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Australia

The logo for STANDARDS Australia consists of a stylized, overlapping yellow and orange shape above the text 'STANDARDS' in a bold, white font, with 'Australia' in a smaller, white font below it.

# Review of Fire Safety Standards

**Smoke Control in buildings**

**AS 1668.1**

**Fire & Smoke Dampers**

**AS 1682.1 & AS 1682.2**



# Topics for this briefing



## Why revise these Standards?

**Likely revisions to AS 1668.1**

**Smoke Control**

**Likely revisions to AS 1682**

**Fire & Smoke Dampers**



# Why revise the Standards?



- To put the smoke detection & activation clauses in the right place **AS 1670.1**
- To overcome “market failures” between the fire damper installation and certification industries
- To get a Standard on Smoke dampers



# The likely revisions to AS 1668.1

In the 2015 edition?

But subject to outcome of public comment review



# Likely revisions to AS 1668.1



## The significant alterations!

- Smoke detection & activation clauses shifted to AS 1670.1
- Technical details of FFCP shifted to AS 1670.1
- **One** standard on Smoke Control in Buildings. AS 1668.3 shifted to AS 1668.1



# Likely revisions to AS 1668.1



## **The significant alterations!**

- Test criteria sorted out for Exit Pressurisation in Class 2 & 3 buildings
- Joint effort with ABCB so heater safety and duct requirements apply to all buildings



# Likely revisions to AS 1668.1



## The significant alterations!

- Carpark exhaust now matches BCA
  - No need for high temperature fans or fire-rated power supply
  - These are ventilation systems used in fire – NOT smoke exhaust systems
  - Activation by whatever detection required by BCA



# Likely revisions to AS 1668.1



## **The significant alterations!**

- Existing clause on power supplies is reinforced:  
No fire rated cables & cable trays for essential power in plantrooms





# Likely revisions to AS 1668.1



## Other alterations

- Requirements for smoke dampers now match BCA Clause E2.2(b)
- To harmonize with AS 1851, **Tests & Records** requirements must be listed as “Baseline Data”
- Definitions for Fire Damper, Smoke Damper, etc shifted to AS 1682



# Likely revisions to AS 1668.1



## Other alterations

- Common misinterpretations clarified by revised text and more Commentary
- Efforts, with ABCB support, to remove anomalies between BCA & AS 1668.1



# **The likely revisions to AS 1682 Parts 1 & 2**

**In the 2015 edition?**

**But subject to outcome of public comment review**



# Likely revisions to AS 1682 Parts 1 & 2



## The significant alterations!

- Addition of Smoke Dampers, Air Dampers and Wall Transfer Grilles
- Two classes of Fire Dampers:
  - **Dynamic** FRL Integrity leak test at 300 Pa
  - **Conventional** FRL Integrity test by sight
  - **Both** Ambient leakage cut to 50% of previous



# Likely revisions to AS 1682 Parts 1 & 2



## **The significant alterations!**

- Test criteria for Wall Transfer Grilles to include FRL Insulation
- Floor mounted fire dampers require FRL Insulation or insulated ducts above them
- Manufacturers of Intumescent Fire Dampers to keep records of material longevity testing



# Likely revisions to AS 1682 Parts 1 & 2



## To eliminate Installer/Certifier conflicts:

- **PRIMARY** installation requirement will be:  
Follow manufacturer's installation instructions!
- Manufacturer's installation instructions will be a requirement prior to Fire Testing
- Prescriptive installation instructions OUT, except Maintenance access, Breakaway joint & Flange width



# Likely revisions to AS 1682 Parts 1 & 2



## Other alterations:

- Baseline Data nominated in clauses on commissioning, to harmonize with AS 1851
- Explanatory commentary included with guidance on installation performance
- Common misinterpretations clarified by revised text and more Commentary



**Any Questions on  
AS 1682 Parts 1 & 2?**