

STN	Navrhovanie prostredia budov Zabudované systémy sálavého vykurovania a chladenia Časť 2: Stanovenie tepelnej a chladiacej kapacity (ISO 11855-2: 2021/Amd 1: 2023) Zmena A1	STN EN ISO 11855-2/A1 06 0245
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Building environment design - Embedded radiant heating and cooling systems - Part 2: Determination of the design heating and cooling capacity (ISO 11855-2:2021)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 03/24

Obsahuje: EN ISO 11855-2:2021/A1:2023, ISO 11855-2:2021/Amd 1:2023

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EUROPEAN STANDARD

EN ISO 11855-2:2021/A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2023

ICS 91.040.01

English Version

Building environment design - Embedded radiant heating and cooling systems - Part 2: Determination of the design heating and cooling capacity - Amendment 1 (ISO 11855-2:2021/Amd 1:2023)

Conception de l'environnement des bâtiments - Systèmes intégrés de chauffage et de refroidissement par rayonnement - Partie 2: Détermination de la puissance calorifique et frigorifique à la conception - Amendement 1 (ISO 11855-2:2021/Amd 1:2023)

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This amendment A1 modifies the European Standard EN ISO 11855-2:2021; it was approved by CEN on 14 May 2023.

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EN ISO 11855-2:2021/A1:2023 (E)

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European foreword

This document (EN ISO 11855-2:2021/A1:2023) has been prepared by Technical Committee ISO/TC 205 "Building environment design" in collaboration with Technical Committee CEN/TC 228 "Heating systems and water based cooling systems in buildings" the secretariat of which is held by DIN.

This Amendment to the European Standard EN ISO 11855-2:2021 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2024, and conflicting national standards shall be withdrawn at the latest by May 2024.

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Endorsement notice

The text of ISO 11855-2:2021/Amd 1:2023 has been approved by CEN as EN ISO 11855-2:2021/A1:2023 without any modification.

INTERNATIONAL STANDARD

ISO 11855-2

Second edition
2021-09

AMENDMENT 1
2023-11

Building environment design — Embedded radiant heating and cooling systems —

Part 2: Determination of the design heating and cooling capacity

AMENDMENT 1

Conception de l'environnement des bâtiments — Systèmes intégrés de chauffage et de refroidissement par rayonnement —

Partie 2: Détermination de la puissance calorifique et frigorifique à la conception

AMENDEMENT 1



Reference number
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This document was prepared by Technical Committee ISO/TC 205, *Building environment design*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 228, *Heating systems and water based cooling systems in buildings*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

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Building environment design — Embedded radiant heating and cooling systems —

Part 2:

Determination of the design heating and cooling capacity

AMENDMENT 1

Clause 4, Table 1

Modify the following rows:

Table 1 — Symbols

Symbol	Unit	Quantity
s_h	m	In system type II, thickness of thermal insulation from the outward edge of the insulation to the inward edge of the pipes (see Figure 2)
s_l	m	In system type II, thickness of thermal insulation from the outward edge of the insulation to the outward edge of the pipes (see Figure 2)
S	m	Thickness of the screed (excluding the pipes in system type I)

Clause 7, second paragraph

Modify to the following:

A given system construction can only be calculated with one of the simplified methods. The correct method to apply depends on the system type I to IV (position of pipes, concrete or wooden construction) and the boundary conditions listed in Table 2.

Delete the NOTE.

Table 2

Modify to the following:

Table 2 — Criteria for selection of simplified calculation method

Pipe position	New system type	Old system type	Figure	Boundary conditions	Reference to method
In screed Thermally decoupled from the structural base of the building by thermal insulation	I	A, C, H, I, J	2 a)	$W \geq 0,050 \text{ m}$ $s_u \geq 0,01 \text{ m}$ $0,008 \text{ m} \leq d \leq 0,03 \text{ m}$ $s_u/\lambda_e \geq 0,01$	7.1 A.2.2
In insulation, conductive devices Not wooden constructions except for weight bearing and thermal diffusion layer	II	B	2 b)	$0,05 \text{ m} \leq W \leq 0,45 \text{ m}$ $0,014 \text{ m} \leq d \leq 0,022 \text{ m}$ $0,01 \text{ m} \leq s_u/\lambda_e \leq 0,18 \text{ m}$	7.1 A.2.3

ISO 11855-2:2021/Amd.1:2023(E)**Table 2 (continued)**

Pipe position	New system type	Old system type	Figure	Boundary conditions	Reference to method
In concrete slab	V	E	4	$S_T/W \geq 0,3$	7.2, B.1
Capillary tubes in concrete surface	III	F	5	$d_a/W \leq 0,2$	7.2, B.2
Wooden constructions, pipes in sub floor or under sub floor, conductive devices	IV	G	6	$\lambda_{wl} \geq 10 \lambda$ $S_{WL,\lambda} \geq 0,01$	7.2, Annex C

koniec náhľadu – text ďalej pokračuje v platenej verzii STN