

Accessible emergency exits

At present, it is unclear how people with disabilities cope when exiting a building in a fire. A current BRANZ research project is investigating the accessibility of emergency egress in commercial buildings to find answers.



WHILE DISABILITY-FRIENDLY access into and out of buildings under normal conditions is covered in the New Zealand Building Code, emergency egress is not explicitly included.

However, when referring to the movement of people into, within and out of a building, holistically, ‘people’ should include all of the intended occupants, regardless of age, physical ability or health.

More vulnerable people

The expected increase in vulnerable groups such as the elderly and people with disabilities living in the community and the growth in higher-density living in urban areas will influence not only the occupancy characteristics of residential buildings but also surrounding community buildings.

In the 2006 Disability Survey, approximately 660,000, or 17% of the New Zealand population, identified as having a disability. However, this does not capture estimates of people who don’t identify with the term ‘disabled’ but may experience reduced capabilities for a time due to injury, illness or pregnancy, for example.

Those with temporary or longer-term reductions in mobility and sensory capabilities will therefore exceed the 2006 survey estimates.

Capabilities unclear

Currently, buildings targeting vulnerable sectors of the population, such as medium to high density residential facilities and halfway or rehabilitation houses, are designed for life safety based on characteristics of the general, predominantly able-bodied population. The characteristic capabilities of vulnerable sectors are not defined well enough to establish emergency egress requirements.

Disabled rely on others

Disability is found in all sectors of society. A significant proportion of the community may not fit the average characteristic values, and due to the omission of explicit requirements to provide accessible emergency egress, there are unequal emergency egress opportunities

for anyone not meeting the average, which means the disabled or impaired may need to rely on others for escape during an emergency.

Information to aid self-rescue

The Building Research Levy-funded *Accessible emergency egress* research project at BRANZ is addressing this problem by assessing international egress guidelines and datasets to see whether they are viable for use here.

Mobility datasets for movement under normal non-fire conditions will also be gathered from health, disability and ageing advocacy groups, universal design experts, and health and disability professionals.

This will be used to model fire scenarios and assess the usefulness of the datasets. The aim will be to facilitate designs that enable individuals to self-rescue rather than having to rely on others and the fire service.

Universal emergency egress solutions

The research is ultimately intended to map potential fire safety solutions for universal emergency egress in New Zealand. The project will also provide recommendations for optimum solutions and identify current knowledge gaps where more information or alternative solutions are needed. ◀