

STN	Plasty Metódy vystavovania slnečnému žiareniu Časť 3: Urýchlený poveternostný vplyv s použitím koncentrovaného slnečného žiarenia (ISO 877-3: 2026)	STN EN ISO 877-3 64 0771
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Plastics - Methods of exposure to solar radiation - Part 3: Intensified weathering using concentrated solar radiation (ISO 877-3:2026)

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. 08/26

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EUROPÄISCHE NORM

EN ISO 877-3

May 2026

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Supersedes EN ISO 877-3:2018

English Version

**Plastics - Methods of exposure to solar radiation - Part 3:
Intensified weathering using concentrated solar radiation
(ISO 877-3:2026)**

Plastiques - Méthodes d'exposition au rayonnement
solaire - Partie 3: Exposition intensifiée par
rayonnement solaire concentré (ISO 877-3:2026)

Kunststoffe - Freibewitterung - Teil 3: Beschleunigte
Bewitterung mit gebündelter Sonnenstrahlung (ISO
877-3:2026)

This European Standard was approved by CEN on 20 May 2026.

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EN ISO 877-3:2026 (E)

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European foreword

This document (EN ISO 877-3:2026) has been prepared by Technical Committee ISO/TC 61 "Plastics" in collaboration with Technical Committee CEN/TC 249 "Plastics" the secretariat of which is held by SIS.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2026, and conflicting national standards shall be withdrawn at the latest by November 2026.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 877-3:2018.

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Endorsement notice

The text of ISO 877-3:2026 has been approved by CEN as EN ISO 877-3:2026 without any modification.



International Standard

ISO 877-3

Plastics — Methods of exposure to solar radiation —

Part 3: Intensified weathering using concentrated solar radiation

Plastiques — Méthodes d'exposition au rayonnement solaire —

*Partie 3: Exposition intensifiée par rayonnement solaire
concentré*

**Third edition
2026-05**

ISO 877-3:2026(en)



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ISO 877-3:2026(en)**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).

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This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 6, *Ageing, chemical and environmental resistance*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 249, *Plastics*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 877-3:2018), which has been technically revised.

The main changes are as follows:

- size requirements in [7.3](#) have been added;
- in [10.2.4](#), a second formula has been added;
- a new [10.2.5](#) “Radiation measurement” has been added and subsequent clauses have been renumbered.

A list of all parts in the ISO 877 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.

Plastics — Methods of exposure to solar radiation —

Part 3:

Intensified weathering using concentrated solar radiation

1 Scope

This document specifies a method for exposing plastics to concentrated solar radiation using reflecting concentrators to accelerate the weathering processes. The purpose is to assess property changes produced after specified stages of such exposures. The reflecting concentrators used in these exposures are sometimes referred to as “Fresnel reflectors” because, in cross-section, the array of mirrors used to concentrate the solar radiation resembles the cross-section of a Fresnel lens.

General guidance concerning the scope of the ISO 877 series is given in ISO 877-1.

NOTE Additional information about solar concentrating exposures, including a partial list of standards in which they are specified, is given in the Bibliography.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 877-1, *Plastics — Methods of exposure to solar radiation — Part 1: General guidance*

ISO 877-2:2025, *Plastics — Methods of exposure to solar radiation — Part 2: Direct weathering and exposure behind window glass*

ISO 4892-1, *Plastics — Methods of exposure to laboratory light sources — Part 1: General guidance and requirements*

ASTM G90, *Standard Practice for Performing Accelerated Outdoor Weathering of Nonmetallic Materials Using Concentrated Natural Sunlight*

ASTM G179, *Standard Specification for Metal Black Panel and White Panel Temperature Devices for Natural Weathering Tests*

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