
Thermal performance of buildings and building components — Physical quantities and definitions

*Performance thermique des bâtiments et des matériaux pour le
bâtiment — Grandeurs physiques et définitions*

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Foreword

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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)).

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This document was prepared by Technical Committee ISO/TC 163, *Thermal performance and energy use in the built environment*.

This third edition of ISO 7345 cancels and replaces the second edition (ISO 7345:1987), which has been technically revised.

This edition includes the following significant changes with respect to the previous edition:

- title of the standard updated from '*Thermal insulation — Physical quantities and definitions*' to '*Thermal performance of buildings and building elements — Physical quantities and definitions*';
- title of ISO/TC 163 corrected (Foreword);
- ISO 31-4 replaced by ISO 80000-5 in the note in the Scope and added to the Bibliography;
- symbols, names and definitions (in 3.3 and 3.4) adapted to current state ($\Lambda \rightarrow L$, $\Lambda_1 \rightarrow L_{2D}$, $U_1 \rightarrow \Psi$, coefficient of heat loss $\rightarrow$ heat transfer coefficient);
- “areal” used instead of “surface” in quantity names (Clause 3) where “surface” was meant to distinguish between a length-related quantity (“linear”) and an area-related quantity (now “areal”) with similar name;
- Formula in 3.1.4 corrected;
- subscript l added in 3.4;
- added a Note 1 to entry in 3.1.11 and a Note 3 to entry in 3.1.13;
- H' added in 3.2.2 as an alternative name for F_s ;
- added “for homogeneous solids” to A.1 in Annex A.