

INTERNATIONAL
STANDARD

ISO
52017-1

First edition
2017-06

**Energy performance of buildings —
Sensible and latent heat loads and
internal temperatures —**

**Part 1:
Generic calculation procedures**

*Performance énergétique des bâtiments — Charges thermiques
latentes et sensibles et températures intérieures —*

Partie 1: Méthodes de calcul génériques

Reference number
ISO 52017-1:2017(E)



© ISO 2017



COPYRIGHT PROTECTED DOCUMENT

© ISO 2017, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Symbols and subscripts	3
4.1 Symbols	3
4.2 Subscripts	4
5 Brief description of the method	5
5.1 Output of the method	5
5.2 General description of the method	5
6 Calculation method	5
6.1 Output data	5
6.2 Calculation time interval and calculation period	6
6.3 Input data	6
6.4 Calculation procedure	7
6.4.1 Applicable time interval	7
6.4.2 Assumptions	7
6.4.3 Calculation of relevant temperatures	8
6.4.4 Building zone thermal balance (sensible heat)	12
6.4.5 Heat transfer components	13
6.4.6 Building zone moisture and latent heat balance	22
6.4.7 Calculation steps	23
6.4.8 Boundary conditions	24
7 Quality control	25
7.1 Report of the calculation	25
7.2 Validation cases	25
8 Compliance check	26
Annex A (normative) Input and method selection data sheet — Template	27
Annex B (informative) Input and method selection data sheet — Default choices	29
Bibliography	31