# Department of Environment, Food & Agriculture

# Proposed changes to the Building Regulations

# A Consultation Document 2017

https://consult.gov.im/ version



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# **Minister's Introduction**

I am pleased to introduce this consultation paper on proposed changes to the Building Regulations as applied in the Isle of Man.

The consultation focuses on those matters concerning energy efficiency but also proposes updates to reflect changes to building practices.

This is just one of a number of proposed actions aimed at meeting our commitment to reducing emissions in line with the goals in Programme for Government and the Government's Climate Challenge Mitigation Strategy that seeks to reduce greenhouse gas emissions by improving the energy efficiency of buildings with the added benefit of reducing energy bills.

I would therefore urge everyone who has an opinion about suggested policies and standards of Building Control on the Island to consider and respond to this consultation document.

Hon. G Boot MHK Minister for DEFA

### **Executive Summary**

This consultation by the Department of Environment, Food & Agriculture, seeks views of the public and the building industry on proposed changes to the Building Regulations 2014. Several changes are being offered for consultation.

The reason for the proposed amendments is to help achieve the requirements set out in the Programme for Government 2016 – 2021; and the Climate Challenge Mitigation Strategy 2016-2020. The suggested changes include increased air tightness requirements and the provision of Energy Performance Certificates. There are some other changes proposed to make it easier to provide high speed internet cabling in the future and provide for charging of electric vehicles. There are some other changes, minor in nature, which may be considered to be a tidying up exercise.

The consultation seeks the views of stakeholders concerning the proposed changes.

# How to Respond

The Department welcomes responses from anyone affected by the proposals in this document.

We will assume, unless you notify us to the contrary, that you are content for your name and/or organization name to be published in any subsequent public review document. Submissions, marked clearly 'Proposed changes to the Building Regulations Consultation 2017' should be sent by post or email to;

Department of Environment, Food & Agriculture Head of Building Control & Standards Murray House Mount Havelock Douglas Isle of Man IM1 2SF

or e-mail: <a href="mailto:buildingcontrol@gov.im">buildingcontrol@gov.im</a>

#### This consultation begins on 8 January 2017 and will close on 16 February 2018.

# 1. Background

- 1.1 The Isle of Man Government have committed to the Programme for Government 2016 2021.
- 1.2 The Programme for Government 2016 2021, amongst other things, includes for:
  - A natural and built environment which we conserve and cherish and which is adapted to cope with the threats from climate change
  - Consider innovative approaches to supporting people to make their homes and businesses more energy efficient
  - Implement an energy efficiency scheme for the Island
  - Ensure we have housing which meets the future needs of our community
  - Ensure we are a digital Island and ready for new technologies
- 1.3 The Building Control Act 1991 allows the Government to make regulations in respect of building design, construction and demolition in the interests of security; the health, safety, welfare and convenience of people; by conserving fuel and power; preventing undue waste; environmental enhancement or protection; sustainable development; and crime detection or prevention.
- 1.4 The current regulations in force in the Island are The Building Regulations 2014 supported by guidance contained in various Approved Documents that are subject a separate order The Approved Documents Order 2014. The Building Regulations are essentially similar to those in the UK (with some changes regarding energy efficiency requirements and fire safety) and the Approved Documents are those printed for use in the UK (but not always the most recent issue).
- 1.5 It is proposed to alter some of the requirements of the Building Regulations in order to enhance the levels of energy efficiency of new and existing buildings. The Building Regulations set down *minimum* standards and therefore do not preclude innovative design which can be demonstrated to meet or exceed the minimum requirements.
- 1.6 Some of the proposed changes are merely tidying up exercises and in essence will not change the requirements of The Building Regulations.

# 2.1 The Proposed Changes to The Building Regulations

- That all new dwellings are constructed to near zero carbon levels and have an airtightness standard of less than 1 m<sup>3</sup>/h.m2 at 50 pa; or Increase airtightness standards to 3 m<sup>3</sup>/h.m2 at 50 pa for dwellings and 5 m<sup>3</sup>/h.m<sup>2</sup> at 50 pa for other buildings (the current levels are 5 m<sup>3</sup>/h.m2 at 50 pa for dwellings and 7 m<sup>3</sup>/h.m2 at 50 pa for other buildings);
- 2. That it is a requirement for all new buildings to be tested for airtightness on an individual basis;
- 3. That extensions to buildings are tested for airtightness;
- 4. That increased standards of insulation are not brought forward until such materials and specifications become standard;
- 5. That the Department introduce Energy Performance Certificates to be required for all properties;
- 6. That electric charging points be required for new dwellings and commercial buildings;
- 7. That ducts for high speed cabling be provided in all new dwellings;
- 8. That the installation of fire alarms be subject to certification;
- 9. That the requirement regarding Carbon Monoxide detectors is clarified to include all fuel types; and
- 10. That The Approved Documents Order be 2014 be updated to reflect the changes to the Building Regulations and those changes made in the UK.

#### 3. Questions:

A. Airtightness

Explanation: The airtightness of a building gives an indication of the amount of air that can escape from the envelope of the building. As air escapes it takes heat with it. Increasing the airtightness therefore reduces the potential for hot air to be lost, resulting in energy savings. Currently the standard for new dwellings is  $5 \text{ m}^3/\text{h.m2}$  at 50 pa for dwellings and it is proposed to increase this to either  $1 \text{ m}^3/\text{h.m2}$  at 50 pa (effectively a near zero carbon standard) or  $3 \text{ m}^3/\text{h.m2}$  at 50 pa. Currently the standard for new buildings other than dwellings is  $7 \text{ m}^3/\text{h.m2}$  at 50 pa and it is proposed to increase this to 5 m $^3/\text{h.m2}$  at 50 pa. Currently new extensions are not tested.

Question A1: Do you agree that the standard of airtightness for all new dwellings should be less than  $1 \text{ m}^3/\text{h.m2}$  at 50 pa? ie. a near zero carbon level of construction.

Yes/No

Comments:

Question A2: Do you agree that the standard of airtightness for all new dwellings should be  $3 \text{ m}^3/\text{h.m2}$  at 50 pa?

Yes/No

Comments:

Question A3: Do you agree that the standard of airtightness for all new buildings other than dwellings (those which already require building regulation approval) should be 5  $m^3/h.m^2$  at 50 pa?

Yes/No

Comments:

Question A4: Do you agree that all new dwellings should be tested for airtightness and not just a sample that is the current policy?

Yes/No

Comments:

Question A5: Do you agree that new extensions to buildings should be tested for airtightness?

Yes/No

Comments:

B. Insulation Standards

Explanation: The Department considers the current level of insulation applied to new buildings provides a good standard. Increasing these standards may begin to introduce a requirement to source materials not readily available 'off the shelf' and this may in turn increase construction costs.

Question B1: Do you agree that insulation standards for new buildings are sufficient at the present time?

Yes/No

Comments:

# C. Energy Performance Certificates

Explanation: Energy Performance Certificates (EPC's) are an assessment of how well a property performs in terms of energy efficiency. Currently there is no requirement in the Isle of Man to have an Energy Performance Certificate for a building of any type. Elsewhere EPCs are required to inform prospective tenants or purchasers of a building's energy efficiency and to make recommendations on ways to improve energy efficiency to save money. Factors taken into consideration include loft insulation; boilers, radiators, glazing and so on.

Question C1: Do you agree that Energy Performance Certificates should be introduced either within the Building Control Regulations or separate Regulations as appropriate?

Yes/No

Comments:

# D. Electric Vehicle Charging Points

Explanation: The Department considers that electric vehicles are becoming more prevalent on the Islands roads and in order to increase this usage a better infrastructure for the charging of such vehicles us required. It is proposed to require all new dwellings with access to off road parking are provided with a standard charging point and that where parking is provided as part of a commercial development, a percentage of spaces are fitted with charging points.

Question D1: Do you agree that charging points for electric vehicles should be provided for all new dwellings that have off road parking provision?

Yes/No

Comments:

Question D2: Do you agree that a percentage of car parking spaces provided with commercial developments should be provided with charging points for electric vehicles?

Yes/No

Comments:

# E. Cable Ductwork

Explanation: In order to make future provision for the installation of cabling such as high speed internet, the Department proposes to introduce Approved Document R and a requirement for ducting for such cabling to be installed at the time of construction.

Question E1: Do you agree with the introduction of a requirement to provide ductwork for high speed internet cabling at the time of construction?

Yes/No

Comments:

# F. Fire Alarm and Emergency Lighting Certification

Explanation: The Department is concerned that where fire alarms and emergency lighting systems are required the level of certification as to its design, installation and testing often falls short of expectations. In order to provide property owners/occupiers, Fire Service Personnel, Insurance companies, Building Control Officers and those who need to maintain such systems with adequate certification, it is proposed to introduce a requirement for standard certification. It is proposed to introduce a requirement that certificates which provide at least the information required in BS 5839 must be provided upon completion of the works.

Question F1: Do you agree that a minimum requirement for the certification of fire alarm and emergency lighting systems should be introduced?

Yes/No

Comments:

# G. Carbon Monoxide Detectors

Explanation: The requirement at J3 mentions combustion appliances. The guidance in Approved Document J does not provide any information regarding the positioning of detectors other than for solid fuel and some designers are interpreting this as that they are only required for solid fuel appliances. It is proposed to alter the wording in the requirement to cover for all fuel types with the propensity to produce carbon monoxide.

Question G1: Do you agree that Carbon Monoxide detectors should be fitted with new and/or replacement appliances that are capable of producing carbon monoxide?

Yes/No

Comments:

# H. Updating The Approved Documents Order 2014

Explanation: The Department realise that many of the Approved Documents which support the requirements of the Building Regulations 2014 are in some cases many years behind those in force in the UK. This causes confusion when working with design teams from off island and it is proposed to bring those used on the island to be in line with those currently in force in the UK. Those versions currently used in the IoM and UK are as follows (note amended versions in brackets):

Approved Document	IoM	UK
A - Structure	2004 (2004)	2004 (2004,2010,2013)
B – Fire Safety	2000 (2002)	2006 (2010 & 2013)
C – Site Preparation	2004	2004 (2010 & 2013)
D – Toxic Substances	1992 (2002)	1992 (2002,2010,2013)
E – Resistance to Sound	2003	2003 (2010,2013,2015)
F – Ventilation	2010 (2010)	2010 (2010 & 2013)
G – Hygiene	2010 (2010)	2010 (2010)
H – Drainage	2002	2015
J – Combustion Appliances	2010 (2010)	2010 (2010 & 2013)
K – Protection from Falling	1998 (2000)	2013
L1A – Conservation of Fuel and Power New Dwellings	2010	2010
L1B – Conservation of Fuel and Power Existing Dwellings	2010	2010
L2A – Conservation of Fuel and Power New Buildings other than dwellings	2010	2010
L2A – Conservation of Fuel and Power Existing Buildings other than dwellings	2010	2010
M – Access to and Use of Buildings	2004	2015 (2016)
N – Glazing	1998 (2000)	Now in K 2013
P – Electrical Safety	2006	2013
Q – Security in Dwellings	N/A	2015
R – High Speed electronic	N/A	2016
communication network		

Question G1: Do you agree to the Department introducing the up to date Approved Documents as outlined above to support the Building Regulations?

Yes/ No

Comments:

# 4. Cost Impact Assessment

- 4.1 The Department is fully mindful of the current economic climate and the need to ensure that any costs incurred by the proposals outlined in this document are kept to a minimum.
- 4.2 The overall aim of the draft proposal is to help end users reduce the amount of energy required to maintain a comfortable indoor temperature.

4.3 Though it is recognized some of the proposals would incur an additional cost during construction, the proposals put forward have been based on those that are most likely to pay back quickly in terms of reduced energy bills.

## 5. Conclusion

5.1 The effect of the proposals put forward would be greater energy efficiency of new buildings and extensions.

#### 6. Next Steps

After publishing this paper we will;

- Publish a summary of matters raised in the consultation with responses where appropriate,
- Work with representative groups, after the formal deadline has passed, in order to further inform our work, as appropriate,
- Make changes to the Building Regulations 2014 and The Approved Documents Order 2014 in consultation with Building Control Authorities as appropriate for the consideration of Tynwald.

# Thank you for taking the time to read this consultation document.