

ISO 13792 :2005-03 (E)

Thermal performance of buildings_ - Calculation of internal temperatures of a room in summer without mechanical cooling_ - Simplified methods

Contents	page
Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms, definitions, symbols and units	1
3.1 Terms and definitions	1
3.2 Symbols and units	3
4 Input data and results	4
4.1 Assumptions	4
4.2 Boundary conditions and input data	4
4.3 Output data.....	9
5 Calculation procedure	9
6 Validation procedures	10
6.1 Introduction.....	10
6.2 Validation procedure for the calculation method	10
6.3 Validation procedure for the sunlit factor due to external obstructions	18
Annex A (informative) Examples of solution model	21
A.1 Introduction	21
A.2 RC three-nodes model	21
A.3 Admittance procedure	27
Annex B (informative) Air changes for natural ventilation	35
B.1 Introduction	35
B.2 Evaluation of the air change rate for natural ventilation	35
Annex C (informative) Evaluation of the shaded area of a plane surface due to external obstructions	37
C.1 Introduction	37
C.2 Calculation procedure	37
Annex D (informative) Internal gains	39
D.1 Introduction	39
D.2 Residential building	39
D.3 Non-residential building	40
Annex E (informative) Examples of calculation	41
E.1 Room characteristics	41
E.2 Example of calculation for the RC3 nodes model	44
E.3 Admittance method	47