

Proposed Omission of Fire Brigade Booster Connection from Automatic Fire Sprinkler Systems Servicing Specific Accommodation Buildings

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1. PURPOSE

The purpose of this guideline is to communicate to industry Fire Rescue Victoria's (FRV) position on the omission of fire brigade booster connections from an *AS 2118.4-2012* [1] automatic fire sprinkler system within Class 1b and Class 3 accommodation buildings.

2. SCOPE

This guideline is applicable to buildings that are situated within the FRV fire district, which are sprinkler protected in accordance with *AS2118.4-2012*.

3. DEFINITIONS

For the purpose of this document, the following definitions will apply.

AFSAB: means the Australian Fire Safety Practitioners Accreditation Board, which is administered by the National Fire Industry Association that facilitates the application and endorsement of fire system practitioners.

BCA: means the Building Code of Australia 2022 – Volume 1, which forms part of the *National Construction Code (NCC)* [2].

Building: has the same meaning as Section 3 of the *Building Act 1993* [3].

Community-based houses: having the same meaning as defined in the *Capital Development Guidelines*. [4]

FPAS: means the Fire Protection Accreditation Scheme, which is administered by the Fire Protection Association of Australia.

Independent Certifier: an accredited individual (Fire Protection Accreditation Scheme, Australian Fire Safety Practitioners Accreditation Board), who is independent

of the designer and installer of the automatic fire sprinkler system, who is responsible for the carrying out of acceptance testing and preparation of the compliance reporting, in accordance with Section 6 of *AS2118.4-2012*.

Residential care building (VIC): having the same meaning as defined in the *National Construction Code*.

Shared accommodation building (VIC): having the same meaning as defined in the *National Construction Code*.

Supported Community-Based house: having the same meaning as defined in the *Capital Development Guidelines*.

4. BACKGROUND

Where a building design proposes to adopt street hydrant installations to satisfy the requirements of the National Construction Code 2022 (NCC), there are a number of factors that must be considered.

4.1. National Construction Code

The Deemed-to-Satisfy Provisions of the NCC sets out the requirements for sprinkler installation for Class 3 buildings. Part E requires sprinklers to be provided in Class 3 buildings or any multi-classified building containing a Class 3 part, where any part of the building has a rise in storey of 4 or more and an effective height of not more than 25m. Sprinklers are also required in Class 3 buildings used as a residential care building.

4.2. Capital Development Guidelines

The Department of Families, Fairness and Housing (DFFH) have the Capital Development Guideline – Series 7 (CDG), that outline requirements in addition to the NCC. The CDG outline the DFFH policy, procedures, and processes for managing fire risks in certain types of buildings that are either owned, operated, or funded by DFFH.

The CDG prescribes mandatory measures, which include the requirement for the installation of an automatic fire sprinkler system complying with either AS2118.4 or AS 2118.1. These measures can apply to all Supported Community-Based and Community-Based houses (Class 1b and Class 3), providing sleeping accommodation for clients.

The purpose of sprinkler system installations in these specific accommodation settings is to enhance and complement the early warning capabilities of smoke alarms. Sprinklers aid in the reduction of fatalities, injuries and property damage by providing protection from fire by containing a fire to a defined area and promote tenability, which allows people to escape.

4.3. Australian Standard AS2118

Clause 3.8 of AS 2118.4-2012 requires a sprinkler system complying with the standard to be fitted with a single inlet fire brigade booster connection, which allows firefighters to pressurise or pump water into the sprinkler system.

5. OBTAINING A REPORT FROM THE FIRE RESCUE COMMISSIONER

5.1. Regulation 129

Under Regulation 129 of the Building Regulations 2018 [6], the report and consent of the Fire Rescue Commissioner is required when a fire safety matter as listed in the regulation does not meet the deemed-to-satisfy provisions of the BCA. The omission of fire brigade booster connection is such a matter that requires a report and consent.

FRV acknowledges that the buildings within the scope of this guideline, when meeting the requirements of the CDG, are of single storey construction.

5.1.1. Consideration Criteria

When considering a Regulation 129 report and consent submission that seeks to omit fire brigade booster connection(s), FRV recommends that the following criteria be reasonably satisfied:

- The building must not exceed 300m² in floor area; and
- The building must be single storey; and
- The public infrastructure (town's) water main satisfies the automatic fire sprinkler system's required design parameters for minimum pressure and flow; and
- An accessible street hydrant is available, as per FRV Fire Safety guideline GL-04 Street Hydrants. [5]

It should be noted that the above criteria are not applicable to a Regulation 129 submission that relates to a multi-classified building, such as a Class 3 within a building containing retail/office part (Class 5 and/or Class 6). Submissions relating to multi-classified buildings will be assessed on their merits and must reasonably demonstrate that the building design achieves a satisfactory degree of fire safety.

5.1.2. Capital Development Guidelines - Reports

The consideration criteria referred to in Section 5.1.1 of this guideline applies equally to Regulation 129 submissions pertaining to buildings that are within the scope of the CDG.

5.1.3. Voluntary Installations

Designers of buildings who propose to omit fire brigade booster connection from their AS2118.4 systems, should seek to obtain a Regulation 129 report in circumstances involving either the NCC, CDG or both.

5.1.4. Conditions

In certain circumstances, the Fire Rescue Commissioner may impose additional conditions within a Regulation 129 report such as--

- The requirement for the submission of test results from an independent testing contractor; or
- The provisions of signage to inform responding firefighters of the varied conditions; or
- Other conditions that the Fire Rescue Commissioner deems appropriate.

6. REFERENCES

- [1] Australian Standard 2118.4-2012 “Sprinkler protection for accommodation buildings not exceeding four storeys in height”.
- [2] National Construction Code 2022, Volume One, Building Code of Australia
- [3] *Building Act 1993 (Vic.)*
- [4] Capital Development Guideline – Series 7 – Fire Risk Management Policy and Procedures
- [5] Fire Safety Guideline GL-04 Street Hydrants
- [6] Building Regulations 2018 (Vic.)