

Acoustic Separation of Fire Pump Room

Approval level: Fire Safety
Date authorised: February 2020
First issued: February 2020
Version number: 1

Guideline No. 45

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1. PURPOSE

This guideline has been developed to assist designers and developers with the provision of acoustic separation between fire indicator panels, control valves and fire pump sets.

2. SCOPE

This guideline applies to all constructions with a fire pump room that is internal or external and is proposed to be constructed within the Fire Rescue Victoria (FRV) district.

3. DEFINITIONS

BCA: refers to the Building Code of Australia which forms part of the National Construction Code Series.

Fire Pump Room: as defined in AS 2419.1 2005, Section 6 and AS 2941.

Control Valve: as defined in AS 2118.1 2017, Section 8.

Fire Indicator Panel: as defined in NCC Volume 1, Specification E1.8 and AS 1670.1, 2015.

4. CONSIDERATIONS

Designers are encouraged to acoustically separate control valves and fire control centres from the fire pump room.

A fire control centre cannot be placed in a fire pump room as the ambient sound levels cannot exceed 65Db(A) when all fire safety equipment is operating in an emergency.

The installation of this equipment in the fire pump room exposes firefighters to unnecessary noise levels when trying to operate the control valves or detection systems.

The decibel exposure limits may exceed occupational health & safety limits, therefore the wearing of hearing protection in these areas is not viable as it interferes with the operation of portable radios.

5. RECOMMENDATIONS

Where a site has a fire pump room installed, internal or external appropriate separation between the control valves and fire indicator panel is to be provided.

Note: This is a controlled document and may only be modified by authorised personnel after review by FRV Fire Safety Advisory Group.