The England, Wales, Scotland, Northern Ireland and Éire all have their own building regulations with regards to structure, which will encompass requirements for climatic loading.

Table 1 - Building Regulations in the UK & Ireland

Country	Building Regulations	Section
England & Wales	Approved Document A [1]	Section 3 – Wall Cladding
Scotland	Domestic Handbook [2] Non-Domestic Handbook [3]	Section 1.1 – Structure
Northern Ireland	Technical Booklet D [4]	Section 1 - General
Éire	Technical Guidance Document K [5]	Section 1 – Structure

BASIC REQUIREMENTS

The requirements are similar between the countries, with the below extracts taken from each countries individual regulations as to the requirements for structural stability;

England & Wales, Approved Document A
A1 (1) A building shall be designed and constructed, with due regard to the theory and practice of structural engineering, so as to ensure that the combined actions that are liable to act on it are sustained and transmitted to the ground - (a) safely, and (b) without causing such deflection or deformation of any part of the building, or such movement of the ground, as will impair the stability of any part of another building. (2) In assessing whether a building complies with sub-paragraph (1), regard shall be had to the variable actions to which it is likely to be subjected in the ordinary course of its use for the purpose for which it is intended.

Scotland, Domestic & Non-Domestic Handbook

Standard 1.1

Every building must be designed and constructed in such a way that the loadings that are liable to act on it, taking into account the nature of the ground, will not lead to:

a. the collapse of the whole or part of the building

b. deformations which would make the building unfit for its intended use, unsafe, or cause damage to other parts of the building or to fittings or to installed equipment or

c. impairment of the stability of any part of another building.

Northern Ireland, Technical Booklet D

Regulation 30 (Stability)

A building shall be designed and constructed so that the combined dead, imposed and

wind loads are sustained and transmitted to the ground, taking into account the nature of the

ground—

(a) safely; and

(b) without impairing the safety of any part of another building.

Éire, Technical Guidance Document A

A1 (1) A building shall be designed and constructed, with due regard to the theory and practice of structural engineering, so as to ensure that the combined actions that are liable to act on it are sustained and transmitted to the ground -

(a) safely, and

(b) without causing such deflection or deformation of any part of the building, or such movement of the ground, as will impair the stability of any part of another building.

A1 (2) In assessing whether a building complies with sub-paragraph (1), regard shall be had to the variable actions to which it is likely to be subjected in the ordinary course of its use for the purpose for which it is intended.

These requirements typically do not provide guidance on requirements on glass types, but other sections of the building regulations for each country, and through the following codes of practice, do provide this.

GLASS TYPES AND ADDITIONAL GUIDANCE

Whilst Building Regulation documents provide the requirements the structure must meet, they do not provide specific details or guidance on design and applicable glass types. For glass types, requirements and guidance is provided by other National and International Codes of Practice, as follows:

Table 2 – Codes & Guidance Relevant to the UK & Ireland

Codes of Practice
EN 1990:2002 [8]
EN 1991-1-4:2005 [7, 8]
EN 1991-1-3:2003 [9, 10]
BS 6262-3:2005 [11]
BS 5516-2:2004 [12]
prEN 16612:2013 [13]
prEN 13474-3 :2009 [13]

COMPLIANCE

When determining the load requirements for a building, local Building Control (or the equivalent certifying authority) should be consulted to ensure that the requirements for the specification will meet the requirements that will be placed upon the building when undergoing final approval.

Full consideration should be given to the requirements of Building Regulations as well as Eurocodes and any associated applicable documents.

REFERENCES

[1] HM Government, *The Building Regulations 2010 - Approved Document A - Structure,* 20123.

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[3] Riaghaltas na h-Alba, *Technical Handbook 2015 - Non-Domestic,* Riaghaltas na h-Alba, 2015.

[4] Department of Finance and Personnel, *Building Regulations (Northern Ireland) 2012 Guidance - Technical Booklet D - Structure,* DFPNI, 2012.

[5] Environment, Community and Local Government (Éire), *Building Regulations 2012 - Technical Guidance Document A - Structure,* Government Publications (Éire), 2012.

[6] European Committee for Standardization, *EN 1990:2002 - Basis of structural design,* CEN, 2002.

[7] European Committee for Standardization, *EN 1991-1-4:2005+A1:2010 - Eurocode 1. Actions on structures. General actions. Wind actions,* CEN, 2005/2010.

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[9] European Committee for Standardization, *EN 1991-1-3:2003+A1:2015 - Eurocode 1. Actions on structures. General actions. Snow loads,* CEN, 2003/2015.

[10] European Committee for Standardization, *NA to BS EN 1991-1-3:2003 - UK National Annex to Eurocode 1. Actions on structures. General actions. Snow loads,* CEN, 2003.

[11] British Standards Institute, BS 6262-3:2005 - Glazing for buildings. Code of practice for fire, security and wind loading, BSI, 2005.

[12] British Standards Institute, *BS 5516-2:2004 - Patent glazing and sloping glazing for buildings. Code of practice for sloping glazing,* BSI, 2004.

[13] European Committee for Standardization, *prEN 16612:2013 - Glass in Building - Determination of the load resistance of glass panes by calculation and testing,* CEN, 2013.

[14] European Committee for Standardization, *prEN 13474-3:2009 - Glass in building - Determination of the strength of glass panes - Part 3: General method of calculation and determination of strength of glass by testing,* CEN, 2009.