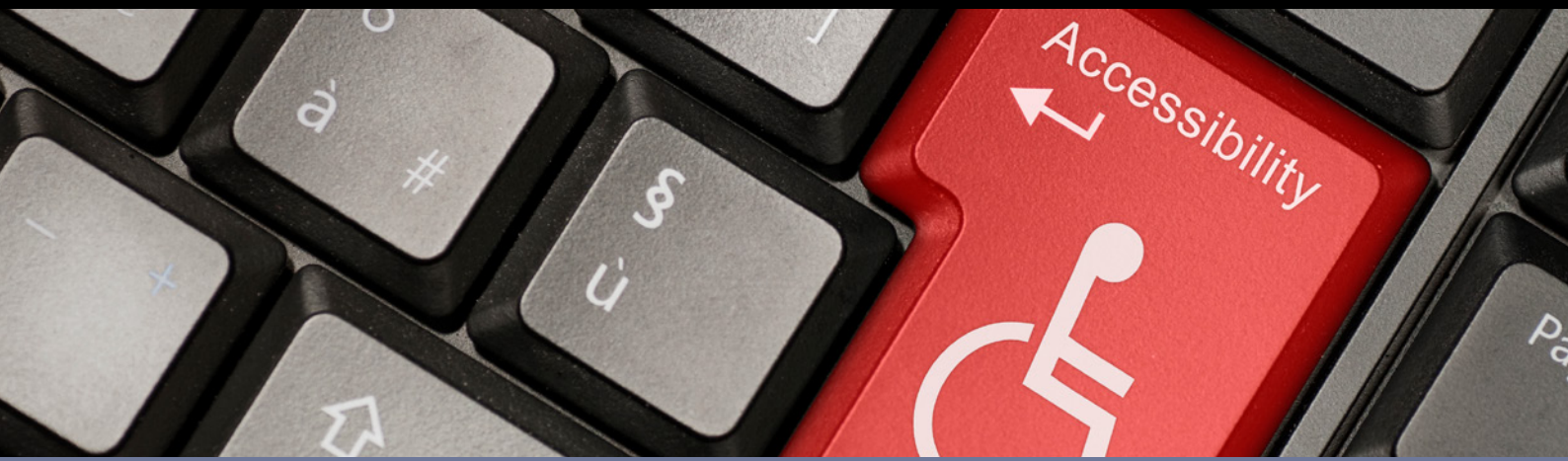


# Disability Access to Premises

A Guide to Door Control and Openings Compliance



## Introduction

Disability affects all Australians. If a person does not have a disability themselves, then the chances are that in their lifetime there will be a family member, friend or colleague who does.

### The number of Australians with Disabilities might surprise:

- Over 4 million Australians have a disability<sup>1</sup>
- About 50% of people aged over 55 have difficulty with their mobility, hearing or vision
- By 2050 more than 25% of the population will be over 65<sup>2</sup>

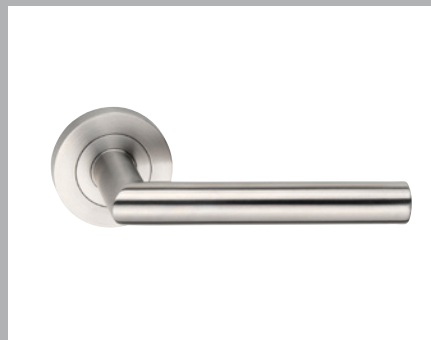
The high percentage of Australians already with a disability coupled with our rapidly ageing population (and the likelihood of disability increasing with age) has seen increased focus on, and reform to, government policy and regulations in regards to disability living.

For our built environment, this focus and reform is reflected in the ever-evolving standards and building codes that address disability living.

Australian Standards 1428.1 address design requirements for access and mobility for people with disabilities. Sections of these standards have now been adopted as compulsory requirements for National Construction Codes of Australia compliance.



ROUND KNOB



'LEVER' TYPE



'D' TYPE

Fig. 1<sup>4</sup>

## Australian Standards and NCC (National Construction Codes) Compliance

The objective of AS 1428.1 is to provide building designers and users with the design requirements for new building work, excluding work to private residences, to provide access for people with disabilities. Particular attention is given to accessways and circulation spaces and providing a continual accessible path for people in wheelchairs<sup>3</sup>.

Door controls play a crucial role in the continuous accessible path of travel, and as such, come under particular scrutiny within the Standards. Some door control types can be difficult for people who have a disability which affects hand and arm function, as opening doors can require a combination of gripping, twisting, pushing or pulling which is not possible.

### Two of the most important elements for compliance as dictated by the standards state that:

- The door handle and related hardware shall be of the type that allows the door to be unlocked and opened with one hand.
- The handle shall be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch.

Adherence to these requirements will have a major bearing on the door handle that is specified.

## Door Control Types

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Of the three most commonly specified types of door controls (Fig.1), only one is compliant to AS 1428.1:

- Round knob: Difficult for people with limited arm mobility and dexterity to operate. Successful operation requires grip, a twist and a push.
- 'Lever' type: An improvement of the round knob but still possible for a hand to slip off.
- 'D' type: The handle type required by AS 1428.1. The shape provides support and prevents hands from slipping off, as well as providing support for closing the door.



## Door Control Specifications

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In addition to the type of door control required, there are specifications surrounding the clearances of the door and handle, the addition of snibs, as well as force required for operation.

### Clearances:

- Clearance between centre grip of D type handle and the back plate or face of the door must be minimum 35mm and maximum 45mm.

### Location

- The location height of the D type handles or other items that need to be grasped must be located no less than 900mm and no more than 1100mm from the finished floor level
- Handles on sliding doors shall not be less than 60 mm from the door jamb or doorstop when in the open or closed position

### Snibs:

- Where a snib is installed the lever handle must be a minimum 45mm in length from the centre of the spindle

### Operational force:

- The force required to operate these doors must not exceed 20N. – This applies to opening the door, swinging the door and holding the door open between 60° and 90°

These standards were adopted as a compulsory element of the BCA in 2013<sup>5</sup> in regards to accessways for any new buildings as well as many existing buildings undergoing alterations.

An accessway is defined by the NCC as “any continuous accessible path of travel to, into or within a building<sup>6</sup>”. Failure to comply with these requirements is seen as a failure of the Deemed-to-Satisfy provisions of the BCA.

## Non-Compliance to National Construction Codes

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Door controls which are deemed non-compliant to NCC requirements can have long-lasting, negative repercussions for all involved.

For the builders and developers, the need to replace non-compliant hardware is an unwanted disruption to a deadline that is most likely already tight. A resulting blowout and failure to handover a project on time can result in liquidation damages, in addition to the costs of purchasing new hardware and labour hire.

These costs could also be passed on to the architect or designer who specified the hardware.

For all involved it can be extremely damaging to reputations, negatively impacting future work and income opportunities, a potential disaster in an increasingly competitive market.

## Ensuring Door Controls Compliance

Being aware of and staying up to date with the necessary standards is the key to delivering a fully compliant project. This however is much easier said than done.

As both the Australian Standards and NCC are 'living documents', that is they are continually edited and updated, it is the challenge of the architect and builder to keep abreast of these changes. In addition to the standards discussed in this paper, further government

documents such as The Disability Discrimination Act (DDA) and National Construction Code (NCC) can also have an effect on the design and construction of buildings<sup>7</sup>, and must also be taken into consideration.

Forming a partnership with an architectural hardware supplier with the knowledge and experience to help through compliancy issues can take away a lot of the work and stress involved, allowing for time and resources to be better spent.



**Being aware of and staying up to date with the necessary standards is the key to delivering a fully compliant project**

## Madinoz Architectural Hardware DORMA

Opened in 1995, Madinoz is an architectural hardware company supplying quality, AS 1428.1 compliant door hardware to the Australian market. Madinoz can work closely with architects and builders, to provide a complete consulting and scheduling service that can help ensure projects are specified and built to Australian standards.

**The Madinoz team of Architectural Hardware Consultants provide a no cost, obligation free specification service that includes:**

- Develop detailed door by door architectural hardware specifications and schedules in a presentable and easy to read format
- Meet with architects, designers, builders, developers or owners to discuss project requirements and security concerns
- Provide hardware specifications to include all access solutions and services. In addition to door controls, Madinoz can help specify automatic doors, glass doors, operable walls, revolving doors, and additional architectural hardware

With extensive training and experience, the Madinoz team of consultants are kept up to date with all of the latest Australian Standards, NCC and all other relevant regional building codes ensuring that their product advice is backed by a complete understanding of building regulation requirements.

Madinoz is a part of the DORMA Group. DORMA is the trusted global partner for premium access solutions and services enabling better buildings. With over 100 years of tradition behind it, DORMA offers holistic solutions covering all facets of door operability – from hinges, closers and floor springs to automatic door systems and time and access control solutions.





## REFERENCES

- <sup>1</sup> Australian Network on Disability – Stats and facts, <http://www.and.org.au/pages/disability-statistics.html>
- <sup>2</sup> Access: Guidelines and Information, Human Rights Commission  
<https://www.humanrights.gov.au/publications/access-guidelines-and-information>
- <sup>3</sup> Australian Standard – Design for access and mobility 2009 pg.5
- <sup>4</sup> Australian Building Codes Board – Understanding the Disability Access Provisions pg.70
- <sup>5</sup> Directions Report on Egress for all Occupants 2013, Australian Building Codes Board pg.19
- <sup>6</sup> NCC 2015 Building Code of Australia – Volume One pg.16
- <sup>7</sup> The Building Code of Australia, Environmental Planning and Assessment Act, Environment & Heritage  
<http://www.environment.nsw.gov.au/resources/heritagebranch/heritage/bcadda.pdf>

