

# **Building Regulations 1997-2008**

## **Technical Guidance Documents 1997-2008 Amendments and Corrections since 1997**

December 2008



Comhshaol, Oidhrecht agus Rialtas Áitiúil  
Environment, Heritage and Local Government





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# Introduction

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The Minister for the Environment, Heritage and Local Government published Technical Guidance Documents (TGDs) A to M under Article 7 of the Building Regulations, 1997 for the purpose of providing guidance with regard to compliance with Parts A to M of the Regulations.

Corrections and minor amendments to current editions of TGDs are issued from time to time as found necessary.

When TGDs are reprinted the opportunity is taken to include existing relevant corrections/amendments in the reprint.

This document contains the text of all currently applicable corrections/amendments made since 1997.

Table 1 provides a summary of all corrections/amendments and identifies those included in most recent reprints.

This document will be updated whenever a new correction/amendment is issued.

The latest version of this document can be downloaded from the Department's website: [www.environ.ie](http://www.environ.ie) under the headings "Development and Housing", "Building Standards", "Technical Guidance Documents" and is also available from

Government Publications Sale Office  
Sun Alliance House,  
Molesworth Street,  
Dublin 2.

**Table I: Amendments/Corrections to TGDs 1997-2008**

TGD	Title	Date			Amendments / Corrections	
		Original	New Edition	Reprint	Included in reprint	Not yet Included
<b>A</b>	<b>Structures</b>	Dec. 1997	-	May 2005	A(i), A(ii), A(iii), A(iv), A(v), A(vi) A(vii), A(viii)	-
<b>B</b>	<b>Fire Safety</b>	Dec. 1997	Feb. 2006	-	-	-
<b>C</b>	<b>Site Preparation and Resistance to Moisture</b>	Dec. 1997	Sept. 2004	-	C(i), C(ii)	-
<b>D</b>	<b>Materials and Workmanship</b>	Dec. 1997	Aug. 2000	May 2005	D(i)	-
<b>E</b>	<b>Sound</b>	Dec. 1997	-	May 2005	E(i)	-
<b>F</b>	<b>Ventilation</b>	Dec. 1997	Dec. 2002	May 2005	F(i), (F(ii)	-
<b>G</b>	<b>Hygiene</b>	Dec. 1997	Sept. 2008	-	-	-
<b>H</b>	<b>Drainage &amp; Waste Water Disposal</b>	Dec. 1997	-	May 2005	H(i), H(ii), H(iii), H(iv), H(v)	-
<b>J</b>	<b>Heat Producing Appliances</b>	Dec. 1997	-	May 2005	J(i), J(ii), J(iii), J(iv)	-
<b>K</b>	<b>Stairways, Ladders, Ramps and Guards</b>	Dec. 1997	-	May 2005	K(i), K(ii), K(iii), K(iv), K(v), K(vi), K(vii), K(viii), K(ix), K(x), K(xi), K(xii), K(xiii), K(xiv), K(xv), K(xvi), K(xvii)	-
<b>L</b>	<b>Conservation of Fuel and Energy</b>	Dec. 1997	Feb. 2006	-	-	-
<b>L</b>	<b>Conservation of Fuel and Energy - Dwellings</b>	Dec. 1997	Dec. 2007	-	-	L(i)-L(xxiii)
<b>M</b>	<b>Access for People with Disabilities</b>	Dec. 1997	June 2000	May 2005	M(i), M(ii), M(iii)	-

# AMENDMENTS AND CORRECTIONS

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## **Technical Guidance Document A** **- Structure**

- A(i) Transitional Arrangements:- Replace 1 January 1998 with 1 July 1998
- A(ii) **1.0.1**, last sentence : replace with :  
“ Wind loads should be in accordance with CP3 : Chapter V : Part 2, using wind speeds based on Diagram 15 of this Technical Guidance Document or BS 6399: Part 2 using wind speeds based on Diagram 15A of this Technical Guidance Document.”
- A(iii) **1.2.1**, Loading: insert between BS 6399: Parts 1 and 3 :  
“BS 6399 : Part 2 (For wind loads and using the wind speed map in Diagram 15A)”
- A(iv) **Diagram 15** : insert: additional Diagram 15A (included).
- A(v) **Standards and other references**, insert :  
“BS 6399 : Loading for buildings Part 2 : Code of Practice for wind loads.”
- A(vi) Reference to I.S. 1:1991 in the following sections is hereby replaced by:
- **Design provisions.** item 1.1.5.2(c). cement (type CEM I) to I.S. EN 197 - 1: 2001
  - **Standards and other References.** I.S. EN 197 - 1: 2001
- A(vii) **Standards and other references:-**  
Replace I.S. EN 197 Part 1 and 2 with I.S. EN 197 - 1: 2001
- A(viii) **Diagram 15:** Wind speed map updated.

## **Technical Guidance Document C** **- Site Preparation and Resistance to Moisture**

- C(i) Item 3.1.4 (b) replace with  
The hardcore bed should be at least 150 mm thick. Hardcore should conform with I.S. EN 13242:2002 and meet the specification as

outlined in Annex E of the accompanying guidance document to this standard, SR21: 2004+A1: 2007. The layer of hardcore should be well compacted, clean and free from matter liable to cause damage to the concrete. Specific guidance is given in 3.4.2 of SR21: 2004+A1: 2007 on limiting the presence of a reactive form of pyrite which may give rise to swelling or sulfate attack on concrete.

A blinding layer should be provided in accordance with the specification given in Annex E, of SR21: 2004+A1: 2007, for fines material. The blinding layer should be of adequate depth to fill surface voids thus creating an even surface and avoiding sharp projections, which may damage radon or damp-proof membranes.

## **C(ii) Standards and other References**

I.S. EN 13242:2002 Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction

SR21: 2004+A1: 2007 Guidance on the use of I.S. EN 13242:2002 - aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction (Incorporating Amendment 1:2007).

## **Technical Guidance Document D** **- Materials & Workmanship** **(2000 edition)**

- D(i) The dimensions stated in Diagram 1 are all in millimetres (mm).

## **Technical Guidance Document E - Sound**

- E(i) Transitional Arrangements:- Replace 1 January 1998 with 1 July 1998.

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## **Technical Guidance Document F - Ventilation**

- F(i) Table 1:- Background Ventilation in Bathrooms. Replace 6500 m<sup>2</sup> per bath/shower with 6500 mm<sup>2</sup> per bath/shower.
- F(ii) Table 1:- Background Ventilation in Sanitary Accommodation. Replace 6500 m<sup>2</sup> per WC with 6500 mm<sup>2</sup> per WC.

## **Technical Guidance Document H - Drainage and Waste Water Disposal**

H(i) Transitional Arrangements:- Replace 1 January 1998 with 1 July 1998

- H(ii) Table 7:- delete reference to rigid asbestos cement pipes and replace with :

"fibre cement to I.S. EN 588-1";

replace list of standards covering rigid concrete pipes with :

"I.S. 6, BS 5911 and for surface water drainage only, I.S. 166."

- H(iii) **Key to diagrams 7 & 8**

replace description of granular material with :

"should be 10 mm aggregate conforming to I.S. 5 : 1990 having a compaction fraction of 0.2 or less when tested in accordance with BS 8310: 1985 Appendix D."

- H(iv) Table 9:- alter the minimum diameter for circular manholes for a depth of 1.5m or less to :

"1000".

- H(v) **Standards and other references -**

delete reference to I.S. 243 and BS 3656 and insert:

"I.S. EN 588-1: 1997, Fibre-cement pipes for sewers and drains - Part 1: Pipes, joints and fittings for gravity systems."

## **Technical Guidance Document J - Heat Producing Appliances**

- J(i) Transitional Arrangements:- Replace 1 January 1998 with 1 July 1998

- J(ii) 2.18 : 4th line - Delete :

"under a hearth".

- J(iii) **5.2** : Table 3:- replace titles in bold to read as follows -

**"Location of tank"**

**"Bund required"**

**"Protection from fire in a building"**

**"Protection from fire in relation to a boundary".**

- J(iv) Reference to I.S. 51: 1983 in the following sections is hereby replaced by I.S. EN 1457: 1999 Class A1 NI

- **Brick/Block chimneys.** item 2.12(a).

- **Chimneys** 3.11(a), and

- **Standards and other References.**

## **Technical Guidance Document K - Stairways, Ladders, Ramps and Guards**

- K(i) Transitional Arrangements:- Replace 1 January 1998 with 1 July 1998

- K(ii) **Paragraph 1.0 (ii):** to read:

means of access for people with disabilities (see Technical Guidance Document M)

- K(iii) **Paragraph 1.1.3:** Add at end of paragraph:

For stepped approaches to entrances which are accessible to people with disabilities, see Technical Guidance Document M, Paragraphs 1.5 and 1.22.

- K(iv) **Paragraph 1.1.4,** final line, to read:

...and BS 5395-1: 2000.

<p>K(v) Table: - Rise, going and pitch. Note 4: to read:</p> <p>In stairs which are intended to satisfy the needs of ambulant disabled people (see Technical Guidance Document M, Paragraphs 1.14 and 1.30), the rise should not be greater than 175 mm and the going should not be less than 250 mm.</p> <p>K(vi) <b>Paragraph 1.1.6:</b> to read:</p> <p>The varying thread width of a tapered step can cause people to misjudge distances and lead to falls. For this reason, the use of tapered steps should be avoided. If it is necessary to use them they should preferably be situated at the bottom of the stairs.</p> <p>Public stairs should not contain tapered steps. Where consecutive treads are used, a uniform going should be maintained. For tapered treads, the going should conform with par. 1.1.4 when measured as follows -</p> <p>(a) if the flight is narrower than 900 mm, measured in the middle, and</p> <p>(b) if the flight is 900 mm or wider, measured 270 mm from each side.</p> <p>In addition, the going at the narrow end should be a minimum of 75 mm.</p> <p>K(vii) <b>Paragraph 1.1.10:</b> final line, to read:</p> <p>...and M - Access for People with Disabilities applies.</p> <p>K(viii) <b>Paragraph 1.1.11:</b> Add at end of paragraph:</p> <p>For stairs suitable for use by ambulant disabled people, see guidance in Technical Guidance Document M, paragraphs 1.14 and 1.30.</p> <p>K(ix) <b>Paragraph 1.1.19:</b> line 5: to read:</p> <p>...recommendations of BS 6262-4: 1994...</p> <p>K(x) <b>Paragraph 1.1.21</b> to read:</p> <p>Further guidance on stairways and ladders is given in the following:-</p> <p>I.S. 158: 1987 Closed String Wood Stairs</p>	<p>BS 5395-1: 2000 Stairs, ladders and walkways, Part 1, Code of Practice for the design, construction and maintenance of straight stairs and winders;</p> <p>BS 5395-2: 1984 Stairs, ladders and walkways, Part 2, Code of practice for the design of helical and spiral stairs</p> <p>BS 5395-3: 1985 Stairs, ladders and walkways, Part 3, Code of practice for the design of industrial type stairs, permanent ladders and walkways;</p> <p>BS 6180: 1999 barriers in and about buildings. Code of practice;</p> <p>BS 6399-1: 1996; Loading for buildings Code of practice for dead and imposed loads;</p> <p>BS 7553: 1992 Specification for loft ladders.</p> <p>K(xi) <b>Paragraph 1.2.4</b> to read:</p> <p>...and M - Access for People with Disabilities applies.</p> <p>K(xii) <b>Paragraph 2.1</b> to read:</p> <p>BS 6180: 1999, gives advice on general design and...</p> <p>K(xiii) <b>Paragraph 2.4</b> to read:</p> <p>Guarding should be provided for any window, the sill of which is more than 1400 mm above external ground level and is less than 800 mm in height above internal floor level. Where a window is capable of being opened, special care must be taken to ensure that the guarding must remain in place and effective at all times (see <i>Diagram 6</i>).</p> <p>K(xiv) <b>Paragraph 2.5</b>, last line, to read:</p> <p>...recommendations of BS 6262-4: 1994.</p> <p>K(xv) <b>Paragraph 2.9</b>, line 5, to read:</p> <p>...forces set out in BS 6399-1: 1996.</p> <p>K(xvi) <b>Paragraph 2.9</b>, line 9, to read:</p> <p>...of BS 6180: 1999, should be followed.</p> <p>K(xvii) <b>Standards and other references</b></p> <p>I.S. 158: 1987 Closed String Wood Stairs</p>
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BS 5395-1: 2000 Stairs, ladders and walkways, Part 1, Code of practice for the design, construction and maintenance of straight stairs and winders

BS 5395-2: 1984 Stairs, ladders and walkways, Part 3, Code of practice for the design of helical and spiral stairs AMD 6076

BS 5395-3: 1985 Stairs, ladders and walkways, Part 2, Code of practice for the design of industrial type stairs, permanent ladders and walkways AMD 14247

BS 6180: 1999 Barriers in and about buildings. Code of practice. AMD 13292

BS 6262-4: 1984 Glazing for Buildings. Safety related to human impacts

BS 6399-1: 1996 Loading for buildings. Part 1 Code of practice for dead and imposed loads AMD 13669

BS 7553: 1992 Specification for loft ladders AMD 7417.

## **Technical Guidance Document L – Conservation of Fuel and Energy – Dwellings**

L(i) **Cover Page**, Building Regulations 2007 to read Building Regulations 2008

L(ii) **Inside Cover Page**, Building Regulations 2007 to read Building Regulations 2008

L(iii) **Page 3, Introduction**, line 6 to read: **Building Regulations (Part L Amendment) Regulations 2008 (S.I. No. 259 of 2008)**.

L(iv) **Page 3, Transitional Arrangements**, replace 1 July 2009 with 30 June 2009

L(v) **Page 5, Building Regulations – The Requirement**, line 2 to read: Building Regulations (Part L Amendment) Regulations 2008 (S.I. No. 259 of 2008).

### **The Second Schedule to read**

#### **Conservation of Fuel and Energy**

L1 A building shall be designed and constructed so as to ensure that the energy performance of the building is such as to limit the amount of energy required for the operation of the building and the

amount of CO<sub>2</sub> emissions associated with this energy use insofar as is reasonably practicable.

L2 For existing dwellings, the requirements of L1 shall be met by:

(a) limiting heat loss and, where appropriate, maximising heat gain through the fabric of the building;

(b) controlling, as appropriate, the output of the space heating and hot water systems;

(c) limiting the heat loss from pipes, ducts and vessels used for the transport or storage of heated water or air;

(d) providing that all oil and gas fired boilers installed in existing dwellings shall meet a minimum seasonal efficiency of 86% where practicable.

L3 For new dwellings, the requirements of L1 shall be met by:

(a) providing that the energy performance is such as to limit the calculated primary energy consumption and related CO<sub>2</sub> emissions insofar as is reasonably practicable, when both energy consumption and CO<sub>2</sub> emissions are calculated using the Dwelling Energy Assessment Procedure (DEAP) published by Sustainable Energy Ireland;

(b) providing that a reasonable proportion of the energy consumption to meet the energy performance of a dwelling is provided by renewable energy sources;

(c) limiting heat loss and, where appropriate, availing of heat gain through the fabric of the dwelling;

(d) providing and commissioning energy efficient space and water heating systems with efficient heat sources and effective controls;

(e) providing to the dwelling owner sufficient information about the dwelling, the fixed building services and their maintenance requirements so that the dwelling can be operated in such a manner as to use no more fuel and energy than is reasonable;



- 
- (f) providing that all oil and gas fired boilers shall meet a minimum seasonal efficiency of 86%.

L(vi) **Paragraph 0.1.2**, replace Regulation L2(a) with Regulation L3(a)

L(vii) **Paragraph 0.1.7**, replace Regulation L3 with Regulation L2(d)

L(viii) **Paragraph 0.5**, at end of Definitions, add:

### **0.5.1 APPLICATION TO BUILDINGS OF ARCHITECTURAL OR HISTORICAL INTEREST**

Part L does not apply to works (including extensions) to an existing building which is a “protected structure” or a ‘proposed protected structure’ within the meaning of the Planning and Development Act 2000 (No 30 of 2000).

Nevertheless, the application of this Part may pose particular difficulties for habitable buildings which, although not protected structures or proposed protected structures, may be of architectural or historical interest.

Works such as the replacement of doors, windows and rooflights, the provision of insulated dry lining and damp-proofing to walls and basements, insulation to the underside of slating and provision of roof vents and ducting of pipework could all affect the character of the structure.

In general, the type of works described above should be carefully assessed for their material and visual impact on the structure.

Historic windows and doors should be repaired rather than replaced, and drylining and dampproofing should not disrupt or damage historic plasterwork or flagstones and should not introduce further moisture into the structure.

Roof insulation should be achieved without damage to slating (either during the works or from erosion due to condensation) and obtrusive vents should not affect the character of the roof.

In specific cases, relaxation of the values proposed may be acceptable, to the local building control authority, if it can be shown to be necessary in order to preserve the architectural integrity of the particular building.

For more guidance on appropriate measures see “Planning Guidelines No. 9: Architectural Heritage Protection - Guidelines for Planning Authorities” published by the Department of the Environment, Heritage and Local Government.

L(ix) **Paragraph 1.1.1**, replace Regulation L2(a) with Regulation L3(a)

L(x) **Paragraph 1.1.2**, replace Regulation L2(a) with Regulation L3(a)

L(xi) **Paragraph 1.2.1**, line 3 and last line, replace Regulation L2(b) with Regulation L3(b)

L(xii) **Paragraphs 1.3.2.2; 1.4.1.1; 1.5.5.1; 2.1.2.2; 2.2.1.1; 2.2.2.1 & Other Publications**, replace (to be published) with (available on [www.environ.ie](http://www.environ.ie))

L(xiii) **Paragraph 1.4.1.1**, replace Regulation L2(d) with Regulation L3(d) and replace Regulation L2(e) with Regulation L3(f)

L(xiv) **Paragraphs 1.4.4.3; 2.2.4.3 and Standards referred to:** replace –400°C with –40°C

L(xv) **Paragraph 1.3.3.2 (b)**, to read: Adopt details that are similar to, or demonstrated as equivalent to, generic details that have been assessed as limiting thermal bridging to an equivalent level to that set out in Table D1 of Appendix D. A set of such details for typical constructions has been developed in consultation with relevant construction industry organisations and is available in a document “Limiting Thermal Bridging and Air Infiltration – Acceptable Construction Details” (available on [www.environ.ie](http://www.environ.ie)). The procedure for assessing the performance of specific details is outlined in Appendix D.

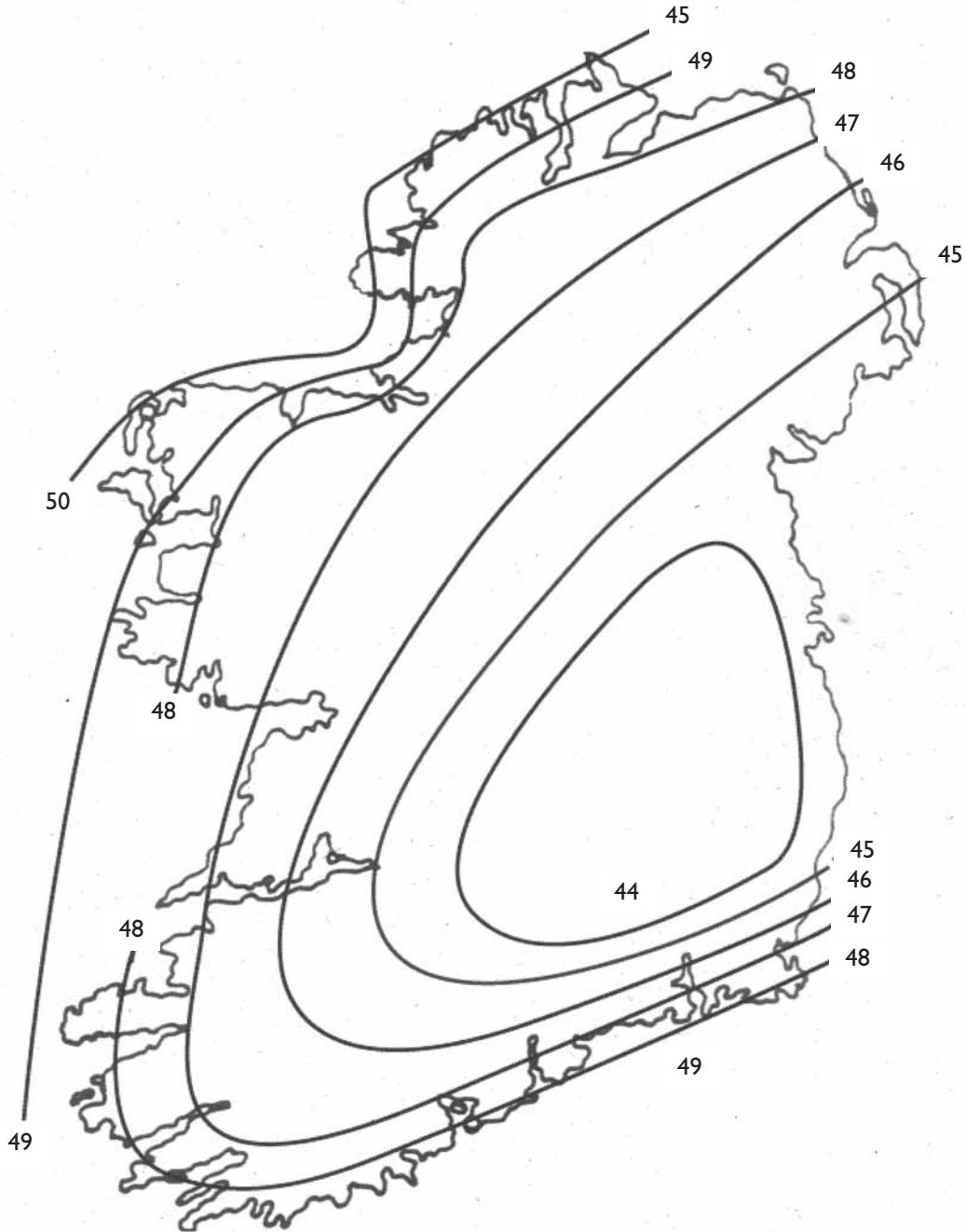
L(xvi) **Paragraph 1.5.4.7**, in second last sentence replace Paragraph 1.3.4.3 with Paragraph 1.3.4.4

L(xvii) **Paragraph 2.1.3.2**, second paragraph to read: Adopt details that are similar to, or demonstrated as equivalent to, generic details that have been assessed as limiting thermal bridging to an equivalent level to that set out in Table D1 of Appendix D. A set of such details for typical constructions has been developed in consultation with relevant construction industry organisations and is available in a document “Limiting Thermal Bridging and Air Infiltration – Acceptable Construction Details” (available on [www.environ.ie](http://www.environ.ie)).

L(xviii) **Paragraph 2.2.1.1**, replace Regulation L3 with Regulation L2(d)

L(xix) **A.4.1, Table A4:** replace 0.23 with 0.28 and insert new item as follows “Facing wall not

- 
- exposed, corridor above and below 0.40”
- L(xx) **B.7.1, Table I8** to read Table B18
- L(xxi) **B.7.1, Tables B19, B20 & B21**, replace column heading “Total Thickness of insulation (mm)” with “Exposed Perimeter/Area (P/A)(m-I)” and replace text “W-Value of construction (W/m2K)” with “Total thickness of insulation (mm)”
- L(xxii) **Paragraph C.1**, replace Regulation L2(a) with Regulation L3(a)
- L(xxiii) **D.4** replace BRE IP 1/07 with BRE IP 1/06

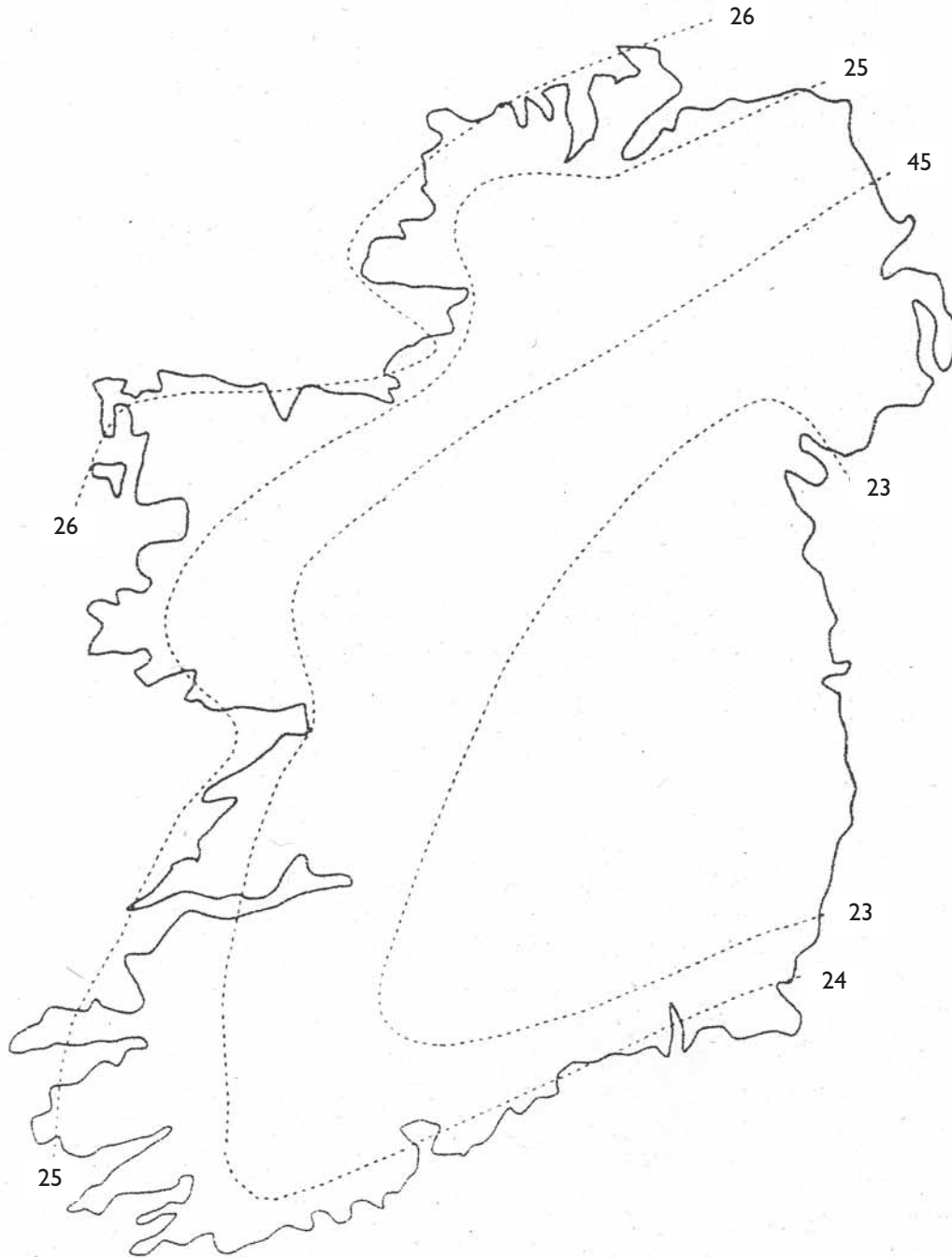


Estimated maximum gust speed (m/s) with return period 50 years.

Valid for a height of 10m above open level country

Note: For sites on the south, west and north coasts increase by 2%

(Data supplied by Met Éireann)



Estimated maximum 60 minute wind speed (m/s) with return period 50 years. Valid for a height of 10m above terrain of category II (farmland with boundary hedges, occasional small farm structures, houses or trees)  
Data supplied by Met Éireann