



# Airflow ventilators for the unoccupied spaces of buildings



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***CSA A93:19***

***November 2019***

**Title:** *Airflow ventilators for the unoccupied spaces of buildings*

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**CSA A93:19**  
***Airflow ventilators for the  
unoccupied spaces of buildings***



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Published in November 2019 by CSA Group  
A not-for-profit private sector organization  
178 Rexdale Boulevard, Toronto, Ontario, Canada M9W 1R3

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ICS 23.120  
ISBN 978-1-4883-2545-8

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# Contents

Technical Committee on Ventilators for Buildings	3
Preface	5
<b>1 Scope</b>	<b>6</b>
<b>2 Reference publications</b>	<b>6</b>
<b>3 Definitions</b>	<b>7</b>
<b>4 General requirements</b>	<b>8</b>
4.1 Types	8
4.2 Installation	8
<b>5 Physical requirements</b>	<b>8</b>
5.1 Basic design	8
5.2 Materials	8
5.3 Insect and rodent protection	9
5.4 Fastener components	9
5.5 Flanges	9
5.6 Foundation ventilators	9
<b>6 Performance requirements</b>	<b>9</b>
6.1 Wind resistance	9
6.2 Rain resistance	9
6.3 Corrosion resistance	10
<b>7 Test methods</b>	<b>10</b>
7.1 General	10
7.2 Wind resistance test	10
7.3 Rain resistance test	10
7.4 Corrosion resistance test	10
7.5 Mechanical ventilator airflow test	10
7.5.1 General requirement	10
7.5.2 Mechanical ventilators with multiple airflow levels	10
<b>8 Net free area</b>	<b>10</b>
8.1 General	10
8.2 Adjustable ventilators	11
8.3 Mechanical ventilators	11
8.4 Availability of information	11
<b>9 Marking</b>	<b>11</b>
<hr/>	
Annex A (informative) — Installation of passive airflow ventilators	12
Annex B (informative) — Guide for determining net free area of passive vents	18

Annex C (informative) — Properties of forced-air ducted ventilators	21
Annex D (informative) — Prevention of ingress of burning embers	22
Annex E (informative) — Precautionary measures for mechanical ventilator installation	23

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# Preface

This is the fourth edition of CSA A93, *Airflow ventilators for the unoccupied spaces of buildings*. It supersedes previous editions published in 1982, under the title of *Natural airflow ventilators for buildings*, and in 1965 and 1961, under the title *Vents for buildings*.

Significant changes since the previous edition include the following:

- addition of requirements of mechanical airflow ventilators for unoccupied spaces;
- updated design and testing requirements for passive airflow ventilators;
- addition of Annex C, *Properties of forced-air ducted ventilators*
- addition of Annex D, *Prevention of ingress of burning embers*; and
- addition of Annex E, *Precautionary measures for mechanical ventilator installation*.

This Standard is intended to be referenced by regulatory authorities, airflow ventilator manufacturers and installers, building designers, and certification bodies responsible for testing and certification of airflow ventilators.

This Standard is considered suitable for use for conformity assessment within the related scope of the Standard.

This Standard was prepared by the Technical Committee on Ventilators for Buildings, under the jurisdiction of the Strategic Steering Committee on Construction and Civil Infrastructure, and has 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.

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- 2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*
- 3) *This Standard was developed by consensus, which is defined by CSA Policy governing standardization — Code of good practice for standardization as “substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity.” It is consistent with this definition that a member may be included in the Technical Committee list and vote, not be in full agreement with all clauses of this Standard.*
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  - c) *wording of the proposed change; and*
  - d) *rationale for the change.*

# CSA A93:19

## ***Airflow ventilators for the unoccupied spaces of buildings***

### **1 Scope**

#### **1.1**

This Standard gives minimum requirements for ventilators used in buildings which are designed to permit venting of unoccupied spaces to the exterior so as to minimize the unwanted accumulation of condensation, moisture, and excess heat in the building component or assembly. These include

- a) passive airflow ventilators for buildings; and
- b) mechanical (powered) airflow ventilators for buildings.

**Note:** *Forced-air ducted ventilators might have additional requirements which are not included in this Standard. Information for these systems is included in Annex C.*

#### **1.2**

This Standard includes physical, performance, and marking requirements. It also includes annexes giving recommendations for installation of ventilators to ventilate unoccupied building spaces, a guide for determining net free area, recommended properties of exterior apertures of ducted forced-air ventilation systems, and the mitigation of ingress of fire embers in areas of high fire risk.

#### **1.3**

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.

#### **1.4**

The values given in SI units are the units of record for the purposes of this Standard. The values given in parentheses are for information and comparison only.

### **2 Reference publications**

This Standard refers to the following publications. Where reference is made and the publication is in force at the installation location, it shall be to the edition and all amendments in force at the time of construction in the jurisdiction where the building will be placed for occupancy. Where such reference is