

**SLOVENSKI STANDARD**  
**SIST EN ISO 10077-2:2017/oprA1:2023**  
**01-maj-2023**

---

**Toplotne značilnosti oken, vrat in polken - Izračun toplotne prehodnosti - 2. del:  
Računska metoda za okvirje - Dopnilo A1 (ISO 10077 2:2017/DAM 1:2023)**

Thermal performance of windows, doors and shutters - Calculation of thermal transmittance - Part 2: Numerical method for frames - Amendment 1 (ISO 10077 2:2017/DAM 1:2023)

Wärmetechnisches Verhalten von Fenstern, Türen und Abschlüssen - Berechnung des Wärmedurchgangskoeffizienten - Teil 2: Numerisches Verfahren für Rahmen - Änderung 1 (ISO 10077 2:2017/DAM 1:2023)

Performance thermique des fenêtres, portes et fermetures - Calcul du coefficient de transmission thermique - Partie 2: Méthode numérique pour les encadrements - Amendement 1 (ISO 10077 2:2017/DAM 1:2023)

**Ta slovenski standard je istoveten z: EN ISO 10077-2:2017/prA1**

---

**ICS:**

|           |                          |                                 |
|-----------|--------------------------|---------------------------------|
| 91.060.50 | Vrata in okna            | Doors and windows               |
| 91.120.10 | Toplotna izolacija stavb | Thermal insulation of buildings |

**SIST EN ISO 10077-2:2017/oprA1:2023 en,fr,de**



# DRAFT AMENDMENT

## ISO 10077-2:2017/DAM 1

ISO/TC 163/SC 2

Secretariat: SN

Voting begins on:  
2023-02-16Voting terminates on:  
2023-05-11

---

---

## Thermal performance of windows, doors and shutters — Calculation of thermal transmittance —

### Part 2: Numerical method for frames

### AMENDMENT 1

*Performance thermique des fenêtres, portes et fermetures — Calcul du coefficient de transmission thermique —*

*Partie 2: Méthode numérique pour les encadrements*

AMENDEMENT 1

STANDARD PREVIEW  
(standards.iteh.ai)

ICS: 91.060.50; 91.120.10 [SIST EN ISO 10077-2:2017/oprA1:2023](https://standards.iteh.ai/catalog/standards/sist/d4d9f17d-9d41-4209-87af-d6be266e07be/sist-en-iso-10077-2-2017-opra1-2023)

This document is circulated as received from the committee secretariat.

THIS DOCUMENT IS A DRAFT CIRCULATED FOR COMMENT AND APPROVAL. IT IS THEREFORE SUBJECT TO CHANGE AND MAY NOT BE REFERRED TO AS AN INTERNATIONAL STANDARD UNTIL PUBLISHED AS SUCH.

IN ADDITION TO THEIR EVALUATION AS BEING ACCEPTABLE FOR INDUSTRIAL, TECHNOLOGICAL, COMMERCIAL AND USER PURPOSES, DRAFT INTERNATIONAL STANDARDS MAY ON OCCASION HAVE TO BE CONSIDERED IN THE LIGHT OF THEIR POTENTIAL TO BECOME STANDARDS TO WHICH REFERENCE MAY BE MADE IN NATIONAL REGULATIONS.

RECIPIENTS OF THIS DRAFT ARE INVITED TO SUBMIT, WITH THEIR COMMENTS, NOTIFICATION OF ANY RELEVANT PATENT RIGHTS OF WHICH THEY ARE AWARE AND TO PROVIDE SUPPORTING DOCUMENTATION.

**ISO/CEN PARALLEL PROCESSING**



Reference number  
ISO 10077-2:2017/DAM 1:2023(E)

© ISO 2023

# iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 10077-2:2017/oprA1:2023](https://standards.iteh.ai/catalog/standards/sist/d4d9f17d-9d41-4209-87af-d6be266e07be/sist-en-iso-10077-2-2017-opra1-2023)

<https://standards.iteh.ai/catalog/standards/sist/d4d9f17d-9d41-4209-87af-d6be266e07be/sist-en-iso-10077-2-2017-opra1-2023>



## **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2023

All rights reserved. Unless otherwise specified, or required in the context of its implementation, 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  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

Published in Switzerland

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 89, *Thermal performance of buildings and building components*, in collaboration with ISO Technical Committee ISO/TC 163, *Thermal performance and energy use in the built environment*, Subcommittee SC 2, *Calculation methods*, in accordance with the agreement on technical cooperation between ISO and CEN (Vienna Agreement).

A list of all parts in the ISO 10077 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).



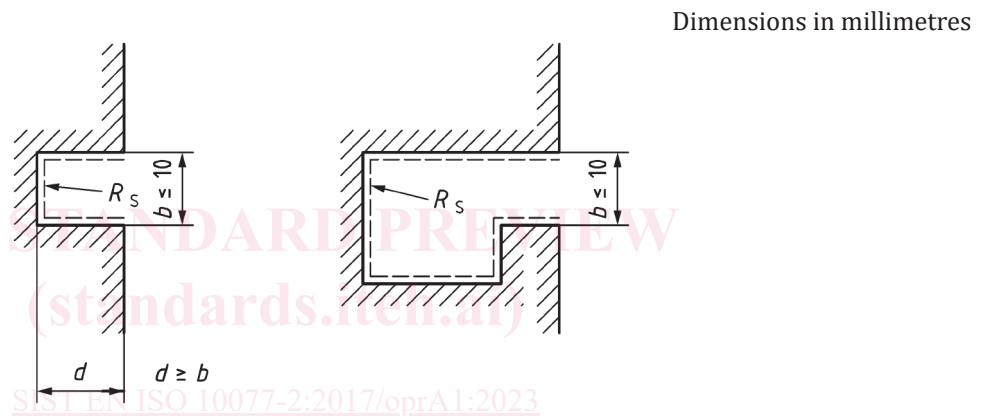
# Thermal performance of windows, doors and shutters — Calculation of thermal transmittance —

## Part 2: Numerical method for frames

### AMENDMENT 1

#### 1 Modification to 6.4.2.4.1

Replace Figure 10 with the following figure:



**Figure 10 — Examples for slightly ventilated cavities and grooves with small cross section**

#### 2 Modification to B.3

Replace the Note with the following Note:

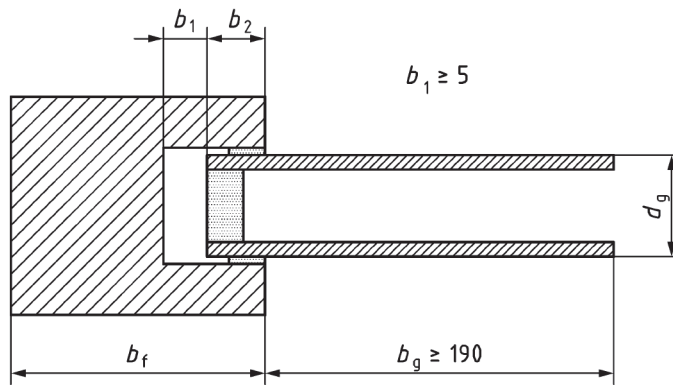
Note Currently in this document, there are no choices between methods and the required input data foreseen that are to be kept open for completion as explained in B.1. To satisfy the need for congruence with all other EPB standards and to make explicitly clear that in this document there are no choices kept open, this annex and Annex A are kept.

#### 3 Modification to F.2

Replace Figure F.2 with the following figure:

## ISO 10077-2:2017/DAM 1:2022(E)

Dimensions in millimetres

**Key**

- $b_f$  width of the frame  
 $b_g$  width of the glazing  
 $d_g$  thickness of the glazing

**Figure F.2 — Schematic of profile section with glazing installed****4 Modification to H.2**

Replace Table H.1 with the following table:

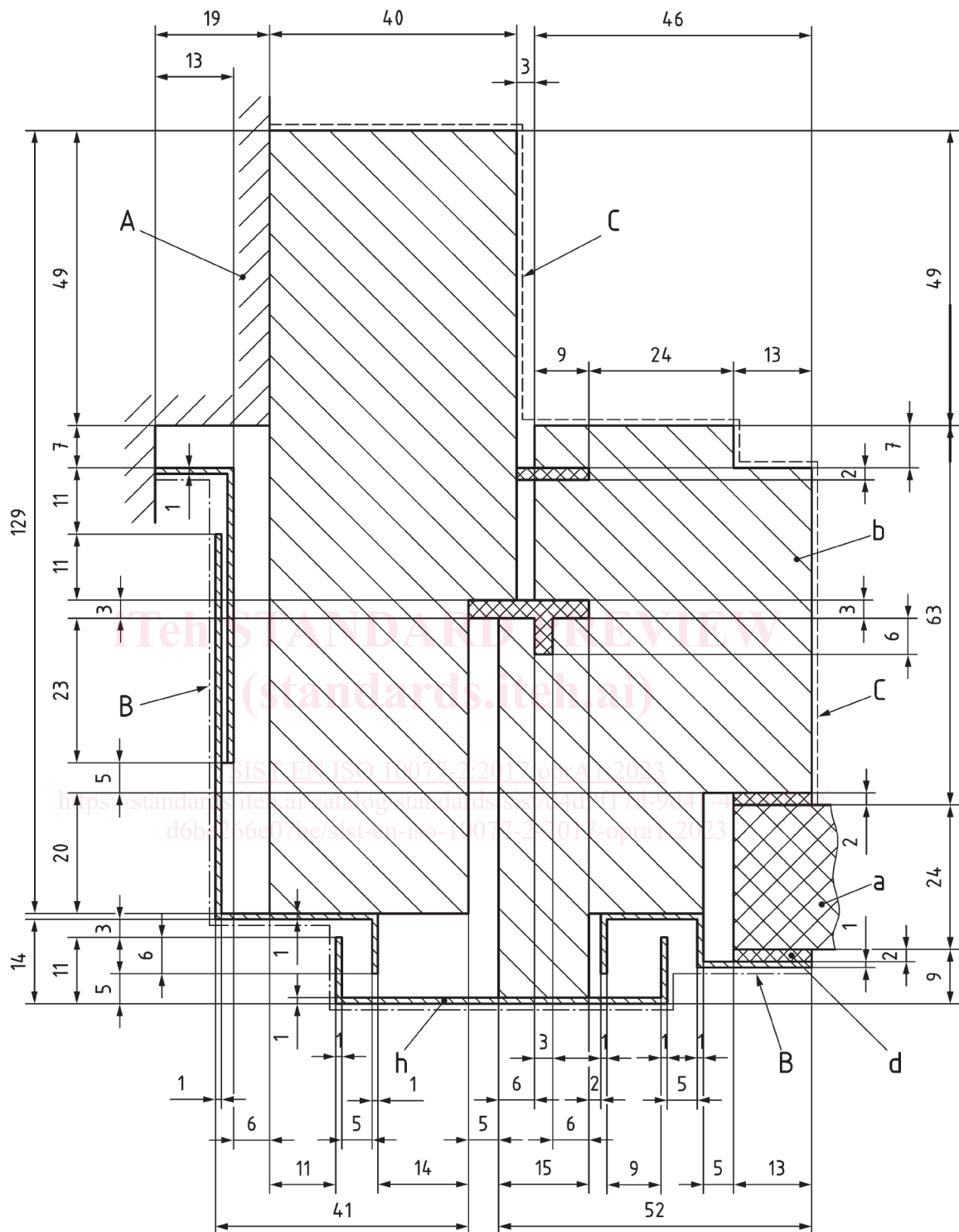
**Table H.1 — Boundaries**

| Key         | Surface resistance, $R_s$<br>$\text{m}^2 \cdot \text{K} / \text{W}$ | Temperature, $\theta$<br>$^{\circ}\text{C}$ |
|-------------|---|---|
| A adiabatic | infinity  | —   |
| B external  | see Annex E   | 0   |
| C internal  | see Annex E   | 20  |

Replace Figure H.6 with the following figure:



Dimensions in millimetres

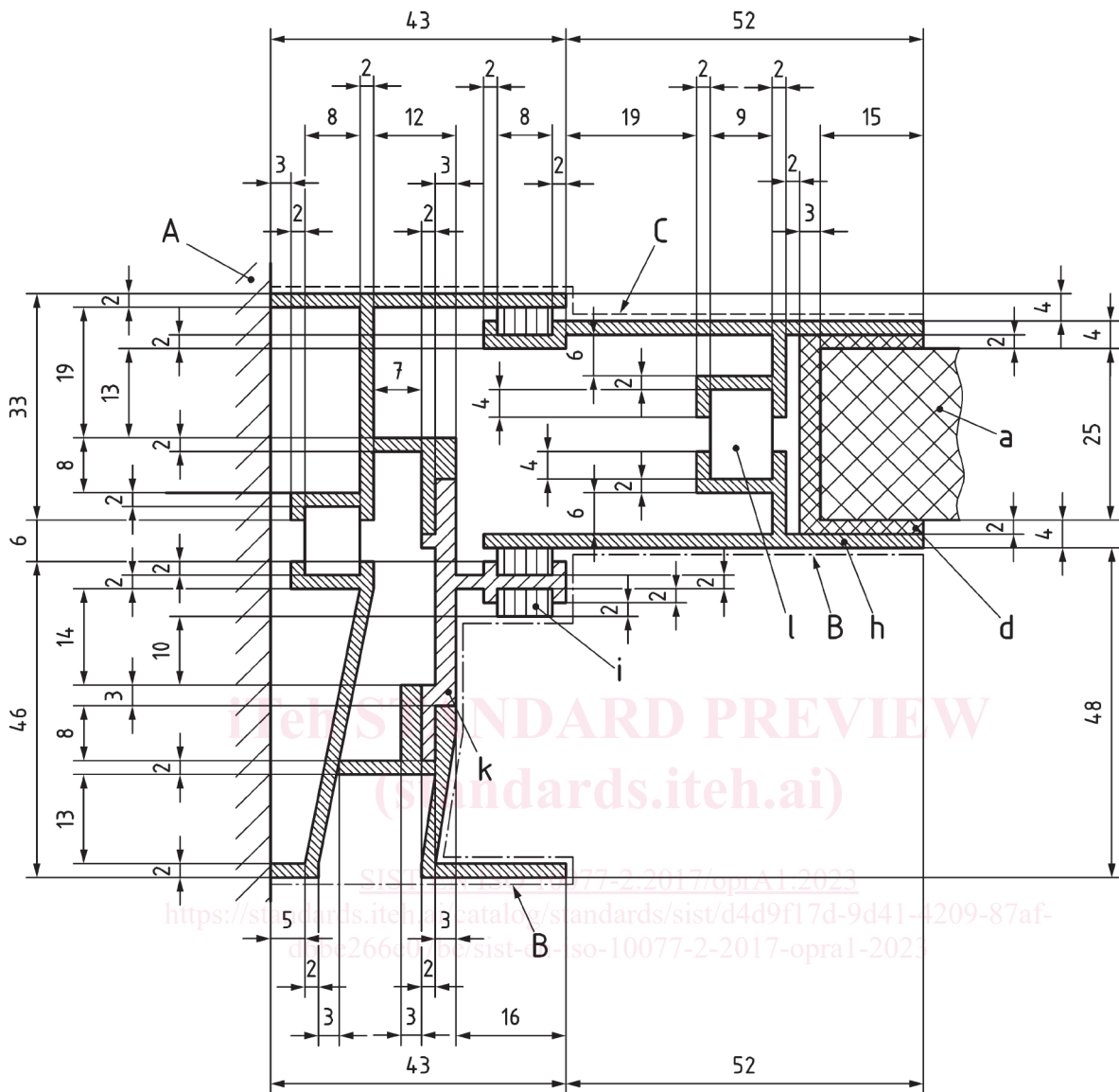


NOTE The projected frame width,  $b_f$ , is 89 mm.

**Figure H.6 — Roof window frame section and insulation panel**

Replace Figure H.7 with the following figure:

Dimensions in millimetres



NOTE The projected frame width,  $b_{\text{p}}$ , is 95 mm.

**Figure H.7 — Sliding window frame section and insulation panel**

Replace Figure H.9 with the following figure: