Built Environment Advisory Bulletin No. 2023-01



Title

Fire Rescue Commissioner Report and Consent involving buildings outside the scope of Australian Standard AS2419.1:2021, Fire hydrant installations, Part 1: System design, installation and commissioning.

Context

This bulletin has been prepared to present the Fire Rescue Commissioner's expectations with respect to the engagement pathways for proposed fire hydrant systems in buildings that are outside the scope of Australian Standard 2419.1:2021. References herein to AS 2419.1 relate to the 2021 edition of the standard.

Section 1 Clause 1.1 of AS2419.1 identifies that the standard only applies to on-site fire hydrant systems for the following settings.

- a. Class 7b or 8 buildings having a total volume not exceeding 108,000 m³.
- b. Buildings that do not include automatic racked storage systems.
- c. Buildings having an effective height not exceeding 135 metres.
- d. Buildings and associated areas that do not include special hazards.

Buildings that are excluded from the above settings are outside the scope of AS 2419.1 and require the consent of the Fire Rescue Commissioner.

FRV notes that AS 2419.1 may apply to buildings in part or in full to settings outside the scope of the standard, however this must occur via appropriately negotiated and documented engagement pathways.

Appendix C, D and E of AS2419.1 provides informative guidance for the design of hydrant systems to buildings outside the scope of the standard.

Actions

The following engagement pathway is relevant for instances where an on-site fire hydrant system for a building outside the scope of AS2419.1 is proposed.

Step 1 – Stakeholder Consultation

It is the expectation of the Fire Rescue Commissioner that early engagement is to be undertaken for proposed fire hydrant system installations in buildings outside the scope of AS 2419.1. The first step involves preparation of the A2G2(4)(a) application and providing supporting documentation. The application is to clearly identify the characteristic of the building that will not comply with Section 1 Clause 1.1 of AS 2419.1.

Clause A2G2(4)(a) of the NCC requires that Performance Based Design Briefs (PBDB) are to be prepared in consultation with relevant stakeholders. The emphasis is on the stakeholder consultation occurring during the preparation of the PBDB and not a review of a completed PBDB.

Application for Consultation is to be completed and submitted to <u>bsr.admin@frv.vic.gov.au</u> along with all supporting documentation as out lined in the application but not limited to. The A2G2(4)(a) application form can be found at the following link:

Building Industry - Applications for Fire Safety Reports and Consultation (frv.vic.gov.au)

In some instances, it may be determined that additional information is required to address project specific complexities or a stakeholder meeting may be required. In these instances, FRV will inform the applicant.

A hydraulic design should support and supplement the equipment that will be used by FRV when attending an incident. Buildings excluded from AS 2419.1 are complex and may contain unique fire hazards in configurations that challenge firefighting access. There may be limits on the activities that can be practically undertaken by FRV and the design must take these limitations into account.

Appendix F of the AS 2419.1 provides design guidance for firefighter equipment and should be considered when preparing fire hydrant installations. Site-specific considerations will be provided as part of the FRV engagement pathway.

Appendix F of the standard provides information and guidance which can be used in conjunction with FRV engagement.

Step 2 – Pre-129 / PBDB Application – Letter of Advice

The second step involves submission of the Pre-129 Application that incorporates the early engagement outcomes of Step 1. As part of this application, it is expected that a copy of the Fire Safety PBDB be included.

This process has been put in place to streamline the Regulation 129 process and will ensure that written advice from the Fire Rescue Commissioner is considerate of the proposed Regulation 129 variations and the proposed Performance Solutions, where applicable.

The Pre-129 application is to be completed and submitted to <u>bsr.admin@frv.vic.gov.au</u> along with all supporting documentation as set out in the application, including documentation requested as part of Step 1.

The Pre-129 application form can be found at the following link: Application for Pre-129-Letter-of-Advice.

FRV's response to the Pre-129 application may include additional design considerations and further commentary of matters raised in Step 1.

Step 3 – Regulation 129 application

An application for Regulation 129 Report and Consent is to be completed and submitted to <u>bsr.admin@frv.vic.gov.au</u> along with all supporting documentation outlined in the application including but not limited to—

- Fire Engineering Report developed from the PBDB addressing all relevant matters from Steps 1 and 2.
- A copy of the Fire Service Hydraulic Design Solution addressing design considerations of Steps 1 and 2.
- Any additional design documents identified in Regulation 25 of the Building Regulations 2023, which FRV's Fire Rescue Commissioner deems necessary.

The Regulation 129 application form can be found at the following link: <u>Application-for-formal-Report-and-Consent</u>.

In circumstances where FRV's Fire Rescue Commissioner believes that the proposed on-site fire hydrant system design is complex, FRV's Fire Rescue Commissioner may request that the final fire service hydraulic design solution be independently reviewed. This review must be completed by an appropriately qualified and experienced engineer having expertise in fire services design, prior to issuing a Regulation 129 report.

Where a design solution is reviewed by an independent engineer, any additional inspections that are deemed necessary for the certification and commissioning of the system may be included on the Regulation 129 consent as a requirement to form part of the Regulation 187 application.

Each application will be assessed independently and there may be condition(s) put in place for the joint inspection to be conducted at specific stages if deemed necessary.



Step 4 – Reg 187 application

A Regulation 187 Application is to be completed and submitted to <u>bsr.admin@frv.vic.gov.au</u> along with all supporting documentation and additional considerations raised in Step 3 or identified below. A link to the application Regulation 187 application form is provided below.

Regulation-187(1)(a)-and-(b)-Application-for-Report-and-Consent (1).pdf

At the completion of construction and prior to seeking the report and consent of FRV's Fire Rescue Commissioner under Regulation 187 of the Building Regulations 2018, the on-site fire hydrant system must be subjected to a commissioning test.

At a minimum, commissioning should be in accordance with Section 12 (Commissioning) of AS2419.1. Broad statements of conformance are not considered adequate to demonstrate conformance.

Appendix A of AS2419.1 provides guidance on the documentation required to demonstrate conformance with the standard. The testing of the fire hydrant system must demonstrate the capability of the system compared to the documented design criteria.

As identified in Step 3, an application under Regulation 187 may require joint inspections to be carried out regarding the commissioning of a system.

Where an independent engineer has undertaken inspections in relation to the certification and commissioning of the system, inspection observations, reports and/or Certificate of Compliance are to be submitted in support of the application.

Conclusion

The focus of this document is fire hydrant installations to buildings that are outside the scope of Section 1 Clause 1.1 of AS 2419.1. These buildings have characteristics or special hazards that present challenges to firefighters and practitioners are urged to follow the engagement pathway presented herein as part of the report and consent process.

Further Information

For further information regarding applications for Fire Safety Reports and Consultation refer to the FRV website <u>Building Industry - Applications for Fire Safety Reports and Consultation (frv.vic.gov.au)</u>

To speak with a staff member or to organise a meeting to discuss a proposal please contact FRV BSR-Admin on (03) 9665 4478.

Mark Carter

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