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SANS 10160-2:2011

Edition 1.1

SOUTH AFRICAN NATIONAL STANDARD

Basis of structural design and actions for buildings and industrial structures

Part 2: Self-weight and imposed loads

**WARNING — Can only be used in
conjunction with SANS 10160-1.**

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Table of changes

Change No.	Date	Scope
Amdt 1	2011	Amended to correct the table on imposed load on floors, balconies and stairs in buildings, to correct the table on imposed loads on floors due to industrial use and storage, and to correct a cross reference in 9.4.8.

Acknowledgement

The SABS wishes to acknowledge the valuable assistance derived from the South African Institution of Civil Engineering (SAICE).

Foreword

This South African standard was prepared by National Committee SABS/TC 098/SC 01, *Structural and geotechnical design standards – Basis of structures design and actions (including earthquake design)*, in accordance with procedures of the SABS, in compliance with annex 3 of the WTO/TBT agreement.

This document was published in October 2011.

This document supersedes SANS 10160-2:2010 (edition 1).

A vertical line in the margin shows where the text has been technically modified by amendment No. 1.

The SANS 10160 series consists of the following eight parts, under the general title *Basis of structural design and actions for buildings and industrial structures*:

Part 1: Basis of structural design.

Part 2: Self-weight and imposed loads.

Part 3: Wind actions.

Part 4: Seismic actions and general requirements for buildings.

Part 5: Basis for geotechnical design and actions.

Part 6: Actions induced by cranes and machinery.

Part 7: Thermal actions.

Part 8: Actions during execution.

Annex A is for information only.

Compliance with this document cannot confer immunity from legal obligations.

**Reaffirmed and reprinted in April 2017.
This document will be reviewed every five years
and be reaffirmed, amended, revised or withdrawn.**

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Basis of structural design and actions for buildings and industrial structures

Part 2

Self-weight and imposed loads

1 Scope

1.1 Scope of application

The scope of application of this part of SANS 10160 falls within the general scope of application as given in SANS 10160-1.

1.2 Scope of SANS 10160-2

1.2.1 This part of SANS 10160 covers the design guidance and actions for the structural design of buildings. It includes the following:

- a) densities of construction materials and stored materials;
- b) self-weight of construction works; and
- c) imposed loads for buildings.

Where a building or structural member can be expected to be subject to actions not listed in here, the most appropriate information should be used.

1.2.2 This part of SANS 10160 does not cover design situations and effects of actions in silos and tanks caused by water or other materials.

NOTE In these cases the designer could consult appropriate standards such as EN 1991-4 or specialist literature.