

STANDARDS AUSTRALIA

Amendment No. 1
to
AS/NZS 1668.1:2015
The use of ventilation and air conditioning in buildings
Part 1: Fire and smoke control in buildings

REVISED TEXT

The 2015 edition of AS/NZS 1668.1 is amended as follows; the amendments should be inserted in the appropriate places.

SUMMARY: This Amendment applies to the following:

- Front cover, Title page and Preface.
- Clauses 1.4.26, 1.4.40, 1.4.41, 1.4.58, 1.4.61, 1.4.65, 1.4.66 (new), 1.6, 2.3, 2.3.1, 2.3.5 (new), 3.2.3.1, 3.3.2, 3.3.3, 3.6.1, 3.7.1, 3.7.4, 4.1, 4.2, 4.6, 4.10.1, 4.10.2.2, 4.10.3, 4.11.1, 4.11.4.2, 4.11.4.4, 4.11.5, 4.13.4, 4.15, 5.2.1, 5.2.3, 5.3.1, 5.3.2, 5.4.1, 5.4.2, 5.5.1, 5.5.3, 6.2.2, 6.2.3.1, 6.2.3.3, 6.2.5, 6.2.6, 7.1, 7.2.1, 7.2.2, 7.2.3, 9.3, 9.4.3, 9.9.3, 9.9.5, 10.2.2, 10.2.4, 10.3 and 10.4.3.
- Tables 4.1, 8.3 and 8.4.
- Figures 4.1, 4.2, 5.1, 5.2, 9.2, 9.3 and CH2.
- Appendices A, B, E, J and K.

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Front cover

Delete 'AS/NZS 1668.1:2015' and *replace* with 'AS 1668.1:2015'.

Title page

Delete 'AS/NZS 1668.1:2015' and *replace* with 'AS 1668.1:2015'.

Preface

1 After first paragraph, *insert* new paragraph as follows:

Amendment No. 1 to this Standard was prepared by the Australian members of Joint Standards Australia/Standards New Zealand Committee ME-062, Ventilation and Airconditioning. As a consequence of Amendment No. 1, which is published as an Australian-only amendment, the designation of this Standard has been changed from AS/NZS 1668.1:2015 to AS 1668.1:2015.

2 Third paragraph, Item (b), *delete* text and *replace* with the following:

(b) Smoke hinders the emergency services personnel during intervention activities (including search and rescue operations).

AMDT
No. 1
DEC
2018

Clause 1.4.26

Delete note and *replace* with the following:

NOTE: The FDCIE panel was formerly known as FIP and SIP.

AMDT
No. 1
DEC
2018

Clause 1.4.40

Delete text and *replace* with the following:

An exhaust system forming an air path between two or more fire compartments, with a total aggregate of penetrations from any individual connected fire compartment not exceeding 0.1 m².

AMDT
No. 1
DEC
2018

Clause 1.4.41

Delete text and *replace* with the following:

A supply system forming an air path between two or more fire compartments, with a total aggregate of penetrations into any individual connected fire compartment not exceeding 0.1 m².

AMDT
No. 1
DEC
2018

Clause 1.4.58

Delete text, including note, and *replace* with the following:

A special configuration of those elements of an air-handling system that is used to conduct smoke exhaust air by use of a smoke exhaust fan, and extends from the most upstream smoke or fire-resistant barrier that is being penetrated to the point of discharge outside the building.

NOTE: Also known as smoke-spill system.

AMDT
No. 1
DEC
2018

Clause 1.4.61

Delete text and *replace* with the following:

A device, when constructed and installed in accordance with Section 3, is deemed to provide an acceptable level of protection to an opening in a building element required to have a fire resistance level, and is intended to limit the backflow of smoke under fire conditions.

AMDT
No. 1
DEC
2018

Clause 1.4.65

Delete text and *replace* with the following:

A zone pressurization system applicable to multi-compartment buildings.

AMDT
No. 1
DEC
2018

Clause 1.4.66 (new)

After Clause 1.4.65, *insert* the following:

1.4.66 Temperature of fusion

For the purposes of this Standard, the temperature of fusion is deemed to be the melting point of the material under consideration.

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2018

Clause 1.6

- 1 Commentary C1.6, first paragraph, *delete* text and *replace* with the following:

This Standard sets out requirements for using air-handling system(s) to reduce smoke spread from fire-affected areas to other areas. Possible leakage paths are shown in Figure C1.6. Systems designed in accordance with this Standard are expected to maintain a tenable atmosphere within fire-isolated exits to enable occupant evacuation and emergency services personnel intervention activities (including search and rescue operations).

- 2 Commentary C1.6, third paragraph, *delete* text and *replace* with the following:

Smoke layer exhaust systems are intended to maintain the smoke layer above occupants to facilitate occupant evacuation and intervention activities by emergency services personnel (including search and rescue operations).

AMDT
No. 1
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Clause 2.3

Delete clause title and *replace* with the following:

2.3 DUCTWORK MATERIALS AND INSTALLATION

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2018

Clause 2.3.1

Delete clause, including title, and *replace* with the following:

2.3.1 Materials

The material, or any composite material, used in the construction of ductwork shall be in accordance with the fire hazard property requirements of AS 4254.1 and AS 4254.2.

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Clause 2.3.5 (new)

After Clause 2.3.4, *insert* the following:

2.3.5 Duct construction

Ducts and components associated with systems required to operate in the fire mode shall be constructed in accordance with the fire hazard properties, construction and installation requirements of AS 4254.1 and AS 4254.2 (excluding insulation fixing requirements).

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Clause 3.2.3.1

Item (b), *delete* text and *replace* with the following:

- (b) For a fire damper that is connected to ductwork conforming with Clause 2.3.2 and with a minimum total duct length of 2 m (with or without breakaway joints), insulation shall not be required.

NOTE: Omission of breakaway joint(s) is to be supported by documentation demonstrating that the building element's FRL will not be adversely affected. Such documentation is to be based on a prototype test as specified in Clause 3.3.2(d) or soundly designed in accordance with fire engineering principles.
