

# Precast concrete paving slabs/Precast concrete pavers



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# Revision History

## CSA A231.1:19/CSA A231.2:19, Precast concrete paving slabs/Precast concrete pavers

Update No. 1 — October 2020	Revision symbol (in margin)
<p>Preface</p> <p><b>CSA A231.1:19</b> Clauses <a href="#">1.1</a>, <a href="#">3</a>, <a href="#">5.1</a>, <a href="#">5.2</a>, <a href="#">5.3</a>, <a href="#">5.5</a>, <a href="#">6.1.1</a>, <a href="#">6.1.2</a>, <a href="#">6.1.3</a>, <a href="#">6.1.5</a>, <a href="#">6.2</a>, <a href="#">6.3</a>, <a href="#">7.2.1</a>, <a href="#">7.2.2.3</a>, <a href="#">7.3</a>, <a href="#">7.3.1</a>, <a href="#">7.3.2.1</a>, <a href="#">7.3.2.3</a>, <a href="#">7.3.3</a>, <a href="#">7.3.4</a>, <a href="#">7.4</a>, and <a href="#">D.1</a> Annex <a href="#">D</a> Table <a href="#">D.1</a> Figure <a href="#">2</a></p> <p><b>CSA A231.2:19</b> Clauses <a href="#">1.1</a>, <a href="#">2</a>, <a href="#">3</a>, <a href="#">5.1</a>, <a href="#">5.2</a>, <a href="#">5.3</a>, <a href="#">5.5</a>, <a href="#">6.1.5</a>, <a href="#">6.2</a>, <a href="#">6.3</a>, <a href="#">7.3.1</a>, <a href="#">7.4.1</a>, <a href="#">7.4.5.2</a>, <a href="#">B.5</a>, <a href="#">B.6</a>, <a href="#">B.8</a>, and <a href="#">B.9</a> Table <a href="#">B.1</a> Figure <a href="#">B.5</a></p>	①

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## ① Preface

This is the third edition of CSA A231.1/CSA A231.2, *Precast concrete paving slabs/Precast concrete pavers*. It supersedes the previous editions published in 2014 and 2006.

The following are the major changes to this edition of CSA A231.1/CSA A231.2:

- a) Clause [4.6](#) of CSA A231.1: Requirements have been revised to be consistent to CSA A231.2.
- b) Clause [4.7](#) of CSA A231.2: Requirements have been revised to be consistent to CSA A231.1.
- c) Clause [5.1](#) of CSA A231.1 and CSA A231.2: Additional guidance has been included for segmental concrete paving units that do not meet the definition of a slab or a paver.
- d) Clause [5.2](#) of CSA A231.1 and CSA A231.2: Additional guidance has been included for production control and frequency sampling for a given product and when there is a change in the mix design.
- e) Clauses [5.3](#), [5.4](#), and [5.5](#) of CSA A231.1 and CSA A231.2: Requirements have been revised to be consistent to A231.2. Additional guidance on field sampling has been included.
- f) Clause [5.6](#) of CSA A231.1 and CSA A231.2: Requirements have been updated for sample and specimen identification.
- g) Clause [6.1.3](#) of CSA A231.1: Additional guidance has been included for the structural integrity of field samples at the time of installation.
- h) Clause [6.1.4](#) of CSA A231.1: For consistency between CSA A231.1 and CSA A231.2, the requirements have been removed and reference to CSA A231.2, Clause [6.1.4](#), has been included.
- i) Clause [6.1.5](#) of CSA A231.1 and CSA A231.2: Additional guidance has been included for visual inspection.
- j) Clause [6.2](#) of CSA A231.2: Requirements have been revised to be consistent to CSA A231.1.
- k) Clause [6.3](#) of CSA A231.1 and CSA A231.2: A new clause has been added to provide guidance on the basis for compliance.
- l) Clause [7.1.1](#) of CSA A231.1: Requirements have been revised to be consistent to CSA A231.2.
- m) Clause [7.1.3](#) of CSA A231.1 and A231.2: Humidity tolerances have been updated.
- n) Clause [7.2.2.3](#) of CSA A231.1 and A231.2: Dimensional accuracy requirements have been updated.
- o) Clauses [7.3.1](#) of CSA A231.2: Additional guidance has been included for the specimens.
- p) Clause [7.3.2.1](#) of CSA A231.1: Additional guidance has been included on the spacing of rollers and bearers, steel platen requirements, and rubber strip requirements.
- q) Clause [7.3.2.2](#) of CSA A231.1: Additional guidance has been included for units that do not fit into the testing machine.
- r) Clause [7.3.2.3](#) of CSA A231.1: Additional guidance has been included for dry conditioning.
- s) Clause [7.4](#) of CSA A231.1: For consistency between CSA A231.1 and CSA A231.2, the requirements have been removed and reference to CSA A231.2, Clause [7.4](#) has been included.
- t) Clause [7.3.2](#) of CSA A231.2: The Note was removed to clarify when concrete should be cut or cored.
- u) Clause [7.4.2.1](#) of CSA A231.2: Additional guidance has been included on the volume of solution relative to the volume of the specimen.
- v) Clause [7.4.3](#) of CSA A231.2: Additional guidance has been included for cutting units.
- w) Clause [7.1](#) of CSA A231.2: Language was revised to clarify this section is for segmental concrete paving units other than pavers.
- x) Clause [D.1](#) of CSA A231.1: Additional guidance has been included for 200 mm centre-to-centre distance between rollers. The Equation has been corrected.

These Standards were prepared by the Technical Committee on Precast Concrete Paving Elements, under the jurisdiction of the Strategic Steering Committee on Construction and Civil Infrastructure, and have been formally approved by the Technical Committee.

This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

**Notes:**

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  - c) *wording of the proposed change; and*
  - d) *rationale for the change.*

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*CSA A231.1:19*

***Precast concrete paving slabs***



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# CSA A231.1:19

## Precast concrete paving slabs

### 1 Scope

#### ① 1.1

This Standard specifies requirements for concrete paving slabs manufactured from hydraulic cement concrete to be used in the construction of pavement and roof coverings. Concrete paving slabs consist of either a single concrete throughout or two layers consisting of a backing concrete with a face that has a minimum thickness, commonly of 4 mm. This Standard includes units with architectural finishes or tactile surfaces.

**Notes:**

- 1) Annex [A](#) contains information on efflorescence and recommends methods for its removal. Annex [B](#) provides information on the installation of pavement components made with precast concrete paving slabs.
- 2) The terms “slab” and “concrete paving slab” are used interchangeably in this Standard.
- 3) The terms “height” and “thickness” are used interchangeably in this Standard.

#### 1.2

In this Standard, “shall” is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the Standard; “should” is used to express a recommendation or that which is advised but not required; and “may” is used to express an option or that which is permissible within the limits of the Standard.

Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material.

Notes to tables and figures are considered part of the table or figure and may be written as requirements.

Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.

## 2 Reference publications

This Standard refers to the following publications, and where such reference is made, it shall be to the edition listed below, including all amendments published thereto.

**CSA Group**

A23.1:19/A23.2:19

*Concrete materials and methods of concrete construction/Test Methods and standard practices for concrete*

A231.2:19

*Precast concrete pavers*

A3001-18 (part of A3000-18, *Cementitious materials compendium*)

*Cementitious materials for use in concrete*