

Second edition
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Glass in building — Glass blocks — Specification and test methods

*Verre dans la construction — Briques de verre — Spécification et
méthodes d'essai*



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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.

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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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 160, *Glass in building*, Subcommittee SC 1, *Product considerations*.

This second edition cancels and replaces the first edition (ISO 21690:2006), which has been technically revised.

The main changes compared to the previous edition are as follows:

- Clause 5 in the previous edition on materials has been deleted;
- the external dimensions has been changed to one value $\pm 1,5$ mm in [6.3](#);
- the dimensional irregularities twisting Δt or misalignment Δm have been changed to not exceed 1,5 mm in [7.2](#);
- subclause 6.2.2 in the previous edition on visual irregularities has been changed to [Clause 8](#) on the appearance for hollow glass blocks, including its test method and requirement;
- the compressive strength minimum value in the previous edition subclause 6.3.1 has been changed from 6,0 N/mm² to 4,4 N/mm² in [9.1](#);
- [Clause 10](#) on thermal shock resistance for hollow glass blocks, with a 40 °C temperature falling, has been added;
- subclause 6.3.3 in the previous edition on thermal properties has been deleted;
- subclause 6.3.4 in the previous edition on radiation properties has been deleted.

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.

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Introduction

Light transmitting glass blocks are used for the construction of building elements both in non-load bearing walls and load bearing horizontally spanning panels.

Glass blocks for non-load bearing walls carry only their own weight and withstand horizontal forces such as those generated by the wind. Glass block walls and horizontally spanning panels do not carry any forces generated by the building.

Glass blocks used for the construction of horizontally spanning panels (e.g. floors, vaults and domes) carry their own weight and any other imposed loads (e.g. pedestrian or vehicular traffic).