

## International Standard



5160/1

R-27-21

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

**Commercial refrigerated cabinets — Technical specifications —  
Part 1 : General requirements***Meubles frigorifiques commerciaux — Spécifications techniques — Partie 1 : Exigences générales*

First edition — 1979-10-15

UDC 621.565.92 : 659.157

Ref. No. ISO 5160/1-1979 (E)

Descriptors : refrigerators, generalities, equipment specifications.

Price based on 6 pages

## FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up 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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 5160/1 was developed by Technical Committee ISO/TC 86, *Refrigeration*, and was circulated to the member bodies in February 1978.

It has been approved by the member bodies of the following countries :

Australia	Israel	Sweden
Bulgaria	Mexico	Switzerland
Chile	Netherlands	Turkey
Czechoslovakia	New Zealand	United Kingdom
Finland	Poland	USA
France	South Africa, Rep. of	USSR
Hungary	Spain	Yugoslavia

The member bodies of the following countries expressed disapproval of the document on technical grounds :

Germany, F. R.  
Italy

# Commercial refrigerated cabinets — Technical specifications —

## Part 1 : General requirements

### 1 SCOPE AND FIELD OF APPLICATION

This International Standard gives guidance in the selection and use of materials and specifies the marking and performance requirements for commercial refrigerated cabinets intended for the sale and/or display of food products.

It is to be read in conjunction with ISO 5160/2, which covers in detail the requirements for cabinets of specific types or intended for particular applications.

Any provisions contained in this International Standard for which no test method is specified should be considered as being of a purely informative character.

### 2 REFERENCES

ISO 534, *Paper — Determination of the thickness of single sheets.*<sup>1)</sup>

ISO 817, *Organic refrigerants — Number designation.*

ISO/R 1662, *Refrigerating plants — Safety requirements.*

ISO 1992, *Commercial refrigerated cabinets — Methods of test :*

*Part 1 : Calculation of linear dimensions, areas and volumes.*

*Part 2 : General test conditions.*

*Part 3 : Temperature test.*

*Part 4 : Defrosting test.*

*Part 5 : Water vapour condensation test.*

*Part 6 : Electrical energy consumption test.*

*Part 8 : Accidental mechanical contact test.*<sup>2)</sup>

ISO 4120, *Sensory analysis — Methodology — Triangular test*<sup>2)</sup>

ISO 5160/2, *Commercial refrigerated cabinets — Technical specifications — Part 2 : Particular requirements.*<sup>2)</sup>

1) At present at the stage of draft. (Revision of ISO/R 534-1967).

2) At present at the stage of draft.

### 3 DEFINITIONS

**3.1 load limit :** For each part of the cabinet, boundary surface consisting of a plane or several planes within which all test packages can be maintained within the limits for the product temperature class declared.

**3.2 load line :** Boundary line denoting the edge of the load limit surface.

**3.3 refrigerated shelf area :** Shelf area where the load limit is not less than 100 mm, measured perpendicularly above the plane of the shelf and within the bounds of any load limit.

The refrigerated shelf areas shall be declared separately for each product temperature class.

**3.4 display opening :** The product of the smallest length and width (or height, as appropriate) of the opening area of the cabinet.

**3.5 net volume :** The volume intended for products within the load limit.

Parts necessary for the proper functioning of the cabinet, including shelves used in the calculation of refrigerated shelf area, shall be fitted as intended and the volume of these parts shall be deducted when the net volume is determined.

Each volume should be declared separately for each product temperature class.

**3.6 overall dimensions :** The dimensions of the rectangular parallelepiped with vertical sides within which the cabinet, including its projecting accessories, is contained. For cabinets having detachable ends, overall dimensions shall be given with and without ends.