



**METROPOLITAN
FIRE
SERVICE**
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RELEVANT FIRE AUTHORITY COMMENT AND REPORT

Attention: Mr Greg Caruso

Date Received: 8 October 2018

This report has been prepared by the South Australian Metropolitan Fire Service (MFS) and provides comment on the proposal in accordance with Regulation 28 of the South Australian Development Regulations 2008.

Development Application number:	050 / 335 / 2016		
Premises Name & Address:	050/335/2016		
Owners Name:	Niatron 10 Pty Ltd		
Council Area:	City of Prospect		
Approving Authority:	Carlo Scinto & Associates	Contact: Carlo Scinto Phone: 8362 6899	
Consultant / Architect:	TMK Consulting Engineers I-Think Design studio	Greg Caruso 8238 4136 Benjamin Figg 7078 4070	
Building Classification:	Class 2, 7a		
Type of Construction:	Type A		
Total floor area:	300 m ²	Fire compartment area/s:	m ² m ² m ²
Rise in storeys:	4		
Effective Height:	9.62m		





**Government
of South Australia**

The following documents have been perused:

SPECIFICATIONS				
Title	Number	Revision	Date	Company
Fire Services Specification	1710168	A	Sept 2018	TMK

FIRE SERVICES DRAWINGS				
Drawing Title	Drawing Number	Revision	Date	Company
Fire services Drawings	1710168 – F1 to F3	A	07.09.2018	TMK

ARCHITECTURAL DRAWINGS				
Drawing Title	Drawing Number	Revision	Date	Company
Architectural Floor Plans	WD 1 to 19	-	13.08.2018	I-Think Design Studio

PROPOSED PERFORMANCE SOLUTIONS

The following *Performance Solutions* to the NCC (BCA Volume 1, 2016) Deemed-to-Satisfy Provisions have been assessed:

NOTE: Text in the following tables contained within quotation marks and formatted in *Italics* has been quoted from the submitted documentation verbatim.

No.	Relevant <i>Performance Requirement(s)</i>	Relevant <i>Deemed-to-Satisfy Provision(s)</i>
1.	BCA-EP1.3	BCA-E1.3
<p align="center">Proposed <i>Performance Solution</i></p> <p><i>"To permit internal hydrants to be mounted in non-fire isolated central stairwell assembly; The stairwell is open to the corridor space at each level, and fire separated from the ground floor carpark area."</i></p>		
<p align="center">Justification for <i>Performance Solution</i></p> <p><i>"The corridor and stairwell spaces are sterile spaces, which are fire separated from the apartments."</i></p> <p><i>"The fire-isolated stairwell requirement is not a BCA Part D requirement, only for AS2419 Internal fire hydrants in SA requirement."</i></p> <p><i>"The provision of a non-required upgraded fire detection system in SOU's with connection to central fire panel with private monitoring, will provide earlier warning for SAMFS attendance to the site."</i></p>		
<p align="center">MFS Comment</p> <p>The MFS supports this <i>Performance Solution</i> and considers that the abovementioned <i>Performance Solution</i> is commensurate with the operational fire fighting requirements of the MFS.</p>		

The MFS recommends that all *Performance Solutions* are included on the Essential Safety Provisions schedule.

PROPOSED FIRE SERVICES AND EQUIPMENT

The following fire services and equipment will be provided within the premises:

BCA E1.3 – Fire Hydrants

- Refer Performance Solution #1.
- Installed in accordance with AS 2419.1-2005.
- Water supply to the system is provided via a 100mm fire services connection to the town main in Airlie Avenue
- System booster (2 x 2) is located adjacent the ground floor entry foyer.

BCA E1.4 – Fire Hose Reels

- Installed to serve ground floor carpark in accordance with AS 2441-2005.
- The fire hose reels will be fed off the hydrant supply system.

BCA E1.5 – Sprinklers

- Window drenchers for exposure protection
- Installed throughout in accordance with AS 2118.2-2010
- Dedicated sprinkler control valve assembly (50DN) provided within stair on Level 1 landing.

BCA E1.6 – Portable Fire Extinguishers

- Installed throughout in accordance with NCC / AS 2444-2001.

BCA Spec E2.2a – Automatic Detection System

- Refer Performance Solution #1.
- Installed throughout in accordance with AS 1670.1-2015
- The fire indicator panel (FIP) will be located in the main entrance.
- Thermal devices will be provided to ground floor carpark.
- Smoke detectors located within stairs and common areas to AS16570.1.
- Smoke detectors provided within Apartments, in lieu of AS3786 smoke alarms.
- System to be privately monitored.

BCA E4.2 – E4.8 – Emergency Lighting and Exit Signage

- Installed throughout in accordance with AS 2293.1-2005.
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Specific Operational Requirements

FIREFIGHTING WATER – SUMMARY TABLE				
Sprinkler duty:	n/a		Flow rate of hydrant system:	10 L/s
No. of external hydrants required to flow 10 L/s:	0		Is a combined hydrant & sprinkler system proposed?	N
No. of internal hydrants required to flow 10 L/s?:	1		Combined hydrant & sprinkler flow rate:	n/a L/s
Booster location satisfactory?	Y		No. of 65 mm dia. booster hydrants:	2
Are street plugs utilised?	N		No. of 65mm dia. booster inlets:	2
Are tanks and pumps utilised?	N		No. of 150mm suction connections:	0
Effective tank capacity:	n/a kL		Effective tank duration:	n/a min

ALARMS – SUMMARY TABLE			
Fire system connected to MFS?	N	FIP / bell / strobe location satisfactory	Y
Fire detection (AS 1670.1)?	Y	Extended grid – common areas & paths of egress (AS 1668.1 / BCA)	N
Fire alarms (AS 3786)?	N	EWIS (AS 1670.4) installed?	N
Building Fire Précis required?	N	OWS (AS 1670.1 / BCA) installed?	Y

ADDITIONAL INFORMATION FOR WATER TESTING / COMMISSIONING		
(No on-site fire pumps installed)		
Type Of Test	Location of test	Duty point
Test 1: unassisted FH	Top Floor (disadvantaged)	600 L/min @ 350 kPa
Test 2: boosted FH	Top Floor (disadvantaged)	600 L/min @ 700 kPa

ADDITIONAL COMMENTS

Fire Hydrant System

Block plan to indicate internal hydrants "located within open stairwell"

Automatic Detection System

The MFS recommends that the AS1670.1 smoke detectors located within SOUs be programmed as "non-brigade call" as per AS3786 alarms.

Unless specifically addressed in this document, our comments are made on condition that all other aspects of the building comply with the Deemed-to-Satisfy Provisions of the Building Code of Australia.

SAMFS Policies or Guidelines^(*) applicable to this project are:

- SAMFS Equipment Specification 001 – *Storz Couplings, Adaptors & Reducers* (Version 1.0, 2013)
- Guideline 018 – *Fire Hydrant Systems* (Version C, 2007)
- Guideline 017 – *Fire Hose Reels* (Version A, 2007)

*SAMFS Equipment Specifications, Policies and Guidelines may be downloaded from:

http://www.mfs.sa.gov.au/site/community_safety/commercial/specifications.jsp

http://www.mfs.sa.gov.au/site/community_safety/commercial/policies.jsp

http://www.mfs.sa.gov.au/site/community_safety/commercial/guidelines.jsp

REGULATION 83(4) OF THE SOUTH AUSTRALIAN DEVELOPMENT REGULATIONS 2008

Prior to the issue of a Certificate of Occupancy, any system installed for fire detection, fire fighting or smoke control, should be inspected and/or tested by this Department and a report issued pursuant to Regulation 83 (4), to verify that they perform in a manner compatible with the operational needs of the South Australian Metropolitan Fire Service and are suitable for occupant safety. The MFS levies a charge for these services.

Signed

Date 16 October 2018



FSO Dave Kubler

BE (MN) GDip (FireSafety), AIFireE

Fire Safety Engineer

COMMUNITY SAFETY & RESILIENCE DEPARTMENT

South Australian Metropolitan Fire Service