

Saskia Holditch

Senior Fire Engineer

Ministry of Building, Innovation and Employment





Building Act 2004

Purpose and principles

3 Purposes

This Act has the follow oses:

- (a) to provide for ation of building work, the establishment of a licensing or building practitioners, and the sett
 - (i) pe se buildings can do so safely and without endangering the salth; and
 - by ave attributes that contribute appropriately to the health, physical independence, and wellby if the people who use them; and
 - (iii) people who use a building can escape from the building if it is on fire; and
 - (iv) buildings are designed, constructed, and able to be used in ways that promote sustainable development:



Building Act S.118
NZS 4121
NZBC Clause D



NZBC Clause C

C1—OBJECTIVES OF CLAUSES C2 TO C6 (PROTECTION FROM FIRE)

Provisions

The objectives of clauses C2 to C6 are to:

- (a) safeguard people from an unacceptable risk of injury or illness caused by *fire*,
- (b) protect other property from damage caused by fire, and
- (c) facilitate firefighting and rescue operations.

C4—MOVEMENT TO PLACE OF SAFETY

Provisions

FUNCTIONAL REQUIREMENT

- **C4.1** *Buildings* must be provided with:
- (a) effective means of giving warning of *fire*, and
- (b) visibility in *escape routes* complying with clause F6.
- **C4.2** Buildings must be provided with means of escape to ensure that there is a low probability of occupants of those buildings being unreasonably delayed or impeded from moving to a place of safety and that those occupants will not suffer injury or illness as a result.

PERFORMANCE

- **C4.3** The evacuation time must allow occupants of a building to move to a place of safety in the event of a fire so that occupants are not exposed to any of the following:
- (a) a *fractional effective dose* of carbon monoxide greater than 0.3:
- (b) a *fractional effective dose* of thermal effects greater than 0.3:
- (c) conditions where, due to smoke obscuration, visibility is less than 10 m except in rooms of less than 100 m² where visibility may fall to 5 m.
- **C4.4** Clause C4.3(b) and (c) do not apply where it is not possible to expose more than 1 000 occupants in a *firecell* protected with an automatic *fire* sprinkler system.
- **C4.5** Means of escape to a *place of safety* in *buildings* must be designed and constructed with regard to the likelihood and consequence of failure of any *fire safety systems*.

BUILDING PERFORMANCE

C/AS2 Acceptable Solution for Buildings other than Risk Group SH	Prescriptive: clear language, minimum requirements set	What is max number of lift users, and what if that changes after occupancy and there is no Evac Scheme? OR ALL lift installations must be fit for evacuation? This can be expensive
MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT C/VM2 Verification Method: Framework for Fire Safety Design	Can set specific requirements and how to verify if fit for purpose	Requires FEB Requires owner to ensure FEB conditions not changed
Alternative solution	Owner / engineer find own way to demonstrate compliance with Building Code	No minimum requirements whether fit for purpose, very reliant on engineering Requires FEB Requires owner to ensure FEB conditions not changed



The controls















