ISO 16346:2013-10 (E)

Energy performance of buildings - Assessment of overall energy performance

Contents

Page

Foreword v

Introduction vi

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 2

4 Symbols and abbreviated terms 2

5 Assessment of energy performance of buildings 2
5.1 Energy uses 2
5.2 Assessment boundaries 3
5.3 Types and uses of ratings 6

6 Weighted energy ratings 6
6.1 Types of ratings and indicators used 6
6.2 Types of factors or coefficients 7
6.3 Energy use indicator 8
6.4 Primary energy rating 8
6.5 Carbon dioxide rating 12
6.6 Policy energy rating 13

7 Calculated energy rating 13
7.1 Calculation procedure 13
7.2 Set of formulae 15
7.3 Building thermal needs 21
7.4 Technical building systems 22

8 Measured energy rating 26
8.1 General requirements 26
8.2 Assessment period 26
8.3 Assessing the used amounts of all energy carriers 29
8.4 Correction for weather 30

9 Validated building calculation model 31
9.1 Introduction 31
9.2 Procedure -- Validation of the building calculation model 31
9.3 Climatic data 31
9.4 Occupancy data 32
9.5 Ratings based on the validated calculation model 33

10 Planningretrofitmeasuresforexistingbuildings 33

11 Test report 34

12 Standard operating assumptions 36
12.1 Introduction 36
12.2 Input data 36

AnnexA(normative) Parallel routes in normative references 38

AnnexB(informative) Methods for collecting building data 39

AnnexC(informative) Energy monitoring 43

AnnexD(informative) Other uses of energy 46

AnnexE(informative)Calorificvaluesoffuels 48

AnnexF(informative)Confidenceintervals 51

AnnexG(informative)Example 55

Bibliography 62