Building Control Officer Part M 2010 Workshop 1 June 2011

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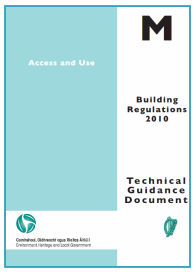
Environment, Community and Local Government



Building Control Officer Part M 2010 Workshop
1 June 2011

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Notes:

This courseware comprises a set of illustrated slides covering the Building Regulations (Part M Amendment) Regulations 2010 and the content of Technical Guidance Document (TGD) M (2010 edition). Any related notes should be read in conjunction with the slides. The courseware is specifically designed for building control authority staff. It is assumed that the users are familiar with the legal framework of the Building Regulations i.e. the Building Control Acts 1990 – 2007 and the accompanying Statutory Instruments. It is also assumed that the users are familiar with Technical Guidance Document M 2010 and its predecessor.

Users should note the applicability of TGD M (2000 edition) as outlined under the heading "Transitional Arrangements" on page 6 of TGD M (2010 edition).

Overview of course

1. Introduction – Background and context;
2. The Building Regulation (Part M Amendment) Regulations 2010;
3. Section 1 – Access and Use of buildings other than dwellings;
4. Technical exercise - Application of Part M to new buildings other than dwellings;
5. Section 2 – Access and Use of existing buildings other than dwellings;
6. Technical exercise – Application of Part M to existing buildings other than dwellings;
7. Section 3 – Access and Use of Dwellings.

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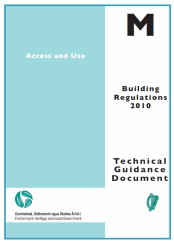

Module 1

Introduction - Background and context

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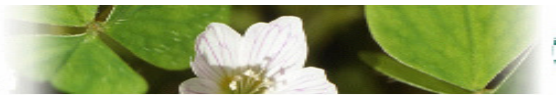

Part M Review

- **2005** - Commitment given in DEHLG Outline Sectoral Plan under Section 36 of the Disability Act 2005 to review Part M;
- **Dec 2005 – March 2006** - Public Consultation (43 submissions received);
- **2006 - 2009 -** Preparation of Part M documentation including Regulatory Impact Assessment (RIA) in consultation with the Building Regulations Advisory Body (BRAB);
- **July 2009 – Oct 2009** - Public Consultation (48 detailed submissions received);
- **1 Nov 2010 -** Signed by the Minister for the Environment, Heritage and Local Government John Gormley and published as a Statutory Instrument (S.I. No. 513 of 2010).

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Notes:

This slide is a quick reference timeline of the Part M Review.

Public Consultation Dec 2005 – March 2006: The public were invited to respond to the following questions:

(1) What part of Technical Guidance Document M would you propose to change?

(2) What specific changes would you suggest?

Submissions received from the Public Consultation came from Disability Groups, Construction Industry, Professional bodies, Public bodies and individuals.

Benefits of improved standards of accessibility

- Key to sustainable development;
- Wider range of buildings and facilities accessible;
- More inclusive society;
- Increased opportunity to participate equally in society.

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Notes:

Accessibility is a key to sustainable development, because it enhances the quality of life and makes the built environment more liveable. The main benefits of improved standards affect people with a wide range of abilities resulting in a wider range of buildings and their facilities being inclusive of society.

Other benefits include:

• Improved legal rights of access to goods, facilities and services in both the public and private sectors.

• Increased availability and range of accessible facilities that people with a wide range of abilities can enjoy.

• Increased opportunity to participate equally in society.

Other groups will also benefit from the improved standards include:

• People with young children in prams, buggies;

• People burdened with luggage, shopping bags, etc;

• People with temporary impairments (e.g. people with broken limbs) and elderly people.

National Disability Survey 2006[4]

Type of Disability	Total Persons
Seeing	50,600
Hearing	57,600
Speech	35,300
Mobility & dexterity	184,000
Remembering & concentrating*	113,000
Learning or intellectual disability	71,600
Psychological or emotional condition**	110,600
Pain**	152,800
Breathing	71,500
Total persons with a disability[5]	**325,800**

[4]Source: - National Disability Survey 2006 – First Results, Central Statistics Office;
[5] Persons reporting multiple disabilities are counted only once in this row;
* 3.5% within this group state that this is their single disability. Part M / TGD M 2010 does not claim to benefit this %;
**Approx 12% within this group state that this is their single disability. Part M/TGD M 2010 does not claim to benefit this %.

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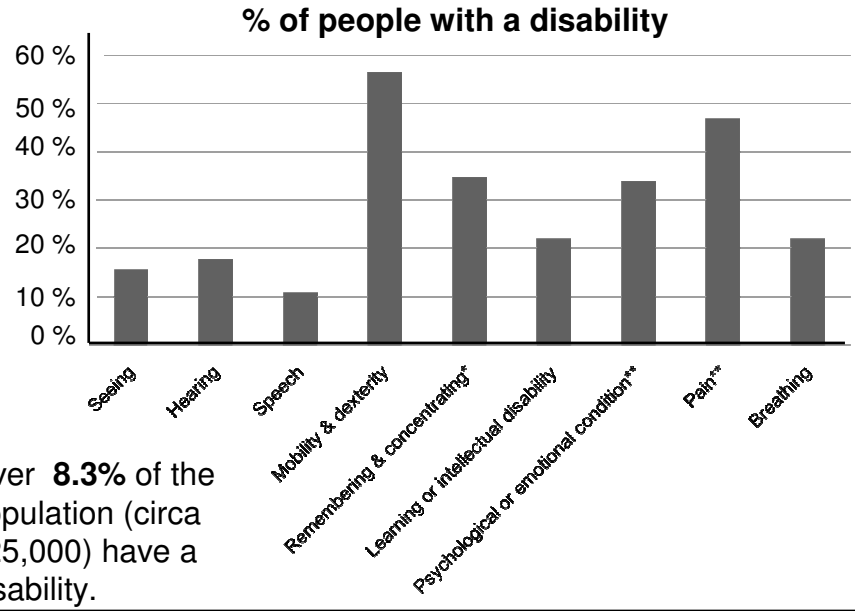
Distribution of disability types



Over **8.3%** of the population (circa 325,000) have a disability.

National Disability Survey 2006

Other beneficiaries will include:	Total Persons
People over 64 in the population[6]	467,926
Households with children under the age of five	229,576
Carers under 65 in the population[7]	142,765

[6] 36% of people with disabilities are 65 and over;
[7] under 65 only; Total carers = 160,917.

Total beneficiaries - approximately **20%** of the population.

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Notes:

Other beneficiaries of improving access and use of buildings caters for the interests of such people as over 64 year olds and households with children under five years old. It is estimated that the combined total beneficiaries amount to approximately **20%** of the population.

Age distribution: The age distribution of Ireland's population is changing dramatically. The following key statistics show some of the demographic changes expected in the first half of the 21st century:

- By 2021, it is predicted that 15% of the Irish population will be over the age of 65. This figure currently stands at approximately 11%.
- By 2021, the number of people over 80 years of age will have increased by two-thirds.
- By 2050 it is estimated that there will only be two 18-64 year olds for every one person over 65 in Ireland, in comparison to six for every one at present.
- As people age, their ability to remain independent can decrease considerably.

Buildings should be designed so that they are easy for people to use and to reflect the fact that all people experience changes in their abilities as they progress through the different stages of life. It is important for designers to take all of the users of buildings into account throughout the design process in order to avoid the creation of a built environment that excludes certain groups from participating in normal everyday activities. Experience has shown that meeting the needs of people with disabilities or elderly people frequently generates design solutions which benefit a wider range of user groups, including people with young children in buggies, people with temporary injuries or carrying heavy luggage.

Review of Disabled Parking Permit scheme 2010

Review of the terms and operation of the Disabled Parking Scheme 2010 - Department of Transport:

- 80,000 qualified permit holders in use (based on current levels of application may rise to over 100,000 shortly);

- NDA estimate that there are over 31,000 wheelchair users in Ireland.

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Barriers faced by people with disabilities





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Barriers and solutions

Uneven surface finishes (i.e. Cobbled surfaces) are a barrier for people with a mobility impairments, older people and people wearing particular footwear.

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Barriers and solutions

Poorly designed crossing points are confusing for people with vision impairments.

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Barriers and solutions

Poor lighting and signage (barrier for all users)

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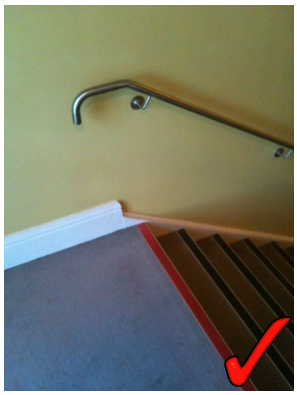
Barriers and solutions



Stairs without adequate handrails, poor colour contrast to identify tread nosings

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Barriers and solutions

A circular doorknob will be very difficult to use if a person has poor grip;

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Barriers and solutions

Round door knob, poor use of symbols on signage

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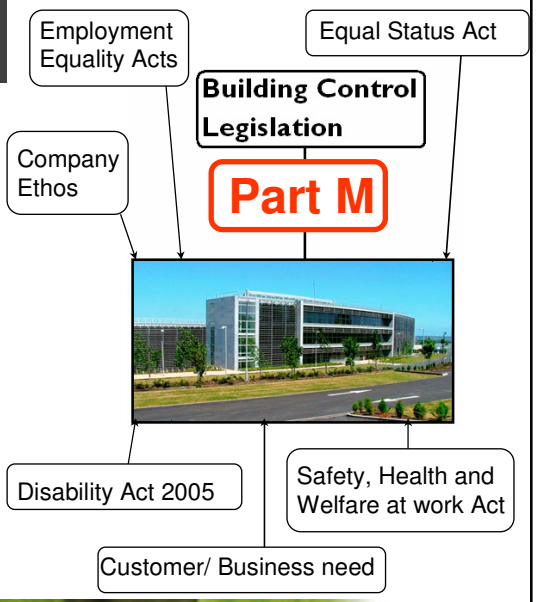
Access and Use of buildings

- Access and Use of buildings is covered by several key pieces of legislation and many other considerations;
- The Building Control Officers role is to secure **compliance with the Building Regulations i.e. Part M** in this context.



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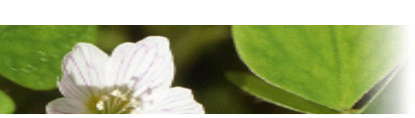

Module 2

The Building Regulations (Part M Amendment) Regulations 2010

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Presentation overview

- Part M of the Building Regulations (2000);
- Building Regulations (Part M Amendment) Regulations 2010;
- Part M 2010 -The Requirements;
- Application of Part M 2010;
- Use of the Guidance (TGD M 2010);
- Determination of Practicability;
- Section 0.8 – 0.12 of TGD M 2010.

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Part M of the Building Regulations 2000

Part M 2000 provides as follows:

Access and Use	M1	Adequate provision shall be made to enable people with disabilities to safely and independently access and use a building.
Sanitary conveniences	M2	If sanitary conveniences are provided in a building, adequate provision shall be made for people with disabilities.
Audience or Spectator facilities	M3	If a building contains fixed seating for audience or spectators, adequate provision shall be made for people with disabilities.
Definition for this Part	M4	In this Part, "people with disabilities" means people who have an impairment of hearing or sight or an impairment which limits their ability to walk or which restricts them to using a wheelchair.
Application of this Part	M5	Part M does not apply to works in connection with extensions to and the material alterations of existing dwellings, provided that such works do not create a new dwelling.

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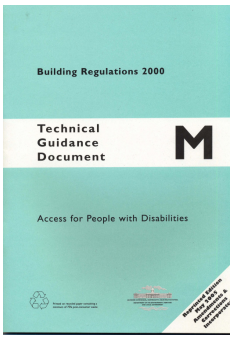
Part M of the Building Regulations 2000

Application of Part M 2000

- New buildings, including dwellings;
- Extensions (subject to M5);
- Material alterations (subject to M5);
- Does **not** apply to material change of use;
- Conformance with TGD M 2000 'shall prima facie indicate compliance';
- Compliance by other means not prohibited.



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Building Regulations (Part M Amendment) Regulations 2010 – S.I. No. 513 of 2010

- In general, applies where works commence, or buildings in which certain changes of use takes place on or after **1 January 2012;**
- The Requirements of Part M (2000) may continue to be used in the case of works, or buildings where –

  (a) the works commence or certain change of use takes place, as the case may be, on or before **31 December 2011**, or

  (b) the works, or buildings are the subject of –

  (i) a planning application made on or before **31 December 2011** for planning permission or approval and where substantial work has been completed by **31 December 2013**, or

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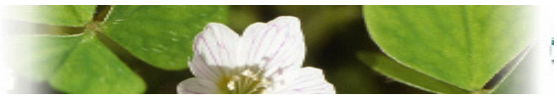

Building Regulations (Part M Amendment) Regulations 2010 – S.I. No. 513 of 2010

(ii) a notice pursuant to the provisions of Part 8 of the Local Government (Planning and Development) Regulations 2001 (S.I. No. 600 of 2001) has been published on or before **31 December 2011**, and where substantial work has been completed by **31 December 2013**, or

(c) a FSC or a DAC in respect of the works or buildings, has been granted on or before **31 December 2011**, and where substantial work has been completed by **31 December 2013**.

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Building Regulations (Part M Amendment) Regulations 2010 – S.I. No. 513 of 2010

The Building Regulations 1997 are amended by substituting for Article 11(2) the following:—

"For the purposes of this article, "material alteration" means an alteration, where the work or part of the work carried out by itself would be the subject of a requirement of Part A, B or **M** of the Second Schedule to these Regulations."

Therefore, where proposed works are subject to Part A (Structure) or Part B (Fire safety) **or Part M (Access and Use)** of the Regulations the works themselves should comply with **ALL** parts of the Regulations.

Notes:

No new or greater contravention to any building shall arise as a result of a material alteration. In assessing compliance of material alterations, the following three questions must be answered "Yes" for the works to comply:

1. Do the works of themselves comply with Building Regulations?
2. Is the creation of any new contravention of Building Regulations in the existing building avoided?
3. Is the creation of any greater contravention of Building Regulations in the existing building avoided?

What about repair or renewal?

"Repair or renewal" is defined as work of restoration or replacement of a routine nature relating to-

- The keeping of a building in good working condition or working order;
- The return of the fabric of a building to its original condition.

Article 11 (3) states "These Regulations shall apply to any repair or renewal likely to affect the structural integrity of the building or building element being repaired or renewed."

Building Regulations (Part M Amendment) Regulations 2010 – S.I. No. 513 of 2010

The Building Regulations 1997 are amended by inserting after "building" in Article 13 (1)(*a) the following:—*

"In addition, **Part M** shall apply to the building, where a material change of use as described in subparagraph (2)(*b)(i), (ii), (iv), (vi), (vii) or (viii) of* this article takes place."

- Day centre;
- Hotel;
- Hostel or guest building;
- Institutional building;
- Place of assembly;
- Shop (which is not ancillary to the primary use of the building);
- Shopping centre.

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Notes:

Note this list does not include offices and industrial buildings. It generally applies to uses which involve people sleeping overnight in buildings or which involve large numbers of people unfamiliar with the building using it. The main reason for this amendment is to ensure improved access **where practicable**, where none was otherwise intended. Over time this will result in a wider range of the existing building stock becoming accessible to people with a wide range of abilities.

Building Regulations (Part M Amendment) Regulations 2010 – S.I. No. 513 of 2010

Part M 2010 (as amended), provides as follows:

Access and Use	M1	Adequate provision shall be made for people to access and use a building, its facilities and its environs.
Application of the Part	M2	Adequate provision shall be made for people to approach and access an extension to a building.
	M3	If sanitary facilities are provided in a building that is to be extended, adequate sanitary facilities shall be provided for people within the extension.
	M4	Part M does not apply to works in connection with extensions to and material alterations of existing dwellings, provided that such works do not create a new dwelling.

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Notes:

Part M of the Second Schedule to the Building Regulations (as amended) comprises four Requirements:

- Regulation M1 requires adequate provision shall be made for people to access and use a building, its facilities and its environs;
- Regulation M2 requires adequate provision shall be made for people to approach and access an extension to a building;
- Regulation M3 requires adequate sanitary facilities shall be provided for people within the extension i.e. people using the extension. If sanitary facilities are provided in a building. This may be done by either providing new accessible sanitary facilities in the extension, or modifying the facilities in the existing building and make them accessible from the extension;
- Regulation M4 states that Part M does not apply to extensions and material alterations to existing dwellings, provided such works do not create a new dwelling.

Building Regulations (Part M Amendment) Regulations 2010 – S.I. No. 513 of 2010

- Why is there no mention of 'people with disabilities' in M1?
- What is considered 'Adequate'?
- What does 'facilities' cover?
- What does 'environs' mean?

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Notes:

Why is there no mention of 'people with disabilities' in M1? The Requirements of Part M 2010 no longer refer to 'people with disabilities' . The aim of Part M 2010 is to foster a more inclusive approach to design and facilitate the needs of all people.

What is considered adequate? Building Regulations are generally written in broad functional terms rather than in prescriptive terms. Hence the need for more specific guidance on what is considered adequate. Clearly, the provisions to ensure adequacy will vary significantly according to a wide range of factors such as use, size, and height of buildings. If the works are carried out in accordance with the guidance in TGD M 2010, this will, prima facie indicate compliance with Part M and will therefore be adequate.

What does 'facilities' cover? The scope of Part M covers sanitary facilities and specifically the following facilities: audience and spectator facilities, refreshment facilities, accessible sleeping accommodation, switches, outlets and controls. It **does not** extend itself to anything else beyond that which is covered in TGD M 2010.

What does 'environs' mean? Within the scope of Part M 'Environs' means the features outside the building to which the Requirements of Part M apply. 'Environs' is defined by the specific guidance given in TGD M 2010 i.e.

- Those features required to provide access to the building from the adjacent road or the entrance at the boundary of the site, and
- From **designated** car parking spaces for people with disabilities and setting down areas within the site;
- Between the accessible entrance(s) and any other subsidiary entrances and buildings where external circulation is required between them;
- To and from facilities associated with the building and within the complex, and;
- From the building exits to assembly points or to the boundary of the site.

It **does not** extend itself to anything else beyond that which is covered in TGD M 2010 and **does not** extend beyond the boundary of the site.

(0.1) The Requirements of Part M (M1 – M4)

Aim to ensure that regardless of age, size or disability:

(a) New buildings other than dwellings are accessible and usable;

(b) Extensions to existing buildings other than dwellings are **where practicable**, accessible and useable;

(c) Material alterations to existing buildings other than dwellings increase the accessibility and usability of existing buildings **where practicable**;

(d) Certain changes of use to existing buildings other than dwellings increase the accessibility and usability of existing buildings **where practicable**, and

(e) New dwellings are visitable.

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Notes:

Part M aims to foster an inclusive approach to the design and construction of the built environment. In doing so, the Requirements, underpin the principle of Universal Design.

(0.1) Universal Design

- "The design and composition of an environment so that it can be accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability or disability"
- TGD M 2010 promotes Universal Design and has incorporated the key principles **where appropriate**;
- "…**consider** making additional provisions where practicable and appropriate";
- Voluntary encouragement (additional provisions at designer/ owners discretion).
- List of useful references advocating greater accessibility provided at end of TGD M;

Notes:

Building Control Officers should note that only the requirements set out in Part M/TGD M are enforceable. Any additional provision is at the designer/owners discretion. Whilst TGD M 2010 underpins Universal Design "those involved in the design and construction of buildings should have regard for the philosophy of Universal Design and consider making additional provisions where practicable and appropriate." This will encourage designers to make provisions beyond minimum standards on a **voluntary** basis where the specific use of a building or client requirements may dictate. The seven principles of Universal Design are:

Principle 1: Equitable Use – The design is useful and marketable to people with diverse abilities.

Provide the same means of use for all users: identical where possible; equivalent when not. Avoid segregating or stigmatising any users. Provisions for privacy, security and safety should be equally available to all users e.g. Integrated, dispersed seating in an audience and spectator facility

Principle 2: Flexibility in Use – The design accommodates a wide range of individual preferences and abilities.

Provide choice in the methods of use. Accommodate right or left hand access and use. Facilitate the user's accuracy and precision. Provide adaptability to the user's pace.

Principle 3: Simple and Intuitive Use – Use of the design is easy to understand, regardless of the users experience, knowledge, language skills, or current concentration level. Eliminate unnecessary complexity.

Principle 4: Perceptible Information – The design communicates necessary information effectively to the user, regardless of ambient conditions or the users sensory abilities.

Principle 5: Tolerance for Error - The design minimises hazards and the adverse consequences of accidental or unintended actions.

Principle 6: Low Physical Effort –The design can be used efficiently and comfortably and with a minimum of fatigue e.g. Lever handles on latched door, taps etc.

Principle 7: Size and Space for Approach and Use – Appropriate size and space is provided for approach, reach, manipulation, and use regardless of a user's body size, posture, or mobility.

(0.2) The Requirements

In order to satisfy the requirements of Part M, all buildings should be designed and constructed so that:

- People can safely and independently approach, gain access and use a building, its facilities and its environs, and
- Elements of the building do not constitute an undue hazard for people, especially for people with vision, hearing or mobility impairments.

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(0.3) The Requirements – Buildings other than dwellings

Buildings other than dwellings:

- People can circulate within the building and use the building's facilities;
- Where sanitary facilities are provided, adequate sanitary facilities are available and accessible to people with a range of abilities;
- Where relevant facilities such as fixed/ unfixed seating for audience or spectators, refreshment facilities, sleeping accommodation and the like are provided, adequate provision is made for people with a range of abilities;
- Suitable aids to communication are available for people with vision, hearing or mobility impairments.

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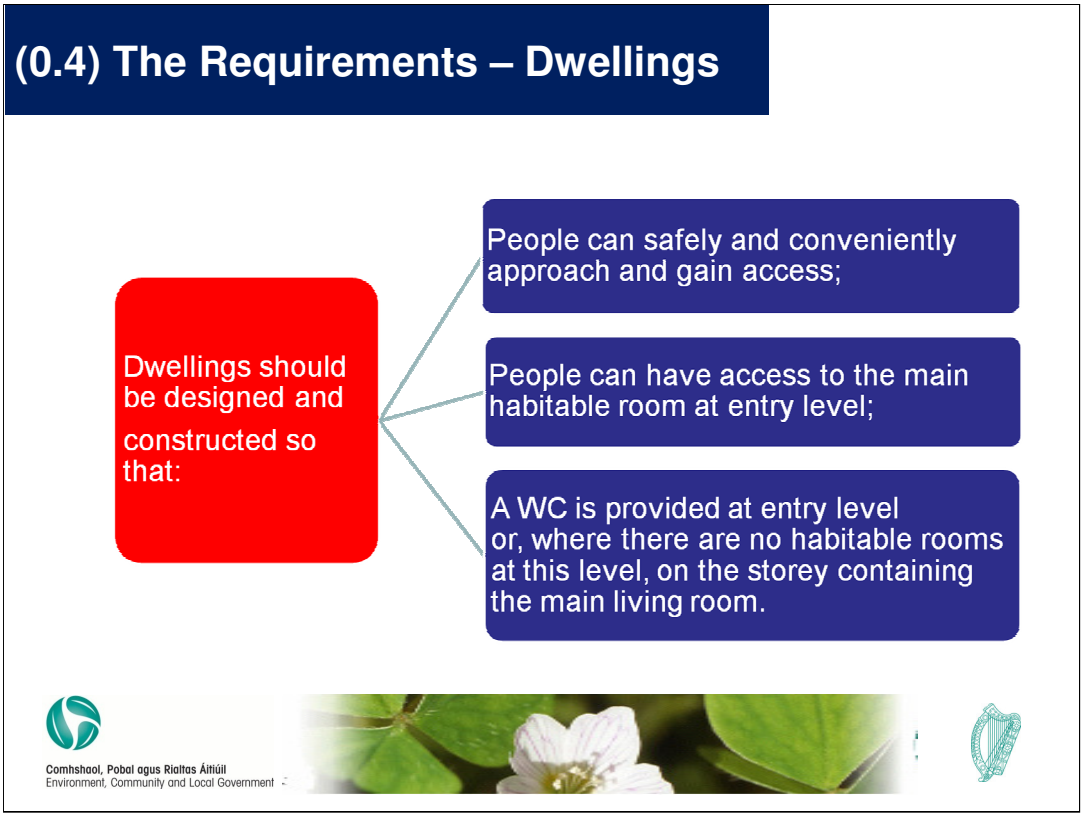


Notes:

People can safely and conveniently approach and gain access to the dwelling: Where due to site specific constraints or where all entrances are on other than ground level and a suitable passenger lift is not provided, it is considered adequate to provide access by means of steps, or a stairway suitable for use by ambulant disabled people.

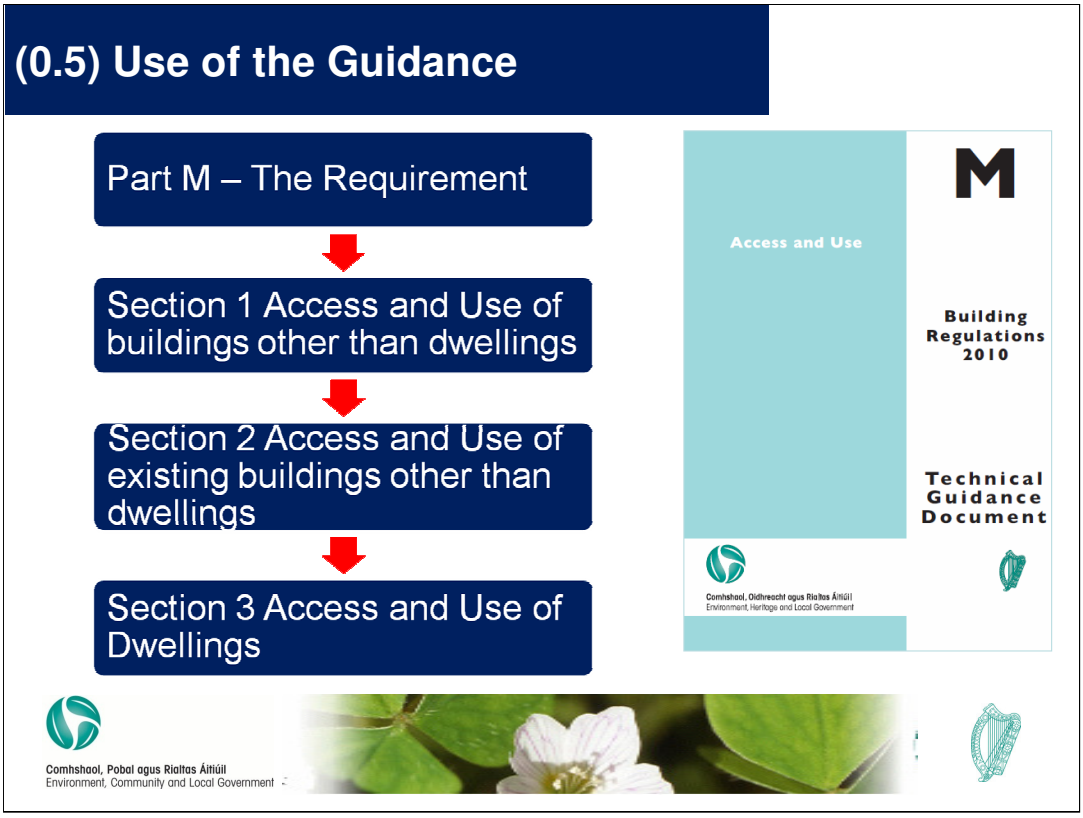
People can have access to at least one habitable room at entry level: Where there is no habitable room at this level, it is considered adequate to provide for access to habitable rooms on the storey containing the main living room. Access to this storey from the entry storey may be by means of a stairway suitable for use by ambulant disabled people.

National housing strategy for people with a disability: A 'National housing strategy for people with a disability' is expected to be completed in early 2011 and will, inter alia, examine the issue of accessibility to housing for people with a disability. In light of this, it was considered premature to extensively update guidance on Dwellings. Nevertheless, there has been a limited update to Section 3 of TGD M 2010.

The Government's Housing Policy Statement, 'Delivering Homes, Sustaining Communities' underpins the commitment made in 'Towards 2016' to develop a national housing strategy for people with a disability. The strategy is being progressed by a National Advisory Group (NAG), which was established in October 2007 under the aegis of the Housing Forum. This group is chaired by the Department of the Environment, Heritage and Local Government and involves the Department of Health and Children, the Health Services Executive, social partners and other relevant stakeholders, including the National Disability Authority.

The remit of the National Advisory Group is to input into the development of a national housing strategy to support the provision of tailored housing and housing supports for people with a disability. The terms of reference of the group are:

- To input into Government policy on addressing the accommodation needs of people with a disability;
- To advise on the structures and supports required to effectively deliver on the accommodation needs of people with a disability, including through the development of inter-agency responses; and
- To act as an advisory and monitoring body on the implementation of the new strategy.

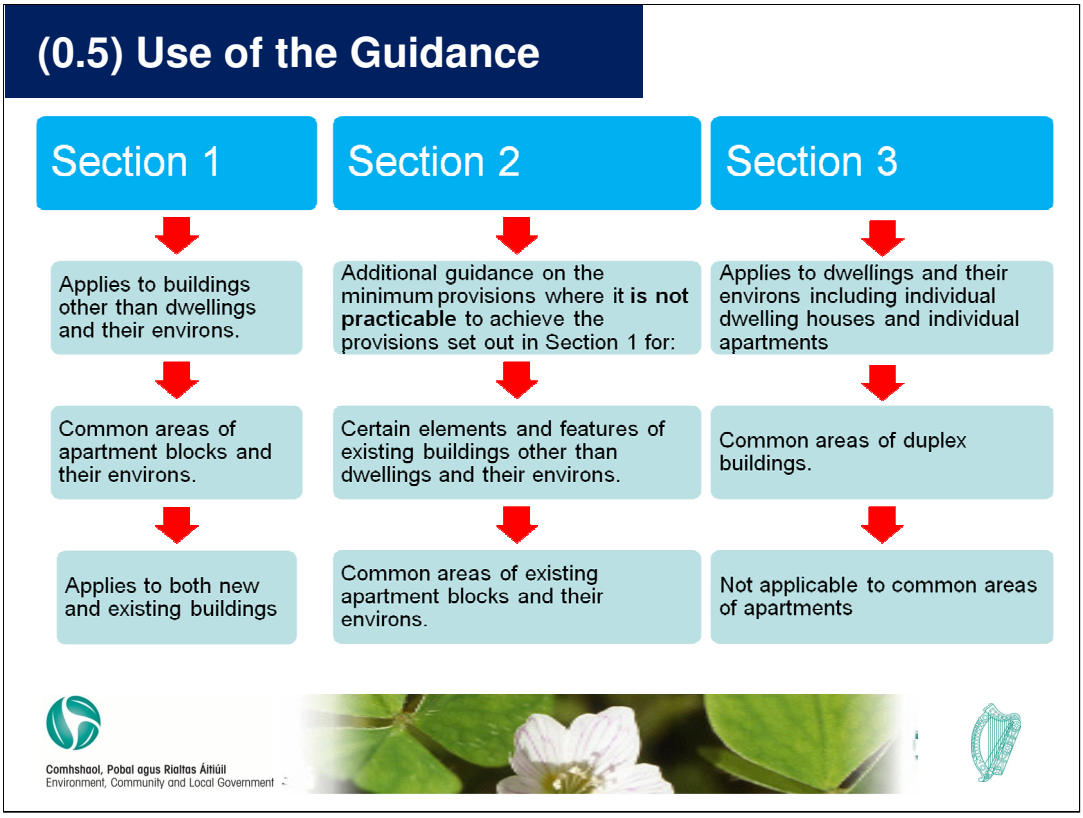


Notes:

Article 7 of the Building Regulations:

- Provides for the publication of Technical Guidance Documents;
- Sets out the status of Technical Guidance Documents - conformance shall indicate **prima facie** evidence of compliance with Regulations;
- Conformance with Technical Guidance Documents is discretionary, not mandatory.

Article 7 further provides that the use of alternative methods to achieve compliance with Building Regulations is not precluded by the existence of Technical Guidance Documents. This is an important provision which permits alternative design and construction approaches to those indicated by the Technical Guidance Document.



Notes:

Each section deals with different types of works.

Section 1: The guidance in Section 1 sets out the minimum level of provision for the following buildings to meet the Requirements of M1.

Section 2: provides additional guidance on the minimum provisions for certain elements and features of existing buildings where it is not practicable (refer 0.7) to achieve the provisions set out in Section 1. Where works (e.g. extensions, material alterations and certain material changes of use, etc) to existing buildings are carried out in accordance with Section 1 and, where necessary Section 2, this will indicate compliance (prima facie) with Requirement M1. Reference should be made to 0.6 and 0.8 for the application of Part M to existing buildings and 0.7 for considerations that should be made when determining 'practicability'.

Section 3: The guidance in Section 3 applies to dwellings and their environs. This includes individual dwelling houses and individual apartments. It does not apply to the common areas of apartment blocks. The guidance in Section 3 also applies to the common areas of duplex buildings.

(0.5) Use of the Guidance

Section 1

Where works (e.g. extensions, material alterations and certain material changes of use, etc) to existing buildings are carried out in accordance with Section 1 and, **where necessary** Section 2, this will prima facie indicate compliance with Requirement M1*.

Section 2

* Reference should be made to 0.6 and 0.8 for the application of Part M to existing buildings and 0.7 for considerations that should be made when determining 'practicability'.

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Notes:

Section 2 provides additional guidance on the minimum provisions for certain elements and features of existing buildings where it is not practicable (refer 0.7) to achieve the provisions set out in Section 1. Where works (e.g. extensions, material alterations and certain material changes of use, etc) to existing buildings are carried out in accordance with Section 1 and, where necessary Section 2, this will prima facie indicate compliance with Requirement M1.

Design and Layout – new features

Overall objectives

Rationale

Section 1.6
Aids to communication

1.6.1 Objective

The objective is to provide adequate aids to communication to ensure people can independently access and use a building and its facilities.

Handrails, in accordance with 1.1.3.6 should be provided on both sides.

Rationale: People with restricted mobility may be weaker on one side and therefore a handrail on each side of the flight is essential for support when ascending and descending ramps.

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Notes:

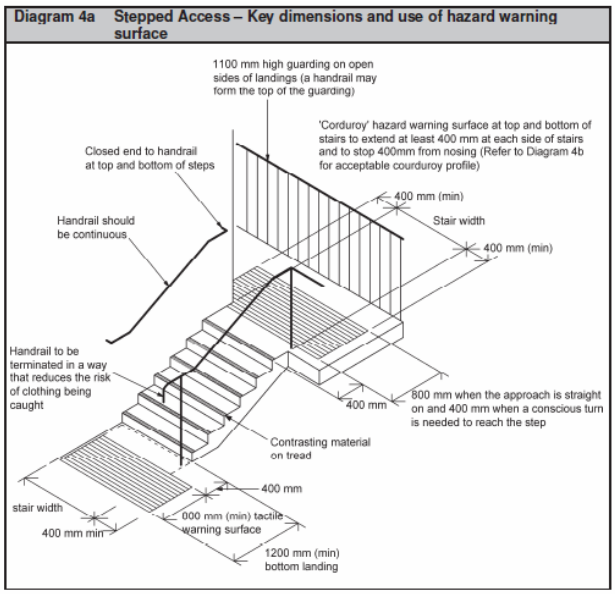
The guidance in TGD M 2010 represents a notable reduction in the gap between minimum standards and best practice. Some new features are as follows:

•The guidance is written in an accessible format;

•**Objectives** are given at the start of each section;

•A **rationale** for certain provisions is given with a view to informing the users understanding of the thinking behind such provisions and encouraging accessibility awareness. Rationale will also help support enforcement decisions where alternatives are proposed;

Diagrams



- Not necessarily to scale
- Not fully detailed solutions
- Dimensions: Minimum or range of **finished** dimensions
- Allowance for tolerances and on-site deviation required
- Reference should be made to TGD D 'Materials and Workmanship' **and other Regulations as required**

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Notes:

More diagrams provided throughout document. Designer should be aware of the functional requirements of a feature and the scope of Part M is limited to matters relating to access to and use of a building. It does not extend to means of escape, for which reference should be made to Part B 'Fire Safety'.

Referenced standards and Part M

•Any reference to a technical specification is a reference to so much of the specification as is relevant in the context in which it arises;

•The main reference source which TGD M 2010 is based on **BS 8300:2009;**

•Compliance with BS 8300 **does not** necessarily mean compliance with Part M of the Building Regulations.

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Notes:

There are several occasions where TGD M 2010 deviates from the guidance provided in these source documents e.g.

•Space provision for parallel car parking in BS 8300:2009 is 6600 mm long. TGD M states this dimension should be 7000 mm long (co-ordinated with the Department of Transport Traffic Signs Manual).

•Space provision for Wheelchair accessible unisex WC in TGD M 2010 is based on a turning space of 1800 x 1800 mm in order to facilitate the needs of an increasing percentage of electric wheelchair users. (BS 8300:2009 space provision is based on 1500 mm x 1500 mm and is generally aimed at manual wheelchair users).

Other standards and publications

- Good Practice documents (generally research based);
- Further source of information;
- **Does not** form part of the guidance;
- Higher levels of provision possible;
- May help to resolve less common situations or issues;
- Helps to develop guidance for future consideration;
- Drives progress and ambition.

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Notes:

In general, the provision of this section will encourage designers to look beyond minimum standards and navigate towards a best solution in given circumstances.

Concept of 'Practicability' in TGD M 2010

- Scope of Part M broadened in relation to its application to existing buildings (i.e. material alteration, certain material changes of use);
- The concept recognises that certain existing buildings (e.g. historic, terraced, urban or restricted sites, etc.) may not be able to comply with the guidance for new buildings;
- Rigid application of guidance for new buildings could seriously limit the potential use of existing buildings as it may not in some cases be possible to comply;
- A balanced and integrated approach is required to address accessibility, conservation and sustainability;
- Adopt concept where the particular circumstances (0.7) apply.

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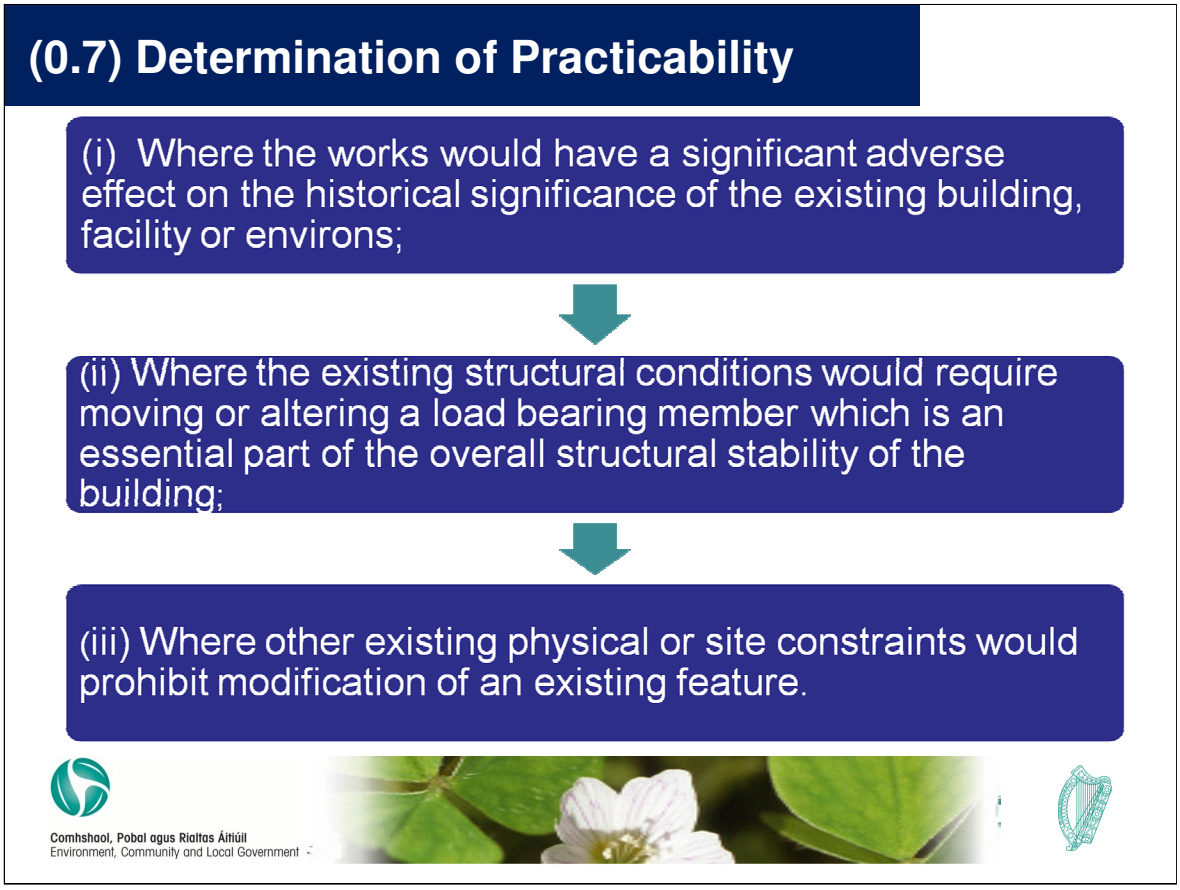
Notes:

'Practicability' is a concept also used elsewhere in the Building Regulations and in other legislation/ definitions to acknowledge that there may be some instances where certain Requirements may not always be feasible e.g. The Disability Act 2005 "Public bodies must ensure that their public buildings are, **as far as practicable**, made accessible……." and Universal Design ….."The design and composition of an environment, so that it may be accessed, understood and used to the **greatest practicable extent**……".

Why is the concept of 'practicability' included in TGD M 2010? The scope of Part M 2010 is broadened in relation to its application to existing buildings i.e. Definition of 'material alteration' extended to include Part M, and Part M now applies to certain material changes of use.

The direct impact of these new changes will significantly help to improve the accessibility of the existing building stock (when works are carried out). However, there may be certain existing buildings where a rigid application of guidance associated with new buildings simply will not work. The application of guidance for new buildings in some cases could seriously limit the potential of renovation, refurbishment, change of use or other works of an existing building. This may result in existing buildings falling into neglect and disrepair. The concept of practicability recognises the many challenges associated with works to existing buildings and encourages accessibility, conservation and sustainability to be addressed in an integrated and balanced manner.



Notes:

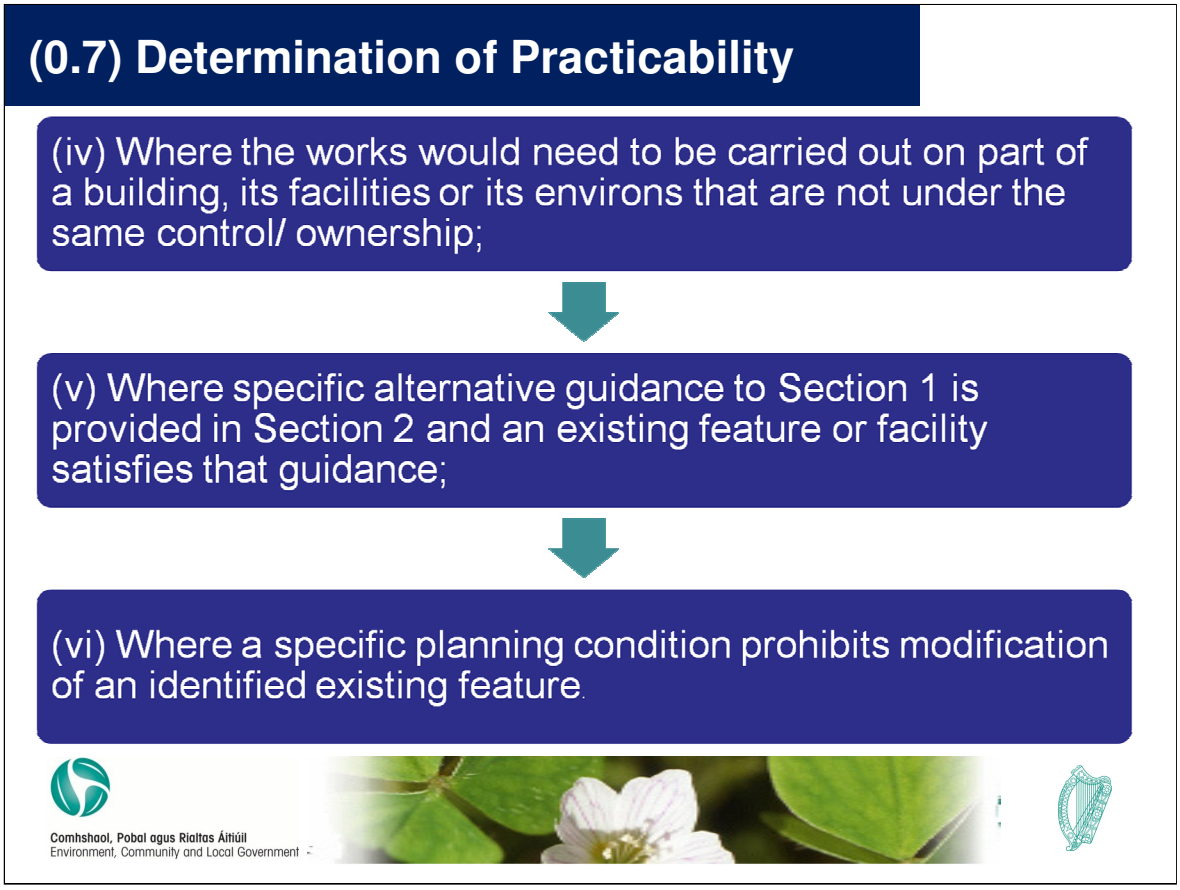
This slide describes the key list of circumstances (non-exhaustive) to be considered in the determination of practicability. There may be other reasons why it is not practicable to adopt a particular approach but these need to be considered on a case by case basis.

Examples of practicability in relation to (i) to (iii):

(i) e.g. Protected Structures or potential Protected Structures. 'Historical significance' may also include non-protected structures in architectural conservation areas, for instance, or other older buildings of architectural or historical interest or value;

(ii) 'Essential part of the overall structural stability' would not normally include increasing the width of a door opening creating a need to replace a lintel but would include increasing the width or altering the going of existing stair cores, where the stair core contributes to the structural stability of the building;

(iii) e.g. entrance to an existing building directly accessed from the public footpath where the entrance level is not level with the footpath.



Notes:

This slide describes the key list of circumstances (non-exhaustive) to be considered in the determination of practicability. There may be other reasons why it is not practicable to adopt a particular approach but these need to be considered on a case by case basis.

Examples of practicability in relation to (iv) to (vi):

(iv) e.g. where the areas of the building or its environs are outside the control/ ownership of the leaseholder;

(v) e.g. where a ramp already exists and it is in compliance with Section 2, it may not be necessary to replace it with one that complies with Section 1. In general the retention of certain existing features allowed in Section 2 adopt the provisions of TGD M 2000 as a benchmark for absolute minimum standards of accessibility.

(vi) e.g. where floor levels are dictated by a Planning Authority due to flood risk.

(0.7) How does 'Practicability' work with Part M 2010?

Adopt as a tool to assist in applying a level of **reasonableness** when assessing proposed works to existing buildings;

May be used in two ways;

1. As a means of demonstrating compliance with Part M where physical intervention to the following proves un-workable:
   - Approach and access to extensions;
   - Approach and access to an existing building (or part of) undergoing a certain Material Change of Use;

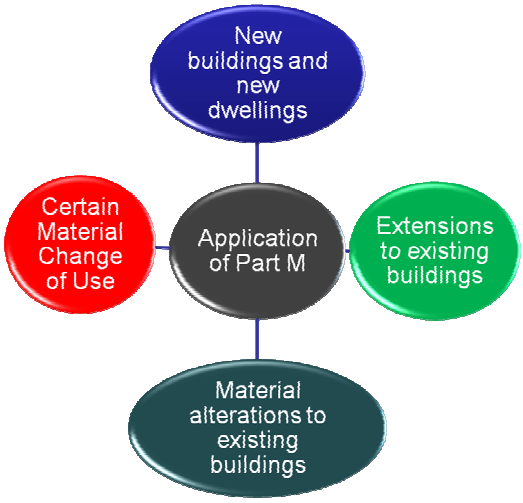
2. As a means of demonstrating compliance with Part M where it may not be feasible for a proposed Material Alteration to comply with the guidance in Section 1.

Notes:

Item 1 Example: A sub-leaseholder in a multi occupancy building proposes a material change of use of the top floor premises into a restaurant but does not have landlord consent to alter the common parts of the building to make them fully accessible.

If an accessible solution cannot be reached an explanation should be provided in the DAC application to identifying the constraints imposed. From this it may be deemed that compliance with Part M has still been achieved.

(0.6) Application of Part M



0.6 (a) New buildings and new dwellings;

0.6 (b) Extensions to existing buildings;

0.6 (c) Material Alterations to existing buildings;

0.6 (d) Certain Material Changes of Use.

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(0.6) Application of Part M

0.6 (a) New buildings and new dwellings

- Meet the Requirements of M1;

M1 - "Adequate provision shall be made for people to access a building, its facilities and its environs"

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(0.6) Application of Part M

0.6 (b) Extensions to existing buildings

M2 "Adequate provision shall be made for people to approach and access an extension to a building".

- Independent approach and entrance (where practicable);
- Modify existing approach and entrance (where practicable).

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Notes:

Extensions are required to comply with Building Regulations in the same way as new buildings are. In addition, the design and construction of an extension should not give rise to any 'new or greater contravention' in the existing building. That is, the addition of an extension (vertical or lateral) to an existing building should not make the existing building any worse in relation to Building Regulations. The following **examples** are given by way of clarification:

The erection of an extension to an existing building whereby the extension is to be served for access and escape purposes by a staircase within the existing building:

- If the staircase were adequate for the capacity of the existing building but inadequate for the extended building, this would constitute a **'new contravention'** of Building Regulations.
- If the existing staircase were inadequate for the existing building and rendered more inadequate due to the additional capacity of the extended building, this would constitute a **'greater contravention'** of Building Regulations.

Note, therefore, that Building Regulations as they apply to works in connection with existing buildings being extended, require solely that the **status quo be maintained** in the existing building. Where an existing building contravenes Building Regulations, the extension of such a building does not carry with it the requirement to make good such contravention, but merely that the contravention is not worsened, **i.e. that no new or greater contravention arises.** Building Regulations do not apply retrospectively to existing buildings where such buildings are being extended except to the extent that any new or greater contravention is not permitted.

(0.6) Application of Part M

0.6 (b) Extensions to existing buildings

M3 "If sanitary facilities are provided in a building that is to be extended, adequate sanitary facilities shall be provided for people within the extension".

"….shall be provided for people within the extension" means **people using the extension.**

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(0.6) Application of Part M

0.6 (c) Material Alterations to existing buildings

- Definition of a Material Alteration is extended to include Part M;
- Therefore, where proposed works are subject to Part A (Structure) or Part B (Fire safety) **or Part M (Access and Use)** of the Regulations the works themselves should comply with **ALL** parts of the Regulations;
- Building as a whole, including the approach from the site boundary and from onsite car parking where provided, must be **no less compliant with M1** following a Material Alteration to a building.

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(0.6) Application of Part M

0.6 (d) Material change of use

Where it applies to whole building:

• The building must comply with M1;

• Approach and access to whole building must comply with M1 where practicable.

Where it applies to part of the building:

• That part of the building must comply with M1;

• Approach and access to that part must comply with M1 where practicable;

• Sanitary facilities provided in or connection with it must comply with M1.

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Requirements of Part M does not apply to the following:

- **Works in connection with extensions to and the material alterations of existing dwellings**, provided that such works do not create a new dwelling;
- **Areas used solely to enable inspection, repair or maintenance.**
- **Building Regulations do not apply to:**
  - Buildings subject to the National Monuments Act 1930 – 2004;
  - Article 8 and Third Schedule Exemptions.

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Notes:

In relation to dwellings, an extension or a material alteration of a dwelling **must not make the building, as a whole, less satisfactory in relation to Part M than it was before**. This means an extension or a material alteration of a dwelling need not itself comply with Part M, but it must not result in the dwelling being less compliant than it previously was. **Example:**

Q. The proposed works involve the removal of a WC from the entrance level of a dwelling. What are the implications of these proposed works?

A. These works constitute a material alteration if it is the only WC provided at that level and the level contains a habitable room. The WC must not be removed or made less compliant with Part M, unless another WC is provided in the entrance storey that is no less satisfactory in compliance with Part M than the previous one.

Areas used solely to enable inspection, repair or maintenance: This is a broad category but generally relates to areas of a building associated with building services. Some examples (non-exhaustive) of where Part M may not apply could include the following but nevertheless they may need to be assessed on a case by case basis: Access to roof top air handling units and electric substations.

The onus rests with the designer to identify these areas of a building which fall under this broad category and provide explanation in the DAC application.

(0.8) Existing Buildings

- Existing buildings cover **ALL** existing buildings and not just buildings of historical significance;
- Works to existing buildings present many design challenges;
- The adoption without modification of the guidance in TGD M 2010 may not in all circumstances be appropriate;
- Nevertheless, the fundamental priorities of accessibility should be as set out in M1 i.e. accessing and using a building, its facilities and environs.

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Notes:

Works to existing buildings present many design challenges of the individual character, appearance and environs of existing buildings, structural implications of works, site constraints etc. While each existing building and site will present its own unique access opportunities and constraints, which may result in different ways of addressing accessibility, the fundamental priorities of accessibility should be as set out in M1.

(0.8) Existing Buildings – Historic Buildings

- **Those carrying out works should:**
- Establish what is important about the building e.g. physical fabric, historical associations, archaeological potential etc;
- Review conservation plan/statement;
- Review Record of Protected Structures;
- Liaise with Architectural Conservation officer/ Building Control officer;
- In specific cases dispensation or relaxation may be required;
- Role of management as a compensatory measure.

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Notes:

Establish the legal status of the building:

• The building or site may be a recorded monument under the National Monuments Acts, in which case the Building Regulations do not apply;

• The building and its curtilage may be a protected structure under the Planning and Development Acts*;

• The building may be located within an architectural conservation area under the Planning and Development Acts*

* In these cases, planning permission will be required for works to improve access where they would materially affect the character of either the protected structure or the architectural conservation area).

Dealing with proposals for alterations:

• When making decisions on the practicability of improving access to historic buildings it is essential to be informed on the significance of the building; to take account of any conservation plan or statement and to liaise with the architectural conservation officer in the local authority;

• Where works would have a significant adverse effect on the historical significance of an existing building or its environs the works may be deemed not to be practicable;

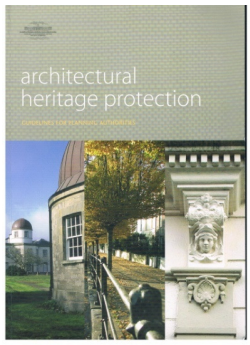
• Where the application of TGD-M would be unduly restrictive or impracticable, alternative approaches based on similar principles should be considered;

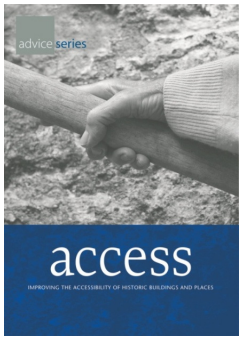
• In specific cases a dispensation or relaxation from the Requirements of Part M may be appropriate.

(0.8) Existing Buildings – Historic Buildings

Available guidance:

- Architectural Heritage Protection - Guidelines for Planning Authorities (2004) – **Chapter 18**;
- Advice Series: Access – improving the accessibility of historic buildings and places (publication forthcoming in 2011).





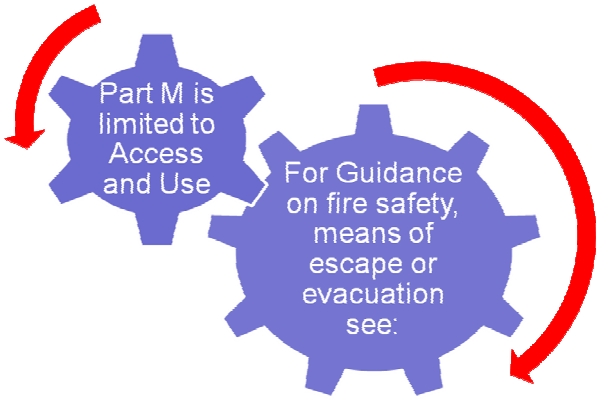
Notes:

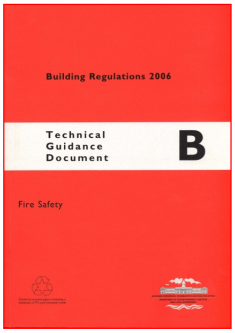
Architectural Heritage Protection Guidelines for Planning Authorities (2004) published by the Department of the Environment, Heritage and Local Government. These are statutory guidelines issued under the Planning and Development Act 2000 to assist planning authorities in the implementation of the Act. Chapter 18 contains many useful practical examples of possible non-invasive' alterations that can be made to historical buildings and Architectural Conservation Areas to make buildings accessible.

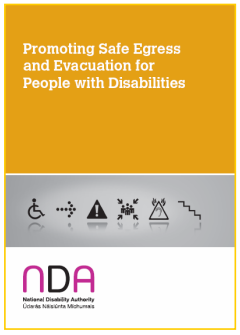
Access – improving the accessibility of historic buildings and places (publication forthcoming 2011). This publication is particularly aimed at the owners, occupiers and managers of historic buildings and places to advise them on issues that should be considered when improving access to historic buildings and places.

(0.9) Fire Safety

Access provision must be **linked** to provision for safe egress in the case of an emergency.







- Technical Guidance Document B (Fire Safety)
- Promoting Safe Egress and Evacuation of People with Disabilities

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Notes:

Access provision must be linked to provision for safe egress in the case of an emergency. The scope of Part M is limited to matters of access to and use of a building. For guidance on means of escape or evacuation, reference should be made to Technical Guidance Document B (Fire Safety) and the NDA publication 'Promoting Safe Egress and Evacuation of People with Disabilities'.

NDA publication titled Safe Evacuation for All – March 2011: This publication is a updated version of the NDA's 2008 publication "Safe Evacuation and Egress for People With Disabilities". The new version of the publication has been largely rewritten, and is aimed at those involved in planning and managing safe evacuation from buildings for employees and visitors. This includes facilities and accommodation staff, health and safety staff, access officers, human resource professionals and others. It may also be of interest to people with disabilities and their representative organisations, and design professionals such as architects and engineers, particularly fire engineers, though **it is not intended as a technical guide.**

(0.12) Part M – Management

- The provisions of the Building Regulations do not relate to management or maintenance and **compliance with the Regulations is not dependent on these.**
- **Further guidance:**
  - Building for Everyone (2011 edition) – NDA;
  - BS 8300:2009 – BSI (Annex A Management and maintenance issues);
  - Access Handbook Template – A Tool to Help Manage the Accessibility of the Built Environment – NDA (Section 5 and 6).

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Summary

- Part M (as amended) will generally commence on 1 January 2012 but is subject to Transitional Arrangements;
- Definition of a 'Material Alteration' extended to include Part M;
- Part M will apply to certain Material Changes of Use;
- A balanced approach is required when dealing with works to existing buildings – Apply the concept of practicability;
- Where works are carried out in accordance with TGD M 2010, this will, prima facie, indicate compliance with Part M;
- Building Control Officers role is to secure compliance with the Building Regulations.

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Thank You - Any Questions?

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Exercise

Answers Page 126

What section of the TGD should be used for the following?

1. Material change of use from an office to a day care centre with material alterations?
2. Material alteration to an inspection area of maintenance garage?
3. Office extension less than 200 sq. m (nett)?
4. Extension to an historic building – No new WCs are required to cater for the increased occupancy – Are alterations required to existing WCs?
5. Material alteration to a dwelling?

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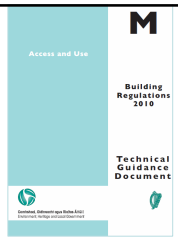

Module 3

Section 1
Access and Use of buildings other than dwellings

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Section 1 - Access and use of buildings other than dwellings

- 1.1 Approach to buildings other than dwellings
- 1.2 Access to buildings other than dwellings
- 1.3 Circulation within buildings other than dwellings
- 1.4 Sanitary facilities for buildings other than dwellings
- 1.5 Other facilities in buildings other than dwellings
- 1.6 Aids to communication

Section 1.1 Approach to buildings other than dwellings

1.1.1 Objective: The objective is to provide independently accessible means of approach to the accessible entrance(s) of a building and means of circulation around a building.

- 1.1.2 Introduction
- 1.1.3 Access Routes
  - 1.1.3.2 Level Access routes
  - 1.1.3.3 Gently sloped access routes
  - 1.1.3.4 Ramped access routes
  - 1.1.3.5 Stepped access routes
  - 1.1.3.6 Handrails
- 1.1.4 Pedestrian Crossings
- 1.1.5 On-site car parking
- 1.1.6 On-site setting down areas

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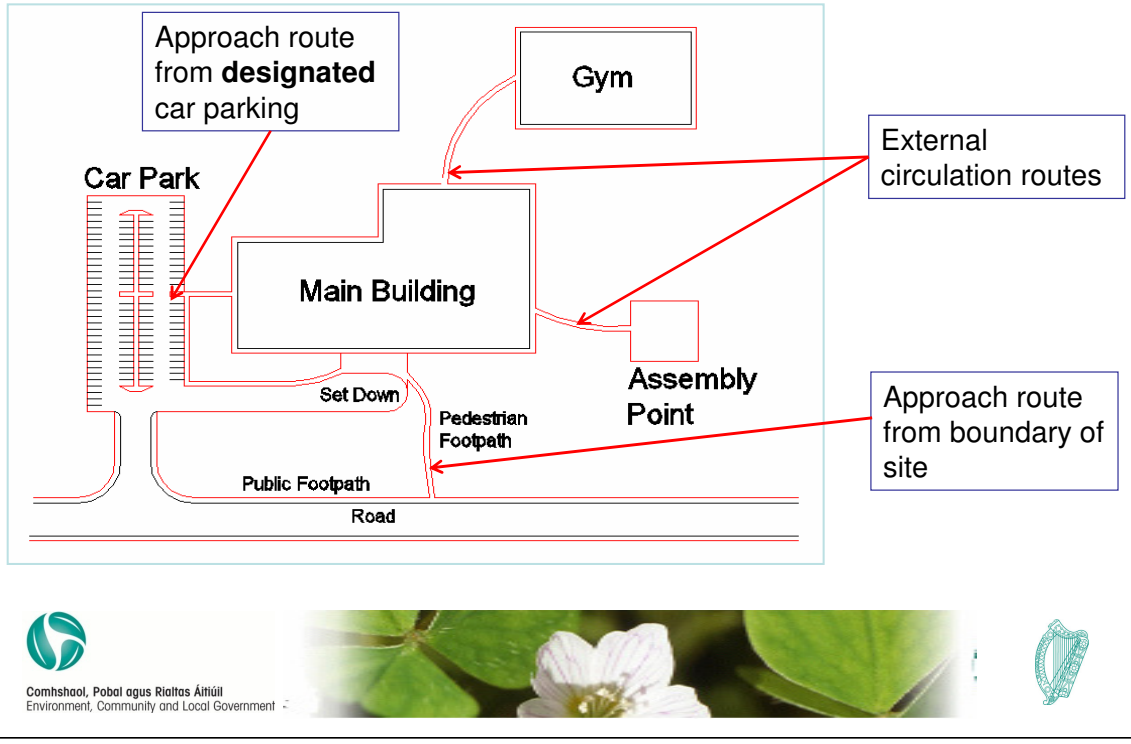
1.1.2 Introduction



Notes:

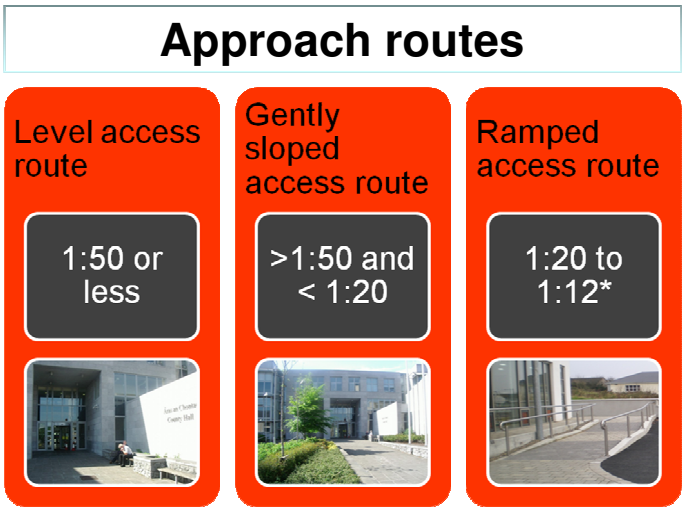
The **approach routes** to the accessible entrances of a building are the routes from:

- the adjacent road or the entrance point at the boundary of the site, and
- any **designated car-parking spaces** for people with disabilities and/or setting down areas.

The **circulation routes** around a building are the routes:

- between the accessible entrances and any other subsidiary entrances and buildings, where external circulation is required between them;
- to and from facilities associated with the building and within the complex, and
- from the building exits to assembly points or to the boundary of the site.

1.1.2 Introduction



Where the ramp has a rise greater than 300 mm (equivalent to 2 x 150 mm steps), a stepped access route should be provided in addition to a ramped access route.**

Notes:

The building should be designed within the overall constraints of space, so that the difference in level between the entrance storey and the site entry point, any designated car-parking spaces, any setting down areas, other subsidiary entrances/ buildings, any associated facilities or assembly points is minimised. The approach and circulation routes as defined in 1.1.1 should be designed and constructed as access routes in accordance with 1.1.3.

Level access routes: They accommodate the widest range of abilities and should be provided, wherever possible. For the purpose of this guidance a gradient of 1:50 or less steep is considered to be level. Changes in level are difficult for many people to negotiate (e.g. wheelchair users, people using walking aids, pushing buggies, people with vision impairment) and should be avoided.

Gently sloped access routes: Where it is not possible to provide a level access route, a gently sloped access route should be provided. The gradient of a gently sloped approach should be as shallow as possible. For the purpose of this guidance a gradient steeper than 1:50 (but less steep than 1:20) is considered to be gently sloped.

Ramped access routes: Where it is not possible to provide a gently sloped access route, a ramped access route should be provided. For the purpose of this guidance a gradient of 1:20 or steeper is considered to be a ramp.

****Platform lifts:** Alternatively, a platform lift may be provided where site specific constraints require it (in addition to a ramped **or** stepped access route). Platform lifts should comply with the Machinery Directive 2006/42/EC.

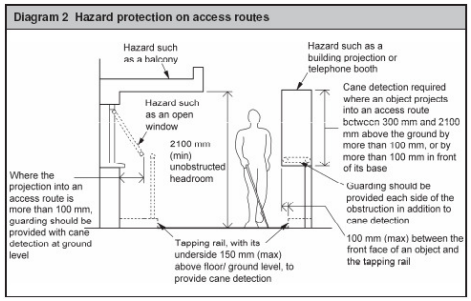
1.1.3 Access Routes → 1.1.3.1 General

General guidance for all access routes:

- Should be free of hazards e.g. projecting features, headroom (Diagram 2);

- Other hazards – street furniture, signposts, litter bins, bollards (contrast), drainage grating and dished channels should be located beyond the boundaries of the access route;

- Minimise danger of pedestrians walking into a vehicular route (separate route, else tactile warning).



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Notes:
General guidance applies to Section 1.1.3.2 to 1.1.3.5.

Where an access route is provided, projecting features which may present hazards should be avoided, to reduce the risks to people with vision impairment. However, if they are unavoidable, hazard protection should be provided if objects project more than 100 mm into an access route and their lower front edge is more than 300 mm above the ground. A window or door in general use should not open out onto these routes, within a height of 2100 mm above floor or ground level. Where such hazards are unavoidable, the area should be protected by guarding, planting or other suitable barrier incorporating low level cane detection.

1.1.3 Access Routes ⇒ 1.1.3.1 General

General guidance for all access routes:

- Well lit:
- Slip resistant (BS 8300:2009 Annex E)

Level surfaces likely to be wet:

⇒ Wet PTV ≥ 36 for straight access;

⇒ Wet PTV > 40 for manoeuvring a wheelchair;

Sloped/ ramped ⇒ Wet PTV > 40 + % gradient e.g. PTV > 45 for a 1:20 ramp.

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Notes:
Slip resistance: There are two indices for slip characteristics of a surface:

-Pendulum Test Values (PTVs). These are obtained using a pendulum tester.
-Surface micro roughness (Rz). These are obtained using a stylus instrument.

Pendulum Test Values (PTVs) also known as Slip resistance values (SRV).
The SRVs of common surface materials and their dry and wet , can be found in Table 3 of BS 5395-1:2010.

Type of finish	Dry PTV	Wet PTV
1. Concrete		
Floated, brushed or similar	75	65
Power floated (worn)	65	40
Power floated (new)	65	35
Power floated (added dry-shake topping)	75	10
2. Stone		
Granite (polished)	75	10
Granite (flamed)	75	45
Granite (brushed hammered)	75	48
Limestone (honed)	75	10
Limestone (polished)	75	10
Limestone (natural)	85	45

1.1.3 Access Routes

1.1.3.2 Level
1.1.3.3 Gently sloped

Key features (in addition to 1.1.3.1):

- Width 1500mm (min) between walls/ upstands;
- Passing places (2m x 1.8m) required;

  ⇒ where width of route < 1800mm;

  ⇒ within direct sight of another passing place or every 25m (max) whichever is closer.

•On gently sloped approaches provide level landing every rise of 500mm.

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Notes:

Passing places: An 1800 mm wide access route allows two wheelchair users to pass one another (Refer to Annex D of BS:8300:2009)

1.1.3 Access Routes → 1.1.3.4 Ramped access routes

Key features (in addition to 1.1.3.1):

- Greater than 1:20 but less than 1:12;
- Width 1500mm (min) between upstands etc;
- 1200mm (min) between handrails;
- Level landing requirements (See Table 1);
- Top and bottom level landing 1800mm x 1800mm:
- Edge protection;
- Handrails both sides.

Table 1 Limits for ramp gradients and lengths (Interpolation allowed)

Max going	Max gradient	Max rise (mm)
≤ 10 m	1:20	500
≤ 5 m	1:15	333
≤ 2 m	1:12	166

Note: Where space permits, the gentlest possible gradient possible should be chosen.

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Notes:

Ramped access routes should be designed to have the shallowest gradient practical. The preferred maximum gradient is 1:20 but where site specific constraints require it, ramps not steeper than 1:12 may be provided if individual flights are not longer than 2000 mm.

If the gradient is too steep or an individual flight too long, a person using or pushing a wheelchair may not have sufficient strength to travel up the ramp. There is also the danger of falling forwards going downhill or backwards when going uphill if the gradient is too steep. To ensure adequate control and braking power, the ramp gradients are limited to those in Table 1 and Diagram 3. Diagram 3 allows an interpolation of ramp gradients between 1:12 & 1:20 and provides the maximum going of relative flights.

1.1.3 Access Routes

1.1.3.4 Ramped access routes

Wider ramped areas:
- Sub-divide **intended** access route;
- Clearly identify - Signage where necessary.

Where ramp rise > 300mm:
- Provide stepped access (in addition).

Where ramp rise > 2000mm:
- Provide platform lift (in addition);

Ramps simply become too tiring for wheelchair users beyond this height.

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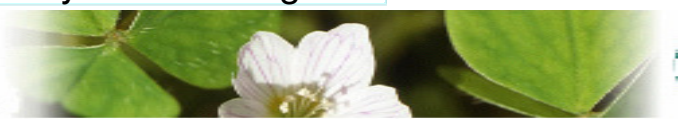

Notes:

A stepped access route should be provided in addition to a ramped access route where the rise of the ramp is greater than 300 mm (equivalent to 2 x 150 mm steps). Some people find it easier to use a flight of steps rather than to travel on a ramp e.g. People with mobility difficulties who use certain walking-aids, older people, people with vision impairment;

An alternative means of access for wheelchair users should be provided e.g. a platform lift, where the ramp is 1:20 or greater and the total rise of the ramp is greater than 2000 mm. Ramps simply become too tiring for wheelchair users beyond this height.

1.1.3 Access Routes

1.1.3.5 Stepped access routes

- **Rise of flight between landings:**
  - If going < 350 mm ⇒ Not >1500 mm;
  - If going ≥ 350 mm ⇒ 18 risers (max).
- **Step nosing:**
  - Permanently contrasting continuous material;
  - Avoid overhanging nosings/ no single steps
- **Step profile:**
  - Tactile warning surface top and bottom;
  - Rise: 150 – 180mm Going: 300 – 450mm;
  - Tapered treads and open risers not allowed;
- **Wider stepped areas:**
  - Subdivide **intended** access route into channels with additional handrails;
  - Signage.

Note: Sub division is required on the **intended** access route only

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Notes:

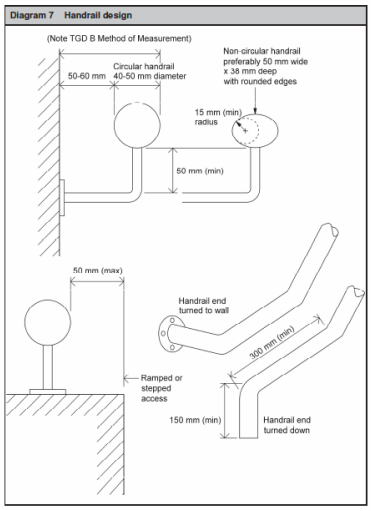
New content for stairs based on BS 5395-1 guidance on slips and trips (following BRE research). The greatest risk of falling on stairs is overstepping when descending. This risk decreases with an increased going. The likelihood of a fall is rare with a 300 mm going and is unlikely to occur with a 350 mm going. The research found that a larger going is more important than a smaller rise. Larger goings also benefit people who wish to pause mid-flight and take a rest.

1.1.3 Access Routes

1.1.3.6 Handrails

Key features (Refer to Diagram 7):

- Two or more flights:
  - ⇒ Handrail continuous;
- Where handrail terminates:
  - ⇒ Extend 300 mm beyond top/bottom
  - ⇒ Reduce risk of catching clothing;
- Contrast visually with background;
- Circular/Oval profiles;
- Clearance between handrail and wall;
- Note: TGD B - Method of Measurement.



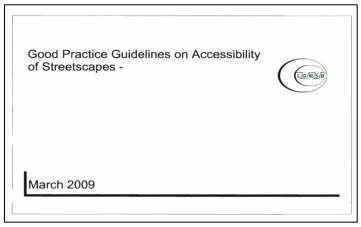
1.1.4 Pedestrian Crossings

Where controlled/ uncontrolled provided:

•Tactile paving;

•Dropped kerbs;

•Refer to 'Good Practice Guidelines on Accessibility of Streetscapes' – LGMSB.



1.1.5 On-site car parking

Provision of designated car parking

Where car parking is provided the provision specified in Local Authority Development Plans or Planning condition takes precedence, **otherwise**:

- At least 5% designated but not less than 1 space**;**
- Parking bay(s) should be the closest bays to the associated accessible entrance;

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Notes:

The planning and building control systems are entirely separate. They operate under separate and independent pieces of legislation. The legislation provides for entirely different procedures in terms of the operating of the planning and building control systems. The systems are operated by what are legally separate authorities—the planning system is administered by planning authorities, the building control system by building control authorities. Therefore it is important to appreciate areas of common interface. Planning decisions in this case take precedence regarding the provision of designated spaces.

For the purposes of this section, designated car parking spaces are those spaces exclusively provided for the holders of a disabled person's parking permit.

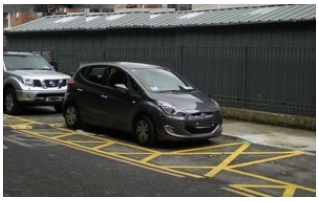
Further guidance on the provision of designated car parking spaces is given in BS 8300:2009 and Sustainable Urban Housing: Design Standards for New Apartments - Guidelines for Planning Authorities.

Ticketing machines, access routes to buildings or other services such as lifts, etc. should be easily located. Clear signage should be provided, where necessary, to direct people.

1.1.5 On-site car parking

Key Features:

- Car spaces, ticketing machines, access routes to building should be easily located (signage);
- Firm, level surface, symbol, dropped kerbs.
- NDA Guidelines for Public Access Terminals.
- Barrier Control Systems;
- 1200mm wide access zone;
- Visual contrast of access zone;
- Where height restrictions apply – Driver to be directed to alternative space or a setting down area.



On-site car parking only

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Notes:

It should be possible for all motorists to activate car park control barriers. Ticket, swipe card or key activated controls can be difficult to reach and manipulate by some drivers (Refer to BS 8300:2009 for further guidance). Barrier control systems should conform to BS 6571- 4:1989.

Minimum dimensions

In order to achieve National consistency, parking bay sizes indicated in Diagram 8 & 9 were coordinated with the Department of Transport following the 'Review of the terms and operation of the Disabled Parking Permit Scheme 2010'.

Visual contrast of access zone around designated space.

Demarcation of the parking space/ bay and visual contrast between the space/ bay and the safe access zone may be provided in many ways e.g. through the use of visually contrasting paving. The visual contrast provision does not demand that the car space be painted blue or yellow hatching provided to achieve visual contrast. The decision rests with the designer to decide what is most appropriate for the setting to satisfying the key requirement.

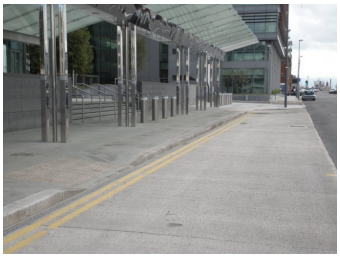
Minimum vertical clearance

This provision also offers designers an alternative to warn drivers of height restrictions and direct them to alternative spaces or a setting down area.

1.1.6 On-site setting down areas

Key features:

- Easily located (signage if necessary);
- Located on firm level surface (≤ 1:50);
- As close as practicable to the accessible entrance(s);
- Should not form an obstruction to through traffic;
- Access route (as per 1.1.3) provided from the setting down area to an accessible entrance;
- Level surface or dropped kerbs required to gain access from the carriageway to the access route.



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Notes:

Where there is a road on site leading to the building, there should be a setting down area provided at, or adjacent to, at least, one accessible entrance. This facilitates a person arriving at a building as a passenger in a vehicle, to alight from the vehicle and enter the building safely and conveniently.

No guidance has been provided in relation to the overall size of the set down area and it is up to the designer to determine the appropriate size based on the services and facilities provided for the proposed building. However, in all cases the functional criteria listed above must be met.

An example for Sport facilities is given in the Sports England guidance (See other standards and publications).

Section 1.2 Access to buildings other than dwellings

1.2.1 Objective: The objective is to provide entrances to buildings that are independently accessible and to avoid segregation based on a person's level of ability.

- 1.2.2 Introduction
- 1.2.3 Accessible Entrances
- 1.2.4 Accessible entrance doors
  - 1.2.4.1 Accessible glass doors
  - 1.2.4.2 Accessible manual doors
  - 1.2.4.3 Accessible power-operated doors
  - 1.2.4.4 Low energy swing doors
- 1.2.5 Entrance Lobbies

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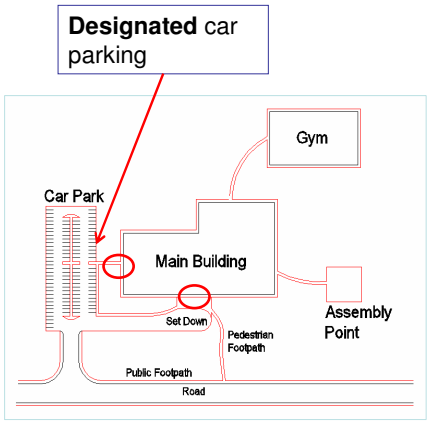
1.2.2 Introduction

All of the following entrances should be accessible entrances:

a) the main entrance which a visitor not familiar with the building would normally expect to approach;

b) the entrance closest to the designated parking area;

c) the entrance closest to the setting down area.



Note: In certain exceptional situations it may not be practicable for each of the entrance(s) above to be accessible, due to steeply sloped or restricted sites or planning requirements.

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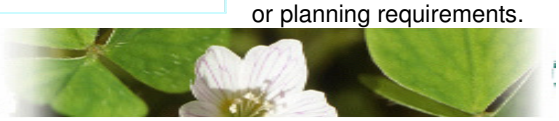


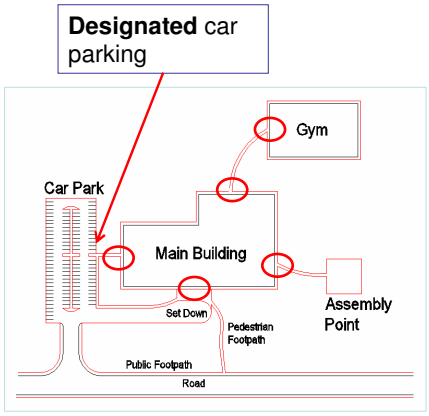
1.2.2 Introduction

Subsidiary external entrances that should also be accessible include:

d) any main entrance to a unique functional area or facility of a building;

e) Staff entrances;

f) Building exits to assembly points or to the boundary of the site.

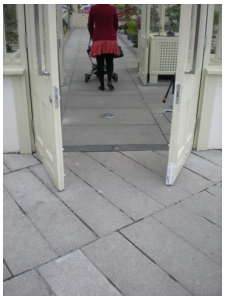


Note: In certain exceptional situations it may not be practicable for each of the entrance(s) above to be accessible, due to steeply sloped or restricted sites or planning requirements.

1.2.3 Accessible entrances

Key Features:

- Easily identifiable/ (provide signage where necessary);
- Level landings and threshold;
- Surface finish should not impede travel;
- Accessible door entry systems (where provided);
- Internal floor finishes/matwells.



1.2.4 Accessible entrance doors

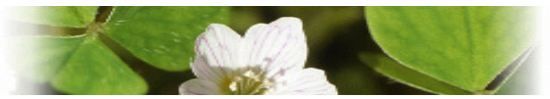
Determining what door to use to ensure independent approach.

- Manual versus power assisted or automated doors;
- Where it is not possible for a controlled closing device to close an entrance door and keep it closed against external conditions without exceeding the opening force set out in 1.2.4.2 (a), one of the following should be used:

  (i) a power-operated door – sliding, folding, balanced or swing;

  (ii) a low energy swing door;

  (iii) a lobby or air lock system of inner and outer doors.



1.2.4 Accessible entrance doors

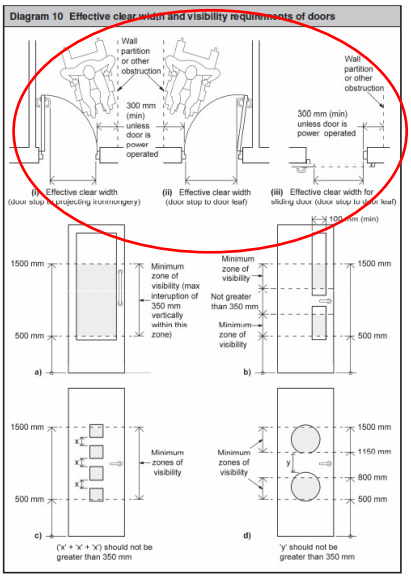
Revolving doors:

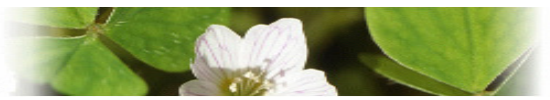
- Not considered accessible;
- If provided, a complementary accessible door immediately adjacent is required.

Access versus egress

Door design:

- Effective clear width;
- Door handle heights;
- 300 (min) leading edge;
- Side panels and zones of visibility.





1.2.4 Accessible entrance doors

Key features:

- Note method of measurement – Diagram 10.

Table 2 Minimum effective clear widths of doors	
Direction and width of approach	**Minimum effective clear width[a]**
Straight on (without a turn or oblique approach)	800 mm
At right angles to an access route at least 1500 mm wide	800 mm
At right angles to an access route at least 1200 mm wide	825 mm
External doors and internal lobby doors at the entrance of buildings used by the general public [b]	1000 mm

NOTES:

(a) The effective clear width should be measured in accordance with Diagram 10.

(b) Buildings used by the general public include day centres, hotels, institutional buildings, places of assembly, shops, shopping centres and office buildings with a nett floor area [c] per floor greater than 200 m^2. (Refer to Page 13 for definitions)

(c) When calculating the nett floor area of any storey, the area provided for vertical circulation, common sanitary facilities and maintenance areas in the storey should not be included.

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1.2.4 Accessible entrance doors → 1.2.4.1 Accessible glass doors / 1.2.4.2 Accessible manual doors

Accessible glass doors

- Permanent **manifestation** within two zones:

⇒ 850 to 1000 and 400 to 1600 above FFL;

- Door frame should be clearly differentiated from surroundings;
- Leading edge should not cause a hazard when door held open.

Accessible manual doors

- Door opening force;
- Leading edge 300mm (min) clearance;
- Door furniture operable with one hand e.g. Lever handle;
- Visual contrast.

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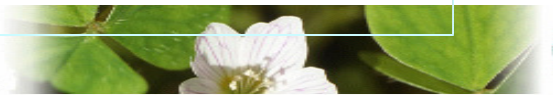

1.2.4 Accessible entrance doors → Guidance on other door types

1.2.4.3 Power operated doors

- Accessible power-operated doors may have a sliding, swinging or folding action controlled by one of the following two types;
- Manually by a push pad, coded entry or remote control, or automatically by a motion sensor or other proximity sensor.

1.2.4.4 Low energy swing doors

- **Use:** Low levels of pedestrian usage e.g. Subsidiary entrance).

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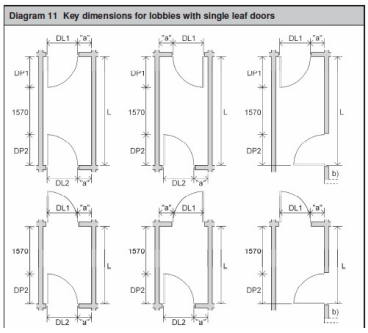
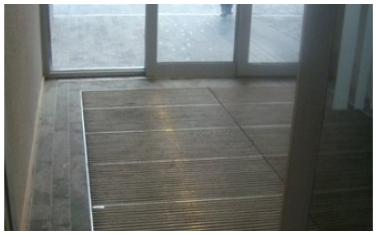
1.2.5 Entrance lobbies

Key features (Diagram 11):

- Sufficient space to enable a person using a wheelchair and an assistant to move clear of one door before opening the other door;
- 300 mm leading edge;
- Manifestation required in glazed lobbies;
- Floor surfaces and material;
- Hazards (see notes);
- Matwells: firm, level surfaces.





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Section 1.3 Circulation within buildings other than dwellings

1.3.1 Objective: The objective is for people to travel horizontally and vertically within a building conveniently and without discomfort in order to make use of all relevant facilities.

- 1.3.2 Introduction
- 1.3.3 Horizontal features
- 1.3.4 Vertical Features

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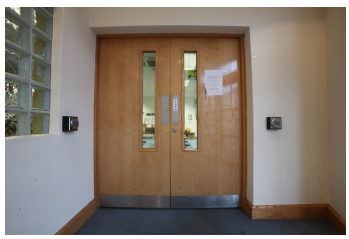
1.3 Circulation within buildings other than dwellings → 1.3.3 Horizontal features

- 1.3.3 Horizontal Features
  - 1.3.3.1 Reception area in entrance halls
  - 1.3.3.2 Internal Doors
  - 1.3.3.3 Corridors and passageways
  - 1.3.3.4 Internal Lobbies



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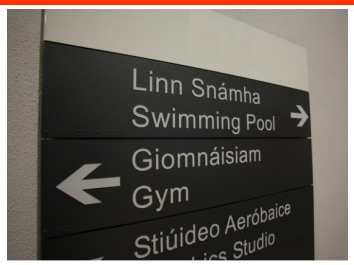
1.3 Circulation within buildings other than dwellings → **1.3.2 Introduction**

General guidance:

- Provide appropriate directional signage indicating location of facilities where necessary;

- Where changes of level within a storey of a building due to site constraints/ design considerations, a suitable means of access between levels should be provided by a gently sloped access route, a ramp and steps or a platform lift.



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1.3 Circulation within buildings other than dwellings → **1.3.3.1 Reception areas in entrance halls**

Key features:

- Easily identifiable;
- Building information signage and symbols;
- Clear space in front of the counter for wheelchair users;
- Facilitate both standing and seated users (low level section & knee recess);
- Hearing enhancement system;
- Slip resistant floor surfaces;
- Avoid glazed screens in front of reception points (except where required for security reasons).

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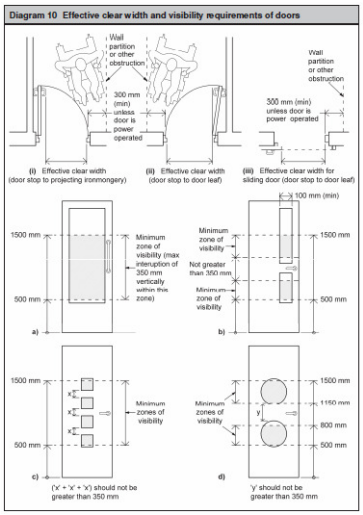
1.3 Circulation within buildings other than dwellings

1.3.3.2 Internal doors

Key features (Diagram 10):

- Self-closing device/ opening force;
- Doors on escape routes – Direction of opening;
- Effective clear width;
- 300mm leading edge;
- Design and location of door handles including visual contrast;
- Visual contrast (door frames, architraves, walls);
- Side panels (vision panels);
- Frameless glass doors/ Low energy doors.

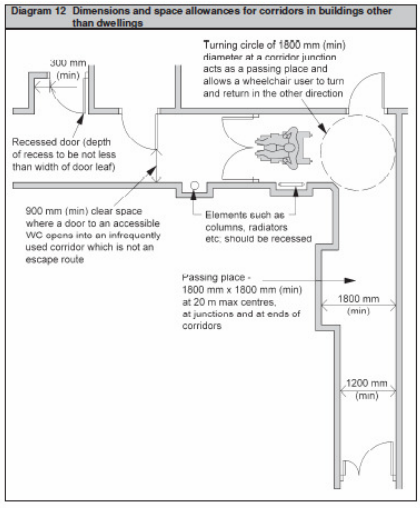


1.3 Circulation within buildings other than dwellings

1.3.3.3 Corridors and passageways and 1.3.3.4 Internal lobbies

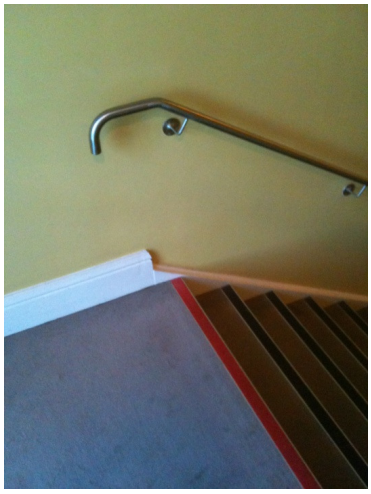
Key features (Diagram 12):

- Minimum 1200mm wide;
- Optimum 1800mm wide; Passing spaces required if less than 1800mm wide;
- Recessed doors/ Accessible doors opening out onto corridors – 900mm requirement;
- Glazing manifestations;
- Lighting levels;
- **Internal lobbies:** Wheelchair accessible areas.



1.3 Circulation within buildings other than dwellings → 1.3.4 Vertical Features

- 1.3.4 Vertical Features
- 1.3.4.1.1 Lifts
- 1.3.4.1.2 Stairs
- 1.3.4.2 Passenger lift details
- 1.3.4.3 Internal steps suitable for ambulant disabled people
- 1.3.4.4 Internal ramps
- 1.3.4.5 Handrails



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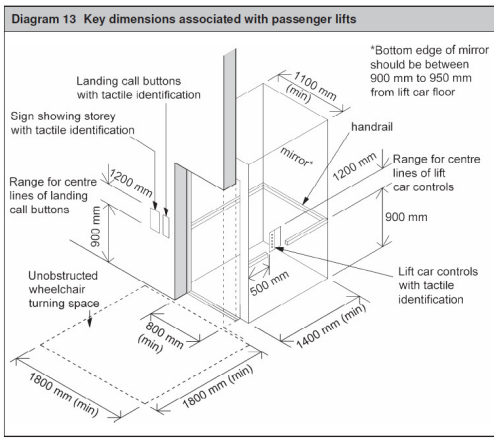
1.3 Circulation within buildings other than dwellings → 1.3.4.1.1 Lifts

Passenger lifts should be provided in **all multi storey buildings** to serve all storeys above and below entry level e.g. basements used for car parking, etc.

Diagram 13



Part M 2000 exemptions

Any storey above or below the entrance storey which:

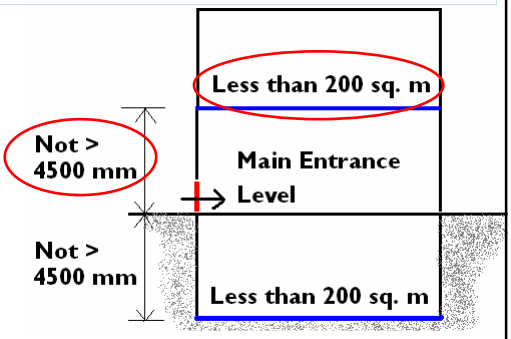
•In a two storey building has a net floor area per floor not > 280 sq. m above, or

• In a building of more than two storeys has a nett floor area per floor not > 200 sq. m above or below entrance storey (no height restriction).

Part M 2010 exemptions

Non-residential or mixed use buildings

Nett floor area per floor < 200m² and with no floor level more than 4500 mm above or below the main entrance level.



Note: Where no lift or lifting device is provided, the same range of services/ facilities that are available on the other levels should be made available on the entry or accessible level.

1.3 Circulation within buildings other than dwellings → 1.3.4.1.1 Lifts

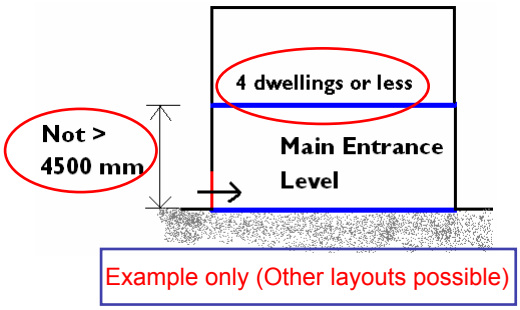
Part M 2000 exemptions

•Total number of flats accessed from above or below entrance storey less than or equal to eight;

•The number of flats with entrance levels more than 10 m above the main entrance to the building does not exceed two.

Part M 2010 exemptions - Apartment buildings

Four (or less) dwellings on any storey other than the entrance storey and with no dwelling having an entrance level more than 4500 mm above or below the main entrance level.



Example only (Other layouts possible)

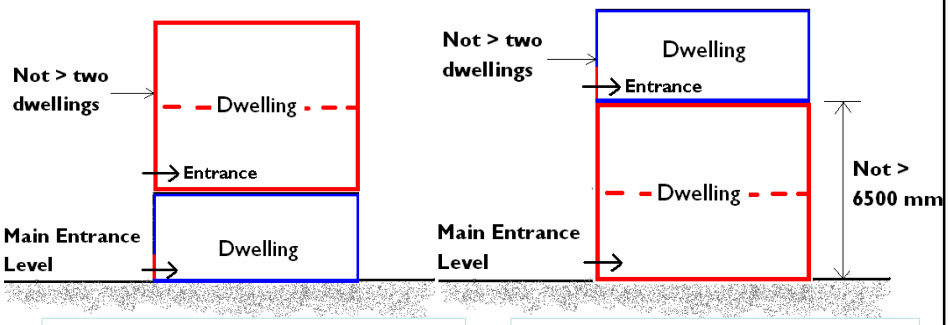
Note: Where no lift or lifting device is provided, the same range of services/ facilities that are available on the other levels should be made available on the entry or accessible level.

1.3 Circulation within buildings other than dwellings

1.3.4.1.1 Lifts

Part M 2010 exemptions – Duplex buildings

Duplex buildings with two (or less) dwellings on any storey other than the entrance storey and with no dwelling having an entrance level more than 6500 mm above or below the main entrance level.



Duplex buildings (common)

Duplex buildings (less common)

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1.3 Circulation within buildings other than dwellings

1.3.4.2 Passenger lift details

Additional provisions:

- Generally lift car size should be 1100 mm wide x 1400 mm deep except:
- In public areas of public facilities such as **hotels, cinemas, theatres, shopping centres and public libraries** where public area has a nett floor area greater than 200 m^2;
- Provide lift car 2000 mm wide x 1400 mm deep;
- This provision is aimed at public buildings which cater for large numbers. (This provision is specific to the building types listed. Note it does not include schools).

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1.3 Circulation within buildings other than dwellings → 1.3.4.3 Internal stairs for ambulant disabled people

Provision: In addition to the provision of a passenger lift, **at least one** internal stairs suitable for ambulant disabled people.

Key features:

- Location of internal stairs should not be directly in line with access route (as no hazard surface provided);
- Provision of refuges – TGD B.
- Rise of flight ≤ 1800 mm;

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Exercise – Two Minutes (Answers page 126)

1. What is the preferred gradient and maximum length of an external ramp?
2. What is the minimum size of a landing at the top and bottom of an external ramp (clear of obstructions)?
3. What is the minimum width of an external stairs between handrails?
4. What type of tactile warning surface should be provided at top and bottom landings of external stepped access routes?
5. How far should a handrail extend beyond the first and last step in a flight of stairs?
6. What are the preferred profiles of handrails?

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1.3 Circulation within buildings other than dwellings

1.3.4.4 Internal ramps
1.3.4.5 Handrails

Where change in level occurs:

- Provide a gentle slope, else provide a ramp.
- **Where change of level ≥ 300 mm:** Provide two or more clearly defined steps in addition to a ramp;

Key Features - Ramp design:

- Allowable gradients – Table 1;
- Max rise 500 mm per flight;
- Max going = 10 m;
- **Handrails:** Refer 1.1.3.6.

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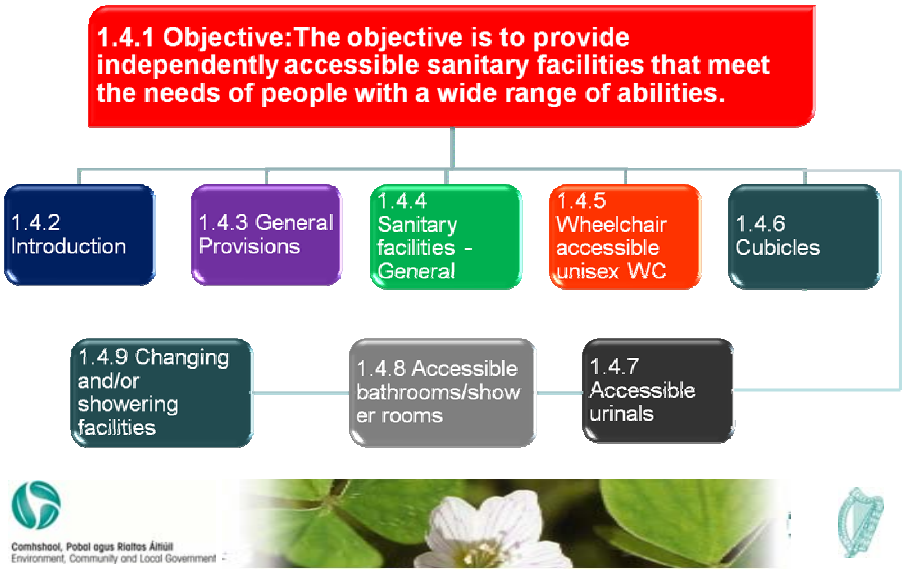
Section 1.4 Sanitary facilities buildings other than dwellings



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1.4 Sanitary facilities → 1.4.3 General Provisions

The **number and location** of sanitary facilities required in a building will be dictated by:

- The nature of the building;
- The size of the building;
- The number of people who will use the building;
- Gender ratio;
- Patterns of use and the ease of access.

Scale of provision of sanitary conveniences (WCs & urinals):

- Part G/ TGD G/ Safety, Health and Welfare at Work Regulations 2007.

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1.4 Sanitary facilities → 1.4.3 General Provisions

•Part M **does not** create a requirement for the provision of sanitary facilities but ensures that accessible sanitary facilities are made where sanitary facilities are provided;

•Part M **does not** create a requirement for provision of sanitary facilities for different user groups e.g. for visitors where provision has only been made for staff.

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1.4 Sanitary facilities → 1.4.3 General Provisions

Where WCs are provided in Primary School classrooms:

- Provision should be made for ambulant disabled people;
- Provision of wheelchair accessible unisex WC as **either** part of the classroom or in the common areas of the building;
- Travel distance should be minimised;
- Department of Education and Skills recommend 30m from entrance door of classroom to entrance door of accessible WC;
- **Sanitary facilities used solely for individual use within offices;**
- Part M **does not** apply - should meet the needs of the user.

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1.4 Sanitary facilities → Wheelchair accessible unisex WCs

Manoeuvring space:

- Guidance generally based on 1800mm x 1800 mm wheelchair turning space;

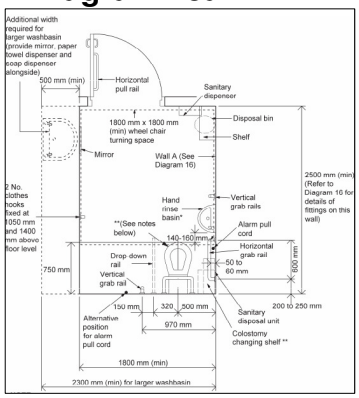
Nett floor area per floor > 200m²

- Provide 1800 mm x 1800 mm turning area (Diagram 15a).

Nett floor area per floor < 200m²

- Provide 1500 mm x 1500 mm turning area (Diagram 15b).

Diagram 15a



Designers should **consider** space provision in excess of 1500 x 1500 where space permits.

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1.4 Sanitary facilities → Wheelchair accessible unisex WCs

Where only one WC facility provided:

- It should be unisex, wheelchair accessible incorporating a standing-user height washbasin, in addition to the finger rinse basin associated with the WC pan.

Where more than one WC facility provided:

- The layouts should be handed;
- If at different locations, **at least one** wheelchair accessible unisex WC should be provided at **each location**.

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1.4 Sanitary facilities → 1.4.6 WC cubicles

Where WC cubicles provided in a washroom:

- At least one ambulant disabled cubicle amongst standard cubicles.

Where four or more cubicles provided:

- At least one ambulant disabled;
- At least one enlarged.

Where more than one enlarged provided:

- Layout should be handed.

Note: Visual contrast would improve the design.

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1.4 Sanitary facilities → 1.4.7 Urinals

Where one and more urinals provided in washroom:

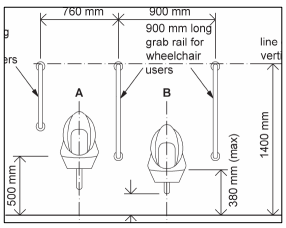
• At least one should be suitable for use by ambulant disabled people.

Where six and more urinals provided:

•At least one urinal should be suitable for use by ambulant disabled people, and

•One urinal should be accessible for wheelchair users.

Diagram 20



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1.4 Sanitary facilities → 1.4.8 Accessible bathrooms/ shower rooms

Where > 1 en-suite is provided provide:

• A balanced combination of en-suite bathrooms and en-suite shower rooms. (A shower is the preferred option if only one in place).

Where > 1 bathroom or shower room provided:

• Provide a choice of layouts suitable for left hand transfer and right hand transfer;

• WC may be incorporated in bathrooms/ shower rooms but should not be the only wheelchair accessible WC in the building.

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1.4 Sanitary facilities → 1.4.9 Changing and/or showering facilities

- Where communal separate-sex facilities are provided provide accessible changing and/or showering facilities by subdividing the area and providing accessible space and fittings as for self-contained facilities in accordance with the guidance in section 1.4.9.

In sport facilities:

- Provide accessible individual unisex self-contained showering and/or changing facilities should be as per 1.4.9 in addition to communal separate-sex facilities;
- Provide a choice of layouts suitable for left hand transfer and right hand transfer where more than one facility provided.

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Section 1.5 Other facilities in buildings other than dwellings

1.5.1 Objective: The objective is to ensure that all facilities within a building are accessible to and useable and that they are designed and constructed to facilitate active participation where appropriate.

- 1.5.2 Introduction
- 1.5.3 Audience and spectator facilities with fixed seating
- 1.5.4 Audience and spectator facilities without fixed seating
- 1.5.5 Refreshment facilities
- 1.5.6 Accessible sleeping accommodation
- 1.5.7 Switches outlets and controls

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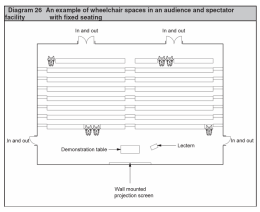
Provisions for ambulant disabled people:

- Access to all levels.

Provisions for wheelchair users:

- Independent access to selected areas;
- Good viewing conditions (also when other spectators are standing);
- Facilities available to other users accessible from these areas;
- Integrated;
- Adjacent to a companion.

Diagram 26



1.5 Other facilities in buildings other than dwellings → 1.5.3 Audience and spectator facilities with fixed seating

The minimum number of permanent and removable spaces should be in accordance with Table 3.

Table 3 Provision of wheelchair spaces in audience seating

Seating capacity (persons)	Minimum provision of spaces for wheelchair users	
	Permanent seating	Removable seating
Up to 600	1% of total seating capacity (i)	Remainder to make a total of 6(i)
More than 600 but less than10,000(ii)	1% of total seating capacity (i)	Additional provision, if desired

NOTE:
(i) Percentages need to be rounded up to determine the recommended number of spaces.
(ii) For seating capacities greater than 10,000 refer to guidelines given in 'Accessible stadia: a good practice guide to the design of facilities to meet the needs of disabled spectators and other users'.

Where a building contains several auditoria, e.g. a multi-screen cinema or a block of lecture theatres the minimum requirement in Table 3 applies to **each** auditorium.

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1.5 Other facilities in buildings other than dwellings → Audience and spectator facilities

Key features:

- Provide access to raised podium or stage in a lecture/ conference facility and clear signage indicating its location;
- Provide a hearing enhancement system.

Note a hearing enhancement system is not required in the following:

- Classrooms in primary and post primary schools, or
- Standard meeting rooms in offices.

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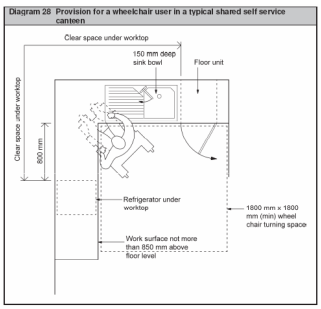
1.5 Other facilities in buildings other than dwellings → 1.5.5 Refreshment facilities

Key factors: where refreshment facilities are provided:

- All users should have access to all parts of the facility;
- Accessible counters;
- 1800 mm x 1800 mm manoeuvring space;
- Worktop design;
- Accessible routes.

Diagram 28



Shared refreshment facility (e.g. shared self service canteen)

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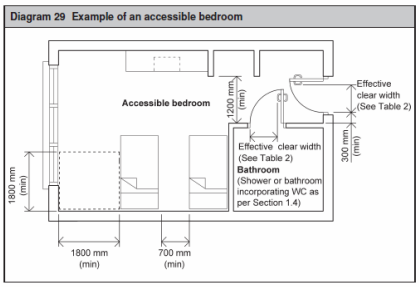
1.5 Other facilities in buildings other than dwellings

1.5.6 Accessible sleeping accommodation

Provision:

- 1 in 20 or minimum of 1 if less than 20;
- Located on accessible routes;
- Accessible doors to room and bathroom;
- Visual fire alarm signal;
- Visual indicator to alert person with hearing impairment that there is someone at the door.

Diagram 29

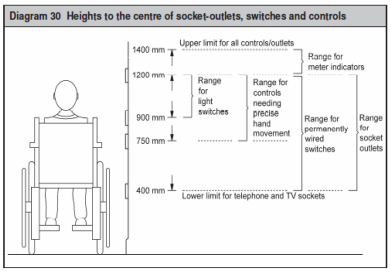


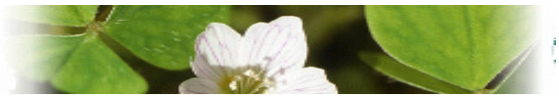
1.5 Other facilities in buildings other than dwellings

1.5.7 Switches, outlets and controls

Key features (Diagram 30):

- Height range;
- Visual contrast/ easy to use.
- Lights used by general public to be push-pad type, else, pull cords;
- Socket-outlets 350mm from corners;
- Switched- sockets & isolator switches–on/off.





Section 1.6 Aids to communication

1.6.1 Objective: The objective is to provide adequate aids to communication to ensure people can independently access and use a building and its facilities.

- 1.6.2 Introduction
- 1.6.3 Signage
- 1.6.4 Visual contrast
- 1.6.5 Lighting
- 1.6.6 Audible aids

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1.6 Aids to communication

Visual contrast is required for people with low vision

Normal vision

Macular degeneration

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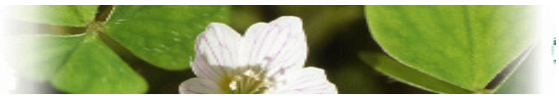


1.6 Aids to communication

Visual contrast is required for people with low vision

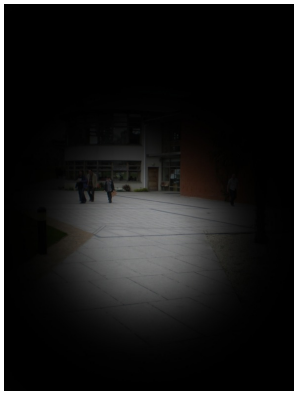
Glaucoma

Cataracts

1.6 Aids to communication

Visual contrast is required for people with low vision

Diabetic Retinopathy



Tunnel Vision

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1.6 Aids to communication → 1.6.3 Signage

- Good accessible signage should benefit all people;
- Clear signs and information are essential for people who have hearing impairment, who might be unable to ask, or feel uncomfortable about asking for directions when navigating a building;
- Tactile text, visual contrast, use of symbols, Braille and easy-to-read text are some of the more obvious ways to make signage and way finding accessible.

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1.6 Aids to communication → 1.6.3 Signage

- Sign directories and orientation signs in visual and tactile form when low enough to be touched;
- Use of international symbol for access (where necessary);
- Hearing enhancement/ induction loop signage (where systems provided);
- Location should not create hazard.

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1.6 Aids to communication → 1.6.3 Signage

Provision of signage is required **in certain locations**. In all these cases **(where necessary)** the provisions should be based on the guidance in 1.6.3

- 1.1.3(g) Access Routes;
- 1.1.5(a) On-site car parking;
- 1.1.5(b) Ticketing machines;
- 1.1.6(a) On-site setting down areas;
- 1.2.3 Accessible entrances;
- 1.3.2 Circulation routes – directional signage;
- 1.3.3.1 Reception area in entrance halls (presence of hearing enhancement system);
- 1.4.4 Sanitary facilities – directional signage;
- 1.5.3 Audience and spectator facilities with and without fixed seating – signage to locate podium.

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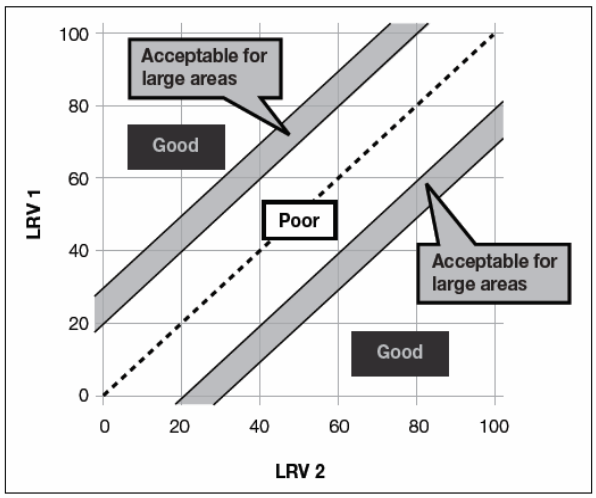
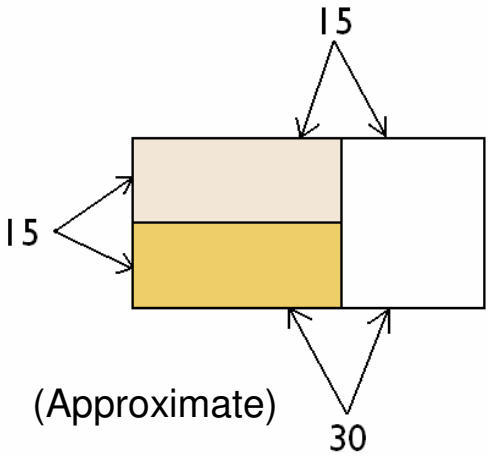
1.6 Aids to communication → 1.6.4 Visual contrast

- Assists in providing spatial information for people with vision impairment;
- Facilitates way finding. Refer to **BS 8300:2009 Annex B.**





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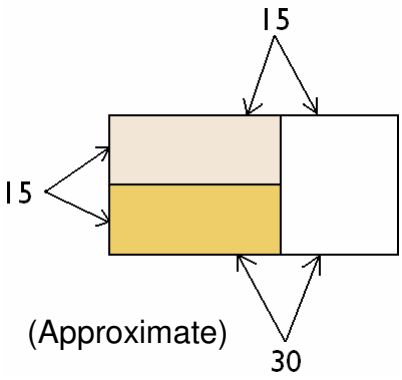
Notes:

This slide deals with visual contrast. Visual contrast sensitivity is the ability to perceive differences between an object and its background e.g. a handle from the door or the nosing from the rest of the step. The amount of light a surface reflects is known as the Light Reflectance Value (LRV). The range of LRV is 0 (black) to 100 (white). The larger the difference between the LRV of each surface the greater the visual contrast is and the easier it is for someone with a low visual contrast sensitivity to perceive the difference.

BS8300:2009 Annex B provides several methods for measuring LRV and provides guidance on acceptable LRV differences between adjoining surfaces. BS 8493:2008 provides LRV measurements for certain colours (as specified in BS 4800:1989).

1.6 Aids to communication → 1.6.4 Visual contrast

- Where visual contrast is provided the difference in the LRV should be as follows:
- Generally - 30 points or more;
- Large areas such as wall and floors – 20 points or more;
- Door opening furniture against background – 15 points or more.



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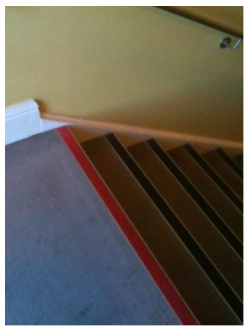
1.6 Aids to communication → 1.6.4 Visual contrast

Provision of visual contrast is required **in certain locations**. In all these cases the provisions should be based on the guidance in 1.6.4.

- Bollards;
- Upstands on ramps;
- Step nosings;
- Handrails on stepped, ramped approaches;
- Access zone around designated car parking;
- Manifestation on glass doors;
- Door opening furniture.



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1.6 Aids to communication → 1.6.4 Visual contrast

- Manual activation controls on power operated doors;
- Hazard protection guard rails;
- Doors, door frames or architrave with surrounding wall;
- Leading edge of door without self closer;
- Lift landing and lift car doors;
- Lift control buttons;
- Sanitary fittings;
- Signage;
- LRV values should meet the requirements of BS8300:2009*.

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1.6 Aids to communication → 1.6.5 Lighting

Good lighting is crucial to ensure that people with vision impairment are able to use buildings conveniently and safely.

Key factors to be considered:

- The illuminance on interior surfaces;
- The quality of the lighting;
- Good colour rendering;
- Avoidance of glare.

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1.6 Aids to communication → 1.6.5 Lighting

Provision of adequate lighting is required **in certain locations**. In all these cases the provisions should be based on the guidance in 1.6.5:

- 1.1.3.1(g) Access routes:
- Level or gently sloped access routes – **20 lux (min);**
- Ramped or stepped access routes – **100 lux (min);**
- 1.2.3 Accessible entrances **(where necessary);**
- 1.3.3.3 Corridors and passageways – **100 lux (min);**
- 1.3.4.3 Internal stairs suitable for use be ambulant disabled people – **100 lux (min);**
- 1.4.4 Sanitary facilities – **200 to 300 lux.**

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1.6 Aids to communication → 1.6.6 Audible aids

There are several types of audible aids:

- Public address systems;
- Audio frequency induction loop systems;
- Infra red systems;
- Radio systems.

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Notes:

All assistive listening devices work on the principle that they filter out background noise and provide a clean an intelligible signal to the user.

Public address systems: These should be coupled with audio frequency induction loops and should be supplemented with visual information.

Audio frequency induction loop systems: These can provide assistance to users of personal hearing aids incorporating an induction pick-up facility (T setting) One of the benefits of loop systems is that when done correctly, there is little reliance on the management of the facility. (The system has to be switched on and checked periodically. Unlike infa-red and FM systems there is no need to manage receivers, clean, charge, replace). This is why facilities managers who understand the different technologies prefer loops. Not needing an additional receiver is also one of the reasons why hearing aid users prefer loops. Induction loop systems must be designed for the environment and application for which they are intended to be used. Where induction loops are considered early in the building construction or refurbishment it is generally practical to install a compliant loop systems in 70 – 100% of all appropriate locations.

Infra red systems: These offer line-of-sight wireless communication to specific personal receiver units. They are commonly used in multi-screen cinemas, theatres and lecture rooms where it is convenient for the users to borrow headsets from a central source.

Radio systems: These offer wireless communication without the need for a clear line-of-sight to receiver units.

Microphone types and their position relative to the speaker are key to the performance of all such systems.

1.6 Aids to communication → 1.6.6 Audible aids

Where audible aids are provided:

- The system should enhance sound communication to the user;
- Filter out background noise, environmental interference and provide a clean an intelligible signal to the user;
- Presence and type indicated by signage.

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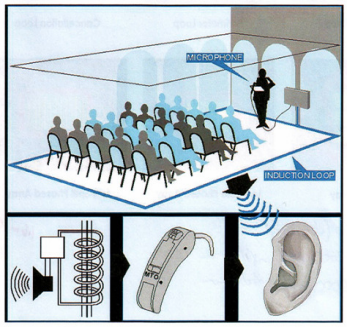
1.6 Aids to communication → 1.6.6 Audible aids

Where audible aids are provided:

- Audible public address systems supplemented by visual information;
- Inductive coupler and additional volume control fitted to circuitry of all public or visitor payphones, entry phones and emergency phones in lifts;
- Induction loops, designed,, installed and commissioned to comply with IEC 60118-4.



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1.6 Aids to communication → 1.6.6 Audible aids

Guidance is given in TGD M 2010 on the provision of hearing enhancement systems required **in certain locations**. In all these cases the provisions should be based on the guidance in 1.6.6:

- 1.2.3 Accessible entrances - Door entry systems;
- 1.3.3.1 Reception areas in entrance halls;
- 1.3.4.2 Passenger Lifts – Emergency communication systems;
- 1.5.3 to 1.5.4 Audience and spectator facilities (with and without fixed seating);
- 1.5.6 Accessible sleeping accommodation (visual indicator).

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Thank You - Any Questions?

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Module 4 (Answers Page 127)
Technical exercise - Application of Part M to new buildings other than dwellings

Question 1 - Provision of adequate sanitary facilities

The occupancy level of a new office building requires the provision of 5 cubicles and 9 urinals in the male washroom in order to meet the requirements of Safety Health and Welfare at Work (General Application) Regulations 2007.

Which of the following provisions meet the Requirements of Part M 2010?

a) One enlarged cubicle and one accessible urinal;

b) One enlarged cubicle, one ambulant disabled cubicle, one accessible urinal and one low level sink;

c) One enlarged cubicle, one ambulant disabled cubicle, one wheelchair accessible urinal, one urinal suitable for ambulant disabled people and one low level sink;

d) One enlarged cubicle, two ambulant disabled cubicles and one accessible urinal.

Question 2 – Provision for vertical circulation

In a new two storey public building (300sq. m nett per floor) what are the minimum provisions to meet the Requirements of Part M 2010 for vertical circulation?

a) One passenger lift and at least one circulation stairs (Part K);

b) One internal stairs suitable for ambulant disabled people;

c) One passenger lift and two internal stairs suitable for ambulant disabled people;

d) One passenger lift and at least one internal stairs suitable for ambulant disabled people.

Question 3 – Provisions for passenger lifts

If a passenger lift is required, what minimum size should the lift car be for a school with a nett floor area per floor greater than 200 sq. m?

a) 1500mm wide x 1500mm deep;

b) 1100mm wide x 1400mm deep;

c) 2000 mm wide x 1400 mm deep;

d) 1100mm deep x 1400mm wide

e) 2000 mm deep x 1400mm wide

Question 4 – Lighting

What illuminance level is required in corridors and passageways to comply with the Requirements of Part M 2010?

a) 50 lux (min);

b) 200 lux (min);

c) 100 lux (min);

d) 200-300 lux.

Question 4a: From the list above, what lighting levels need to be in place in accessible WCs to meet the minimum requirements of Part M 2010?

Question 5 – Aids to communication

In a new a six classroom primary school, the school has one main reception area and a multi purpose hall which is intended to host staged events. What is the minimum provision of hearing enhancement systems to meet the Requirements of Part M 2010?

a) An induction loop (clearly indicated by signage) provided at the reception area;

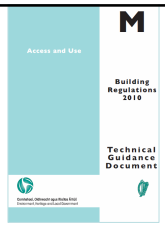
b) An induction loop provided at the reception area and a hearing enhancement system in the multi purpose hall (both clearly indicated by signage);

c) An in induction loop (clearly indicated by signage) provided at the reception area, and hearing enhancement systems in both the multi purpose hall and in all classrooms;

d) An in induction loop (clearly indicated by signage) provided at the reception area, and hearing enhancement systems in both the multi purpose hall and in at least one classroom.

Question 6 – Stairs suitable for ambulant disabled people

For stairs with continuous flights does the continuous handrail have to extend at least 300mm beyond the first and last nosing at the central well of the staircase, as it would for a single flight staircase?



Module 5

Section 2 – Access and Use of existing buildings other than dwellings

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2.0 Introduction

- Application of Section 1 or Section 2;
- Determination of practicability;
- Section 2 mirrors the structure of Section 1.

Section 1

Where works (e.g. extensions, material alterations and certain material changes of use) to existing buildings are carried out in accordance with Section 1 and Section 2, this will prima facie indicate compliance with Requirement M1.

Section 2

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Existing buildings

Covers all existing buildings not just buildings of historical significance

- Works to existing buildings present many design challenges;
- The adoption without modification of the guidance in TGD M 2010 may not in all circumstances be appropriate;
- Nevertheless, the fundamental priorities of accessibility should be as set out in M1 i.e. accessing and using a building, its facilities and environs.

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Existing buildings – Historic buildings

Works to historic buildings may present particular design challenges. Those carrying out works should:

- Establish what is important about the building;
- Physical fabric, Historical associations, Archaeological potential etc;
- Review conservation plan/statement;
- Review Record of Protected Structures;
- Liaise with Architectural Conservation Officer/ Building Control Officer;
- In specific cases dispensation or relaxation may be required;
- Role of management as a compensatory measure.

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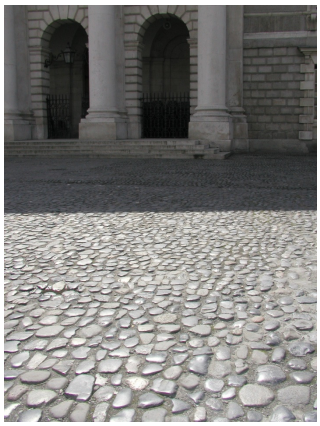
Existing buildings – Barriers to access



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Existing buildings – Accessible solutions

Custom House – Ramped access provided discretely behind railings.

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Existing buildings – Accessible solutions

Custom House – Non invasive solution to overcome stepped access.

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Existing buildings – Accessible solutions

Áras an Uachtaráin – Ramped access.

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Existing buildings – Accessible solutions

Existing approach re-graded.

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Existing buildings – Accessible solutions

Iveagh House – Ramped access.

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Existing buildings – Accessible solutions

Iveagh House – Ramped access.

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Existing buildings – Accessible solutions

Trinity College Dublin – Platform lift.

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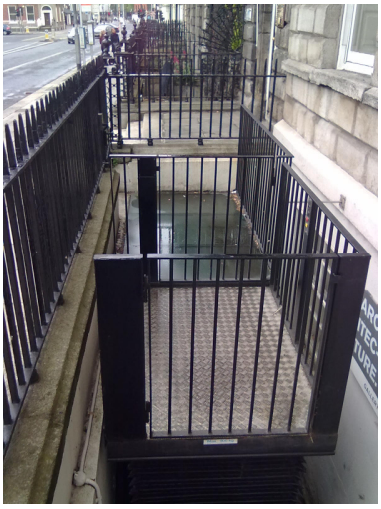
Existing buildings – Accessible solutions



No. 8 Merrion Square – External platform lift to basement level then vertical circulation provided by passenger lift.

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Existing buildings – Accessible solutions

Non-invasive solutions.

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Existing buildings – Accessible solutions

Accessible approaches.

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Existing buildings – Accessible solutions

Overcoming stepped entrance.

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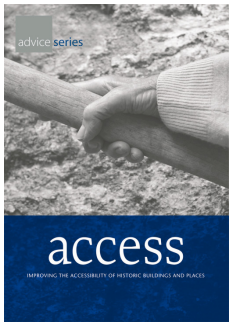
Existing buildings – Historic buildings

Advice Series: Access – improving the accessibility of historic buildings and places

- Aimed at increasing understanding of the principles of conservation and universal design;
- Improving awareness and understanding of the relevant legislation and policy;
- Provides guidance on preparing an access strategy;
- Provides illustrated examples of successful solutions where access to historic buildings and places has been improved.



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Section 2 - Access and use of existing buildings other than dwellings

- 2.1 Approach to existing buildings other than dwellings
- 2.2 Access to existing buildings other than dwellings
- 2.3 Circulation within existing buildings other than dwellings
- 2.4 Sanitary facilities for existing buildings other than dwellings
- 2.5 Other facilities in existing buildings other than dwellings
- 2.6 Aids to communication

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2.1 Approach to existing buildings other than dwellings → 2.1.2 Introduction

The guidance in 1.1.2 should be followed except:

a) where it is not practicable to provide both approach routes as per 1.1.2 **at least one** approach route to an accessible entrance of an existing building should be in accordance with 1.1.2 and 1.1.3, (2.1.2 and 2.1.3 where necessary);

b) where it is not practicable to provide circulation routes as per 1.1.1 (c) and (d) then similar facilities should be provided within the building or its environs which are accessible to people with disabilities. **(Striking a balance).**

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Notes on (a):
The approach route (s) to the accessible entrance (s) of a building are the routes from:

(a) the adjacent road or the entrance point at the boundary of the site, and
(b) any **designated** car-parking spaces for people with disabilities and/or setting down areas.

Note on (b):
The circulation routes around a building are the routes:

(c) between the accessible entrance(s) and any other subsidiary entrances and buildings, where external circulation is required between them;
(d) to and from facilities associated with the building and within the complex,

This clause allows for some flexibility in the building design but maintains provision of service on the basis of equality.

2.1 Approach to existing buildings other than dwellings → 2.1.2 Introduction

The guidance in 1.1.2 should be followed except:

(c) Where steps provide the only access to an existing building (i.e. there is no ramp), **the stepped approach may need to be modified or an alternative provided where practicable e.g.**

- Landscape or re-align the approach to provide a level, gently sloped or ramped access route and new steps where necessary, or
- Retain the existing steps and install an external platform lift, or
- Revise the internal planning of the building to change the main approach to one that can be made accessible in accordance with 1.1.3 (and 2.1.3 where necessary).

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2.1 Approach to existing buildings other than dwellings → 2.1.2 Introduction

The guidance in 1.1.2 should be followed except:

(d) Where level, gently sloped, ramped and stepped access routes exist they should be in accordance with 1.1.3 (2.1.3 where necessary).

Under practicability item (v) "Where specific alternative guidance to Section 1 is provided in Section 2 and an existing feature or facility satisfies that guidance" retention of that feature is permissible.

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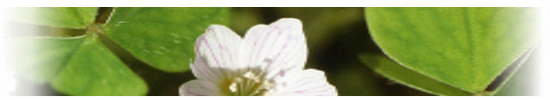

2.1 Approach to existing buildings other than dwellings → 2.1.3 Access routes

Further guidance given on:

•Level, gently sloped and ramped access routes

- Clear width, gradients and passing places;
- Top and bottom and intermediate landings;
- Stepped access in addition to a ramp.

•Stepped access routes

•Clear width, landings, steps

Handrails

•Height and clearance

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2.1 Approach to existing buildings other than dwellings → 2.1.5 On-site car parking

- As many as possible of the number required under 1.1.5 should be accessible **but at least one;**

- **Alternatively a setting down area should be provided.**

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2.2 Access to existing buildings other than dwellings

Where it is not practicable for each accessible entrance in 1.2.2 to be accessible:

- Alternative entrance(s) should be provided, or;
- Internal planning of building revised;
- At least one entrance should be made accessible;
- Landing dimensions not less than **1500 mm x 1500 mm.**

Further guidance given on:

•Effective clear width of entrance doors;
•Minimum vertical zone of visibility;
•Entrance lobbies.

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2.3 Circulation within existing buildings other than dwellings

Further guidance given on:

- Effective clear width of internal doors;
- Unobstructed clear width of corridors;
- Allowance of platform lift between change in level as an alternative to a slope/ ramp;
- Internal lobby dimensions;
- Passenger lift details;
- Internal stairs suitable for ambulant disabled people.

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2.3 Circulation within existing buildings other than dwellings

2.3.4 Vertical features
2.3.4.1 Provision

Where it is not practicable to provide a passenger lift in an existing building:

- An enclosed vertical lifting platform should be provided;
- **Alternatively, the same range of services/ facilities that are available on the other levels should be made available on the entry or accessible level(s) – Striking a balance.**

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Notes:

Example of striking a balance: A three storey (> 200 sq m nett per floor) historic building undergoes a material change of use from an office to a restaurant. Restaurant space and sanitary facilities are proposed only on the upper levels. If a passenger lift is required to be provided the lift shaft override will protrude through the roof of the historic building and will have a negative impact on the building from a conservation perspective. Considering the sensitive nature of the proposed works some alternatives are:

(a) Install a vertical lifting platform to all upper levels (generally will not have the same requirements on shaft override); **or**

(b) Do not install a lifting device but instead also provide restaurant space at ground floor level and a unisex accessible WC.

In doing so, provision of service will be secured on the basis of equality whilst maintaining reasonable accessibility.

2.3 Circulation within existing buildings other than dwellings → 2.3.4.2 Passenger lift details

The guidance in 1.3.4.2 should be followed except where it is not practicable:

- To provide the manoeuvring space in front of a lift it should be as large as possible but **not less than 1500 mm x 1500 mm;**
- To provide a larger lift in public areas of public facilities, the minimum internal dimensions of **lift car 1100 mm wide x 1400 mm deep.**

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2.4 Sanitary facilities → 2.4.3 General provisions

General provisions in 1.4.3 should be followed except:

- Where there is more than one WC facility provided at different locations provide **at least one unisex accessible WC per accessible floor should be provided.**
- Where it is not practicable to provide an effective width in accordance with 1.3.3.2, the doors should be as wide as possible but **not less than 750 mm;**
- Where it is not practicable to provide a wheelchair accessible unisex WC with a turning space of 1800 mm x 1800 mm, a facility with **a 1500 mm x 1500 mm** turning space may be provided.

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2.4 Sanitary facilities in existing buildings other than dwellings

2.4.3 General provisions

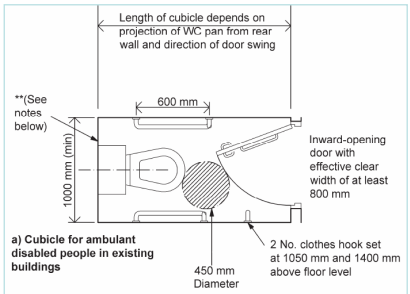
Where it is not practicable to provide an ambulant disabled/ enlarged WC cubicle in accordance with Section 1 then WC in accordance with Diagram 31 may be provided.

Key differences:

•Cubicle width – 1000 mm (min);

•Door may open inward if 450Ø activity space is maintained.

Diagram 31



2.5 Other facilities in existing buildings other than dwellings

Refreshment facilities:

1.5.5 should be followed except where it is not practicable:

- To provide access to users to all parts of facility **a refreshment facility should be available in the accessible area;**
- To provide the minimum manoeuvring space in 1.5.5 provide a minimum manoeuvring space of **1500 mm x 1500 mm;**
- To provide a working surface of a bar as per 1.5.5, the **serving counter** as wide as possible but **not less than 900 mm** long and ≤ 800 mm above floor level.

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2.6 Aids to communication

Guidance on the following should be followed **where practicable:**

- 1.6.3 Signage;
- 1.6.4 Visual contrast;
- 1.6.5 Lighting;
- 1.6.6 Audible aids.

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Summary

- Adopt the concept of practicability when dealing with works to existing buildings;
- Where works to existing buildings are carried out in accordance with Section 1 and, where necessary Section 2, **this will prima facie indicate compliance with Requirement M1;**
- When making decisions on practicability associated with historic buildings it is essential to be informed on the significance of the building; to take account of any conservation plan or statement and to liaise with the architectural conservation officer in the local authority;

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Thank You - Any Questions?

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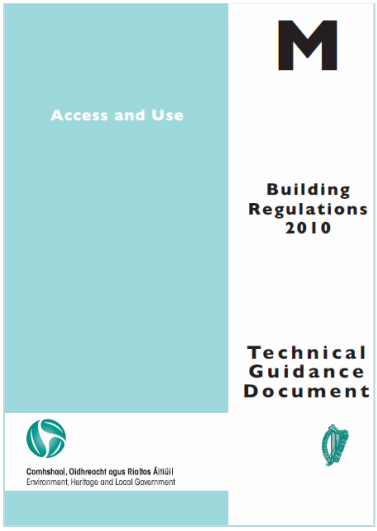


Module 6

Technical Exercise – Application of Part M to existing buildings other than dwellings

Exercise 1

Site description:

- Existing building of historical significance (Not a protected structure);
- Existing level approach and level threshold entrance;
- Existing entrance door clear width = 800 mm.

Proposed works:

Material change of use from a dwelling to a hotel.

Discuss compliance with Part M for the proposed works specifically regarding the provision of an accessible entrance?

Use the Part M 2010 Flow chart to determine outcome.

Exercise 2

Site description:

- Existing building (Non-historic);
- Mid-terrace ground floor office (own entrance) with offices overhead (separate entrance);
- No rear access;
- Main entrance accessed via steps directly from public footpath;

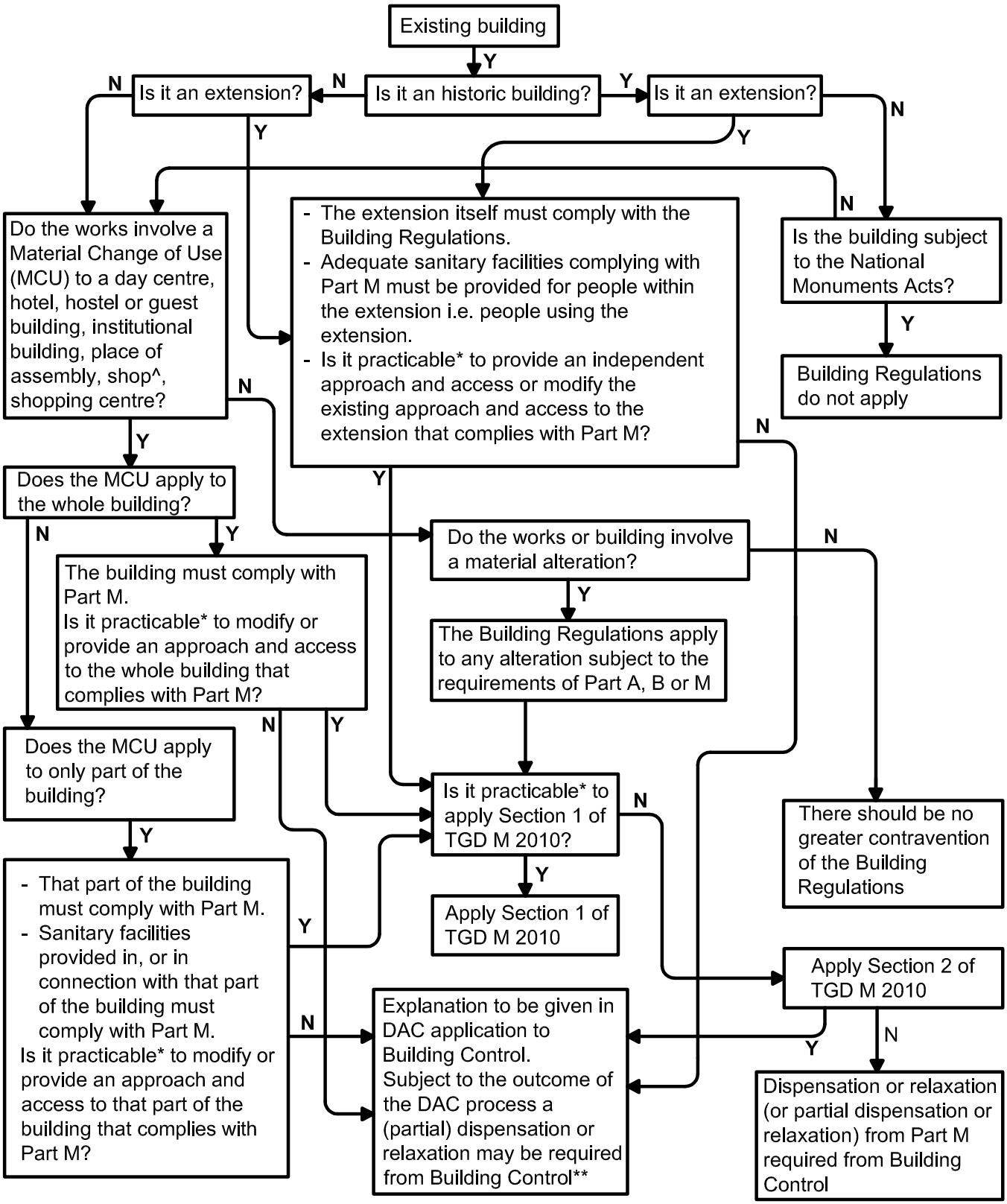
Proposed works:

Material change of use of the ground level office to a restaurant.

Discuss compliance with Part M for the proposed works specifically regarding approach and access and what consideration need to be made?

Use the Part M 2010 Flow chart to determine outcome.

Application of Part M 2010 to existing buildings other than dwellings



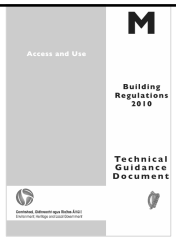
NOTES:

1. **The adoption of an approach other than that outlined in the guidance is not precluded provided the relevant Requirements of the Regulations are complied with.**
2. Many projects may involve an extension, a material change of use and a material alteration. Each of the these should be applied to the flowchart separately.
3. Refer to 0.6 'Application of Part M' and 0.8 'Existing buildings' in TGD M 2010 for further information.
4. Part M does not apply to the part(s) of a building used solely to enable inspection, repair or maintenance.

^ a shop (which is not ancillary to the primary use of the building).

* Refer to 0.7 for the determination of 'practicability' in TGD M 2010 .

** For clarity, this flowchart does not incorporate the DAC process. Refer to the Building Control Regulations.



Module 7

Section 3 - Access and Use of Dwellings

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Section 3 - Access and Use of dwellings

- 3.1 Approach to dwellings
- 3.2 Access to dwellings
- 3.3 Circulation within dwellings
- 3.4 Sanitary facilities for dwellings
- 3.5 Switches and sockets in dwellings

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3.1 Approach to dwellings

3.1.1 The objective is to provide an adequate means of approach to the main entrance of a dwelling to facilitate visitors from a point of access.

3.1.2 Access route to a dwelling

- 3.1.2.1 General
- 3.1.2.2 Level access route
- 3.1.2.3 Gently sloped access route
- 3.1.2.4 Ramped access route
- 3.1.2.5 Stepped access route

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3.1 Approach to dwellings → 3.1.2.1 General

Similar provisions as TGD M 2000 except:

- Clear opening width of **900 mm (min)** at point of access;
- If approach forms part of driveway – **3600 mm (min)** wide;
- Raised kerb – **100 mm** where adjacent ground not graded to the approach);
- Clear headroom 2100 mm (min).

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3.2 Access to dwellings → 3.1.2.2 Level access route

- The dwelling should be designed, within the overall constraints of space, so that the difference in level between the entrance to the dwelling and the dwelling plots point of access is minimised.
- Where site gradients do not allow a level access route, the flattest gradient achievable should be used.

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3.2 Access to dwellings → 3.1.2.5 Stepped access route

Stepped approach acceptable where level or gently sloped or ramped approach is not practicable because:

- Dwelling approach gradient within plot steeper than 1:15;
- There is insufficient space between dwelling and boundary;
- Planning requirements exist e.g. in relation to flood plains;
- Entrance is not at ground floor level (e.g. duplexes).

Note: The ground floor level of a duplex building should not use a stepped approach.

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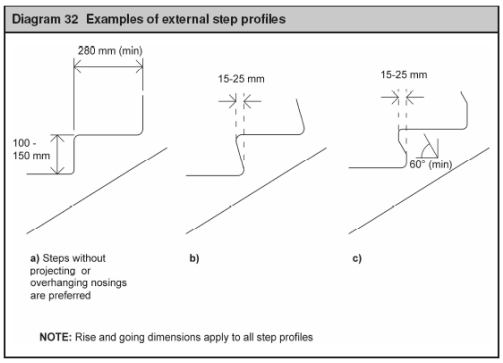
3.2 Access to dwellings → 3.1.2.5 Stepped access route

Stepped Access Route - Similar provisions as TGD M 2000 except:

- Clear width: **900 mm** (min) between handrails;
- Equal rises, **100 -** 150 mm (max).



3.2 Access to dwellings

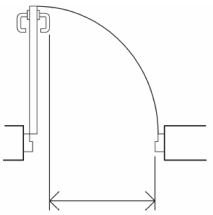
3.2.1 The objective is to provide a main entrance to a dwelling that is accessible to visitors.

3.2.2 Accessible entrance

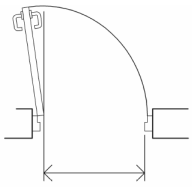
3.2 Access to dwellings → 3.2.2 Accessible entrances

Similar provisions as TGD M 2000 except:

- Effective clear width of entrance door should be **800 mm (min);**
- **Note method of measurement in Diagram 33.**



(i) Effective clear width (door stop to projecting ironmongery)



(ii) Effective clear width (door stop to door leaf)

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3.3 Circulation within dwellings

3.3.1 The objective is to facilitate circulation of visitors within the entrance storey, or where there is no habitable room at this level, in the storey containing the main living room.

- 3.3.2 Circulation within a dwelling
  - 3.3.2.1 Horizontal circulation within a dwelling
  - 3.3.2.2 Vertical circulation within a dwelling

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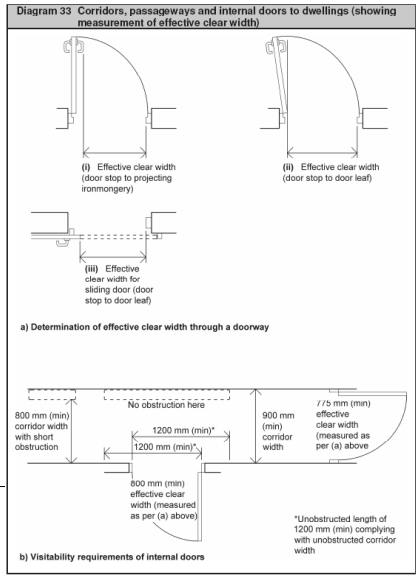
3.3 Circulation within dwellings → 3.3.2.1 Horizontal circulation within a dwelling

Similar provisions as TGD M 2000 except:

- **Minimum effective clear width of doors (Table 4)**;
- Localised obstructions;
- Door handles – **800 mm** to 1200 mm above floor level.

Table 4 Doors to accessible habitable rooms	
Minimum effective clear width	**Minimum unobstructed corridor width**
775 mm	1050 mm (900 mm if approached head on)
800 mm	900 mm



3.3 Circulation within dwellings → 3.3.2.2 Vertical circulation within a dwelling

Where no habitable room at the entry level the stairway providing access to the storey containing the main living room should comply with the following:

- Width – **900 mm** between handrails;
- Rise of flight - less than 1800 mm;
- Top and bottom landing - 900 mm;
- Rise ≤ 175 mm;
- Going **not less than 280 mm;**
- Avoid tapered steps;
- 3 or more risers - Suitable continuous handrail both sides.

3.4 Sanitary facilities for dwellings

3.4.1 The objective is to provide a WC that is accessible to visitors.

3.4.2 Accessible WC

3.4.3 WC in smaller dwellings

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3.4 Sanitary facilities for dwellings

Provide WC:

- At entry level with accessible entrance and at least one habitable room, or
- In dwellings with no habitable rooms at entry level, at level of main living room without need to negotiate steps.

WC design:

- Located in bathroom/ separate WC;
- Layout to facilitate access/use. Provide clear space within room/cubicle, 750 x 1200 mm, to facilitate transfer;
- Size and layout and positioning of door to facilitate wheelchair user with door closed **(Door width - Table 4);**
- Headroom – **2100 mm.**

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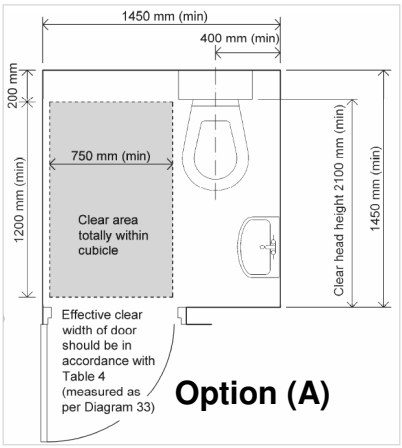
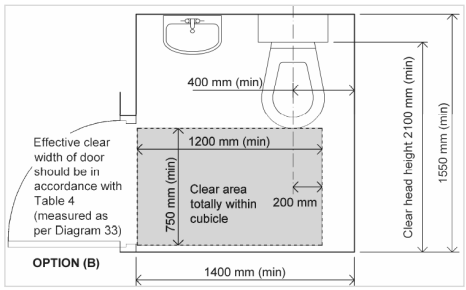
3.4 Sanitary facilities for dwellings → 3.4.2 Accessible WC

Example of WC cubicle for visitable housing (Diagram 34)



Option (A)



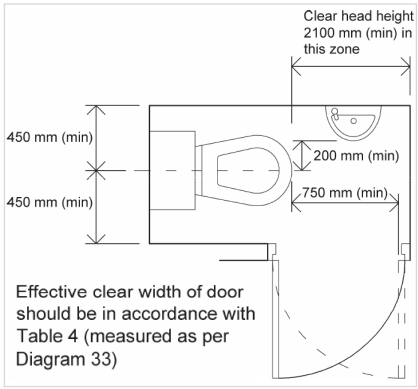
Option (B)

3.4 Sanitary facilities for dwellings → 3.4.3 WC in smaller dwellings

WC cubicle small dwelling where storey area < 45 m²

- Outward opening door, folding door or sliding door (consider doors wider than minimum);
- Door choice should not pose hazard on circulation route;
- Min effective clear width as per Table 4;
- **Clear head height – 2100 mm from front of pan.**

Diagram 35



3.5 Switches and sockets in dwellings

3.5.1 The objective is that switches and socket outlets should be located at accessible heights and are easy to operate in the accessible areas of a dwelling.

3.5.2 Switches and sockets

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3.5 Switches and sockets in dwellings

Heights of controls in the accessible areas of a dwelling

- Light switches and door entry systems (doorbells, entry phones, intercoms) - 900 mm to 1200 mm above floor level;
- Switches and socket outlets - 400 mm to 1200 mm above floor level;
- Applies to convenience socket outlets only;
- Do not apply to dedicated socket outlets not readily accessible or used for appliances that are intended to be used continuously e.g. fridge;
- The height requirements apply for all control devices in accessible areas except where the manufacturer's instructions specify otherwise e.g. thermostats.

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Summary

- Increase in clear opening width at point of access to site;
- Increase in width of driveway where it forms part of the approach;
- Further clarification that he ground floor level of a duplex building should not use a stepped approach;
- Increase in clear width of stepped access routes;
- Increase in effective clear width including method of measurement of same of main entrance and internal doors;
- Increased width and going for stairs where no habitable room is provided at entry level;
- Minimum headroom specified in visitable WCs;
- Heights of controls (co-ordinated with ETCI);

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Thank You – Any Questions?

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Appendix 1

Answers to Questions Page 45

Do the Requirements of Part M apply to the following? If so what section of the TGD should be used?

1. *Material change of use from an office to a day care centre with material alterations?*
A. Part M does apply. Section 1 should be used. If it is not practicable (refer 0.7) to carry out the material alterations in accordance with Section 1, then Section 2 may be used.

2. *Material alteration to an inspection area of maintenance garage?*
A. The Requirements of Part M do not apply to the part(s) of a building used solely to enable inspection, repair or maintenance;

3. *Office extension less than 200 sq. m (nett)?*
A. Part M does apply. The application of Section 1 is not subject to floor area requirements. Extensions are treated as new buildings.

4. *Extension to an historic building – No new WCs are required to cater for the increased occupancy – Are alterations required to existing WCs?*
A. Part M does apply. If accessible WCs are not provided in the extension then the existing WCs must be accessible from the extension. If the existing WCs do not comply with Section 1 they may need to be modified, (else provide new accessible WCs in accordance with Section 1 in the existing building). Modification of existing WCs would constitute a material alteration. If it is not practicable to modify the existing WCs, then the guidance in Section 2 may apply;

5. *Material alteration to a dwelling?*
A. The Requirements of Part M do not apply to works in connection with extensions or material alterations of existing dwellings, provided that such works do not create a new dwelling.

Answers to Exercise Page 70

1. The preferred gradient is 1:20 with a maximum length of 10m between landings.

2. For new buildings, the top and bottom landings should be at least 1800 mm long x 1800 mm wide and clear of any door swings or other obstructions.

3. The minimum unobstructed width between handrails should not be less than 1000 mm.

4. A corduroy tactile warning surface should be provided in accordance with Diagrams 4a and 4b of TGD M 2010.

5. Where the handrail is not continuous the handrail should extend at least 300 mm beyond the top and bottom of a ramped approach and the top and bottom risers of a stepped approach, and terminate in a closed end which does not project into a route of travel.

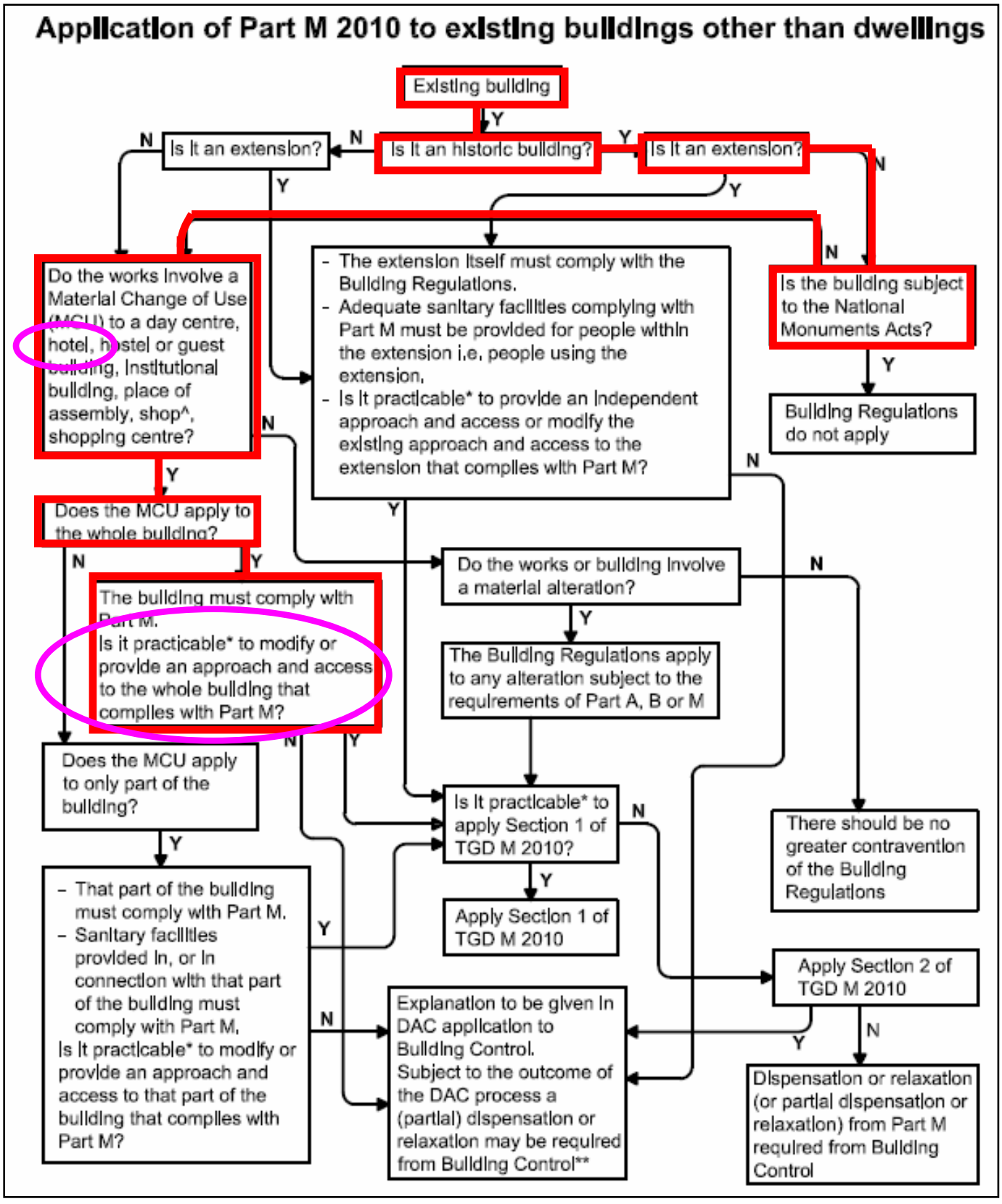
6. The profile should be either circular with diameter of between 40 mm to 50 mm or oval with a width of 50 mm (refer to Diagram 7 of TGD M 2010).

Answers to Module 4

Q1. **(c)**
Q2. **(d)**
Q3. **(b)**
Q4. **(c)**
Q4(a) 200-300 lux
Q5. **(b)**
Q6. An ambulant disabled person should be able to hold a handrail for support either before taking a first step up or down, or after reaching the landing from the last step in a flight. That should normally be possible where the handrail continues around the central well of a stair without further extension onto the landing, particularly if the handrail continues in an unbroken radius.

Answer to Module 6

Exercise 1 – Answer using Flowchart



Considerations

- **0.6(d) - Application of Part M states:**

"…..Where such material changes of use applies to the whole building (including approach and access **where practicable**), the building must comply with M1."

- **Refer to Section 1 of the TGD first.**

Table 2 Note (b) states – "Buildings used by the general public including….. hotels…… should have a minimum effective clear width of **1000 mm";**

- **Establish if this is practicable.**

- **Practicability circumstances that may be relevant from 0.7 as follows:**

•Item (i) – Where the works would have an adverse effect on the historical significance and/or;

•Item (v) - Where specific alternative guidance to Section 1 is provided in Section 2 and the existing feature or facility satisfies that guidance;

Considerations

Refer to Section 2 to see if there is additional guidance available.

- **Section 2.2.4** TGD M 2010 states:

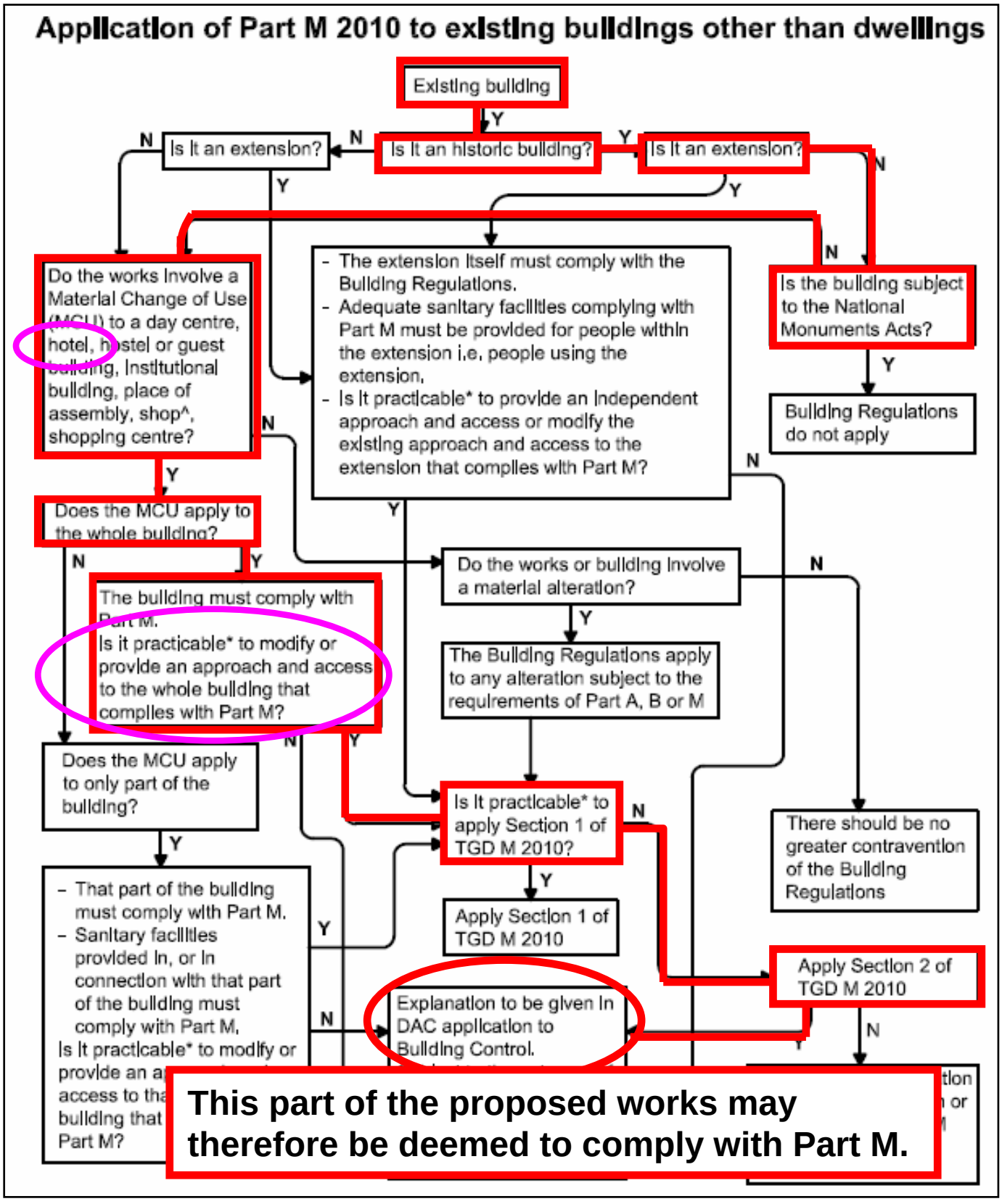
"Where it is not practicable to provide an entrance door with an effective clear width in accordance with 1.2.4 then the effective clear width should be as wide as possible but not less than **750 mm**…"

Therefore it **is** practicable to meet the specification in TGD M 2010.

This part of the proposed works may therefore be deemed to comply with Part M. Explanation to be given in DAC application to Building Control.

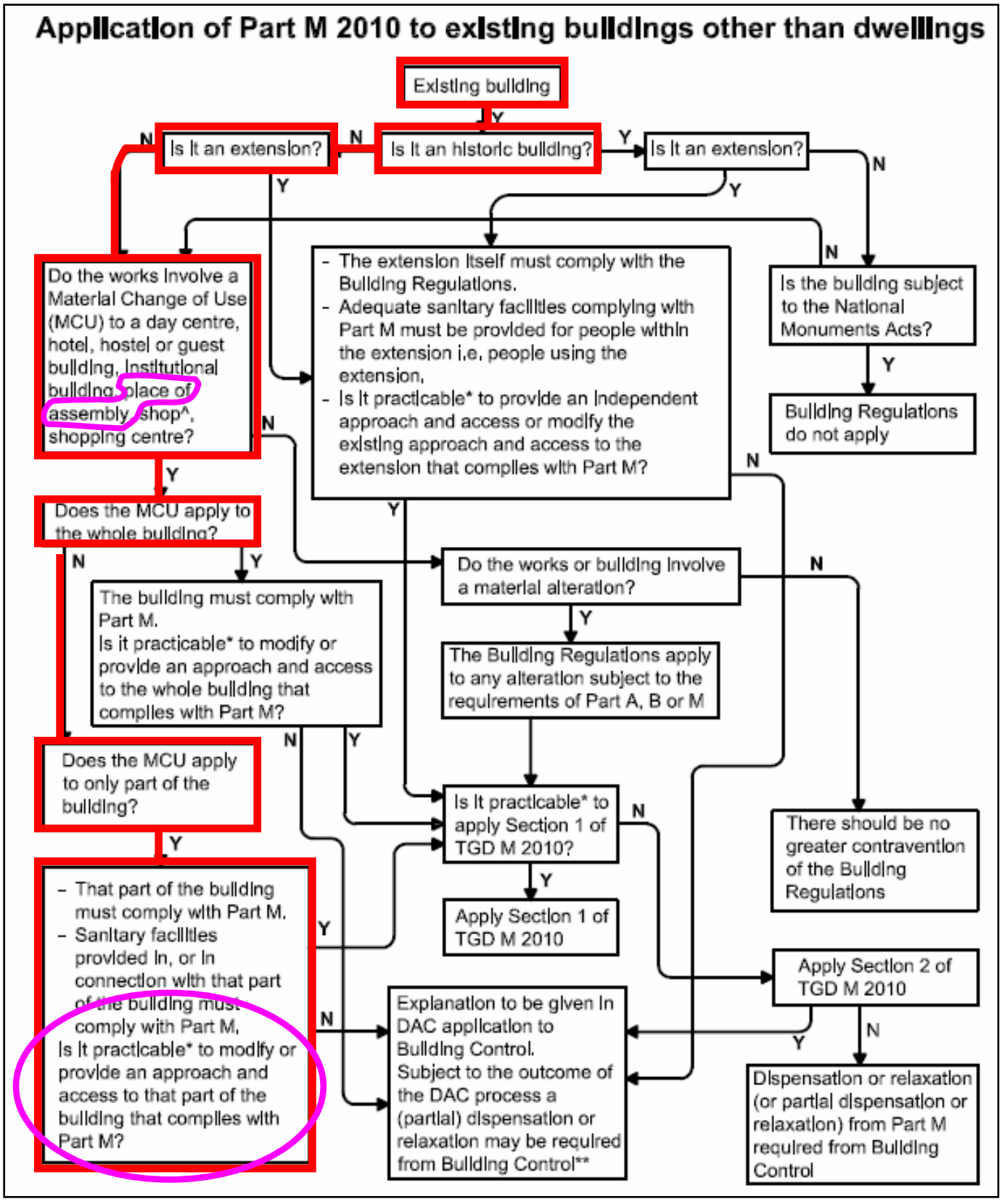
(Refer to the following page for completion of flowchart)

Flowchart Finalised



Answer to Module 6

Exercise 2 – Answer using Flowchart



Considerations

0.6(d) - Application of Part M states:

"…..Where such material changes of use only applies to part of the building, that part must comply with M1, the approach and access to that part (through independent access or through another part of the building) **where practicable** (refer to 0.7) must comply with M1……"

Refer to Section 1 of the TGD first.

- Explore all possible solutions to achieve access to the ground floor level in compliance with M1;

- If the approach and access cannot comply with Section 1 then refer to **Section 2;**

Considerations

Section 2 considerations

• Is the private space sufficient enough to re-align the approach to provide:
• a level access;
• a gently sloped, or
• a ramped access?

• Is there sufficient private space to install an external platform lift?

•If the answer is **NO** then it is simply **not practicable** to meet the specification in Section 1 or Section 2 of TGD M 2010.

This part of the proposed works may therefore be deemed to comply with Part M.

Explanation to be given in DAC application to Building Control.

(Refer to the following page for completion of flowchart)

Flowchart Finalised