

Notice of Approval of the methodologies of calculation of the energy performance of buildings to demonstrate compliance with the Building Regulations 2010 in England and in respect of certain buildings in Wales

## Introduction

This notice of approval sets out the national approved calculation methodologies (NCM) for calculating the energy performance of buildings in England, and for certain buildings in Wales, for the purposes of regulations 25 and 29 of the Building Regulations 2010 ([SI 2010/2214](#)).

This document does not apply to national calculation methodologies in Northern Ireland and Scotland, nor in respect of most buildings in Wales, which are subject to separate regulatory requirements.

The notice of approval for calculating the energy performance of buildings as required by the Energy Performance of Buildings (England and Wales) Regulations 2012 is issued as a separate document.

# Notice of Approval

**TAKE NOTICE** that the Secretary of State, under regulation 24 of the Building Regulations 2010, hereby approves the methodologies listed below for the calculation of the energy performance of buildings for the purposes of regulations 25 and 29 of the Building Regulations 2010. This approval applies to building work carried out in England, and in respect of building work in Wales on excepted energy buildings,<sup>1</sup> and on educational buildings, buildings of statutory undertakers, or Crown buildings, or building work by Crown authorities in Wales<sup>2</sup>.

This approval takes effect on 6 April 2014 and continues in effect until withdrawn by the Secretary of State or superseded.

This approval does not apply in respect of:

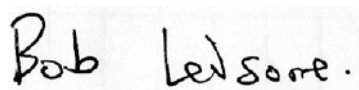
- (a) building work started on site before 6 April 2014; or
- (b) where a notification of building work under regulation 12(2) of the Building Regulations 2010, or sections 47(1), 50, 51A(2) or 54 of the Building Act 1984 has been given before 6 April 2014 provided that the building work is commenced on site before 6 April 2015.

In both these cases earlier versions of the methodologies may continue to be used.

The approved methodologies are:

- a. the Government's Standard Assessment Procedure (SAP) for the Energy Rating of Dwellings, 2012 edition;
- b. the Government's Simplified Building Energy Model (SBEM), versions 5.2; and
- c. the following proprietary approved Dynamic Simulation Models (DSM)
  - Hevacomp Simulator V8i (Bentley Systems (UK) Limited), version 25.01
  - TAS (Environmental Design Solution Limited), version 9.2.1
  - Virtual Environment (IES Limited), version 6.4.0.

Signed by authority of the Secretary of State



R J Ledsome

An Assistant Secretary in the Department for Communities and Local Government

04 April 2014

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<sup>1</sup> As defined in the Welsh Ministers (Transfer of Functions) (No.2) Order 2009 (S.I. 2009/3019)

<sup>2</sup> For these categories see regulation 34 of the Building Regulations 2010

## **Notes on the approved methodologies**

This notice of approval sets out the ways of expressing the energy performance of buildings, as calculated in accordance with the methodology approved by the Secretary of State under regulation 24 , for the purposes of regulation 25 (Minimum energy performance requirements for new buildings) and regulation 29 (Energy performance certificates) of the Buildings Regulations 2010.

## **Software packages and interfaces**

To use the approved methodologies it is also necessary to use only the approved software packages and interfaces relating to them. The currently approved software packages and interfaces are available at:

<https://www.gov.uk/government/publications/method-for-calculating-the-energy-performance-of-buildings-notice-of-approval>.

Please note that from time to time the list at this link is revised to include new software applications or new versions of existing ones as they are approved by the Secretary of State.

## **Calculating the energy performance of new dwellings**

For the purposes of compliance with regulations 25, 26, 26A, 27 and 27A of the Buildings Regulations 2010, the target CO<sub>2</sub> emission rate, target fabric energy efficiency rate, calculated CO<sub>2</sub> emission rate for the dwelling as designed and constructed and calculated fabric energy efficiency rate for the dwelling as designed and constructed shall be calculated using SAP 2012. The asset rating of the dwelling for the purposes of providing an energy performance certificate under regulation 29 of the Building Regulations shall also be calculated using SAP 2012.

## **Calculating the energy performance of new buildings other than dwellings**

For the purposes of regulations 25, 26 and 27 of the Building Regulations the target CO<sub>2</sub> emission rate and the calculated CO<sub>2</sub> emission rate for a building other than a dwelling as designed and constructed shall be calculated using SBEM version 5.2 or an approved DSM. The asset rating of a building other than a dwelling for the purposes of providing an energy performance certificate under regulation 29 of the Building Regulations 2010 shall be calculated using SBEM version 5.2 or an approved DSM.

## **Approval of commercial software calculation tools**

Applications may be made to the Secretary of State for approval of software packages to form part of the methodology for the calculation of the energy performance of buildings, such as:

- a. software applications of SAP;
- b. software interfaces with SBEM;
- c. Dynamic Simulation Models (DSMs).

To be approved, the software tool must be validated against a set of published criteria to ensure it operates in a manner and to a standard consistent with the NCM before it can be approved by the Secretary of State. The criteria for approval and the procedures for applying for approval may be obtained from:

Department for Communities and Local Government  
Building Regulations and Standards  
Eland House  
Bressenden Place  
Victoria  
London SW1E 5DU

Email: [enquiries.br@communities.gsi.gov.uk](mailto:enquiries.br@communities.gsi.gov.uk).