



ACT
Government



MAINTENANCE OF FIRE PROTECTION SYSTEMS AND EQUIPMENT

FIRE SAFETY GUIDELINE FSG – 05

JUSTICE AND COMMUNITY SAFETY DIRECTORATE
ACT EMERGENCY SERVICES AGENCY
ACT FIRE & RESCUE

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GLOSSARY OF TERMS

Acronym / Term	Definition
ACTF&R	ACT Fire & Rescue
AS	Australian Standard
FDAS	Fire Detection Alarm System.
FIP	Fire Indicator Panel, also referred to as Fire Brigade Panel. The FIP forms part of the FDCIE.
Fire Appliance	<ul style="list-style-type: none"> ○ Any vehicle, equipment, implement or thing used for the prevention, extinguishing or containment of fire or smoke; and ○ Any fire alarm; and ○ Any apparatus for alerting the occupants of a building to a fire or facilitating the evacuation of the building; and ○ Equipment used for the control or evacuation of smoke from a building. ○ Any design element of piece of equipment required as part of a Performance Based Solution or Special Hazard Report to meet the performance requirements of the NCC.
FPAA	Fire Protection Association Australia
NCC	National Construction Code
NZS	New Zealand Standard

1. PURPOSE

1.1. This guideline has been developed by ACT Fire & Rescue (ACTF&R) to:

- advise building owners/occupiers of their legal obligations to maintain building fire protection systems and equipment as stipulated by the Emergencies Act 2004 (ACT), and
- confirm the requirements and expectations that ACTF&R has of building owners/occupiers in relation to these requirements.

2. SCOPE

2.1. This guideline applies to installed fire protection systems and equipment in all class 2 – 9 buildings as categorised by the National Construction Code (NCC) throughout the ACT.

3. THE EMERGENCIES ACT 2004 (ACT)

3.1. Section 95(2)(b) of the Act describes the maintenance requirements for fire protection systems and equipment in the ACT. This section is summarised below.

- Section 95(2)(b) reads:

“The occupier of a premises commits an offence if-

(a) a fire appliance is provided or installed at the premises under a direction under section 92; and

(b) the occupier does not maintain the fire appliance in accordance with a proper maintenance standard.”

- Section 95(7) describes what is meant by ‘proper maintenance standard’:

(7) In this section, proper maintenance standard means any one of the following:

(a) AS 1851 (Routine service of fire protection systems and equipment) as in force from time to time;

(b) AS/NZS 2293.2 (Emergency evacuation lighting for buildings Inspection and maintenance) as in force from time to time;

(c) a standard approved for the fire appliance as part of a building approval issued for the premises under the Building Act 2004, section 28;

(d) a standard of maintenance prescribed by regulation.

4. REFERENCED STANDARDS

- 4.1. AS 1851 and AS 2293.2 are referenced as the required maintenance standard within the Emergencies Act.
- 4.2. Any reference to AS 1851 or AS 2293.2 is to be taken as referring to the latest edition of those standards including any amendments.

5. RELEVANT FIRE PROTECTION SYSTEMS AND EQUIPMENT

- 5.1. “Fire Appliance” as mentioned in Section 95(2)(b) of the Act is deemed to include all systems and equipment covered by AS 1851 and AS 2293.2 and any design element of piece of equipment required as part of a Performance Based Solution or Special Hazard Report to meet the performance requirements of the NCC.
- 5.2. The definition of “fire appliance” as per the Act includes:
 - a) Any vehicle, equipment, implement, or thing used for the prevention, extinguishing or containment of fire or smoke;
 - b) Any fire alarm;

- c) Any apparatus for alerting the occupants of a building to a fire or facilitating the evacuation of the building;
 - d) Equipment used for the control or evacuation of smoke from a building.
 - e) Any design element or piece of equipment required as part of a Performance Based Solution or Special Hazard Report to meet the performance requirements of the NCC.
- 5.3. Adoption of AS 1851 and AS 2293.2 has provided clarification of the fire protection systems and equipment required to be maintained to those Standards, including;
- o Automatic fire sprinkler systems
 - o Fire pumpsets
 - o Fire hydrant systems
 - o Hydrant valves
 - o Water storage tanks for fire protection systems
 - o Fire detection and alarm systems
 - o Special hazard systems
 - o Delivery lay flat fire hose
 - o Fire hose reels
 - o Portable and wheeled fire extinguishers
 - o Fire blankets
 - o Passive fire and smoke systems
 - o Fire and smoke control features of mechanical services
 - o Emergency planning in facilities
 - o Emergency escape lighting and exit signs
- 5.4. For any item, design element or thing that forms part of a Performance Based Solution or Special Hazard Report and does not have maintenance requirements specified within AS 1851 or AS 2293.2 the required standard of maintenance is as per the requirements of the Performance Based Solution or Special Hazard Report.

6. FIRE SAFETY SCHEDULE

- 6.1. The fire safety schedule is a record of all the fire safety systems contained within the building. This will vary between buildings. The fire safety schedule must specify each of the fire protection systems and or fire safety measures that apply to the building. The schedule must specify the relevant design standard of the system and the installation date of the system. An example fire safety schedule template is provided in appendix 1.

7. BASELINE DATA

- 7.1. Results of routine service activities required under AS 1851 may require verification against baseline data. AS 1851 recognizes that baseline data is not consistently available for all buildings however ACTF&R expects building owners and maintenance providers to make concerted efforts to compile this data where required.

8. COMPETENCE OF MAINTENANCE PERSONNEL

- 8.1. It is important that maintenance of building fire protection systems and equipment is carried out by competent persons. ACTF&R recognises that holding relevant nationally recognized units of competency from the Australian Qualification Framework (AQF) is an appropriate way to demonstrate competence regarding the maintenance of fire protection systems and equipment. Appropriate national accreditation schemes may also demonstrate the required level of competency. Accreditation schemes will generally ensure that accredited practitioners have the relevant qualifications, are experienced, have adequate insurance and adhere to a code of conduct.
- 8.2. It is the responsibility of building owners and their delegated representatives to ensure that individuals undertaking maintenance of their buildings fire protection systems and equipment are competent. Using accredited practitioners is recommended to help in achieving this outcome.

9. MAINTENANCE RECORDS AND YEARLY CONDITION REPORTS

- 9.1. Records of maintenance (electronic or hard copy) must be kept by the building owner or their delegated representative as per the Standards, with the exception of those described in 9.2 below. These records including the fire safety schedule, logbooks, summary records and yearly condition reports are to be available for inspection by ACTF&R within 48 hours following request. That these documents are made available for inspection by ACTF&R is mandatory under Section 101(f) of the Act.
- 9.2. Hard copy logbooks kept on site so as to comply with section 1.16.6 of AS 1851 are not required to include details described in section 1.16.3 (d), those being;
(d) Each activity performed, including recorded results if required, and 'pass' or 'fail' as appropriate.
These details however, must be made available to ACTF&R on request as per 9.1 above.

10. ACTF&R INSPECTIONS

- 10.1. Under Section 104 of the Act ACTF&R are entitled to at any time, enter premises to find out whether the premises comply with any relevant fire & safety requirements, maintenance or testing requirements in the National Construction Code or any standard applying to the premises under Territory law.

10.2. Under Section 101(g) of the Act the occupier, or anyone at the premises is required to provide reasonable assistance to an inspector on request.

10.3. Wherever possible ACTF&R Inspectors will contact building owners/occupiers prior to any planned inspections.

11. DEFECT REPORTING AND RECTIFICATION

11.1. In accordance with the procedure outlined in AS 1851 the following applies to all fire protection systems and equipment installed in a building.

- The building owner or their nominated representative must be notified of critical defects before the maintenance service provider leaves site, or where this cannot be achieved, as soon as possible. Written confirmation of critical defects shall be provided within 24 hours.
- Non-critical defects, non-conformances and out of tolerance activities will be communicated in writing to the building owner by the maintenance service provider within one week.

It is the building owner's responsibility to rectify any identified defects. Critical defects should be rectified with the minimum of delay. Non-critical defects and non-conformances should be rectified or resolved as soon as practicable.

- ACTF&R must be notified in writing to ACTFRFireMaintenance@act.gov.au of all critical defects as soon as practicable after the defect being identified.

11.2. ACTF&R is committed to working collaboratively with building owners and maintenance service providers to negotiate realistic pathways towards rectification of defects and non-conformances. Any such negotiated pathways will be subject to improvement notices issued under Section 87 of the Act. Please contact ACTFRFireSafety@act.gov.au to pursue this process.

12. FURTHER INFORMATION

12.1. If you require further information regarding the requirements to maintain fire protection systems and equipment in your building ACTF&R recommends consulting an appropriately qualified person specializing in building fire safety systems.

12.2. Any questions regarding this guideline should be emailed to ACTFRFireMaintenance@act.gov.au for clarification.

Related forms and documents

Related legislation and documents	
Building Act 2004 (ACT)	Section 28
Emergencies Act 2004 (ACT)	Section 95
National Construction Code (NCC)	Building Code Australia Volume 1
AS 1851 2012	Routine service of fire protection systems and equipment
AS 2293.2 - 1995	Emergency escape lighting and exit signs for buildings, Inspection and maintenance
FPAA Good Practice Guide 05	Baseline Data for Routine Service of Fire Protection Systems

APPENDIX 1 – FIRE SAFETY SCHEDULE

- The schedule provided below is notional only. Fire safety measures must be specific to the building.
- Year of standards and codes must include the relevant year version at the time of building approval.

Fire safety measures	Proposed standard of performance	Required Maintenance standard	Install Year
Performance Solution	Any requirement specified in a performance solution related to the acceptance of a departure to the deemed-to-satisfy (DTS) provisions of the NCC addressed in the report	List Performance Solution requirements and relevant maintenance schedule	
Access Panels, doors and hoppers to fire resisting shafts	NCC C4D14 and AS 1905.1-2015	AS 1851-2012 – section 12	
Atriums	NCC specification 12 (fire doors) NCC specification 31 (wall-wetting sprinkler system) NCC specification 17 (sprinklers) NCC specification 31 (fire and smoke control) AS 1668.1:2015 (smoke control), AS 1670.1:2018 (fire detection and alarm) and AS 1670.4:2018 (emergency warning and intercom system)	AS 1851-2012 – as applicable	
Air pressurising systems	NCC E2D3, E2D4, spec 20 and AS/NZS 1668.1-2015	AS 1851-2012 – section 13	
Automatic fail safe devices	NCC part C4, NCC S12C1-S12C6, NCC D3D24, D3D26, specification 17, AS1670.1-2018	Periodic inspection as per relevant standard of installation, manufactures specification, however no less than annual inspection	
Automatic fire suppression system (sprinkler)	NCC E1D4-E1D13, spec 17, AS 2118.1-2017, AS 2118.4-2012 or AS 2118.6-2012	AS 1851-2012 – section 2	
Building occupant warning system	NCC S20C7 of specification 20, AS 1670.1:2018	AS 1851-2012 – section 6	

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Fire safety measures	Proposed standard of performance	Required Maintenance standard	Install Year
Construction joints	NCC C4D16 and AS 1530.4-2014	AS 1851-2012 – section 12	
Doors and doorways	NCC D3D24, D3D25 and D3D26	Inspection every three months to ensure doors are intact, operational and fitted with conforming hardware	
Emergency evacuation plan	AS 3745:2010 and AS 4083:2010	AS 1851-2012 – section 14	
Emergency lifts	NCC E3D5	Periodic inspection as per relevant standard of installation, manufactures specification, however no less than annual inspection	
Emergency lighting	NCC E4D2, E4D4 and AS/NZS 2293.1:2018	AS 2293.2-1995	
Emergency Warning and Intercom system (EWIS)	NCC E4D9, AS 1670.4:2018	AS 1851-2012 – section 6	
Exit and directional signs	NCC E4D5, E4D6, E4D7 (class 2 and 3), E4D8 and AS/NZS 2293.1:2018	AS 2293.2-1995	
Fire blankets	AS 2444-2001, AS/NZS 3504-2006	AS 1851-2012 – section 10	
Fire control centres (or rooms)	NCC E1D15 and specification 19	Annual inspection to ensure compliance of construction and contents with NCC nominated at time of building approval	
Fire dampers	NCC C4D13, C4D15, AS 1668.1:2015, AS 1668.2:2012, AS 1682.1:2015, AS 1682.2:2015	AS 1851-2012 – section 12	
Fire doors	NCC spec 12, AS 1905.1-2015	AS 1851-2012 – section 12	
Fire hose reel system	NCC E1D3 and AS 2441:2005	AS 1851-2012 – section 9	
Fire hydrant systems (including mains, pumpset and booster)	NCC E1D2 and AS 2419.1-2005	AS 1851-2012 – section 4	

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Fire safety measures	Proposed standard of performance	Required Maintenance standard	Install Year
Fire pumpsets	NCC E1D2 and AS 2419.1-2005 and NCC E1D4, spec S17C7, AS 2118.1-2017, AS 2118.4-2012 or AS 2118.6-2012	AS 1851-2012 – section 3	
Fire-rated lift landing doors	NCC C4D11 and AS 1735.11-1986	Periodic inspection as per manufacturers specification, however no less than annual inspection	
Protection of penetrations in fire resisting elements	NCC C4D13, C4D15, spec S13C1-SC13C7, AS 1530.4-2014 and AS 4072.1-2005	AS 1851-2012 – section 12	
Fire service controls	NCC E3D9	Periodic inspection as per manufacturers specification, however no less than annual inspection	
Fire shutters	NCC specification 12 and AS 1905.2-2005	AS 1851-2012 – section 12	
Fire windows (including windows that are automatic or permanently fixed in position)	NCC specification 12 and tested prototype	AS 1851-2012 – section 12	
Lightweight construction	NCC C2D9 and specification 6	AS 1851-2012 – section 12	
Mechanical air handling systems	NCC E2D3, specification 21, AS 1668.1:2015	AS 1851-2012 – section 13	
Paths of travel to and discharge from an exit	NCC section D	Inspection every three months to ensure there are no obstructions and no alterations	
Perimeter vehicle access for emergency vehicles	NCC C3D4 and/or C3D5 as appropriate	Annual inspection to ensure that unobstructed access to buildings and firefighting facilities are maintained	
Portable fire extinguishers	NCC E1D14, AS 2444-2001	AS 1851-2012 – section 10	

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Fire safety measures	Proposed standard of performance	Required Maintenance standard	Install Year
Safety curtains in proscenium openings	NCC I4D8 and I4D15	AS 1851-2012 – section 12	
Smoke Control System	NCC E2D3, AS 1668.1:2015 and specs 21 and/or 31, AS/NZS 1668.1-2015	AS 1851-2012 – section 13	
Smoke dampers	NCC specification 11, AS/NZS 1668.1-2015, AS1682.1-2015 and AS 1682.2-2015	AS 1851-2012 – section 12	
Smoke doors	NCC C3D6, specs 11 and 12	AS 1851-2012 – section 12	
Smoke separation	NCC C3D6, C3D15, D2D12, D3D8, specs 11 and 12	AS 1851-2012 – section 12	
Solid core doors	NCC C4D12	Annual Inspection for damage, deterioration, and check operation of closers, handles and/or electronic strikes.	
Special Hazards	Services required under NCC E1D17 – provision for special hazards. Services required under NCC E2D21 – provision for special hazards.	Special Hazards	
Stand-by power systems	NCC S31C20 of specification 31	Periodic inspection as per manufacturers specification, however no less than six monthly inspection.	
Structural fire resistance	NCC S5C1-S5C25, AS 3600-2018, AS 3700-2018, AS 4100-1998 (as appropriate)	AS 1851-2012 – section 12	
Wall wetting sprinkler and drencher systems	NCC C4D5, C4D9, C4D12, D2D12, D2D13, D2D17, Spec 14, S31C5 and AS 2118.2-2010 and / or AS 2118.1:2017	AS 1851-2012 – section 2	
Warning and operational signs	Section 108 of EP&A (Development Certification and Fire Safety) Regulation 2021 NCC E3D4 (lifts) NCC NSW D3D24(2)(e)(iii) (notices on doors in sight of audience) NCC specification 19 (fire control room) NCC D2D22 (access to lift pits) Building Act 2004, ACT D1.101 (notices on fire isolated stairs) NCC D3D28 (signs on exit doors) NCC specification 31 (atrium evac area)	Warning and operational signs	

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Fire safety measures	Proposed standard of performance	Required Maintenance standard	Install Year
Water tanks	Bolted steel circular and rectangular water tanks for the storage of water for fire protection systems shall be in accordance with AS 2304-2019	AS 1851-2012 – section 5	



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