6

Matters not addressed by the Standards

Introduction

- 6.1 In addition to commenting on the provisions which are currently included in the Premises Standards, many submissions raised concerns about issues which are not addressed, or which are considered to not be sufficiently addressed, in the Premises Standards.
- 6.2 This chapter considers a number of the most significant issues identified by submitters that are not addressed by the Standards. These include detailed provisions on emergency egress for people with a disability, provisions on wayfinding, and provisions relating to environmental sensitivity disorders such as Multiple Chemical Sensitivity.

Emergency egress

- 6.3 The Building Code of Australia presently provides extensive provisions relating to egress from buildings in the event of an emergency. The Access Code simply refers to these provisions.¹ Therefore, compliance with the existing Building Code emergency egress provisions would be sufficient for compliance with the Premises Standards.
- 6.4 The Guidelines to the Premises Standards explain that:

The Access Code refers to the [Building Code of Australia] fire safety provisions relating to the construction of buildings. These

¹ Clause A2.4, Disability (Access to Premises – Buildings) Standards 2009, hereafter 'Premises Standards'.

fire safety provisions include emergency egress for all building occupants. Therefore, compliance with the [Building Code] fire safety provisions is deemed to be compliance with the Premises Standard in respect of egress for people with a disability.²

6.5 A large number of submitters to the inquiry argued that the existing Building Code provisions for emergency egress do not adequately address the safety of people with a disability. The Queensland Chapter of the Society of Fire Safety submitted that:

It is the experience of Engineers Australia: Society of Fire Safety that community expectations with respect to safe egress of buildings for people with a disability... may not be adequately represented in the [Building Code] fire safety provisions.³

- 6.6 In an emergency people who are deaf or hearing impaired cannot hear emergency alarms. Similarly, people who are blind or vision impaired may require wayfinding features to safely evacuate a building, and people in wheelchairs or mobility scooters may lack accessible routes to exit a building independently given the current policy that lifts should not be used in the event of a fire.
- 6.7 Witnesses to the inquiry described how the inadequacy of the existing emergency egress provisions impinges on their dignity and their ability to work safely. Mrs Francesca Davenport told the Committee that:

I try not to work weekends – I work at home, because of [the issue of fire safety]. But, if I have to, I make sure I report to security so that if there is an emergency I have alerted them and they know where I am. ...Currently, in most old buildings, the stairwell is too small to keep a person in a wheelchair and allow people to evacuate. In my office, when that happens I have to leave my wheelchair and sit on the floor in the stairwell to be rescued.⁴

6.8 Representatives of the Australian Building Codes Board told the Committee that while they sympathised with concerns about the current emergency egress provisions, development of adequate emergency egress provisions would require more time, and that the question was thus:

should we wait until those technical solutions are fully developed, tested and costed before we move forward with the premises

² Disability (Access to Premises - Buildings) Standards Guidelines 2009, p. 13.

³ Society of Fire Safety, Queensland Chapter, *Submission 6*, p. 1.

⁴ Mrs Francesca Davenport, Health Science Planning Consultants, *Transcript of Evidence*, 30 March 2009, p. 24.

standards, or do we move forward [with the Standards] now and look at that as further work for the future?⁵

6.9 The Australian Human Rights Commission agreed that further work is required, explaining that while research was undertaken into emergency egress during the development of the Standards:

The Commission understands that the research, while valuable, has not yet delivered practical options suitable for inclusion in the Premises Standards at this stage.⁶

6.10 Submitters to the inquiry suggested a number of possible innovations in emergency egress for people with a disability which should be investigated. These included strengthened access requirements in fire stairs, fire-isolated lifts, 'places of refuge/rescue assistance', visual alerts, and 'bed shakers'.

Fire stairs

- 6.11 As noted in Chapter 4, the Access Code currently exempts fire-isolated stairs and ramps from accessibility requirements. A number of submitters argued that this reduces the safety of these stairs for ambulant people with a disability, such as people who are blind or vision impaired.⁷
- 6.12 The Committee has recommended that this exemption be reconsidered and narrowed.⁸ In addition to improving general access to buildings, the inclusion of accessibility features on fire stairs and ramps would provide safer emergency egress for people with a disability.

Lifts

6.13 One of the most urgent short-comings of emergency egress provisions for people with a disability is the lack of a safe means of independent egress for people in wheelchairs or mobility scooters. This problem arises

⁵ Mr Kevin Newhouse, Australian Building Codes Board, *Transcript of Evidence*, 12 March 2008, p. 13.

⁶ Australian Human Rights Commission, *Submission* 57, p. 39; see also Disability Council of NSW, *Submission* 58, pp. 22–23.

⁷ Disability Council of NSW, Submission 58, p. 22; Australian Federation of Disability Organisations, Submission 83, p. 20; Australian Blindness Forum, Submission 65, p. 14; Southwest Advocacy Organisation, Submission 81, p. 3. Mr Chris Gildersleeve from the Queensland Chapter of the Society of Fire Safety indicated that accessibility features in fire stairs 'could be beneficial' in some cases, but that this would need to be assessed on a case-by-case basis: Transcript of Evidence, 3 April 2009, p. 31.

⁸ Recommendation 10, chapter 4, above.

because of the traditional policy that lifts should not be used in event of fire. As a consequence, it may be very dangerous for people with a disability to work in buildings at times when they are unlikely to be able to gain assistance in the event of an emergency.

6.14 A number of submissions suggested that consideration should be given to allowing the use of lifts for emergency egress, including imposing requirements for fire-isolated lifts.⁹ The Society of Fire Safety submitted that:

> Fire safety engineering studies by the National Institute for Standards and Technology (NIST) in the USA prompted by the 1993 World Trade Centre bombing and the 2001 aerial attack have shown that the traditional 'do not use the lift in case of fire' approach may need to be changed.¹⁰

6.15 However, evidence from the Australian Building Code Board suggested that the conclusions of this NIST study have not been widely adopted. Mr Ivan Donaldson told the Committee that:

> NIST's recommendations in relation to emergency egress have not been picked up by any jurisdiction in the United States. Indeed, New York City, who you might have thought were somewhat sensitive to this matter, have actually rejected their proposals on the grounds of cost.¹¹

6.16 The ABCB also argued that they

do not believe that the technical solution at the moment in relation to lifts is cost effective. There are some very significant costs associated with protecting a lift in the event of fire...¹²

Places of rescue assistance

6.17 A number of submitters to the inquiry argued that, in the absence of consensus about the feasibility of lifts as an emergency egress strategy, 'places of rescue assistance' or 'places of refuge' might be one way of providing greater safety for people with a disability until they are assisted

⁹ People with Disabilities ACT, Submission 72, p. 13; Moonee Valley City Council, Submission 66, p. 3; Ms Rita Struthers and Mr Daniel Bedwell, Submission 121, p. 16; Mrs Francesca Davenport, Health Science Planning Consultants, Transcript of Evidence, 30 March 2009, p. 26.

¹⁰ Society of Fire Safety, Queensland Chapter, *Submission 6*, p. 2.

¹¹ Mr Ivan Donaldson, Australian Building Codes Board, *Transcript of Evidence*, 7 April 2009, p. 39.

¹² Mr Ivan Donaldson, Australian Building Codes Board, *Transcript of Evidence*, 12 March 2009, p. 12.

to leave a building.¹³ Places of rescue assistance are fire-isolated parts of a building where a person can shelter safely until assistance arrives. They may include communication systems to allow a person to call for help,¹⁴ and specialised evacuation chairs.¹⁵ Mr Mark Relf told the Committee that:

At the minimum level, we believe that fire-isolated stairways should incorporate a place of rescue assistance or a place of refuge which incorporates communication systems to emergency services personnel and that those areas could also incorporate specialist evacuation wheelchairs, which have been in the marketplace for decades.¹⁶

6.18 Evidence to the Committee indicated that there had been some disagreement during the development of the Standards as to appropriate locations for safe refuges. Mrs Francesca Davenport told the Committee that:

In the past, the accessible toilet was suggested. I would not agree with that. I would advise my client to put it in the stairwell. Make the landing big enough for two wheelchairs to manoeuvre and park there without endangering anyone. That would be my recommended solution...¹⁷

- 6.19 Similarly, other submitters suggested that refuges should be placed in the stairwells or in lift lobbies.¹⁸ Toilets were not considered to be a suitable location for a place of rescue assistance, because this option lacks dignity and is likely to be separated from the main exit paths from a building.¹⁹
- 6.20 Representatives from the building industry, however, did not support the concept of refuges. Mr Bob Appleton from the Master Builders Association told the Committee that:

Mrs Francesca Davenport, Health Science Planning Consultants, *Transcript of Evidence*, 30 March 2009, p. 26.

¹⁴ People with Disability ACT, Submission 72, p. 11

¹⁵ Mr Daniel Bedwell and Ms Rita Struthers, *Submission* 121, p. 15; Mr Daniel Bedwell, private capacity, *Transcript of Evidence*, 3 April 2009, p. 44.

¹⁶ Mr Mark Relf, Physical Disability Australia, Transcript of Evidence, 25 March 2009, p. 23.

¹⁷ Mrs Francesca Davenport, Health Science Planning Consultants, *Transcript of Evidence*, 30 March 2009, p. 26.

¹⁸ People with Disability ACT, *Submission* 72, p. 11; Mr Daniel Bedwell and Ms Rita Struthers, *Submission* 121, p. 15.

¹⁹ Mr Mark Relf, Physical Disability Australia, *Transcript of Evidence*, 25 March 2009, p. 23; Mrs Francesca Davenport, Health Science Planning Consultants, *Transcript of Evidence*, 30 March 2009, p. 26.

I am not in favour of refuges. I do not think they are appropriate. I think psychologically a lot of people have problems with refuges.²⁰

6.21 Some concerns were also raised about the efficacy of places of refuge in very tall buildings, because of the continued requirement that rescue would take place using the stairs. Dr John Macpherson told the Committee that:

... while carrying people down fire stairs from fire refuges might work in one- and two-storey buildings, it would be fairly inadequate once we got into multistorey buildings. Therefore that has really left us with one option, to use an emergency lift...²¹

6.22 The Australian Building Codes Board told the Committee that places of refuge were not supported by them during the development of the Standards:

[Places of refuge were] the notion that we could be in this building, and our friend Dougie over there would be faced with a fire. We would leave, but Dougie would go off into a place of refuge and he would be locked in there while the building burned down, and we would come back and get him later. I have to say that that concept did not really get a great deal of support from the ABCB or from others...²²

Visual and other alerts

- 6.23 One practical solution which may be suitable for immediate inclusion in the Standards are visual alarms.²³ These alarms use visual cues such as flashing lights to alert a deaf person when an alarm sounds.²⁴
- 6.24 The Society of Fire Safety indicated in their submission that standards for visual alarms are already specified in AS 1670.4 2004 'Fire Detection, Warning, Control and Intercommunication Systems System Design, Installation and Commissioning. Part 4: Sound Systems and Intercom

- 21 Dr John Macpherson, Spinal Injuries Association (Qld), *Transcript of Evidence*, 3 April 2009, p. 52.
- 22 Mr Ivan Donaldson, Australian Building Codes Board, *Transcript of Evidence*, 12 April 2009, p. 12.
- 23 HMinfo Clearinghouse, Submission 29, p. 3; Australian Human Rights Commission, Submission 57, p. 37; Deafness Forum of Australia, Submission 18, p. 8; Victorian Equal Opportunity and Human Rights Commission, Submission 22, p. 5; Deafness Council Western Australia, Submission 27, p. 2; Disability Council of NSW, Submission 58, p. 22; Disability Discrimination Legal Centre, Submission 51, p. 15; Deaf Services Australia, Submission 68, p. 3

²⁰ Mr Bob Appleton, Master Builders Australia, *Transcript of Evidence*, 19 March 2009, p. 23.

²⁴ Australian Human Rights Commission, Submission 57, p. 37.

Systems for Emergency Warning', which is referenced by the Building Code. However, the Building Code at present only requires visual alarms in high noise environments.²⁵

6.25 The Deafness Forum of Australia argued that because visual alarms are not yet mandatory:

This generally means that visual warning devices are in the common areas of buildings such as cinemas, shopping centres or airports but only rarely in other buildings such as office buildings or hotels.²⁶

6.26 Representatives of the Australian Building Codes Board argued, however, that further work would need to be done before visual alarms could be included in the Standards:

There are currently some Australian standards that deal with... [visual emergency alarms]. There were not completed standards at the time that these proposals were developed, so the appropriateness of those standards and what they would cost have not been tested through this process yet. That would have to be done... before any decision was made to include those provisions in the BCA or the premises standards.²⁷

6.27 In addition to visual alarms, the Deafness Forum of Australia argued that Class 1b and Class 3 accommodation should be required to provide 'bed shakers' to wake people who are profoundly deaf.²⁸

Committee comment

6.28 Every Australian has the right to expect that reasonable provisions will be made to allow them to leave buildings safely in the event of an emergency. Moreover, it is crucial for equitable, dignified and independent access to buildings that people with a disability can be confident that they will also be able to evacuate from a building in a safe, dignified and independent fashion. On the evidence before the Committee, there is no doubt that the emergency egress provisions of the Premises Standards and the Building Code of Australia fall short of ensuring either the safety or the dignity of

²⁵ Society of Fire Safety, Queensland Chapter, Submission 6, p. 3.

²⁶ Deafness Forum of Australia, Submission 18, p. 8.

²⁷ Mr Kevin Newhouse, Australian Building Codes Board, *Transcript of Evidence*, 7 April 2009, p. 37.

²⁸ Deafness Forum of Australia, Submission 18, pp. 8-9.

people with a disability. These deficiencies must be rectified as soon as possible.

6.29 The innovative techniques for safe evacuation of people with a disability raised in evidence to this inquiry are promising. However the Committee accepts that further research is required to ensure that these approaches will provide safe and cost-effective solutions before they are included in the Premises Standards. The Committee urges the Government and the Australian Building Codes Board to continue work on this issue with a view to adopting any practical solutions which emerge as soon as possible.

Recommendation 16

6.30 The Committee recommends that the Australian Building Codes Board undertake further research to identify deemed-to-satisfy provisions for emergency egress for people with a disability with a view to making changes to the Building Code as soon as possible.

Wayfinding

6.31 Wayfinding refers to building features which allow a person with a disability to locate themselves within a building and find their way to facilities safely and independently. The definition favoured by the Australian Blindness Forum is:

Knowing where you are, where you are headed, and how best to get there; recognise when you have reached your destination; and find your way out - all accomplished in a safe and independent manner.²⁹

6.32 The Premises Standards presently contain requirements for several features which are useful for wayfinding, including requirements for signage to accessible toilets, spaces with hearing augmentation systems,

²⁹ Australian Blindness Forum, Submission 65, p. 8, citing the US Department of Education National Institute on Disability Research.

and accessible entrances,³⁰ as well as for luminance contrast and tactile grounds indicators.³¹ The Australian Blindness Forum submitted that:

The draft Premises Standards has some limited coverage of Braille and tactile signs, luminance contrast, lighting and tactile indicators. However, wayfinding is much more than these — it is about the ease with which a person proceeds and is facilitated through an environment from one point of interest to another. Wayfinding systems include the basic layout of a building and site, interior and exterior landmarks, views to outside, signs, floor and room numbering, spoken directions, maps, directories, logical progression of spaces, colour coding.³²

6.33 Many submissions argued that more comprehensive requirements for wayfinding should have been included in the Premises Standards.
However, most submitters conceded that significant work remained to be done if suitable deemed-to-satisfy provisions are to be identified to comprehensively deal with wayfinding.³³ The Australian Human Rights Commission submitted that:

At this point in time there is little prospect of developing consistent, universally applicable deemed-to-satisfy solutions suitable for the Premises Standards or building law.³⁴

6.34 Representatives of the Australian Building Codes Board explained to the Committee that their research had indicated that it would be very difficult to codify requirements for wayfinding:

> [W]e did some research on way-finding to try and identify what would be the best way of codifying the requirements. That research was done in conjunction with the Victorian Building Commission and through the [Cooperative Research Centre] for Construction Innovation. The outcome from that research was that it is very difficult to try and codify a solution that would be suitable for all buildings and, in fact, it may be much better to try and provide guidance to the industry on the issues that should be taken into account when they are designing these buildings to

- 31 Clause D3.8, Access Code.
- 32 Australian Blindness Forum, Submission 65, p. 8.
- 33 Vision Australia, Submission 55, p. 14; Mr Bruce Maguire, Vision Australia, Transcript of Evidence, 25 March 2009, p. 7; Ms Amelia Starr, Disability Council of NSW, Transcript of Evidence, 25 March 2009, p. 73.
- 34 Australian Human Rights Commission, Submission 57, p. 41.

³⁰ Clause D3.6, Premises Standards Schedule 1 Access Code for Buildings (hereafter 'Access Code').

make sure that the way-finding is implemented in an appropriate way. But the research that we undertook indicated that there was not a single technical solution or a number of technical solutions that you could apply through the building code that would be suitable for all circumstances.³⁵

- 6.35 A number of submissions to the inquiry suggested that wayfinding provisions could be improved by imposing greater requirements for accessible signage.³⁶ Many submitters also argued that provisions for wayfinding should be considered by, or as part of, the review of the Standards.³⁷
- 6.36 Submitters also requested clarification that the Standards would not prevent complaints being brought under the Disability Discrimination Act or State and Territory anti-discrimination laws in relation to wayfinding.³⁸ Mr Stephen Fox of the Attorney-General's Department explained that

to the extent that a wayfinding matter is a matter concerned with premises... the standards as proposed contain the class of matters that have to be dealt with in terms of wayfinding in order to comply with the standard. To the extent that there are other wayfinding matters that are not concerned with premises, not concerned with the building structure, then they should continue to be the subject of a potential successful complaint and available for complaint.³⁹

6.37 It is the view of the Attorney-General's Department that complaints would not be possible in respect of the design and construction of a building. However, complaints would still be possible in respect of the fitout of the building and any other premises.

³⁵ Mr Kevin Newhouse, Australian Building Codes Board, *Transcript of Evidence*, 12 March 2009, p. 13.

³⁶ Australian Blindness Forum, Submission 65, p. 8; Mr Bruce Maguire, Vision Australia, Transcript of Evidence, 25 March 2009, p. 2; Disability Council of NSW, Submission 58, p. 41; Blythe–Sanderson Consulting, Submission 47, p. 6.

³⁷ Vision Australia, Submission 55, p. 14; Blind Citizens Australia, Submission 118, p. 8; Australian Braille Authority, Submission 111, p. 4; Vision 2020 Australia, Submission 82, p. 4; Australian Federation of Disability Organisations, Submission 83, p. 11.

³⁸ Australian Blindness Forum, Submission 65, p. 8; Disability Council of NSW, Submission 58, p. 21; Morris Goding Accessibility Consulting, Submission 123, p. 7; Australian Human Rights Commission, Submission 57, p. 41; Royal Society of the Blind SA, Submission 98, p. 2; National Disability Services, Submission 54, p. 7; Vision Australia, Submission 55, p. 14; Blind Citizens Australia, Submission 118, p. 9; Victorian Equal Opportunity and Human Rights Commission, Submission 22, p. 6; Australian Federation of Disability Organisations, Submission 83, p. 7.

³⁹ Mr Stephen Fox, Commonwealth Attorney-General's Department, *Transcript of Evidence*, 7 April 2009, p. 37.

Committee comment

- 6.38 Access to premises should be about more than simply allowing physical entry and exit to buildings. In order for access to be truly equitable, facilities must also be put in place to allow people with a disability to navigate a building independently and with dignity. Requiring people with a disability to be escorted or to rely on there being people in the vicinity to provide directions is not satisfactory.
- 6.39 The requirements for some accessible signage and tactile ground surface indicators in the Premises Standards would provide a degree of assistance to people with a disability to navigate buildings safely. However, much more must be done if people with a disability are to be able to find their way independently.
- 6.40 It is unfortunate that no comprehensive requirements for wayfinding could be identified in the development of the Premises Standards. Such provisions would doubtless have ensured a higher compliance rate and provided greater certainty. However, the Committee accepts that present research indicates that wayfinding matters are best assessed on a case-by-case basis, and that guidelines have been developed to help developers do so. The Committee believes that it is important that building owners and developers should be required to actively consider what wayfinding measures are appropriate for their building.
- 6.41 The Committee therefore considers that it is important that it should remain possible to bring a complaint of unlawful discrimination under the Disability Discrimination Act where reasonable wayfinding features have not been provided.
- 6.42 The Committee also considers that any review process for the Standards must consider whether any further deemed-to-satisfy provisions for wayfinding can be incorporated into the Premises Standards.

Multiple Chemical Sensitivity

6.43 A number of submitters to the inquiry argued that the Premises Standards should contain provisions addressing the needs of people who have Multiple Chemical Sensitivity (MCS) and related disorders. In their current form, the Standards do not contain any provisions relevant to MCS.

6.44 There is currently no commonly accepted definition of MCS.⁴⁰ However, the Allergy, Sensitivity and Environmental Health Association Queensland suggested that MCS can be identified as:

> a chronic condition with symptoms that recur in response to low levels of exposure to multiple chemicals that improve or resolve when those chemicals are removed. Symptoms occur in multiple organ systems throughout the body.⁴¹

- 6.45 The primary difficulties faced by individuals with MCS in accessing the built environment arises from sensitivity to chemicals used in building construction or released by building elements such as carpet, paint and plasterboard, and problems with air quality resulting from building design. The latter may exacerbate the effect of chemicals introduced into the environment through cleaning agents, air fresheners, deodorants and other materials.
- 6.46 Submitters argued that sufferers of MCS face many difficulties, including difficulty accessing services, finding and maintaining employment, and securing suitable accommodation.⁴² The South Australian Task Force on Multiple Chemical Sensitivity explained that:

people with MCS are often unable to access indoor spaces and associated services without experiencing severe and disabling symptoms due to exposure to chemicals in indoor air. Exposure to volatile organic compounds in indoor air is typically 5 to 50 times higher than outdoors, even in heavily polluted cities... This problem not only applies to newly constructed buildings but also to those that have been recently renovated and those that bring toxic materials into the enclosed environment.⁴³

- 6.47 Submitters suggested that a very wide range of measures might need to be taken to adapt building practices to protect people with MCS.⁴⁴
- 6.48 The Australian Human Rights Commission has produced some guidelines in relation to access to buildings which refer to issues affecting people

⁴⁰ South Australian Task Force on Multiple Chemical Sensitivity, Submission 44, p. 2.

⁴¹ Allergy, Sensitivity, and Environmental Health Association Queensland, *Submission* 60, p. 3.

⁴² Allergy and Environmental Sensitivity Support and Research Association, *Submission* 103, p. 1; Fragrance and Chemical Sensitivity Support Group, *Submission* 23, p. 2.

⁴³ South Australian Taskforce on Multiple Chemical Sensitivity, *Submission* 44, p. 3.

⁴⁴ Allergy, Sensitivity and Environmental Health Association Qld, Submission 60, pp. 10–12; Fragrance and Chemical Sensitivity Support Group, Submission 23, p. 3. See also the National Institute of Building Studies research into measures for Indoor Environment Quality: 'Indoor Environment Quality', last viewed 29 April 2009, <ieq.nibs.org/index.php>.

with MCS.⁴⁵ However, these do not provide a comprehensive set of technical requirements suitable for inclusion as deemed-to-satisfy provisions in the Building Code. Given the complexity of the problems, it is likely that development of detailed and cost-effective provisions suitable for inclusion in the building standards will require significant research.

Committee comment

6.49 The Committee recognises the difficulties facing people with MCS and environmental sensitivities. The Committee urges the Government to undertake research with a view to determining what measures might be taken to alleviate the impact of building design on sufferers of these conditions.