INTERNATIONAL STANDARD

ISO 877-2

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Plastics — Methods of exposure to solar radiation —

Part 2: Direct weathering and exposure behind window glass

Plastiques — Méthodes d'exposition au rayonnement solaire —

Partie 2: Exposition directe et exposition derrière une vitre en verre

Reference number
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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 877-2 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 6, *Ageing, chemical and environmental resistance*.

Together with the other parts (see below), it cancels and replaces ISO 877:1994, which has been technically revised.

ISO 877 consists of the following parts, under the general title *Plastics — Methods of exposure to solar radiation*:

— *Part 1: General guidance*

— *Part 2: Direct weathering and exposure behind window glass*

— *Part 3: Intensified weathering using concentrated solar radiation*

Plastics — Methods of exposure to solar radiation —

Part 2:
Direct weathering and exposure behind window glass

1 Scope

This part of ISO 877 specifies a method for the direct exposure of plastics to solar radiation (method A) and a method for the exposure of plastics to glass-filtered solar radiation (exposure behind window glass) (method B). The purpose is to assess property changes produced after specified stages of such exposures. General guidance concerning the scope of ISO 877 is given in ISO 877-1:2009, Clause 1.

2 Normative references

The following referenced documents are indispensable for the application 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: 2009, *Plastics — Methods of exposure to solar radiation — Part 1: General guidance*

ISO 4582, *Plastics — Determination of changes in colour and variations in properties after exposure to daylight under glass, natural weathering or laboratory light sources*

ASTM G 24, *Standard Practice for Conducting Exposures to Daylight Filtered Through Glass*

3 Principle

General guidance is given in ISO 877-1:2009, Clause 4.

4 Apparatus

4.1 General requirements

Refer to ISO 877-1:2009, Subclause 5.1, for general requirements.

When installed, the racks employed in test methods A and B shall be capable of providing the desired angle of inclination (see 6.1) and shall be such that no portion of any test specimen is closer than 0,5 m to the ground or to any other obstruction. Specimens may be mounted directly on the rack or in suitable holders which are then affixed to the rack. Mounting fixtures shall be secure, but shall apply as little stress as possible to the specimens and shall permit shrinkage, expansion or warping to occur without constraint, as far as possible.

In some cases, the object to be exposed is intended to be in direct contact with the ground (e.g. when entire vehicles are exposed). In these cases, the requirements for minimum distance between the specimens and the ground do not apply.