



Points of interest:

- The FAS Training Programme in Building Control/Building Regulations is currently being held at the City West Conference Centre, Saggart, Co. Dublin. The programme is aimed at all people involved in the building control area and has proved very useful for staff in both the public and private sectors. Details of this course and future venues are available from:

Kevin Sheridan/Edith Conway,
FAS Environmental Training Unit,
Baggot Street, Dublin 4. Tel. (01) 6070500.

Information is also available on the FAS website at: www.fas.ie.

Inside this issue:

Part M:

The introduction of the revisions to Part M of the Building Regulations on 1st January, 2001 introduces new provisions that apply to the design of dwellings. The centre pages of this issue outline the changes and the implications they will have for the design and construction of dwellings.

Part L:

Ireland is a signatory to the Kyoto Protocol which significantly limits the amount of greenhouse gas emissions in participating countries. As a large percentage of such emissions are attributable to home heating, radical changes in the thermal performance of dwellings are on the cards. See the back page for details.

National Building Control Conference Postponed

As a consequence of the countrywide foot and mouth disease alert, the Council of the IBCI, in consultation with the Department of the Environment and Local Government, has decided to postpone the National Building Control Conference 2001.

The decision to postpone was not taken lightly as the conference is recognised as the premier event for those involved in building control in Ireland. Given that people would be travelling from Northern Ireland and Great Britain and the consequences that an outbreak of the disease in Ireland would bring, the Council considered it prudent to cancel the event for the

time being.

Readers should note that Council has postponed the conference rather than cancelled it entirely. Should events change for the better, consideration will be given to holding the conference later in the year. Details of any decisions to reschedule the conference will be published in the IBCI News.

It is a shame that the conference will not be taking place as planned as a distinguished panel of speakers was assembled. One can only hope that the same group will be available should we be able to reschedule for the autumn.

The majority of the work involved in organising the event was already in place

at the time of the decision and Council would like to put on record their thanks to the conference committee for their efforts.

The IBCI urge all their members to comply with the guidelines of the relevant agencies in respect to proper disinfection procedures, etc., especially those undertaking site visits in rural areas.

We all look forward to a speedy end to the foot and mouth crisis and, despite the inconvenience associated with the postponement of the conference, the IBCI are happy to be able to play our part, however small, in bringing about a successful outcome.

Private Electrical Generating Stations Granted Exempted Buildings Status

The Building Regulations (Amendment) (No. 3) Regulations, 2000 (S.I. No. 441 of 2000) came into effect from 1st January, 2001. The amendment applies to Article 8 of the Third Schedule (Exempted

Buildings) of the Building Regulations, 1997. It extends the Class 9 exemption to include licensed Electricity Supply Utilities other than the ESB.

The Commissioner for

Electricity Regulation is being asked to seek undertakings from the relevant utilities to consult the Chief Fire Officer on aspects of fire safety and access for fire brigade/emergency services.

Implications of Part M for Dwellings

Everyone should be aware by now that the amended Part M regulations came into effect on 1st January, 2001. The amended provisions represent a significant change in policy in that they now apply to dwellings. Consequently, dwelling designers must be familiar with these provisions and incorporate them into their drawings if confusion is to be avoided during construction.

The underlying principle of Part M is that all dwellings should be designed and constructed so that people with disabilities can:

- safely and conveniently approach the dwelling,
- gain access into the dwelling, and
- access a WC at entry level.

The revised technical guidance document sets out recommendations as to how this can be achieved and a summary of the revisions is outlined below.

Approach to a dwelling

At least one entrance at the boundary of the dwelling plot should have a minimum clear opening of 800 mm.

At least one entrance to the dwelling, preferably the main entrance, should be accessible to wheelchair users. Where it is not practicable to use the main entrance, an alternative entrance that is wheelchair accessible should be provided.

There should be a clear area at least 1.2m wide x 1.2m deep in front of every wheelchair accessible entrance.

The approach from the point of entry at the boundary of the dwelling plot to the wheelchair accessible entrance should also be suitable for use by wheelchair users. However, where:

- the distance between the point of access to the site and the wheelchair accessible entrance is greater than 30m, or
 - the plot gradient is such that the relative finished levels between the entrance to the dwelling and the point of access to the site do not allow for the provision of a ramped or sloped approach,
- the approach suitable for wheelchair users may be provided from a point inside the plot where a visitor can conveniently alight from a vehicle.

The approach to the wheelchair accessible entrance should have a clear unobstructed width of at least 900mm.

Where the approach comprises, either wholly or in part, the onsite driveway, that driveway should be at least 3m wide to allow adequate unobstructed width alongside parked cars.

The approach should have a firm surface that is suitable for wheelchair use and minimises the risk of slipping.

The approach should be level or, where plot gradients do not allow this, gently sloping. It should be noted that level areas may have a slope not exceeding 1:50 to facilitate drainage.

Where a level approach is not possible, the gradient should be the flattest achievable on site. Where the gradient of the approach provided is no steeper than 1:15, the maximum distance between level landings should be no more than 10m. For gradients between 1:15 and 1:12, the maximum distance between level landings should be no more than 6m.

Where the ground is not graded to the edge of the approach, a raised kerb of at least 75mm high should be provided along any open side.

Where it is not practicable to provide either a level or sloped approach to the wheelchair accessible entrance, either from the point of entry on the boundary of the dwelling plot, or from a point inside the plot where a visitor can alight from a vehicle, a stepped approach may be used. This might arise where:

- the gradient of the approach is greater than 1:15,

- there is insufficient space for slopes and landings because of the need to conform to the existing building line or other planning requirements, or
- the dwelling entrance is not at ground level, e.g., in duplex developments.

In these circumstances, steps suitable for use by ambulant disabled persons should be provided.

Access into a dwelling

Where the approach to a dwelling entrance is level or sloped, the entrance should be suitable for wheelchair access.

A wheelchair accessible entrance should be provided with a level entry having a maximum threshold height of 15mm.

The minimum clear opening width of a wheelchair accessible entrance is 775mm.

Equipment adjacent to the entrance such as doorbells, entry phones, etc. should be located at a height between 900mm and 1200mm above the entry level.

Circulation within a dwelling

Corridors and doors to habitable rooms in the entrance storey or, where there is no habitable room at this level, in the storey containing the main living room, should be sufficiently wide and free of stepped changes of level to allow convenient circulation by people with disabilities.

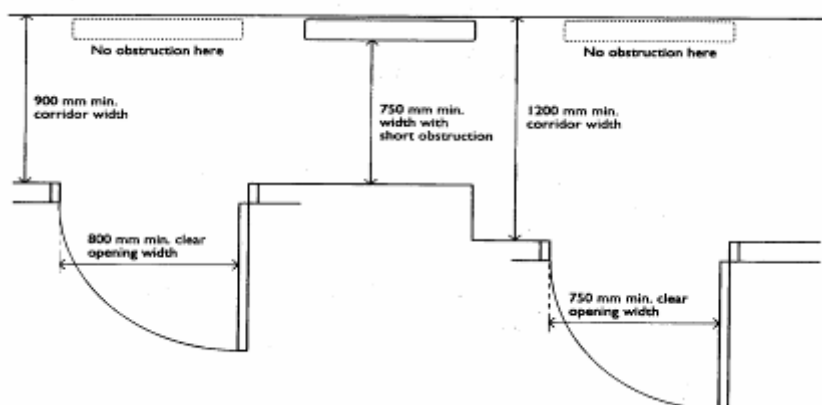


Diagram 1: Corridors, passages and internal doors in dwellings.

Note, where a stepped change of level is provided, e.g. because of the slope of the site, it should be located so that at least one habitable room and the entry level toilet can be accessed from the accessible entrance without the need to negotiate the step(s).

Corridors should have a minimum unobstructed width of 900mm. At local permanent obstructions, such as radiators, a clear width of 750mm should be provided.

The minimum clear opening width of doors to accessible habitable rooms should be related to the adjoining unobstructed corridor width. The length of unobstructed corridors should be at least 1200mm.

Saddle boards, where provided, should be bevelled with a maximum up stand of 10mm.

Doors to rooms, which can only be accessed by the use of steps or stairs, should have a minimum clear opening width of 750mm, irrespective of the adjoining unobstructed corridor width.

Door handles and light switches should be located between 900mm and 1200mm above floor level.

Sanitary conveniences

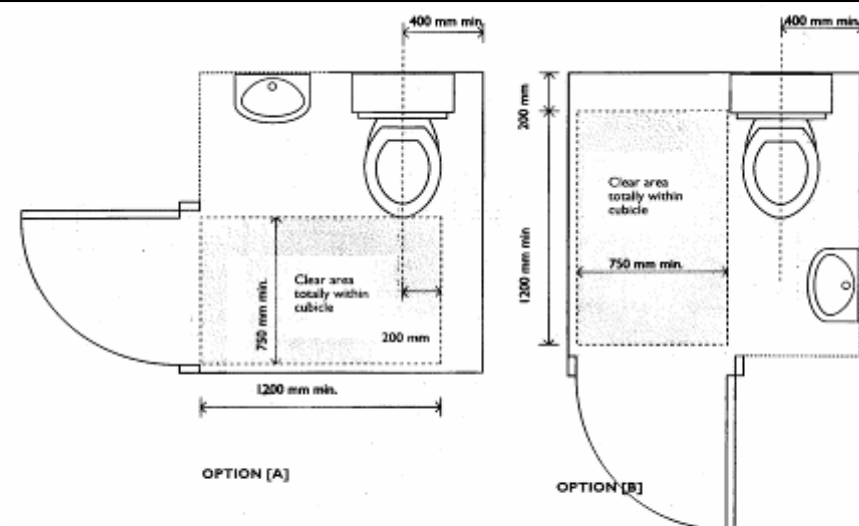
A WC should be provided at entry level or where there is no habitable room at entry level, in the storey containing the main living room. This WC should be located so that it can be accessed from the accessible entrance and from at least one habitable room without the need to negotiate steps.

The WC should be located in a bathroom or separate WC compartment.

A clear space 750mm x 1200mm, accessible by wheelchair users, should be available adjacent to the WC so as to facilitate sideways transfer from the chair to the WC.

In general, the size and layout of the bathroom or WC compartment and the positioning of the door should be such that a wheelchair can be fully contained within the compartment and the door closed with the wheelchair inside. Diagram 2 illustrates the levels of provision considered generally acceptable for WC's in visitable housing.

In certain smaller dwellings (dwellings where the area of the storey in which



NOTE: Washbasin may be located either within the space containing the WC or in an area adjacent to that space (see reg. G2(2)). The washbasin should be located so as not to impede access.

Diagram 2: Examples of WC Cubicles for Visitable Housing

the WC is located is less than 45m²) WC compartments which, while providing for the necessary clear space to facilitate for sideways transfer, cannot fully accommodate a wheelchair or do not facilitate the compartment door to be closed with the wheelchair fully inside, may be acceptable. Diagram 3 illustrates examples of WC compartments for such dwellings.

Guidance with regard to minimum clear opening width of the WC compartment door is also given.

The use of a door opening wider than the minimum, an outward opening door, a folding door or a sliding door might assist in facilitating wheelchair access. The choice of door type and location should be such as not to pose undue hazard on a circulation route or be otherwise dangerous in use.

Full details of the guidance is given in Technical Guidance Document M: Access for People with Disabilities which is available from the Government Publications Sale Office or through most book sellers.

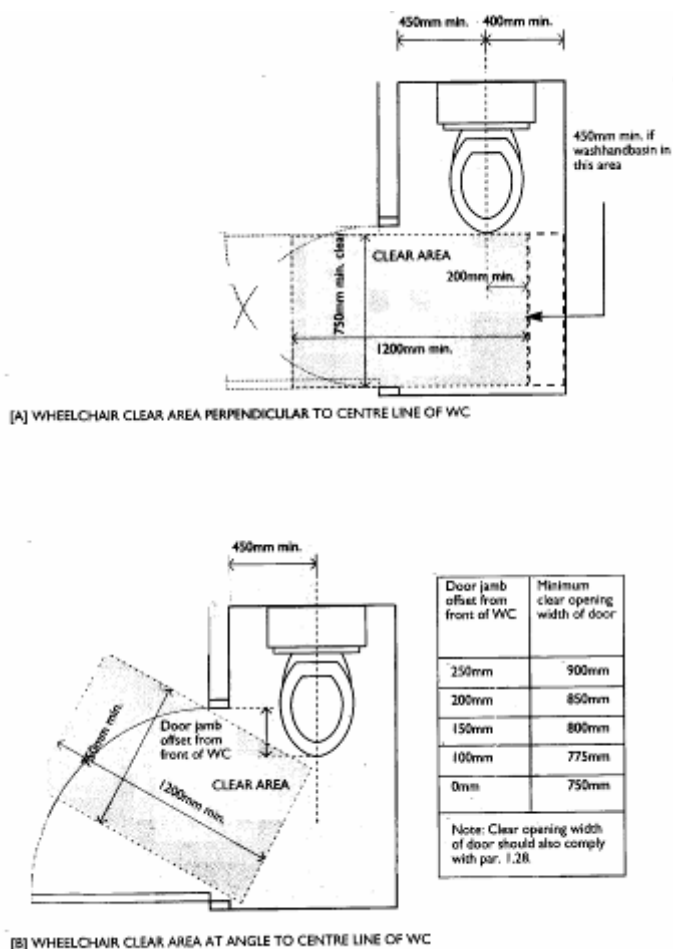


Diagram 3: Examples of WC Cubicles for Small Dwellings

Increases in insulation on the way

In November of last year, the Minister for the Environment and Local Government gave some insight into the expected revisions to Part L of the building regulations.

He was commenting on the reported results of a study commissioned by the Building Regulations Advisory Body and carried out by the UCD Energy Research Group. The study assessed common forms of construction used for housing in Ireland to determine whether they could deliver higher levels of thermal performance. The constructions assessed were single leaf hollow concrete block construction, twin leaf cavity wall construction, and timber frame construction.

The Minister noted that the 1997 revisions to Part L of the building code had resulted in a consequential reduction of up to 10% in energy used for space heating in new houses. The envisaged changes to Part L are designed to further reduce the amount of energy required for space heating in new houses by some 35%. This level of reduction is necessary if Ireland is to honour commitments under the Kyoto Protocol to limit increases in Greenhouse Gas emissions (including CO₂) to 13% above the 1990 levels by 2008-2012.

Approximately 40% of CO₂ emissions are attributable to energy consumed by the users of buildings. It follows, therefore, that a further and radical tightening up of thermal performance/insulation requirements for buildings is required.

Indications are that all forms of construction commonly used for housing in Ireland can deliver significantly improved thermal performance through the use of higher levels of insulation.

The Minister announced that the Building Regulations Advisory Body had advised him that it will not now be necessary to phase in the improvements in thermal/insulation standards over the period 2002 to 2005 as originally envisioned by the Department of the Environment and Local Govern-

ment. On the basis of their current information, it appears that the DOE&LG will now introduce the revised insulation requirements in a single step.

The date of the revisions will be determined in light of further work by BRAB on the detailed technical guidance to assist designers and builders achieve the more demanding standards involved. It is estimated that BRAB will have completed their work during the Spring of 2001.

Depending on the nature of the final advice given, the revisions may be introduced during 2002. The Minister indicated that the building industry would be consulted about the final details of proposals for amending Part L prior to their introduction. He also acknowledged that it would be normal to give the industry 6 to 12 months "lead in time" to implement major changes in the Building Regulations when they are signed into law.

The changes in thermal performance envisaged for the main elements of new houses are as follows:

	Current U-value (1997)	Proposed U-value (2003)
Roof	0.25	0.16
Walls	0.45	0.27
Floors	0.45	0.25

The increases in the thickness of insulation required as a consequence of these revisions would be as follows:

Exposed Element	Insulation Thickness* (1997) (2003)	
Roof:	150mm	250mm
Walls:		
<i>normal block</i>		
<i>inner leaf:</i>	60mm	120mm
<i>lightweight</i>		
<i>block inner leaf:</i>	-	100mm
<i>timber frame or</i>		
<i>internally</i>		
<i>insulated wall:</i>	75mm	150mm
Floor Slab:	40mm	90mm

IRISH BUILDING CONTROL INSTITUTE



**P.O. Box 3667,
Ballsbridge,
Dublin 4.**

If you would like to contribute an article to the IBCI News, or comment on anything contained in this issue, please write to:

**IBCI News,
P.O. Box 3667,
Ballsbridge,
Dublin 4.**

Or email us at:

ibcireland@hotmail.com

* NOTE: These figures are approximate and assume thermal conductivity in the range 0.035 to 0.04 Watts per metre Kelvin (W/mK). Lesser thickness will suffice where insulation of lower thermal conductivity is used.

The figures given are an indication only and there may be some adjustment of the proposed U-values and, consequently, in the thickness of insulation in the light of the final recommendations of the Building Regulations Advisory Body expected in the Spring of 2001.