
Fire Programme

In late 2014, a review of the fire regulation changes implemented in 2012 was initiated. This review was in response to stakeholder feedback and to gauge issues being experienced by the sector following the changes.

In April 2012 the Building Code provisions for fire safety and the supporting documents (Acceptable Solutions and Verification Method) were changed. The changes were made to provide designers, fire engineers and Building Consent Authorities with better design criteria and methods so that fire design could be applied more consistently. The changes were significant in content and structure and the sector experienced issues in adjusting to the changes.

In response to the industry feedback, MBIE commenced a review in 2014 of the effectiveness of the 2012 changes to determine if any adjustments were required, and how MBIE can support industry in adapting to the changes. This produced a substantial amount of feedback. In response, we have developed a plan to improve fire safety in New Zealand, and for this to occur in collaboration with the sector.

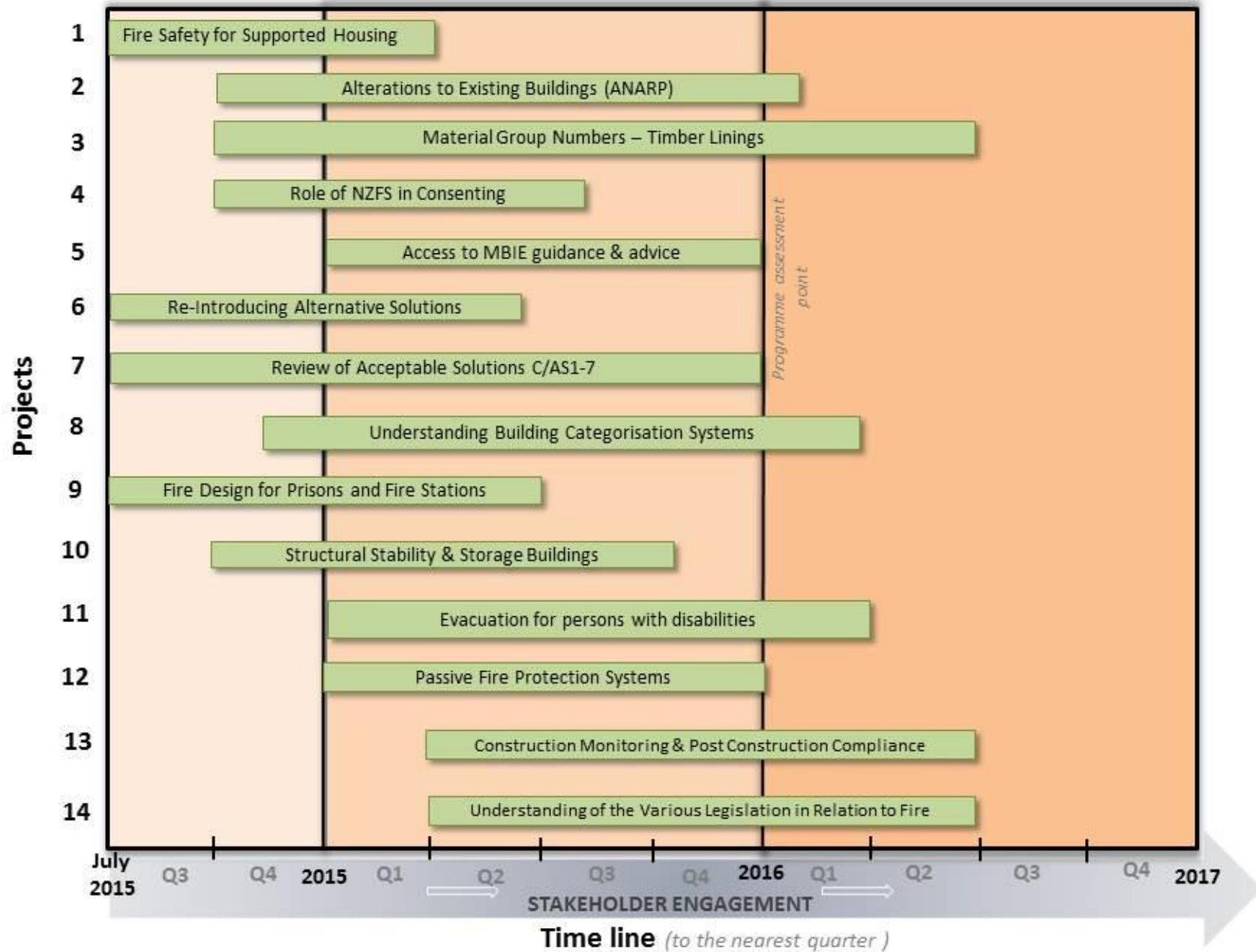
As well as the feedback from the stakeholder engagement process, the review drew on guidance from international fire experts, and undertook a critical review and assessment of the 2012 changes.

The review identified a range of issues that need to be addressed and the Fire Programme has been developed in response. The programme is made up of 14 projects and the following brief outlines a short description of each project.

Stakeholders will have various opportunities to participate in and provide input to the projects. More information about these opportunities will be outlined as each project is initiated.

We're happy to hear your questions on the Fire Programme, or on individual projects, and can be contacted via firereview@mbie.govt.nz.

Fire Programme Schedule



Projects

1. Fire Safety Requirements for Supported Housing
2. Alterations to Existing Buildings and As Near As Reasonably Practicable (ANARP)
Decisions for Fire Safety Requirements
3. Material Group Numbers – Timber Linings
4. Role of the New Zealand Fire Service (NZFS) in Consenting
5. Stakeholder Access to MBIE Guidance and Advice
6. Re-Introduction of Alternative Solutions and the Effectiveness of the FEB Process
7. Review of Acceptable Solutions C/AS1-7
8. Understanding Building Categorisation Systems
9. Fire Design for Prisons and Fire Stations and other Specialist Buildings
10. Structural Stability and Storage Buildings
11. Evacuation for Persons with Disabilities in Commercial Buildings
12. Installation and Compliance of Passive Fire Protection Systems
13. Construction Monitoring and Post-Construction Compliance
14. Understanding all of the Legislation and Regulations that applies to Fire Safety in
buildings

Project Descriptions

1. Fire Safety Requirements for Supported Housing

In 2014, an amendment to the Acceptable Solution C/AS3 brought Supported (or community care) Housing under the new Risk Group *Care or Detention*. The fire safety measures required under C/AS3 are calibrated to the highest risk buildings in the Risk Group (hospitals), without regard to management structures or the nature of Supported Housing in a normal residential setting.

The amendment has created issues for the sector with Building Code compliance, and the provision of supported living in a normal residential setting with the appropriate fire safety measures.

MBIE will work with service providers, housing providers, funding providers (MoH), NZFS and the disability sector to uncover and address the issues with fire safety provisions for Supported Housing.

2. Alteration to Existing Buildings and As Near As Reasonably Practicable (ANARP) Decisions for Fire Safety Requirements.

There was significant stakeholder feedback that ANARP decisions for existing buildings are more difficult following the 2012 changes for alterations to existing buildings. The consequence has caused uncertainty for building owners, designers and BCAs resulting in delays, building upgrades not proceeding, illegal work and additional costs.

This project will look into issues of ANARP in consenting and consider developing guidance along with worked examples to support better quality ANARP decisions for fire safety measures. This will be further supported by workshops and training for designers, fire engineers and BCAs.

3. Material Group Numbers – Timber Linings

The internal surface finish requirements included in the Building Code Clause C3.4 in 2012 are restrictive and this has affected the use of timber linings in buildings.

The project will review Code Clause C3.4 and investigate alternative ways to specify performance requirements for surface finishes enabling different solutions whilst maintaining the appropriate level of fire safety when considering fire spread. Research is required to understand the phenomena of fire spread on surfaces. This project will also look into a Verification Method for combustible wall linings.

4. Role of the New Zealand Fire Service (NZFS) in Consenting

Stakeholder feedback from the Fire Review identified a number of issues relating to the role of NZFS in the building regulatory system.

The Building Act outlines the role of the NZFS in the consent process; being to provide non-binding advice on design for evacuation and firefighting.

Issues raised by stakeholders about the NZFS' role in the building regulatory system will be addressed by MBIE and NZFS, working in partnership with industry stakeholders.

5. Stakeholder Access to MBIE Guidance and Advice

MBIE proactively provides a significant amount of Guidance and advice and in response to queries raised by BCAs and other parts of the sector. Previous research showed that this is highly valued. Guidance, advice and information are delivered in a number of different forms and via various channels however, it can be hard to find on the website.

The flow of information between MBIE, the sector and BCAs is critical to the effective functioning of the regulatory system. The project objective is to ensure BCAs and the sector can easily access the information they need and then receive prompt, consistent responses to queries.

6. Re-Introduction of Alternative Solutions and the Effectiveness of the FEB Process

The 2012 changes limited the use of Alternative Solutions and promoted the Verification Method C/VM2 to introduce consistency and increased rigour into fire engineering design including the introduction of the Fire Engineering Brief (FEB) process.

The changes resulted in a restrictive approach and the system settings that govern the use of Acceptable Solutions, the new Verification Method and Alternative Solutions need to be adjusted.

Alternative Solutions need to be re-introduced into the system and FEB Process improved, whilst ensuring the quality of fire designs is maintained. This project will set a path for formulating and consenting Alternative Solutions.

7. Review of the Acceptable Solutions C/AS1-7

Feedback from stakeholders noted the seven Acceptable Solutions (C/AS1-7) requires a complete overview. This new documents require more definitions and the status of the commentary is also unclear.

Acceptable Solution C/AS1 also needs to be reviewed as a complete solution for housing and outbuildings in its entirety. MBIE is to carry out a complete review of the Acceptable Solutions C/AS1-7 to remove errors and inconsistencies and improve the quality of the documents. The status of the commentary documents will also be reviewed.

8. Understanding Building Categorisation Systems

The change from 16 Purpose Groups to 7 Risks Groups has created complexity to the building regulatory system for fire. This has made it difficult for end users to understand and apply the regulatory requirements correctly.

The activity use groups that apply for the Change of Use regulations no longer align with the new Risk Groups, creating further difficulty for users trying to determine if a Change of Use has occurred.

The project will review the way in which the different categorisation systems are currently applied and will recommend improvements and/or how they can be rationalised. Guidance will then be developed to assist users to navigate the building categorisation systems as they apply to fire.

9. Fire Design for Prisons and Fire Stations and Other Specialist Buildings

The 2012 changes removed Prison Buildings from the Acceptable Solutions. Additionally, the introduction of the Verification Method incurred an increased cost for fire engineering design for Fire Stations being upgraded to meet seismic standards. Corrections and NZFS have developed design manuals for fire safety for their specialist buildings to meet Building Code requirements.

The project will develop guidance to support the design manuals as Alternative Solutions to meet Building Code requirements. The project will also investigate if this approach is suitable to apply to other classes of specialist buildings.

10. Structural Stability and Storage Buildings

The 2012 changes amended the Building Code Clause C6 for Structural Stability and also changed the requirements in the Acceptable Solutions for structural stability.

These changes created uncertainty about the requirements for structural stability for housing and warehouses. The linkages between Building Code Clauses B1, C6 and Verification Methods B1/VM1 and C/VM2 need to be investigated.

The new Acceptable Solution C/AS6 also requires sprinklers for all large storage buildings and the appropriateness of this requirement needs to be re-assessed.

MBIE will review the structural stability requirements during and after fire and align the different requirements together with the requirement for sprinklers in C/AS6.

11. Evacuation for Persons with Disabilities from Commercial Buildings

One of the long standing issues raised by stakeholders is the fire evacuation of people with disabilities in commercial buildings is unclear and there is uncertainty of the features and systems required for safe evacuation of all occupants.

The project will review the evacuation of persons with disabilities required under the Building Act and Building Code. This will also be linked with any requirements from the broader access review that is currently underway within the Office of Disability Issues (ODI).

12. Installation and Compliance of Passive Fire Protection Systems

There was significant stakeholder feedback about the lack of adequate passive fire protection measures in construction and maintenance of commercial buildings. Stakeholders indicated concern about the correct specification, installation, inspection and maintenance of passive fire protection features. The sector has requested guidance on passive fire protection systems and fire stopping systems. There are several product specific installation guides, but no industry standard for fire stopping.

The project objective is to increase knowledge about correct passive fire protection measures and improve the quality of construction and maintenance of passive fire protection systems in buildings.

13. Construction Monitoring and Post-Construction Compliance

The 2012 changes did not directly affect construction monitoring or post construction compliance; however a number of issues were raised by industry stakeholders about both. This included uncertainty around the process to secure a Code Compliance Certificate and requirements for ongoing inspections and maintenance of buildings under the BWOFF system.

Stakeholders indicated that building owners often lack, lose or never receive critical information regarding specific fire design parameters and other building design features contributing to the building's compliance at the time of construction.

The project objective is to improve the quality of information, inspection and auditing to ensure buildings continue to perform at the standard when they were constructed.

14. Understanding all of the Legislation and Regulations that Applies to Fire Safety in Buildings

Stakeholders highlighted the difficulty in ensuring fire designs comply with overlapping legislation and regulations including; the Resource Management Act, the Hazard Substances and New Organisms Act, the Fire Service Act and the Building Act. The relationships between the different legislation and regulations that relate to fire are also not well understood.

The project will investigate possible opportunities to provide guidance on using the different Acts and regulations that relate to fire design to navigate the requirements under the different legislation and regulations.