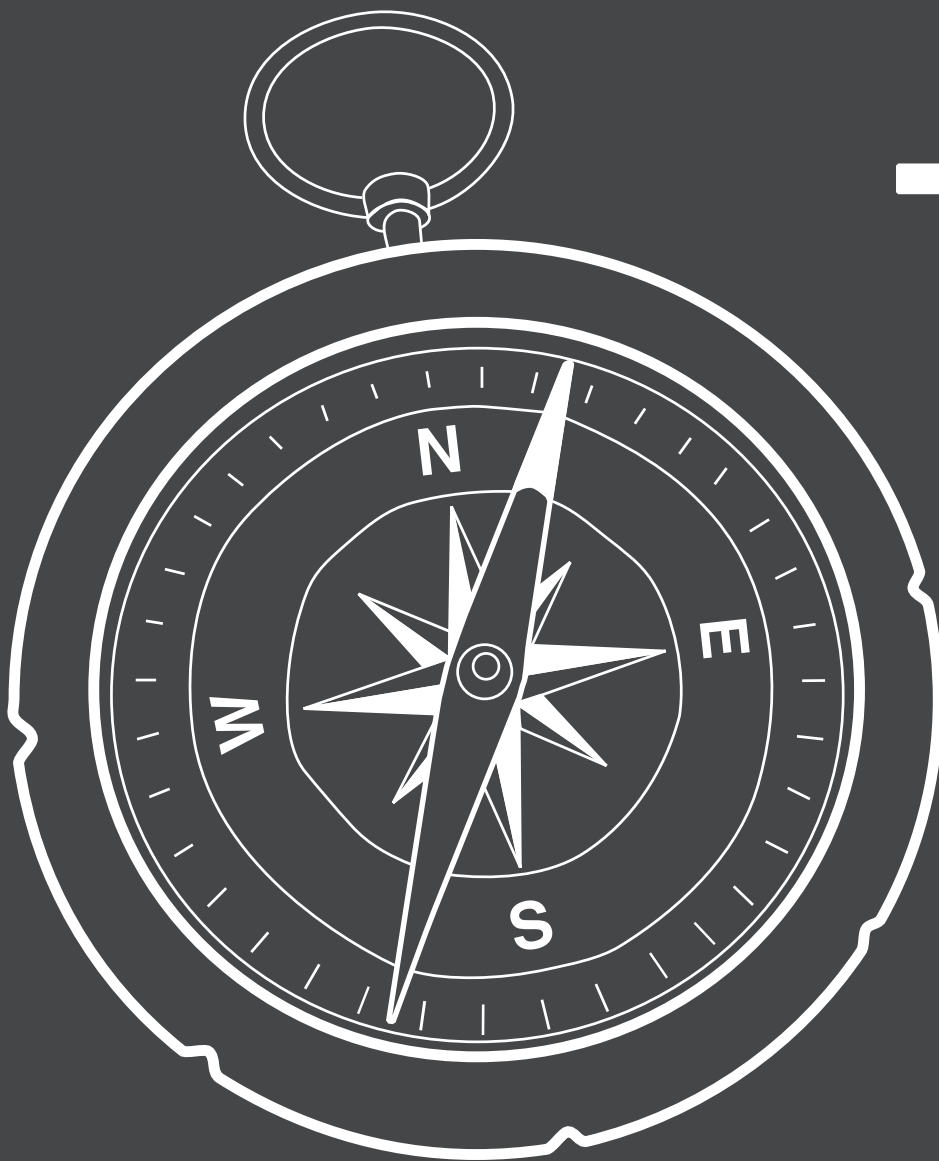


Building for Everyone:

A Universal Design Approach

Index and terminology

10



Centre for Excellence in Universal Design

Creating an environment that can be used by all people, regardless of their age, size, disability or ability.

The National Disability Authority's Centre for Excellence in Universal Design has a statutory role to promote the achievement of excellence in universal design in:

- the design of the built and external environment
- product/service design
- information and communications technologies (ICT)
- the development and promotion of standards
- education and professional development
- raising awareness of universal design

More information and updates on the website at: [**www.universaldesign.ie**](http://www.universaldesign.ie)

Building for Everyone

Booklet 10 - Index and terminology

The other booklets from the
Building for Everyone series:

Booklet 1 - External environment and approach

Booklet 2 - Entrances and horizontal circulation

Booklet 3 - Vertical circulation

Booklet 4 - Internal environment and services

Booklet 5 - Sanitary facilities

Booklet 6 - Facilities in buildings

Booklet 7 - Building types

Booklet 8 - Building management

Booklet 9 - Planning and policy

Index

A

Abilities

age and size (1) 95; (2) 74; (3) 70; (4) 85; (5) 104; (6) 58; (7) 143; (8) 56; (9) 71

mental (1) 95; (2) 74; (3) 70; (4) 85; (5) 104; (6) 58; (7) 143; (8) 56; (9) 71

physical (1) 91; (2) 70; (3) 66; (4) 81; (5) 100; (6) 54; (7) 139; (8) 52; (9) 67

sensory (1) 93; (2) 72; (3) 68; (4) 83; (5) 102; (6) 56; (7) 141; (8) 54; (9) 69

Access officers. *See* (9) **Implementation: role of access officers**

Access plan (8) 21–22

checklist (8) 22

Access statements (9) 83

Accessible shower with WC (5) 56

Accessible toilets. *See* (5) **Peninsular-arrangement toilets**

Acoustics (4) 8–10, 15, 40–41

checklist (4) 41

reverberation time (4) 15, 40

Adamstown Access for All Strategy (9) 19

Adamstown Strategic Development Zone (SDZ) (9) 19–20

Adaptability: indicators (9) 23–24

Air-conditioning systems (4) 39. *See also* (4) **Ventilation**

dust extraction (4) 39

Alarm call button (3) 38. *See also* (3) **Passenger lifts: safety devices**

Allergic reactions (4) 16, 20

Amenities. *See* (9) **Policy statements: public realm and amenity**

Archaeological sites. *See* (7) **Outdoor access: archaeological sites**

Art exhibition venues. *See* (7) **Cultural buildings: displays and exhibits**

Assessing planning applications (9) 56–58

Assistance dogs (7) 16–18, 44–49, 61–63

dog relief areas (7) 17

signage (7) 48

Audible crossing signals (1) 74

Audible information (4) 56, 75–76

checklist (4) 76

Audio information. *See* **(8) Information: audio information**

Audits: access (8) 13–15

checklist (8) 14

recommendations (8) 14–16

checklist (8) 15

priorities

categories (8) 19–21

checklist (8) 21

ratings (8) 16–19

Automated teller machines (ATMs) (6) 29–37

checklist (6) 36

keypads (6) 33–35

Automated ticket machines. *See* **(1) Ticket machines & dispensers**

Automatic door systems (2) 59

checklist (2) 66

Automatic lights (4) 35

Automatic water taps (4) 38

B

Baby-changing facilities (5) 43–45; (7) 20

baby-changing table (5) 27, 43

checklist (5) 45

Bars (5) 16, 78

Bathrooms (5) 51, 72. *See also* **(5) Dwellings: domestic bathrooms;** *See also* **(5) Shower rooms: checklist**

en-suite bathrooms (5) 16

for independent use (5) 62

checklist (5) 64

Blinds (4) 29, 32

Braille (4) 54, 57, 58, 65–68, 73, 75

Breast-feeding (5) 44–45

British Standards Institution (BSI) (9) 25

British Toilet Association (5) 12

Building maintenance (8) 19, 24–27. *See also* **Cleaning**

checklist (8) 27

Building management (8) 10–12, 17

checklist (8) 12

design issues and role (8) 10

checklist (8) 11

Bus stations (5) 15

C

Cafes (5) 16

Campsites and caravan parks (7) 126

Captioning. *See* **(8) Information: for people with hearing difficulties: real time captioning**

Car parking (1) 92; (9) 68. *See also* **(7) Housing: car parking**

Card-operated machines. *See* **(6) Coin-operated machines**

Ceiling finishes (4) 21

checklist (4) 25

Cemeteries. *See* **(7) Outdoor access: cemeteries**

Changes of level (2) 30

Changing areas (5) 64–68; (7) 34–36. *See also* (7) Shopping centres and retail outlets: fitting rooms

checklist (5) 65

communal changing and shower areas (5) 67

checklist (5) 68

self-contained accessible changing area (5) 65–68

checklist (5) 67

Checkouts. *See* (7) Shopping centres and retail outlets: counters and checkouts

Churches. *See* (7) Religious buildings

Cinemas (5) 18. *See also* (7) Venues

Circulation routes (2) 20, 23, 27, 29, 47, 52, 55–57

Cisterns (5) 38–39

Cleaning (8) 19, 27–29. *See also* (8) Building maintenance

checklist (8) 29

Clearance

seating (1) 73

vertical (1) 27–28, 33, 49, 67, 73

wall mounted (1) 48

Clothes hooks (5) 80, 96

Clothes rails. *See* (6) Storage facilities

Coach stations (5) 15

Coin-operated machines (6) 29–31. *See also* (6) Vending machines

checklist (6) 30

Colour rendering characteristics. *See* (4) Colour temperature

Colour temperature (4) 30

Community facilities (9) 22

checklist (9) 22

Concert halls. *See* (7) Venues

Confederation of Transcribed Information Services (COTIS) (8) 48. *See also* (8) Information: printed information

Conference facilities. *See* (7) **Venues**

Construction sites (1) 88–90

Consultation events (9) 85

Cooking appliances. *See* (6) **Kitchens: appliances**

Corner radius (9) 30–31, 46, 86. *See also* (9) **Street design**

Corridors (2) 31–35

checklist (2) 35

Counters. *See* (6) **Service counters.** *See also* (7) **Shopping centres and retail outlets: counters and checkouts**

Courtyards. *See* (7) **Outdoor access: gardens and courtyards**

Craughwell Local Area Plan (9) 27

Crossing points (1) 74–81

audible (1) 74

pelican (1) 74

Cubicles (5) 15, 24

enlarged cubicles (5) 27–28

Cultural buildings (7) 47–59

checklist (7) 49

displays and exhibits (7) 51

checklist (7) 54

information and interpretation (7) 49–50

checklist (7) 51

study areas (7) 54–59

checklist (7) 59

Customer service (8) 22–23

checklist (8) 23

Cycle paths (1) 64, 66, 86

D

Daisy CD (8) 47–48. *See also* (8) **Information: audio information**

DeafSpace (2) 32, 60, 78

Design briefs (9) 52–53

Design guidelines (6) 8

Development control (9) 15

Development plans (9) 13–15

consultation (9) 15–17

key questions (9) 16

Dimmer switches (4) 30, 47. *See also* (4) **Switches**

Directional floor coverings (4) 12

Dog-leg stairs. *See* (3) **Switchback stairs**

Domestic stairlifts. *See* (3) **Stairlifts**

Door ironmongery/furniture (2) 8, 43, 49–60, 79

checklist (2) 58

emergency exit door ironmongery (2) 57

finger plates and kick plates (2) 52

handles, latches and locks (2) 49

hinges (2) 49, 58

knobs (2) 50, 73

Door security and entry systems (2) 66–69

checklist (2) 69

Door-closing devices (2) 53, 59

Doors and locks (2) 36, 47, 51, 52, 55, 62; (5) 81, 96

checklist (2) 37

power-assisted doors (2) 63

door handles (5) 82

inward opening doors (5) 24, 75

outward opening doors (5) 24

sliding doors (5) 73, 81

swing-clear hinges (5) 81–82

Drainage (1) 6, 38–39, 41, 79

Drinking fountains (1) 70–71

Driveways. See (7) Housing: external approach

Dublin City Development Plan (9) 25, 33, 54, 75

Dwellings (5) 68

domestic bathrooms (5) 72–75

checklist (5) 75

domestic toilet (5) 68–71

E

Economic development See (9) Policy statements: economic development

Electrical cables (4) 34

Electrical outlets (4) 35, 38

checklist (4) 38

Electromagnetic fields (4) 34

Elevators. See (3) Lifts

Emergency evacuation (8) 29–42

checklist (8) 34

evacuation chairs (8) 31–32

evacuation lifts (8) 32–33

evacuation planning (8) 34–37

evacuation procedures (8) 10, 11, 19–21, 30–42

Entertainment venues (5) 18, 50

Entrance doors (2) 37–43, 46

checklist (2) 46

Entrance foyer (2) 20

Entrance lobbies (2) 14–20, 23, 38, 46, 59

checklist (2) 19

Entry systems. *See* (2) **Door security and entry systems**

Equality Acts (9) 34

Escalators (3) 10–11, 57–62, 72

checklist (3) 61

dimensions (3) 58

emergency stop controls (3) 59

speeds (3) 59

Evacuation lifts (3) 8, 42–44. *See also* (3) **Passenger lifts**

External ramps. *See* (1) **Ramps**

External steps. *See* (1) **Steps**

F

Factories (5) 18

Family toilets (5) 9, 42–43

checklist (5) 43

Ferry terminals (5) 15

Fire alarms (4) 77–84; (5) 84

audible alarm (4) 77

break-glass units (4) 78

checklist (4) 80

visual alarms (4) 77

flashing beacons (4) 77

Fire detection (4) 77, 80

Fire extinguishers (2) 34

Fire safety systems (8) 30, 40. *See also* (8) **Emergency evacuation**

Fitting rooms. *See* (7) **Changing areas; See also** (7) **Shopping centres and retail outlets: fitting rooms**

Floor finishes (2) 19, 23, 29, 36, 73; (4) 11, 14–20

checklist (4) 20

coir matting (4) 12, 20

deep-pile carpets (4) 12

Floor pattern (4) 24

Floor plan (4) 56

Flush systems (5) 39

dual-flush system (5) 39

Footpaths (1) 6, 35–41

checklist (1) 41

maintenance (1) 90

surfacing (1) 62–65, 80–88

Footpath layout. *See* (9) Street design

checklist (5) 21

Future proofing (5) 19–20

G

Galleries. *See* (7) Cultural buildings

Galway County Council (9) 27

Galway County Development Plan (9) 32

Gardens. *See* (7) Outdoor access: gardens and courtyards

Gates (1) 70, 73

Glass markings (2) 42, 79. *See also* (2) Vision panels

Glazed screens (4) 22–24. *See also* (4) Wall finishes

Grabrails (5) 24, 29, 62, 85, 97

door-mounted grabrail (5) 26, 86

positioning (5) 25

Gradient (1) 6, 21, 23, 38, 41–46, 51, 74, 76, 80

Grass (1) 40, 64–65

Gravel (1) 63–64

Graveyards. *See* (7) **Outdoor access: cemeteries**

Grilles (1) 6, 32, 33, 39

Guardrails (1) 39–41

Guest accommodation. *See* (7) **Hotel, guest and residential accommodation**

Guide dogs. *See* (7) **Assistance dogs**

Gyms. *See* (5) **Sport and leisure buildings**

H

Hair dryers (5) 86, 97

Hand-drying facilities (5) 87–88, 97

Handles (2) 8, 38, 47, 49–52, 57–59, 73

Handrails (1) 39–40, 48–51, 58–62, 89; (3) 21–23, 27, 41–42, 62

Hazards (1) 85–90

entrapment (1) 78, 79

tripping (1) 9, 23, 32, 38–39, 51, 54, 63–64, 80

warning surfaces (1) 57–65

Health Science Building (9) 34–35

Hearing aids (4) 34, 50–51

Hearing enhancement systems (4) 41–43

checklist (4) 43

infrared systems (4) 49–50

checklist (4) 50

radio systems (4) 50

checklist (4) 51

signage (4) 53–54

checklist (4) 54

soundfield systems (4) 51

checklist (4) 52

Heating (5) 88, 97

Heritage policy. *See* (9) **Policy statements: heritage**

High-intensity beacons. *See* (4) **Fire alarms: visual alarms**

Hinges (2) 8, 54, 58; *See also* (5) **Doors and locks: swing-clear hinges**

Historic buildings (7) 94–98

changing (7) 98

checklist (7) 98

checklist (7) 96

conservation principles (7) 97–98

detailed design issues (7) 99–103

checklist (7) 103

Hoist facilities (5) 48–50

Hold-open devices (2) 56–57, 59

Horizontal circulation (2) 29–31

checklist (2) 31

Hostels (5) 15

Hotel, guest and residential accommodation (5) 15; (7) 69–80

checklist (7) 70

bathrooms (7) 79

checklist (7) 80

bedrooms (7) 71–81

checklist (7) 78

Housing (7) 80–94

checklist (7) 81

car parking (7) 81–82

checklist (7) 82

entrances (7) 85

checklist (7) 87

external approach (7) 83–84

checklist (7) 84

horizontal circulation (7) 87–89

checklist (7) 89

rooms (7) 93–94

checklist (7) 94

services (7) 92

checklist (7) 93

setting-down points (7) 82

checklist (7) 82

vertical circulation (7) 89–92

checklist (7) 91

Housing policy (9) 13, 18–20, 23–26, 58, 62–64, 73

I

Icons. *See* (4) **Symbols**

Illumination (4) 31–33. *See also* (4) **Lighting**

lux levels (4) 26

recommended levels (external) (4) 33

recommended levels (internal) (4) 31

Implementation (9) 63

enforcement (9) 63

monitoring (9) 64

role of access officers (9) 64

Inclined platform stairlifts (3) 53–55. *See also* (3) **Vertical platform lifts**

checklist (3) 55

Inclusivity: indicators (9) 23–24

Induction loop systems (2) 20–22, 27; (4) 43–48; *See also* (8) **Information: for people with hearing difficulties**

checklist (4) 48

international symbol for induction loop systems (4) 43

permanent induction loop systems (4) 47

portable induction loop systems (4) 47

clipboard loop systems (4) 48

desk loop systems (4) 47

guide loop systems (4) 48

Induction loop: international symbol (6) 22

Inductive couplers (6) 21, 24. *See also* (6) Telephones

Information (4) 54; (8) 41; *See also* Signage

checklist (4) 58

audio information (8) 47–48

checklist (8) 48

for people with hearing difficulties (8) 41–44

checklist (8) 44

induction loops (8) 42

lip speakers (8) 42

real time captioning (8) 43

printed information (8) 44–47

checklist (8) 46

websites (8) 48–51

checklist (8) 51

Information desk. *See* (6) Service counters

Intercoms (2) 67

Internal doors (2) 10, 19, 30, 36, 46–50, 59, 66

checklist (2) 49

Internal lobbies (2) 35–36

checklist (2) 36

Internal ramps (3) 25–30

checklist (3) 30

kerbed upstand (3) 28

Internal stairs (3) 4, 8, 10, 12–24, 31, 44, 47, 56, 57, 71

checklist (3) 24

hazard warning surface (3) 19–20, 24

spiral stairs (3) 13

International Symbol of Access (1) 17; (3) 33

International telephone symbol (3) 39

Irish Guide Dogs for the Blind (7) 17

**Irish Sign Language (8) 41–44. *See also* (8) Emergency evacuation: Personal
Emergency Evacuation Plans (PEEPs)**

J

Joseph Rowntree Foundation (9) 24–25, 82

K

Kerbs

dished. *See* (1) Kerbs: dropped

dropped (1) 6, 9, 10, 16, 74, 79, 80, 90

raised (1) 8

Kilkenny Western Environs Local Area Plan (9) 27

Knee clearance (1) 71. *See* (1) Clearance: seating

L

Lamp posts. *See* (1) Lighting

Landings (3) 17, 26

Landscape types (1) 7; (7) 107. *See also* (7) Outdoor access

checklist (7) 112

beaches (7) 116

checklist (7) 117

conservation areas (7) 117–118

checklist (7) 118

mountains (7) 112–115

- checklist (7) 114
- natural landscape (1) 7; (7) 107
- peatlands (7) 115
 - checklist (7) 115
- tamed landscapes (7) 104
- tempered landscapes (1) 7; (7) 104, 109–110
- urban landscape (1) 37, 64; (7) 110
- woodlands (7) 122–124
 - checklist (7) 124

Lecture facilities. *See* (7) **Venues**

Left-handed transfer (5) 34–36. *See also* (5) **Right-handed transfer**

Level changes (1) 4, 39, 43–63, 80; (9) 7

Libraries. *See* (7) **Cultural buildings**

Licensing (9) 66

Lifetime Homes

Lifts (3) 4–13, 31–58. *See also* (3) **Inclined platform stairlifts;** *See also* (3) **Passenger lifts;** *See also* (3) **Platform lifts;** *See also* **Vertical platform lifts**

- dimensions (3) 33
- emergency systems (3) 38
- glass-walled lifts (3) 32
- interior finishes (3) 39
- safety devices (3) 34
- signalling system (3) 37, 44, 51

Light reflectance value (LRV) (4) 25–27

Light switches (4) 35, 36. *See also* **Switches**

Lighting (1) 7, 10, 27, 61, 65–66; (2) 23; (4) 27–34; (5) 88, 97

- automatically operated lights (5) 89
- external lighting (4) 32–34; (8) 26
 - checklist (4) 34
- recommended levels of illumination (4) 33

internal lighting (4) 28–32

checklist (4) 32

recommended levels of illumination (4) 31

Lip speakers. *See* (8) **Information: for people with hearing difficulties: lip speakers**

Lip-reading (4) 42

Litter (1) 7, 44, 66, 67, 70

Lobbies. *See* (2) **Entrance lobbies; See also (2) Internal lobbies**

Local area plans (9) 50

Lockers (5) 98

Lockers: coin-operated (7) 16

Locks (2) 8, 47, 49, 58, 66; (5) 81, 84, 96. *See also* (5) **Doors and locks**

Loose-laid mats (4) 12, 17

M

Manually-activated powered doors (2) 62

Maps (4) 57. *See also* (4) **Tactile maps and models**

Matwells (2) 17

Mirror (3) 40, 44; (5) 98–100

Mixed-use developments (9) 18

Models (4) 57–58. *See also* (4) **Tactile maps and models**

Modified strike plate (2) 51, 58

Motels (5) 15

Moving walkways. *See* (3) **Travelators**

Multi-storey car parks. *See* (1) **Car parking: multi-storey and underground**

Museums. *See* (7) **Cultural buildings**

N

National Council for the Blind of Ireland (NCBI) (8) 45

National Spatial Strategy (NSS) (9) 13

Natural landscape. *See* **(1) Landscape: natural and tempered**

Neighbourhood planning (9) 20

checklist (9) 20

Non-slip materials (4) 12

Nosing (3) 14–17

Nursery (5) 17

Nursing homes (5) 16

O

Office buildings (5) 18; (7) 23–26

checklist (7) 23

internal environment (7) 24

checklist (7) 25

workstations and storage (7) 25–26

checklist (7) 26

Online information. *See* **(8) Information: websites**

Outdoor access (7) 104–130. *See also* **(7) Landscape types**

checklist (7) 107

archaeological sites (7) 130

campsites and caravan parks (7) 126–127

checklist (7) 127

cemeteries (7) 133–134

checklist (7) 134

country parks (7) 120–122

checklist (7) 122

gardens and courtyards (7) 136–138

checklist (7) 138

- parks (7) 132–133
 - checklist (7) 133
- picnic areas (7) 125–126
 - checklist (7) 126
- playgrounds (7) 134–136
 - checklist (7) 136
- temporary events (7) 130–132
 - checklist (7) 132
- viewing points (7) 118
 - checklist (7) 120
- waterways (7) 127–132
 - checklist (7) 129

Outdoor works (1) 88

Overhang (1) 67

P

Parking. *See* (1) **Car parking**

Pager devices (4) 78

Parks. *See* (7) **Outdoor access: parks;** *See also* (7) **Outdoor access: country parks**

Passenger facilities (7) 16–18

Passenger lifts (3) 10, 12, 13, 31–56, 73

- dimensions (3) 33
- interior finishes (3) 39
- lights (3) 40
- mirror (3) 40
- lift car controls (3) 37
- safety devices (3) 34
 - 'hold-open' button (3) 34
 - 'rapid-close' button (3) 34

self-levelling device (3) 34

signage (3) 35

size and capacity (3) 32

Passing places (1) 35, 36, 37, 41, 47

Paths. *See* (1) **Footpaths**

Pavements. *See* (1) **Footpaths**

maintenance (1) 90

Paving. *See* (1) **Tactile paving surfaces**

Payphone. *See* (6) **Telephones: payphones**

Pedestrian crossings. *See* (1) **Crossing points**

PEEPS (8) 39

checklist (8) 39

planning consultation advice (8) 39–41

checklist (8) 41

Peninsular-arrangement toilets (5) 45–52

checklist (5) 48

unisex peninsular-arrangement toilet (5) 48–50

checklist (5) 50

Petrol stations. *See* (5) **Service stations**

Picnic areas (1) 65, 72, 73. *See also* (7) **Outdoor access: picnic areas**

Pictorial devices (4) 62

Planning checklist (4) 10

Platform lifts (3) 9, 10, 31, 44–56. *See also* (3) **Inclined platform stairlifts;**
See also (3) **Vertical platform lifts**

Playgrounds. *See* (7) **Outdoor access: playgrounds**

Portable sanitary facilities (5) 19–20

Power supply (4) 34

checklist (4) 34

Protection of outdoor works (1) 88

Public phones. *See* (6) **Telephone booths**

Pull handles and rails (2) 51

Q

Queuing areas (2) 27–30

checklist (2) 29

R

Radiators (2) 34

Radio systems. *See* (4) **Hearing enhancement systems: radio systems**

Ramps (1) 42–48; (3) 4, 10, 11, 25–31, 57. *See also* (3) Internal ramps

checklist (1) 51

gradient (3) 25, 30

ramp landings (3) 26

Ratios: male to female (5) 12

Reading rooms. *See* (7) **Cultural buildings: study areas**

Reception and waiting areas (2) 19–27

checklist (2) 27

Reception desks (6) 9–13, 24, 26

checklist (6) 13

Refuges (3) 18, 19; (8) 33. *See also* (8) Emergency evacuation

Regeneration areas (9) 51

Regional Planning Guidelines (RPG) (9) 13

Regulations

building (1) 5; (9) 8

Religious buildings (7) 65–69

checklist (7) 66

seating and prayer (7) 67

checklist (7) 68

Residential accommodation (5) 9, 15, 57, 62. *See also* (7) Hotel, guest and residential accommodation

Residential streets (9) 26, 45

Restaurants, Bars and Cafés (5) 16; (7) 39–47

customer service (7) 44–46

checklist (7) 45

layout and seating (7) 40

checklist (7) 41

outdoor smoking areas (7) 45, 46

checklist (7) 46

self-service facilities (7) 42–43

checklist (7) 43

Resting places (1) 7, 36, 41–42, 92; (9) 68

Retail environments (9) 37–38. *See also* (9) Policy statements: retail

Retail outlets. *See* (7) Shopping centres and retail outlets

Revolving doors (2) 43–46

Right-handed transfer (5) 34–35. *See also* (5) Left-handed transfer

Road layout. *See* (9) Street design

Roads

maintenance (1) 90

Royal National Institute of Blind People (RNIB) (8) 45

S

Safe areas. *See* (3) Refuges

Safety devices. *See* (3) Passenger lifts: safety devices

Safety signs (4) 70–73. *See also* (4) Signage

checklist (4) 73

Schools (5) 17–18

Seating (1) 13, 33, 34, 71–72, 92; (2) 24–25, 27–28, 29, 31, 34, 71; (6) 13–16, 37; (9) 68. *See also* (6) Waiting areas

checklist (6) 16

key dimensions (6) 15

Security. *See* (2) Door security and entry systems

Self-closing devices (2) 54, 72

Self-contained accessible shower (5) 52–53

Self-service facilities. *See* (7) **Restaurants, Bars and Cafés: self-service facilities**

Sensory abilities (1) 93; (9) 69

Service counters (6) 9–13, 26. *See also* (6) **Reception desks**

Service stations (5) 17

Setting-down points (1) 32–33. *See* (9) **Car parking**
checklist (1) 33

Shades. *See* (4) **Sun-shading devices; See also** (4) **Solar-control glass**

Shared spaces (9) 43–45
checklist (9) 45

Shelves (5) 91, 98

Shop front design (9) 59

Shopping centres and retail outlets (7) 27–39
assistive equipment (7) 37
checklist (7) 39
powered wheelchairs with integrated shopping baskets (7) 37
shopping trolleys (7) 37
counters and checkouts (7) 31–33
checklist (7) 33
display and storage (7) 28–32
checklist (7) 31
fitting rooms (7) 34
checklist (7) 37
internal circulation (7) 27
checklist (7) 28

Shopping trolleys (7) 37

Shops (5) 18. *See also* (7) **Shopping centres and retail outlets**

Short-rise vertical platform lifts (3) 48. *See also* (3) **Vertical platform lifts**

Shower and peninsular arrangement WC (5) 60–61

checklist (5) 60

Shower curtain (5) 56

Shower head (5) 55, 56

Shower rooms (5) 51–61

checklist (5) 56

accessible shower with WC (5) 56

checklist (5) 60

peninsular arrangement WC (5) 60–61

checklist (5) 60

self-contained accessible shower (5) 52

Shower tray area (5) 54

Sign Language. *See* (8) Irish Sign Language

Signage (1) 4, 7, 66, 73, 95; (3) 30, 35, 70; (4) 54–75; (5) 91, 98, 104; (9) 7, 18, 22, 37–43, 55, 59, 66, 71

Checklist (4) 60; (4) 65; (9) 43

arrows (4) 56, 60, 62–66

embossed signs (4) 65–68

letter size (4) 58, 60

parking (1) 16–18, 20, 23, 26–28, 32

pedestrian (1) 44, 45, 66–67, 67, 71

positioning (4) 74–75

checklist (4) 75

signage: visual contrast (4) 69

checklist (4) 70

taxis (1) 33

traffic (1) 66, 90

Signage: external (8) 26

Single-sex toilets (5) 22–33

checklist (5) 33

Sinks (6) 44–45

accessible sink (6) 46

pop-up plugs (6) 45

taps (6) 45

Sliding doors (2) 60

Slip Resistance Value (SRV) (4) 11

Smoking areas. *See* (7) **Restaurants, Bars and Cafés: outdoor smoking areas**

Soap dispensers (5) 93, 98

Sockets. *See* (6) **Kitchens: switches and sockets**

Solar-control glass (4) 29

Sport and leisure buildings (5) 18, 51

Sports facilities. *See* (5) **Sport and leisure buildings**

Staff training (8) 23–24

checklist (8) 24

Stairlifts (3) 9, 53–58

checklist (3) 56

Stairs. *See* (3) **Internal stairs**

Standards - national and international (1) 5, 91, 94, 96–100; (9) 8, 67, 70, 72–76

Steps (1) 4, 41–62, 86–87; (9) 7. *See* (3) **Nosing**

checklist (1) 54, 62

dimensions (3) 13

step risers (3) 14

Storage facilities (6) 17–19, 42. *See also* (6) **Kitchens: storage.** *See also* (7) **Office buildings: workstations and storage**

checklist (6) 19

shelving (6) 17–19

storage units (6) 18

Street design (9) 29–31

Street furniture (1) 65–73

checklist (1) 73

Strobe lighting (4) 30

Student halls (5) 15

Sun-shading devices (4) 29, 32

Supermarkets. *See* (7) **Shopping centres and retail outlets**

Surfaces (5) 93, 98, 103. *See* (1) **Tactile paving surfaces;** *See also* (1) **Footpaths: surfacing.** *See also* (4) **Ceiling finishes;** *See also* (4) **Floor finishes;** *See also* (4) **Wall finishes**

Sustainable Residential Development in Urban Areas Guidelines (9) 23. *See also* (9) **Housing policy**

Swimming pools (5) 12, 18

Swing doors (2) 61

Swing-free door-closing devices (2) 57

Switchback stairs (3) 22

Switches (4) 30, 35–38, 47. *See also* (6) **Kitchens: switches and sockets**

multi-gang switches (4) 37

passive infrared light switching (4) 37

rocker-type switches (4) 37

switching by sensors (4) 38

Symbols (1) 16, 17, 20, 95; (4) 60–65

checklist (4) 64

T

Tables. *See* (1) **Picnic tables**

Tactile maps and models (4) 68–69. *See also* (4) **Braille**

checklist (4) 69

Tactile paving surfaces (1) 7, 9, 10, 20, 23, 80–88. *See also* **Footpaths**

checklist (1) 88

Tactile signs (4) 65–67. *See also* (4) **Braille**

checklist (4) 67

Tactile warning surfaces (2) 30, 68; (4) 12, 20

Taps: single mixer tap (5) 37

Taxi

checklist (1) 34

ranks (1) 33–34

setting down points (1) 7, 32

Telephone booths (6) 27, 28

Telephone handsets (3) 38

Telephones (2) 20, 25, 27; (6) 19–20

payphones (6) 20

checklist (6) 24

public telephones (6) 20

checklist (6) 20

telephone booths (6) 27

checklist (6) 28

textphones (6) 24–26

checklist (6) 26

Tempered landscapes. *See* (1) **Landscape: natural and tempered**

Temporary barriers (2) 27–30

Temporary events. *See* (7) **Outdoor access: temporary events**

Temporary facilities (5) 19

Temporary surfaces (1) 88, 90

Temporary works (1) 88, 90

Theatres (5) 12, 18. *See also* (7) **Venues**

Ticket dispensers.

Ticket machines & dispensers (1) 4, 26, 27, 28–32, 65–70; (9) 7. *See also* (6) **Vending machines**

Toilet bowls. *See* (5) **WC pans**

Toilet facilities (7) 16, 18, 44, 62–63, 69

Toilet paper dispensers (5) 94

Toilets (2) 25; (5) 16, 22–56, 48–50, 68, 92. *See also* **(5) Unisex toilets;** *See also* **(5) Single-sex toilets;** *See also* **(5) Dwellings: domestic toilet**

Towns and villages: existing (9) 50

Train stations (5) 15

Transfer techniques (5) 10. *See also* **(5) Left-handed transfer;** *See also* **(5) Right-handed transfer**

Transport. *See* **(9) Policy statements: transport and movement**

Travel chain analysis (9) 28–29

Travel information (7) 18–22

checklist (7) 22

Travelators (3) 9, 62–66

checklist (3) 65

gradient (3) 63, 65

Trip hazards. *See* **(1) Hazard: tripping**

Turnstiles (2) 44, 46

Typefaces. *See* **(4) Signage: typeface**

U

Underground car parks. *See* **(1) Car parking: multi-storey and underground**

Underground services (1) 88

Unisex toilets (5) 33–42

checklist (5) 42

unisex accessible toilet (5) 33

Universal design pre-application checklist (9) 55

Urban Design Manual (9) 23. *See also* **(9) Sustainable Residential Development in Urban Areas Guidelines**

Urban extension (9) 51

Urinals (5) 17, 28

stall-type (5) 28

troughs (5) 28

wall-hung bowls (5) 28

User-centred design (9) 56

V

Vending machines (5) 94, 99; (6) 8, 31–32. *See also* (6) Coin-operated machines

checklist (6) 32

Ventilation (4) 39. *See also* (4) Air-conditioning systems

checklist (4) 39

mechanical ventilation (4) 39

Venues (7) 59–65; (9) 85

audience seating (7) 60–63

checklist (7) 63

performers' facilities (7) 63–64

checklist (7) 64

speakers' facilities (7) 64–65

checklist (7) 65

Vertical circulation (3) 10, 13

checklist (3) 13

Vertical platform lifts (3) 9, 45–55

checklist (3) 52

controls (3) 49

dimensions (3) 47

retro-fitting (3) 45

Viewing points (7) 118–120

checklist (7) 120

Vision panels (2) 41, 46, 48, 49, 79

Visitor's accommodation (5) 15

Visual contrast (surfaces) (4) 13, 25–27

checklist (4) 27

W

Waiting areas (6) 13. *See also* (2) Reception and waiting areas

checklist (6) 16

Walkways (2) 29, 31, 75, 76

enclosed walkways (2) 31

Wall finishes (4) 21. *See also* (4) Ceiling finishes: checklist

Warning signs (4) 70–73

Washrooms (5) 22

Waste disposal (5) 95, 99

bins (5) 44, 95, 99

Water supply (5) 37, 57, 95–98

Waterford Institute of Technology (9) 34

Waterways. *See* (7) Outdoor access: waterways

Wayfinding (9) 18, 37, 41–43

WC pans (5) 17, 38, 107

Web Accessibility Initiative (8) 50. *See also* (8) Information: websites

**Web Content Accessibility Guidelines (WCAG) (8) 50. *See also*
(8) Information: websites**

Wexford County Development Plan (9) 25

Wheelchair (3) 6–10, 25–27, 31–33, 42, 46, 53, 68; (4) 6, 12, 73, 83; (5) 22, 38, 45, 65, 86, 97; (6) 14, 16, 22, 32; (7) 16, 20, 28, 31, 33, 36, 37, 39, 40, 41, 48, 49, 52, 60, 61, 62, 63, 67, 82, 87, 93, 113, 116, 117, 118, 135; (7) 16, 20, 28, 31, 33, 36, 37, 39, 40, 41, 48, 49, 52, 60, 61, 62, 63, 67, 82, 87, 93, 113, 116, 117, 118, 135; (8) 31

parking (1) 11, 21–22, 28, 29

passing places (1) 10, 35–38, 72

ramps (1) 45–47

suitable surfaces (1) 8, 62–65, 78

taxi ranks (1) 33–35

Wheelchair access (9) 49, 81

Wheelchair users (2) 6, 12, 24, 27, 32, 48; (4) 6, 12, 73, 83;

Wheelchair-accessible toilet. *See also* **(5) Unisex toilets: unisex accessible toilet;** *See also* **(5) Unisex toilets**

Window frames (4) 29

Window reveals (4) 29

Windows (6) 51–53

checklist (6) 53

electrically-powered window-opening devices (6) 53

Work surfaces (6) 37–44

adjustable-height (6) 37

checklist (6) 42

fixed-height work surfaces (6) 37

Workplaces (5) 18

Workstations. *See* **(7) Office buildings: workstations and storage**

X

Xenon beacons. *See* **(4) Fire alarms: visual alarms**

Terminology

Access route – Any route in an internal or external environment whether it is level, gently sloped, ramped or stepped that is available and understandable for a person to use. In external environments, access routes comprise paths, pavements and other pedestrian routes, such as a right of way through a public space.

Accessible – With respect to buildings, or parts of buildings, means that people, regardless of age, size, ability or disability, are able to both access and use the building and its facilities.

Accessible design – Design focussed on principles of extending standard design to people with some type of performance limitation to maximize the number of potential customers who can readily use a product, building or service.

Accessible facilities – Facilities that are designed for all users of a building or external environment, including the young and old, and those of all sizes, abilities, and disabilities.

Acoustics – Characteristics relating to sound.

Automated teller machine (ATM) – A machine for dispensing cash and undertaking other financial transactions, including checking an account balance and changing a personal identification number. Also commonly termed cash point, cash machine, or cash dispenser.

Bathroom – A room comprising a bath, WC, washbasin, and associated accessories.

Building – A permanent or temporary structure of any size that accommodates facilities to which people have access. A building accommodating sanitary facilities may include a toilet block in a public park or shower facilities at a campsite. A temporary building may include portable toilet facilities such as those provided at outdoor events.

Building user – A person regardless of age, size, ability or disability using facilities in a building or associated external environment.

Clear width – The width between handrails.

Coir matting – A coarse kind of carpet made from coconut fibre usually used as a floor mat in matwells at building entrances.

Communal – An area that a group of individual people will share for a common purpose. A communal changing area will be a room for people to change and will typically comprise an open area with minimal privacy.

Designated car parking – Car parking spaces reserved for the use of car users with disabilities, whether as motorists or passengers.

Dog-leg/Switch back stairs – Configuration of stairs between two floors of a building, often a domestic building, in which a flight of stairs ascends to a half-landing before turning 180 degrees and continuing upwards. The flights do not have to be equal, and frequently are not.

Door ironmongery – A collective term for components including hinges, handles, locks and self-closing devices, which are used to facilitate the correct functioning of a door. May also be termed ‘architectural ironmongery’ or ‘door furniture’.

Dropped kerbs – A lowered section of kerb between a pavement and carriageway forming a level or flush crossing point. Also referred to as dished kerbs.

Egress – Independent emergence of a person from a building and the immediate vicinity.

Escalator – A moving stairway.

Evacuation – Egress in an emergency situation, from a place of danger to a place of safety.

Evacuation lifts – Lifts designed to continue operating in the event of a fire, which have special design features to ensure safety.

Extranet – A private network that uses the internet to securely share part of an organisation’s information or operations with others such as suppliers, customers or other businesses. An extranet may form part of an organisation’s intranet that is extended to outside users.

Family toilets – A toilet compartment or washroom designed to meet the needs of a family group or adults supervising young children, which provides a range of facilities including baby-changing area, children’s and adult WCs, in a single room.

Fillet – A decorative filler piece on the floor between balusters.

Grille or grill – An opening of several slits side by side in a wall or metal sheet or other barrier, usually to let air or water enter and/or leave but keep larger objects including people and animals in or out.

Handed – Referring to the layout of a room, this term means the provision of both left- and right-handed arrangements in a building.

Horizontal framing member – A horizontal bar running across a window.

Inclined platform stairlift – A stairlift incorporating a fold-down platform for wheelchair users and support rails that follows the incline of a stair. Also termed wheelchair stairlift and platform stairlift.

Intranet – An in-house website that serves the employees or members of an organisation. An intranet is not a site accessed by the general public.

Internet – A worldwide system of computer networks that uses the public telecommunication network to link millions of computers for communication purposes.

Kerbed upstand – Strip used to form a raised edge (for example 150mm high) at floor level.

Laid to falls – Paving and drainage that relies on fall to carry away water. Fall may also be referred to as slope or, more correctly, gradient. By making one part of the pavement higher than another, gravity will cause the water to move in a preferred direction.

Lift core – A standard industry term for the lift/lift shaft used to service an apartment complex / multi-story building.

Matwell – Entrance Door Matting Systems set into a frame in the floor.

Nosing – An edge part of the step tread that protrudes over the riser beneath in a flight of stairs.

Park and ride – The formal provision of car parking linked with either bus or rail services.

Passenger lift – A conventional motorised lift enclosed within a structural shaft and rising one or more storeys within a building. Lift and door movement is automatic.

Path – A pedestrian route that has no adjacent vehicle carriageway and includes paths in countryside locations as well as paths in urban and residential environments.

Pavement – A pavement is the part of a roadway used by pedestrians and is adjacent to the vehicle carriageway.

Payphone – A public telephone that requires payment on a call-by-call basis, either using coins, a prepaid telephone card, or a credit or debit card.

Person with mobility difficulties – A person who is able, either with or without personal assistance, and who may depend on prostheses (artificial limbs), orthoses (callipers), sticks, crutches or walking aids, to walk, provided that particular design features are installed or available.

Personal identification number (PIN) – A personal four-digit code used to verify card-based payments.

Plinth – The base or platform upon which a structure or fixed furniture fixture, such as a cupboard, rests.

Raked – The degree to which seating in an auditorium or theatre slopes. A seating rake is where the seats are on terraces (so they slope overall), rather than flat on the floor. This helps sight lines and means you can see over the people in front of you.

Refuge area – Areas within a building separated by fire-resisting construction and provided with a safe route to a storey exit, where people with mobility difficulties can await assistance for their evacuation.

Reverberation – The reflection of sound within a room or space.

Riser – The vertical portion between each tread on the stair.

Sanitary facilities – A collective term for toilet, shower, bathing and changing facilities in buildings.

Self-contained – A single facility, such as a shower or changing area that is enclosed by walls or cubicle partitions. A self-contained facility will provide greater privacy than communal facilities.

Setting-down point – A designated area close to a building entrance or other facility where passengers can alight from a car or taxi.

Settlement hierarchy – A way of arranging settlements into a hierarchy based upon their population or some other criteria.

Shower room – A room comprising a shower, WC, washbasin, and associated accessories, such as en-suite facilities in residential accommodation.

Soffit – The underside of any construction element, the underside of a flight of stairs.

Speed Tables – Traffic calming feature normally installed as part of a traffic-calming scheme that helps to reduce vehicle speeds by introducing modest up-and-down changes in the level of the street, thereby requiring drivers to decelerate. They are the same width as the road and rise to meet the grade of the pavement,

providing safe and comfortable crossings. One benefit of speed tables is that people cross at the point where drivers decrease speed.

Stairlift – A device mounted on a support rail that follows the incline of a stair and incorporates either a seat with footrest (chairlift) or standing platform and perch (perching stairlift). Stairlifts are designed for domestic use only. Also termed chair stairlift and domestic stairlift.

Step nosing – The leading edge of a step or landing.

Street furniture – Items located in street and other pedestrian environments such as lamp posts, litter bins, signs, benches, and post boxes.

Tactile paving surface – A profiled paving or textured surface that provides guidance or warning to pedestrians with visual difficulties.

Textphone – A telephone device that facilitates text communication and incorporates a screen and keyboard.

Transfer arrangement – The technique adopted by wheelchair users to transfer from a wheelchair to a WC or shower seat and back. The technique will depend on individual preference and the layout and size of the toilet or shower compartment. Common terms for describing transfer arrangements include lateral (side) transfer, angled (oblique) transfer, frontal, or rear transfer. Transfer may be assisted or unassisted. A left-hand transfer means that a person transfers to their left when seated in a wheelchair.

Transom – A horizontal crosspiece across a window or separating a door from a window over it.

Travelator – A moving walkway designed to transport people quickly over a long distance in large buildings. Travelators are usually level, but may have a slight incline where a vertical change in level is also required.

Tread – The part of the stairway that is stepped on.

Unisex – Facilities that are usable by males and females. Unisex toilets or changing areas may be located adjacent to single-sex washrooms or changing areas but have an independent access. Unisex accessible toilets may be accessed by a person with an assistant, carer, or companion of the opposite sex.

Universal Design = Useable = Understandable - Understanding user needs – For example an older person may require many resting places due to discomfort when walking for long distances.

Vertical platform lift – A guarded platform that travels vertically and is designed to accommodate one wheelchair user and one companion. Vertical platform lifts do not require a structural shaft, but are required to be enclosed if they rise more than 2000mm. Also termed vertical lifting platform; vertical-rise platform lift; short-rise platform lift (up to 2000mm rise); enclosed platform lift; hydraulic platform lift; and scissor lift.

Vision panel – A fixed, glazed panel set into a door that enables people to see through from one side of the door to the other. May also be termed ‘viewing panel.’

Visual contrast – Colour and/or tonal contrast between surfaces and fixtures, designed to improve visual clarity.

Washroom – The term for a room or area accommodating toilet cubicles and associated facilities, such as washbasins, hand dryers, and urinals (in facilities for males).

Waterless WC – A WC that does not use water to flush and is not connected to traditional water supply pipes or a waste drainage system. Waterless WCs may be used in remote areas, such as forestry sites, fairgrounds, car parks, and construction sites.

Wayfinding – A collective term describing features in a building or environment that facilitate orientation and navigation.

Wet room – A shower room in which the floor and walls are all waterproof. The shower area can be accessed without crossing a threshold or stepping into a shower tray.

nda

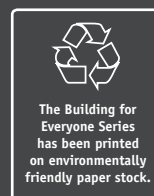


Lárionad Foirfeachta
i nDearadh Uilíoch

Centre for Excellence
in Universal Design

**Lárionad Foirfeachta
i nDearadh Uilíoch**
Údarás Náisiúnta Míchumais
25 Bóthar Chluaidh
Baile Átha Cliath 4
Teileafón (01) 608 0400
Facs (01) 660 9935
www.nda.ie

**Centre for Excellence
in Universal Design**
National Disability Authority
25 Clyde Road
Dublin 4
Telephone (01) 608 0400
Fax (01) 660 9935
www.nda.ie



designed by catalysto°