



Department for  
Communities and  
Local Government

# Calculating the energy performance of buildings

Notice of Approval of the methodology for expressing the  
energy performance of buildings in England and Wales

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# Introduction

This notice of approval sets out the national calculation methodology for expressing the energy performance of buildings, as approved in accordance with Regulation 24 of the Building Regulations 2010 (SI 2010/2214), for the purposes of the Energy Performance of Buildings (England and Wales) Regulations 2012 (SI 2012/3118).

The notice of approval which sets out the approved national calculation methodologies 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 Buildings Regulations 2010 is issued as a separate document.

This document does not apply to national calculation methodologies for expressing the energy performance of buildings in Northern Ireland and Scotland. Buildings in Northern Ireland and Scotland are subject to separate regulatory requirements and are not covered or referred to in this document.

# Notice of Approval

TAKE NOTICE that the Secretary of State, under regulation 24 of the Building Regulations 2010, hereby approves the methodologies for calculating and the means of expressing the asset ratings required by Regulation 9(1)(a) and the operational ratings required by Regulation 15(a) of the Energy Performance of Buildings (England and Wales) Regulations 2012. In regulation 24(2)(b) of the Building Regulations 2010:

- a. 'asset rating' means a numerical indicator of the amount of energy estimated to meet the different needs associated with a standardised use of the building, and
- b. 'operational rating' means a numerical indicator of the amount of energy consumed during the occupation of a building over a period of time.

This notice of approval is valid until withdrawn by the Secretary of State or superseded.

The approved methodologies for expressing the energy performance of buildings are:

- a. the Standard Assessment Procedure for the Energy Rating of Dwellings, 2012 edition
- b. the government's Simplified Building Energy Model version 5.2<sup>1</sup>
- c. approved Dynamic Simulation Models
  - Environmental Design Solution Limited TAS version 9.3
  - Integrated Environmental Solutions Limited Virtual Environment version 7.0.0.0
- d. the government's method for calculating the Operational Rating for buildings

Bob Ledsome.

R J Ledsome  
Signed by authority of the Secretary of State  
an Assistant Secretary in the Department for Communities and Local Government

26 June 2014

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<sup>1</sup> For buildings in Wales version 5.2 becomes applicable on the 31 July 2014 until that date version 4.1 should be used.

# Notes on the approved methodologies

This notice should be read in conjunction with the approved software packages and interfaces for calculating the asset and operational ratings of buildings. The current approved software packages and interfaces are available on the Department for Communities and Local Government website. The approved software packages and interfaces are revised from time to time to include new versions, or new versions of existing ones, as they are approved by the Secretary of State.

## Expressing the energy performance of dwellings

### **For dwellings at construction completion**

For the purposes of Regulation 9 (energy performance certificates) of the Energy Performance of Buildings (England and Wales) Regulations 2012 the energy performance of a dwelling shall be expressed using the Standard Assessment Procedure.

### **For dwellings on sale or rent**

For the purposes of regulation 9 (energy performance certificates) of the Energy Performance of Buildings (England and Wales) Regulations 2012 the energy performance of a dwelling shall be expressed using Standard Assessment Procedure or the Reduced Standard Assessment Procedure<sup>2</sup>.

## Expressing the energy performance of buildings which are not dwellings

For the purposes of Regulation 9 (energy performance certificates) of the Energy Performance of Buildings (England and Wales) Regulations 2012 the energy performance of a building which is not a dwelling shall be expressed using the Simplified Building Energy Model version 5.2<sup>3</sup> or approved software interfaces of the Simplified Building Energy Model or an approved Dynamic Simulation Model.

For the purposes of Regulation 15 (Display Energy Certificates) of the Energy Performance of Buildings (England and Wales) Regulations 2012 the Operational Rating of a building shall be expressed using the method for calculating the Operational Rating or an approved software application of the method for calculating the Operational Rating.

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<sup>2</sup> Reduced Data SAP 2012 is an application of SAP 2012 for use in the energy assessment of existing dwellings where, during a site survey of the building, the complete data set required by SAP is not easily accessible

<sup>3</sup> For buildings in Wales version 5.2 becomes applicable on the 31 July 2014 until that date version 4.1 should be used.

# Approval of commercial software calculation tools

## Application and approval process

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 Standard Assessment Procedure and Reduced Standard Assessment Procedure
- b. software interfaces with Simplified Building Energy Model
- c. Dynamic Simulation Models
- d. software applications of the method for calculating the Operational Rating for buildings.

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 national calculation methodology 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:

The EPB Operational Delivery Team  
Department for Communities and Local Government  
Climate Change & Sustainable Buildings  
Eland House  
Bressenden Place  
Victoria  
London SW1E 5DU

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