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Rubber building gaskets — Materials for preformed solid vulcanized structural gaskets — Specification

*Profilés en caoutchouc pour le bâtiment — Matériaux pour
profilés de structure compacts préformés vulcanisés —
Spécifications*

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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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 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 45, *Rubber and rubber products*, Subcommittee SC 4, *Products (other than hoses)*.

This third edition cancels and replaces the second edition (ISO 5892:2013), which has been technically revised.

The main change is as follows: lifetime estimation has been added as an optional requirement in [Clause 9](#).

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.

Rubber building gaskets — Materials for preformed solid vulcanized structural gaskets — Specification

1 Scope

This document specifies the material requirements for preformed, solid vulcanized rubber structural gaskets in sealing and supporting applications for buildings.

NOTE Specifications for non-supporting gaskets are given in ISO 3934.

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 37, *Rubber, vulcanized or thermoplastic — Determination of tensile stress-strain properties*

ISO 48-4, *Rubber, vulcanized or thermoplastic — Determination of hardness — Part 4: Indentation hardness by durometer method (Shore hardness)*

ISO 188:2023, *Rubber, vulcanized or thermoplastic — Accelerated ageing and heat resistance tests*

ISO 812:2017, *Rubber, vulcanized or thermoplastic — Determination of low-temperature brittleness*

ISO 815-1, *Rubber, vulcanized or thermoplastic — Determination of compression set — Part 1: At ambient or elevated temperatures*

ISO 815-2, *Rubber, vulcanized or thermoplastic — Determination of compression set — Part 2: At low temperatures*

ISO 1382, *Rubber — Vocabulary*

ISO 1431-1, *Rubber, vulcanized or thermoplastic — Resistance to ozone cracking — Part 1: Static and dynamic strain testing*

ISO 3302-1, *Rubber — Tolerances for products — Part 1: Dimensional tolerances*

ISO 3384-1:2024, *Rubber, vulcanized or thermoplastic — Determination of stress relaxation in compression — Part 1: Testing at constant temperature*

ISO 11346, *Rubber, vulcanized or thermoplastic — Estimation of life-time and maximum temperature of use*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 1382 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

structural gasket

building *gasket* (3.2) that directly supports glass substrates, etc. and makes components watertight and airtight

Note 1 to entry: It consists of gaskets and *lock strips* (3.3).

3.2

gasket

component with channels which support both glasses and support frames

Note 1 to entry: Gaskets having two channels are called double-channel gaskets and those having one channel are called single-channel gaskets.

3.3

lock strip

component that is inserted into the lock-strip cavities for ensuring the required watertightness and airtightness

3.4

working temperature

temperature range where the *gasket* (3.2) is intended to be used

4 Types of material

Two types of materials are specified. Type E, with a nominal hardness of 75 Shore A, is intended for the gaskets and for the lock strip. Type F, with a nominal hardness of 85 Shore A, is intended only for the lock strip.

5 Working temperature range

The working temperature ranges of gaskets are divided into the following categories:

- a) P₁: temperature of gasket: -20 °C to +55 °C;
- b) P₂: temperature of gasket: -20 °C to +85 °C;
- c) P₃: temperature of gasket: -40 °C to +70 °C;
- d) P₄: temperature of gasket: -40 °C to +100 °C.

6 Material and workmanship

6.1 Gaskets shall be made from ozone-resistant rubber and shall not depend for ozone resistance solely on surface protection which can be removed by abrasion, detergents or other means.

6.2 Gaskets shall be free from porosity, significant surface defects and dimensional irregularities, particularly on the sealing faces.

7 Dimensions and tolerances

Dimensions and tolerances shall be the subject of agreement between the interested parties. Tolerances shall be in accordance with the specifications of ISO 3302-1.