please enter the Masterspec spec and version IDs.

Spec ID	Version ID	
<input type="text" value="159601"/>	- <input type="text" value="98338"/>	<input type="button" value="SUBMIT"/>

Authentication results

Compare the results presented with the Specification you have to validate its authenticity.

Spec ID:	159601
Version ID:	98338
Project:	GESTRO APARTMENTS For Consent
Spec Completed:	05/06/2018
Spec Written by:	BIG Architecture

✓ If the results DON'T match or are invalid

Verification Seal

Instant Identification of Authentic Documentation

Reinforces to both TA's and Constructors;

- Completion of content
- Currency of content
- Easy online verification

The screenshot displays the Masterspec Verification Seal interface. On the left is a navigation menu with links: Masterspec, Support, FAQs, Phone Support, Contact Us, and Spec Authentication (highlighted). The main area contains input fields for Spec ID (109972) and Version ID (23546), followed by a SUBMIT button. Below this is the 'Authentication results' section, which includes the instruction: 'Compare the results presented with the Specification you have to validate its authenticity.' The results are as follows:

Spec ID:	109972
Version ID:	23546
Project:	West Plaza Addition Hill House Specification
Spec Completed:	21/03/2018
Spec Written by:	Treehouse @ Arkitects

At the bottom, there is a note: 'If the results DON'T match or are invalid'.

Conclusions

SUMMARY POINTS

- Building consent documentation is of varied quality
- Approximately 17% of specifications are of poor quality / unacceptable
- Manufacturers documentation is generally unstructured and too much bulk
- The level of specification expertise in the market has reduced over the last decade

ACTIONS

Several opportunities for industry stakeholders to collaborate to achieve improved quality and efficiencies in the compliance process:

- ✓ The first has now been implemented: A 'Verification seal' for properly customised and up-to-date project specifications
- Several other projects to come, including training.

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