
**Solar energy — Collector components
and materials —**

**Part 4:
Glazing material durability and
performance**

*Energie solaire — Composants et matériaux du capteur —
Partie 4: Durabilité et performance des matériaux de vitrage*





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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 document 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 180, *Solar Energy*.

A list of all parts in the ISO 22975 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.

Solar energy — Collector components and materials —

Part 4: Glazing material durability and performance

1 Scope

This document specifies definitions and test methods for glazing material durability and performance.

This document is applicable to those collectors having a glazing to fit sheets or tubes of glass into collectors; accordingly, soda lime silicate glass and borosilicate glass are used.

This document is applicable to solar transmittance of glass for solar collector.

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 9488, *Solar energy — Vocabulary*

ISO 22975-1, *Solar energy — Collector components and materials — Part 1: Evacuated tubes — Durability and performance*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 9488, ISO 22975-1 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at <https://www.iso.org/obp>

— IEC Electropedia: available at <https://www.electropedia.org>

3.1

specimen

general term applied to test glass samples of flat plate and tube

3.2

solar transmittance

τ_s

fraction of solar radiation energy transmitted by a piece of glass in the solar energy wavelength range of 0,3 μm to 2,5 μm for air mass 1,5 (AM1,5)

3.3

solar glass

transmittance of a piece of glass without treatment above 0,850 for air mass 1,5 (AM1,5) is called solar glass

3.4

thermal shock

sudden change in temperature applied to *specimens* (3.1)