

Minister's Specification SA 76

Maintenance and testing of essential safety provisions

2015 edition – Including Amendment 1



Government of South Australia

Department of Planning,
Transport and Infrastructure

Amendment 1 – editorial corrections and amendments to align with National Construction Code 2019 (May 2019)

Published by:

Building Policy Unit
Department of Planning, Transport and Infrastructure

1. PREFACE

This Specification should be read in conjunction with the requirements of regulation 76 of the Development Regulations 2008 (Regulations).

2. SCOPE

This specification sets out the standards or other requirements for the installation, maintenance and testing of items classed as *essential safety provisions* as defined in Schedule 1 of the Regulations. It establishes a Performance Requirement for the maintenance of *essential safety provisions* and sets out a menu of deemed-to-satisfy maintenance and testing standards for achieving the Performance Requirement.

2.1 Performance requirement

Essential safety provisions (ESPs) in buildings must continue to be capable of performing to a standard no less than the standard they were originally required to achieve.

2.2 Deemed-to-satisfy maintenance routines

Regulation 76(6) of the Regulations requires building owners to ensure that maintenance and testing of *ESPs* installed in buildings is carried out in accordance with this specification. Maintenance and testing fully carried out in accordance with the maintenance standards or other requirements listed in column 3 of section 3 of this specification, are deemed-to-satisfy Performance Requirement 2.1 above and the requirements of regulation 76.

A reference to 'maintenance' in the Regulations and this specification includes replacing the essential safety provisions and keeping records relating to the carrying out of maintenance work on the safety provisions.

Appendix C – RECORDS provides further information about keeping records of maintenance procedures carried out on *ESPs*. Australian Standard AS 1851, which is referenced herein for the routine service of fire protection systems and equipment, specifies the routine service records and condition reports that must be produced and retained in relation to maintenance and testing procedures carried out to comply with the standard.

2.3 Schedule of essential safety provisions (Form 1, Schedule 16 of the Development Regulations)

Regulation 76(4) requires a *council*, private certifier or the State Commission Assessment Panel (as relevant) to issue a Form 1 schedule of *ESPs* when-

- Issuing a *building rules consent* for a building in which *ESPs* are installed or required to be installed; or
- Assigning a change of classification (no building work) for a building in which *ESPs* are installed; or
- A building owner applies for a new schedule to be issued for a building in which *ESPs* are installed (fee payable); or
- Issuing any certification of compliance with the *Building Rules* for a building in which *ESPs* are installed or required to be installed.

A Form 1 schedule must -

- list all the *ESPs* for the building (ie installed or to be installed); and
- list the maintenance and testing standards or requirements that must be undertaken to ensure that the listed *ESPs* will continue to meet Performance Requirement 2.1 of this specification.

Relevant deemed to satisfy installation standards referenced in the National Construction Code (NCC) that apply to *ESPs* are tabulated in column 2 of section **3 SCHEDULE OPTIONS** of this specification.

These installation standards set the required performance benchmarks for those *ESPs* and it is this performance that must be maintained under Performance Requirement 2.1 of this specification. Baseline data for *ESPs*, such as water supply details, pump test flow and pressure data, pressure settings etc (which must be maintained in order to achieve the required performance), can be identified from the relevant installation standards that apply to the *ESPs* (as listed on a Form 1 schedule issued by the *relevant authority* with a development approval).

The scheduled forms issued with the *building rules consent* for a new building must therefore only list the *ESPs* that form part of the *building rules consent*, the installation standards relevant to those items and the maintenance required to maintain their performance.

Owners of existing buildings can apply to the *council* or a private certifier to have a new Form 1 schedule issued if they wish to switch to using the maintenance and testing routines listed in this specification (eg to use the AS 1851 routines for fire protection).

Appendix A – PERFORMANCE SOLUTIONS provides additional guidance on criteria to be considered when preparing Form 1 schedules for Performance Solutions.

Appendix B - EXISTING BUILDINGS provides further information about the issuing of Form 1 schedules for alterations and additions to existing buildings.

2.4 Certificate of compliance with essential safety provisions (Form 2, Schedule 16 of the Development Regulations)

When building work is being undertaken, the building owner is required under regulation 76 (5) to provide a Form 2 certificate of compliance to the *council* as soon as is reasonable after installation, to verify that each *ESP* listed on the Form 1 schedule has been installed in compliance with the relevant approval and installation standards.

A Form 2 certificate of compliance must be signed by the installer of the safety provision or if the installer is a company, by the manager responsible for the installation work. If more than one installer is involved in the installation of the scheduled safety provisions, certification will need to be obtained from each of the installers (or their company managers) for their particular installation or part of the work. These certificates can then be attached to the Form 2 certificate of compliance submitted to *council*.

2.5 Certificate of compliance with maintenance procedures (Form 3, Schedule 16 of the Development Regulations)

Regulation 76(7) requires a building owner to provide adequate annual proof to the relevant *council* that maintenance and testing has been carried out in accordance with this specification on all *ESPs* listed in the Form 1 schedule issued by the *relevant authority* for the building, during the year. A Form 3 certificate of compliance signed by the owner or manager of the building complies with this requirement.

If a building owner fails to provide annual proof (Form 3 certification) to the *council* that the *ESPs* in that building have been maintained and tested as required, the *council* has the power to take enforcement action and may revoke a Certificate of Occupancy under regulation 83(9)(c).

A Form 3 certificate of compliance is not required for the following buildings (unless the building has been the subject of a notice under section 71 of the *Development Act 1993 (Act)*, or the *ESPs* have been installed under a condition arising from a variance with the Performance Requirements of the NCC -

- a Class 1b building; or
- a Class 2 building that does not have a rise in storeys exceeding 3, and does not have a floor area exceeding 2000 m²; or
- a Class 3, 4, 5, 6, 7, 8, or 9b building that does not have a rise in storeys exceeding 2 and does not have a floor area exceeding 500 m².

2.6 Schedule options for Forms 1, 2 and 3

Section 3 of this specification outlines a menu of **SCHEDULE OPTIONS** that **must** be customised by the *relevant authority* to suit each individual development when completing Forms 1, 2 and 3 to meet the requirements of regulation 76 of the Regulations.

Column 1 of the **SCHEDULE OPTIONS** lists *ESPs* that must be maintained and tested. Only the *ESPs* that are relevant to a particular building should be listed on the relevant forms.

Column 2 of the **SCHEDULE OPTIONS** lists the deemed-to-satisfy installation standards currently called up in the NCC for the installation of new *ESPs*. These standards establish the baseline data and level of performance required for each of the *ESPs* at installation. A Form 2 certificate of compliance submitted by the building owner to the *council* must verify that all *ESPs* listed on a Form 1 schedule have been installed in compliance with the relevant installation standards listed in column 2 or otherwise approved as part of the *building rules consent*.

Column 3 of the **SCHEDULE OPTIONS** lists maintenance and testing standards and requirements that are deemed to comply with Performance Requirement 2.1 of this specification. A *relevant authority* may select the appropriate maintenance and testing standards or requirements from column 3 or they may nominate on a Form 1 schedule any other appropriate maintenance standards that are deemed to satisfy the Performance Requirement. It is then the responsibility of the building owner to ensure that maintenance and testing is carried out in accordance with the standards or requirements listed on the Form 1 schedule and that the corresponding Form 3 certification is submitted after the end of each calendar year to *council* as required by regulation 76(7).

Column 4 of the **SCHEDULE OPTIONS** is provided for information only. It is included to give building owners some indication of the frequency of maintenance and testing routines specified in the standards listed in column 3 of the **SCHEDULE OPTIONS**, and to elaborate on other requirements listed in column 3.

Note 1 - For *ESPs* approved and installed prior to the adoption of this specification, different installation standards to those listed in column 2 may have applied. Therefore, when a new Form 1 schedule is issued for a building, the building owner may need to identify those installation standards in order to ascertain the baseline data that applied and needs to be maintained to ensure ongoing performance of those *ESPs*.

Note 2 - For additions and alterations to existing buildings, a new Form 1 schedule can be issued to include all existing and any additional *ESPs*. Refer to Appendix B2.2 for circumstances under which a Supplementary Form 1 schedule may be issued by the *relevant authority*.

2.7 Definitions

For the purposes of this specification, the following definitions apply:

Act means the *Development Act 1993*.

Building Rules has the same meaning as defined in section 4 of the *Development Act 1993*

Building rules consent has the same meaning as defined in section 4 of the *Development Act 1993*

Council has the same meaning as defined in section 4 of the *Development Act 1993*.

Essential safety provisions has the same meaning as defined in Schedule 1 of the Development Regulations 2008.

Relevant authority has the same meaning as defined in section 4 of the *Development Act 1993*.

Minister's Specification SA 76 2015 edition
Maintenance and testing of essential safety provisions

3. SCHEDULE OPTIONS

3.1 Structural fire protection and compartmentation

COLUMN 1 - Items to be inspected or tested as nominated by the relevant authority	COLUMN 2 - Deemed to satisfy Installation standards	COLUMN 3 – Standards or other requirements for maintenance and testing of ESPs	COLUMN 4 – Informative (provided for guidance only – refer to standards or other requirements in Column 3 for specific detail)
(a) Fire resistant materials applied to building elements, including intumescent paints, fire protective sprays, coatings and boards.	NCC Volume One - Section C (as applicable)	Annual inspections to check the integrity of fire resistant materials and/or as prescribed in AS 1851, sections 1 and 12.	Check that there is no damage or deterioration to fire resistant materials. Refer table 12.4.2 of AS 1851 for yearly service schedule for materials protecting structural elements.
(b) Fire hazard properties of floor, wall and ceiling linings; floor coverings, air handling ductwork, lift cars, non-required and non-fire isolated stairways or ramps, attachments to internal floors, walls and ceilings, insulation, proscenium curtain and auditorium seating, etc	NCC Volume One - Specification C1.10	Annual inspection to identify any changes to linings and finishes	Check that any new or altered linings and finishes have the required fire hazard properties.
(c) Compartmentation including bounding construction and service penetrations through fire resistant structures (includes fire walls; smoke walls; fire resistant exits, and fire resistant elements such as walls, floors, ceilings, protective coverings, lift shafts, services shafts/ducts, access panels and control joints).	NCC Volume One - Parts C2 and C3 and Specifications C1.1 and C3.15	Annual inspections for damage or deterioration; identify and rectify any non-compliance; and as prescribed in AS 1851, sections 1 and 12 for protection of structural elements.	Check integrity of fire and/or smoke barriers, including all joints, junctions, fire-stopped penetrations and smoke seals. Check that any additional penetrations have been adequately fire stopped. Identify and record any services not permitted in fire-isolated exits (refer NCC Volume One - Clause C3.9) that must be removed. Refer table 12.4.2 of AS 1851 for yearly service schedule for materials protecting structural elements.

Minister's Specification SA 76 2015 edition

Maintenance and testing of essential safety provisions

COLUMN 1 - Items to be inspected or tested as nominated by the relevant authority	COLUMN 2 - Deemed to satisfy Installation standards	COLUMN 3 – Standards or other requirements for maintenance and testing of ESPs	COLUMN 4 – Informative (provided for guidance only – refer to standards or other requirements in Column 3 for specific detail)
(d) Fire doors	NCC Volume One - Clause C3.4 and Specification C3.4; and AS 1905.1	As prescribed in AS 1851, sections 1 and 12.	Refer table 12.4.3.1 of AS 1851 for six monthly service schedule for hinged and pivoted fire resistant door-sets. Refer table 12.4.3.2 of AS 1851 for three monthly and six monthly service schedules for horizontal sliding fire resistant door-sets.
(e) Smoke doors	NCC Volume One - Clause C3.4 and Specification C3.4	As prescribed in AS 1851, sections 1 and 12.	Refer table 12.4.4 of AS 1851 for six monthly service schedules for hinged and pivoted smoke doors (or yearly for private residential apartment entrance doors).
(f) Solid core doors (and required life safety doors)	NCC Volume One - Clause C3.11	Six monthly inspections of door and door hardware to check for damage or deterioration and to ensure correct operation of door, closer and latch.	
(g) Fire shutters	NCC Volume One - Specification C3.4; and AS 1905.2 for steel shutters	As prescribed in AS 1851, sections 1, 12 and 13.	Refer table 12.4.5 of AS 1851 for yearly service schedule for fire shutters. Refer tables 13.4.1.13 and 13.4.1.14 for six monthly and yearly service schedules for mechanical operation if relevant.
(h) Fire windows	NCC Volume One - Clause C3.4 and Specification C3.4	As prescribed in AS 1851, sections 1, 12 and 13.	Refer table 12.4.6 of AS 1851 for yearly service schedule for fire rated glazing Refer tables 13.4.1.13 and 13.4.1.14 for six monthly and yearly service schedules for mechanical operation if relevant.
(i) Proscenium curtains and walls	NCC Volume One - Specification H1.3	Six monthly inspections to check integrity of curtains. In addition, for curtain and curtain operation, as prescribed in AS 1851, sections 1 and 13.	Checking integrity includes checking that there is no damage or deterioration to the curtain or curtain operation and that there is minimal smoke leakage around the perimeter of the curtain when lowered. Refer tables 13.4.1.11 and 13.4.1.12 of AS 1851 for six monthly and yearly routines for mechanical operation of curtains.

Minister's Specification SA 76 2015 edition

Maintenance and testing of essential safety provisions

COLUMN 1 - Items to be inspected or tested as nominated by the relevant authority	COLUMN 2 - Deemed to satisfy Installation standards	COLUMN 3 – Standards or other requirements for maintenance and testing of ESPs	COLUMN 4 – Informative (provided for guidance only – refer to standards or other requirements in Column 3 for specific detail)
(j) Fire sprinklers for protection of openings	<p>1. NCC Volume One - Clause C3.4 and relevant parts of AS 2118.1 or AS 2118.2.</p> <p>2. NCC Volume One – Clause C3.11 and relevant parts of FPAA101D and FPAA 101H.</p>	<p>1. As prescribed in AS 1851, sections 1 and 2 for systems installed to AS 2118</p> <p>2. As prescribed in AS 1851 for components from AS 2118 installed in accordance with FPAA010D or FPAA101H (eg sprinkler heads)</p>	Refer tables 2.4.4.1, 2.4.4.2, 2.4.4.3 and 2.4.4.4 of AS 1851 for monthly, six monthly, yearly and five yearly service schedules for deluge and water spray systems.
(k) Fire sprinklers for protection of curtain or panel walls	NCC Volume One - Clause 2.5 of Specification C1.1 and AS 2118.1 or AS 2118.2 as appropriate	As prescribed in AS 1851, sections 1 and 2.	Sprinklers may be installed as part of a full sprinkler system or form a stand-alone system and must be inspected and maintained to the relevant parts of AS 1851 that apply to that system.
(l) Proscenium curtain deluge system	NCC Volume One - Specification H1.3 and. AS 2118.1 and AS 2118.3. AS 1670.1 (for electrical detection components).	As prescribed in AS 1851 sections 1, 2 and 6 as relevant.	Control and actuation of deluge system may be via multiple jet control, wet pilot or fire/smoke detectors, therefore refer to relevant parts of AS 1851 for applicable service requirements.
(m) Fire and smoke curtains generally (including at atrium roof).	In accordance with approved documents	<p>Six monthly inspections to check integrity of curtains.</p> <p>In addition, for curtain and curtain operation, as prescribed in AS 1851, sections 1 and 13.</p>	<p>Checking integrity includes checking that there is no damage or deterioration to the curtain or curtain operation and there is minimal smoke leakage around the perimeter of the curtain (check overlapping and edge sealing).</p> <p>Refer tables 13.4.1.11 and 13.4.1.12 of AS 1851 for six monthly and yearly routines for mechanical operation of fire curtains and smoke curtains.</p>
(n) Performance solutions – structural fire protection and compartmentation	As approved by the <i>relevant authority</i> (insert details on Form 2)	As approved by the <i>relevant authority</i> (insert details on Forms 1 and 3).	Refer to Appendix A of this specification for information on performance solutions.

Minister's Specification SA 76 2015 edition
Maintenance and testing of essential safety provisions

3.2 Means of egress

COLUMN 1 - Items to be inspected or tested as nominated by the relevant authority	COLUMN 2 - Deemed to satisfy Installation standards	COLUMN 3 – Standards or other requirements for maintenance and testing of ESPs	COLUMN 4 – Informative (provided for guidance only – refer to standards or other requirements in Column 3 for specific detail)
(a) Exits and paths of travel to exits including doors, doorways, operation of latches (including automatic closing or unlocking devices), ramps, stairways and clearance from obstructions.	NCC Volume One - Section D (as applicable) and section G (as applicable)	Three monthly inspection of exits and paths of travel to exits to check their ongoing compliance and ensure there are no impediments that could delay or prevent occupants evacuating to a safe place in an emergency.	Inspections should include checking the following (as applicable)- <ul style="list-style-type: none"> • exits and paths of travel to exits remain unblocked (including at the point of discharge) ; • there are no unprotected installations in exits or paths of travel to exits and protection of openable windows has not been damaged or removed; • exits are not lockable from the inside and are readily openable by a single downward action on a single device without a key from the side that faces a person seeking egress, unless fail-safe devices are fitted and are operational; • barriers or bollards protecting paths of travel and exits remain in place; • separation of rising and descending flights and any associated signage is maintained; • spaces under fire isolated stairs or ramps are not enclosed or used to store goods or materials of any kind unless they are enclosed with fire resistant construction; • spaces under fire isolated stairs or ramps are not enclosed or used to store goods or materials of any kind unless they are enclosed with fire resistant construction; • slip resistant surfaces of stair treads and nosings have not been damaged or removed; and • tactile ground surface indicators have not been damaged or removed.
(b) Performance solutions – means of egress	As approved by the <i>relevant authority</i> (insert details on Form 2).	As approved by the <i>relevant authority</i> (insert details on Forms 1 and 3).	Refer to Appendix A of this specification for information on performance solutions.

Minister's Specification SA 76 2015 edition

Maintenance and testing of essential safety provisions

3.3 Signs

COLUMN 1 - Items to be inspected or tested as nominated by the <i>relevant authority</i>	COLUMN 2 - Deemed to satisfy Installation standards	COLUMN 3 – Standards or other requirements for maintenance and testing of <i>ESPs</i>	COLUMN 4 – Informative (provided for guidance only – refer to standards or other requirements in Column 3 for specific detail)
(a) Warning signs concerning use of lifts in the event of fire	NCC Volume One - Clause E3.3	Check annually that warning signs are not damaged and continue to be clearly visible to persons approaching the lift.	Check for damage and visibility includes checking that wording and word size still comply.
(b) Illuminated exit signs (including internally and externally illuminated exit signs)	NCC Volume One - Clauses E4.5 and E4.8; and AS 2293.1	<p>Check monthly that exit signs are not damaged and continue to be clearly visible to persons approaching the exit.</p> <p>In addition, six monthly and yearly procedures as prescribed in AS/NZS 2293.2 sections 2 or 3 as relevant to the type of system (a single point or central system).</p>	<p>Refer sections 2.1, 2.2 and 2.3 of AS/NZS 2293.2 - six monthly and yearly procedures for central systems (system where a number of emergency exit signs are supplied from a common power source).</p> <p>Refer sections 3.1, 3.2 and 3.3 of AS/NZS 2293.2 - six monthly and yearly procedures for single point systems (system employing only self-contained exit lights).</p> <p>Refer section 3.4 of AS/NZS 2293.2 for battery replacement.</p>
(c) Photo luminescent exit signs	NCC Volume One - Clauses E4.5 and E4.8 and Specification E4.8	Check monthly that exit signs are clean, not damaged, have sufficient lighting levels in the vicinity of the sign to facilitate 'charging', and continue to be clearly visible to persons approaching the exit.	
(d) Identification signage on fire doors and smoke doors; signs on egress doors leading from fire-isolated passageways; signs and audible and visual alarms on sliding fire doors; chevron stripes identifying exits	NCC Volume One - Clauses D2.23 and C3.6 (and/or as approved by the <i>relevant authority</i>).	Check door signage six monthly to ensure signs are not damaged and continue to be clearly visible to persons approaching the doorway or exit.	<p>Refer to items 3.1(d) and (e) for maintenance of fire and smoke door signage.</p> <p>Refer to item 3.8(e) for maintenance of building occupant warning systems for green flashing luminaires associated with chevron stripes, if applicable.</p>

Minister's Specification SA 76 2015 edition

Maintenance and testing of essential safety provisions

COLUMN 1 - Items to be inspected or tested as nominated by the relevant authority	COLUMN 2 - Deemed to satisfy Installation standards	COLUMN 3 – Standards or other requirements for maintenance and testing of ESPs	COLUMN 4 – Informative (provided for guidance only – refer to standards or other requirements in Column 3 for specific detail)
(e) Performance solutions – signs	As approved by the <i>relevant authority</i> (insert details on Form 2)	As approved by the <i>relevant authority</i> (insert details on Forms 1 and 3).	Refer to Appendix A of this specification for information on performance solutions.

3.4 Emergency lighting

COLUMN 1 - Items to be inspected or tested as nominated by the relevant authority	COLUMN 2 - Deemed to satisfy Installation standards	COLUMN 3 – Standards or other requirements for maintenance and testing of ESPs	COLUMN 4 – Informative (provided for guidance only – refer to standards or other requirements in Column 3 for specific detail)
(a) Emergency lighting	NCC Volume One - Clause E4.2 and E4.4 and AS 2293.1.	Check power availability monthly. In addition, six monthly and yearly procedures as prescribed in AS/NZS 2293.2 sections 2 or 3.	Refer sections 2.1, 2.2 and 2.3 of AS/NZS 2293.2 - six monthly and yearly procedures for central systems (system where a number of emergency lighting luminaires are supplied from a common power source). Refer sections 3.1, 3.2 and 3.3 of AS/NZS 2293.2 - six monthly and yearly procedures for single point systems (system employing only self-contained emergency lighting luminaires).
	NCC Volume Two - Clause 3.7.2.5 for Class 1b buildings, and clause G1.2 for cool rooms, strongrooms etc.	Check power availability and light functionality monthly. For cool rooms and strongrooms, also check that the associated indicator lamp and the alarm positioned outside the chamber are functioning.	
(b) Performance solutions – emergency lighting	As approved by the <i>relevant authority</i> (insert details on Form 2)	As approved by the <i>relevant authority</i> (insert details on Forms 1 and 3).	Refer to Appendix A of this specification for information on performance solutions.

Minister's Specification SA 76 2015 edition
Maintenance and testing of essential safety provisions

3.5 Fire-fighting services and equipment

COLUMN 1 - Items to be inspected or tested as nominated by the relevant authority	COLUMN 2 - Deemed to satisfy Installation standards	COLUMN 3 – Standards or other requirements for maintenance and testing of ESPs	COLUMN 4 – Informative (provided for guidance only – refer to standards or other requirements in Column 3 for specific detail)
(a) Fire pump sets	Section 6 of AS 2419.1; sections 4 and 12 of AS 2118.1; AS 2941; FPAA101D and FPAA101H	<ol style="list-style-type: none"> As prescribed in AS 1851, sections 1 and 3. As prescribed in AS 1851 for components from AS 2118 installed in accordance with FPAA101D or FPAA101H. 	Refer tables 3.4.1, 3.4.2, 3.4.3 and 3.4.4 of AS 1851 for monthly, six monthly, yearly and five yearly service schedules.
(b) Water storage tanks for fire protection systems.	NCC Volume One - Part E1, AS 2118 and AS 2419.1. SA E1.3 and Table SA E1.3 and SA Fire Authorities' Policy No 14 where applicable.	As prescribed in AS 1851, sections 1 and 5.	Refer tables 5.4.1, 5.4.2, 5.4.3, and 5.4.4 of AS 1851 for monthly, six monthly, yearly and ten yearly service schedules.
(c) Fire hydrant installations, including fire mains and booster assemblies	NCC Volume One - Clause E1.3; AS 2419.1; FPAA101D and FPAA101H	<ol style="list-style-type: none"> As prescribed in AS 1851, sections 1 and 4. As prescribed in AS 1851 for components from AS 2118 installed in accordance with FPAA101D or FPAA101H. 	Refer tables 4.4.1, 4.4.2, 4.4.3 and 4.4.4 of AS 1851 for monthly, six monthly, yearly and five yearly service schedules.
(d) Street hydrants	NCC Volume One - Clause E1.3; and AS 2419.1, clause 2.1.1.	Annual verification of hydrant location.	Supply and maintenance by relevant water authority.
(e) Fire control centres and rooms	NCC Volume One - Specification E1.8.	Annual inspection for ongoing compliance with construction and content requirements.	Check that any additional installations comply and that the ambient sound level within the fire control centre/room does not exceed the max allowable level when all fire safety equipment is operating.
(f) Fire hose reels	NCC Volume One - Clause E1.4; and AS 2441.	As prescribed in AS 1851, sections 1 and 9.	Refer tables 9.4.1 and 9.4.2 of AS 1851 for six monthly and yearly service schedules.

Minister's Specification SA 76 2015 edition
Maintenance and testing of essential safety provisions

COLUMN 1 - Items to be inspected or tested as nominated by the relevant authority	COLUMN 2 - Deemed to satisfy Installation standards	COLUMN 3 – Standards or other requirements for maintenance and testing of ESPs	COLUMN 4 – Informative (provided for guidance only – refer to standards or other requirements in Column 3 for specific detail)
(g) Portable fire extinguishers	NCC Volume One – Clause E1.6, Table E1.6; and AS 2444	As prescribed in AS 1851, sections 1 and 10 and check annually that no additional risks have arisen due to the changed nature or quantity of materials stored, displayed or used in the building.	Refer tables 10.4.1, 10.4.2 and 10.4.3 of AS 1851 for six monthly yearly and five yearly service schedules.
(h) Fire sprinkler installations	NCC Volume One – Clause E1.5, Table E1.5, Specification E1.5, Specification E1.5a, Clause G3.4, G3.8 and Specification G3.8 for atriums and the relevant part of either AS 2118.1, AS2118.4 or AS 2118.6 or FPAA101D or FPAA101H G3.4, G3.8 and Specification G3.8 for atriums	<ol style="list-style-type: none"> As prescribed in AS 1851, sections 1 and 2 for systems installed to AS 2118. As prescribed in AS 1851 for components from AS 2118 installed in accordance with FPAA101D or FPAA101H. <p>Where specialist systems are installed, check the relevant building and occupancy constraints are maintained (refer to (j) below).</p>	<p>For wet pipe systems –</p> <p>Refer tables 2.4.2.1, 2.4.2.2, 2.4.2.3 and 2.4.2.4 of AS 1851 for monthly, six monthly, yearly, five yearly, ten yearly, twenty five yearly and thirty yearly service schedules.</p> <p>For pre-action systems-</p> <p>Refer tables 2.4.5.1, 2.4.5.2, 2.4.5.3 and 2.4.5.4 of AS 1851 for monthly, six monthly, yearly and five yearly service schedules.</p> <p>For dry pipe systems-</p> <p>Refer tables 2.4.3.1, 2.4.3.2, 2.4.3.3 and 2.4.3.4 of AS 1851 for monthly, six monthly, yearly and five yearly service schedules.</p>
(i) Special hazards fire-fighting systems and equipment	NCC Volume One - Clause E1.10 of Vol 1 of the NCC or as approved by the relevant authority. (This may include various fire extinguishing media and systems in accordance with relevant standards, eg AS 6183 and AS 14520 or other published standards).	For gaseous, aerosol and open nozzle water mist special hazard fire suppression systems - As prescribed in AS 1851, sections 1 and 7 (and section 6 if incorporating electrical detection and control systems).	<p>Refer tables 7.4.2, 7.4.3, 7.4.4 and 7.4.5 of AS 1851 for monthly, six monthly, yearly and ten yearly service schedules for special hazard fire suppression systems.</p> <p>Refer to tables 6.4.1.2, 6.4.1.3 and 6.4.1.4 for monthly, six monthly and yearly service schedules for detection and control parts of special hazard systems if relevant.</p> <p>Refer to section 3.7 (b) below for maintenance of associated special hazard detection and alarm systems.</p>

Minister's Specification SA 76 2015 edition

Maintenance and testing of essential safety provisions

COLUMN 1 - Items to be inspected or tested as nominated by the relevant authority	COLUMN 2 - Deemed to satisfy Installation standards	COLUMN 3 – Standards or other requirements for maintenance and testing of ESPs	COLUMN 4 – Informative (provided for guidance only – refer to standards or other requirements in Column 3 for specific detail)
(j) Occupancy hazards in fire compartments with a floor area >2000 m ² ; or a volume >12000 m ³	NCC Volume One - Clause E1.5 and Table E1.5.	In non-sprinklered compartments, annual inspection to ensure that the occupancy has not changed and become one of excessive fire hazard (as defined in NCC Volume One – Table E1.5 and requiring sprinkler protection).	If the occupancy becomes one of excessive fire hazard, changes must either be made to the occupancy to reduce the fire hazard, or sprinklers installed to address the increased fire risk. Occupancies of excessive hazard are buildings that contain- (i) Hazardous processes or storage (ii) Combustible goods with an aggregate volume exceeding 1000m ³ and stored to a height greater than 4m. Refer to the note 3 of Table E1.5 of Volume One of the NCC for examples of hazardous processes, storage and goods.
(k) Performance solutions – fire-fighting services and equipment	As approved by the <i>relevant authority</i> (insert details on Form 2).	As approved by the <i>relevant authority</i> (insert details on Forms 1 and 3).	Refer to Appendix A of this specification for information on performance solutions.

3.6 Fire and smoke control features of mechanical services

COLUMN 1 - Items to be inspected or tested as nominated by the relevant authority	COLUMN 2 - Deemed to satisfy Installation standards	COLUMN 3 – Standards or other requirements for maintenance and testing of ESPs	COLUMN 4 – Informative (provided for guidance only – refer to standards or other requirements in Column 3 for specific detail)
(a) Essential fans and fan motors	AS/NZS 1668.1 and AS 1668.2.	As prescribed in AS 1851, sections 1 and 13.	Refer tables 13.4.1.2 and 13.4.1.3 of AS 1851 for three monthly and yearly service schedules for fans and motors.
(b) Smoke detectors for smoke control systems	NCC Volume One - Clause E2.2, Specification E2.2a; and AS/NZS 1668.1 or AS 1670 as applicable.	As prescribed in AS 1851, sections 1 and 6.	Refer tables 6.4.2.2 and 6.4.2.3 of AS 1851 for six monthly and yearly service schedules for smoke alarms and heat alarms.

Minister's Specification SA 76 2015 edition

Maintenance and testing of essential safety provisions

COLUMN 1 - Items to be inspected or tested as nominated by the relevant authority	COLUMN 2 - Deemed to satisfy Installation standards	COLUMN 3 – Standards or other requirements for maintenance and testing of ESPs	COLUMN 4 – Informative (provided for guidance only – refer to standards or other requirements in Column 3 for specific detail)
(c) Fire mode operation-			
(i) System changeover in fire mode condition	NCC Volume One - Clause E2.2; or AS/NZS 1668.1 as applicable (or as approved by the <i>relevant authority</i>).	As prescribed in AS 1851, sections 1 and 13.	Refer tables 13.4.2.4 and 13.4.2.5 of AS 1851 for three monthly and yearly routine service schedules for system changeover under fire condition.
(ii) Fire shut down of equipment	NCC Volume One - Clause E2.2; or AS/NZS 1668.1 as applicable	As prescribed in AS 1851, sections 1 and 13.	Refer tables 13.4.2.4 and 13.4.2.5 of AS 1851 for three monthly and yearly service schedules for system changeover under fire conditions and 13.4.2.8 for yearly test and records schedule for fire and smoke control features of mechanical services system shutdown.
(iii) Control of supply and/or return air fans or equipment	AS/NZS 1668.1 (or as approved by the <i>relevant authority</i>).	As prescribed in AS 1851, sections 1 and 13.	Refer tables 13.4.1.2 and 13.4.1.3 of AS 1851 for monthly and yearly routine service schedules for fans and motors.
(iv) Fire mode operation of air dampers for outside air, recycle air, relief air, and zone control dampers for supply and return air (including motorised fire and/or smoke and combination dampers).	AS/NZS 1668.1 (or as approved by the <i>relevant authority</i>).	As prescribed in AS 1851, sections 1 and 13.	Refer tables 13.4.1.5, 13.4.1.6, 13.4.1.7 and 13.4.1.8 of AS 1851 for six monthly and yearly service schedules for air control dampers.
(v) Fire dampers – mechanical and intumescent.	AS 1682 and AS/NZS 1668.1	As prescribed in AS 1851, sections 1 and 13.	Refer table 13.4.1.4 of AS 1851 for yearly service schedule for fire dampers.

Minister's Specification SA 76 2015 edition

Maintenance and testing of essential safety provisions

COLUMN 1 - Items to be inspected or tested as nominated by the relevant authority	COLUMN 2 - Deemed to satisfy Installation standards	COLUMN 3 – Standards or other requirements for maintenance and testing of ESPs	COLUMN 4 – Informative (provided for guidance only – refer to standards or other requirements in Column 3 for specific detail)
(d) Smoke hazard management-			
(i) Automatic air pressurisation for fire-isolated exits and fire-isolated lift shafts.	NCC Volume One - Table E2.2a and AS/NZS 1668.1 (or as approved by the <i>relevant authority</i>).	As prescribed in AS 1851, sections 1 and 13.	Refer tables 13.4.2.2 and 13.4.2.3 of AS 1851 for three monthly and yearly tests and records schedule for fire isolated exit pressurisation systems.
(ii) Smoke exhaust	AS/NZS 1668.1 (or as approved by the <i>relevant authority</i>).	As prescribed in AS 1851, sections 1 and 13.	Refer tables 13.4.2.6, 3.4.2.7 and 13.4.3.4 of AS 1851 for three monthly and yearly tests and records schedule for fire and smoke control features of mechanical services for smoke exhaust systems.
(iii) Smoke curtains, baffles or bulkheads (including concealed voids).	NCC Volume One - Specification E2.2b or as approved by the <i>relevant authority</i>	As prescribed in AS 1851, sections 1 and 13. Annually check curtains and baffles and bulkheads forming smoke reservoirs for damage or deterioration that could compromise its integrity.	Refer tables 13.4.1.11 and 13.4.1.12 of AS 1851 for six monthly and yearly routines for fire curtains and smoke curtains and table 13.4.3.4 for yearly check of smoke reservoirs.
(iv) Smoke and heat vents	NCC Volume One - Specification E2.2c and AS 2665	As prescribed in AS 1851, sections 1 and 13 and check activation.	Refer tables 13.4.1.9 and 13.4.1.10 of AS 1851 for six monthly and yearly service schedules for automatic smoke and heat vents. Check activation by smoke detection system.
(v) Smoke dampers	AS 1682 and AS/NZS 1668.1	As prescribed in AS 1851, sections 1 and 13.	Refer tables 13.4.1.4 of AS 1851 for yearly service schedule for smoke dampers and table 13.4.2.9 for yearly test and records schedule for fire and smoke control features of mechanical services smoke dampers.
(vi) Natural openings (such as windows, doors, panels or the like - applicable only to buildings approved prior to 1 January 1995)	Openings identified and approved by the <i>relevant authority</i> as part of a smoke management system.	Annual inspection for deterioration or damage to ensure they are readily openable and continue to comply with any approval conditions, eg key availability.	

Minister's Specification SA 76 2015 edition

Maintenance and testing of essential safety provisions

COLUMN 1 - Items to be inspected or tested as nominated by the relevant authority	COLUMN 2 - Deemed to satisfy Installation standards	COLUMN 3 – Standards or other requirements for maintenance and testing of ESPs	COLUMN 4 – Informative (provided for guidance only – refer to standards or other requirements in Column 3 for specific detail)
(vii) Make up air provisions, including louvres and automatic doors	NCC Volume One - Specification E2.2b (or as approved by the <i>relevant authority</i>).	As prescribed in AS 1851, sections 1 and 13.	Refer tables 13.4.1.18 and 13.4.1.19 of AS 1851 for six monthly and yearly routine service schedules for outdoor air intakes.
(viii) Provision for special hazards	NCC Volume One - Clause E2.3	Check annually for any changes to the type or quantity of materials stored, displayed or used in the building.	Additional smoke hazard management measures may be necessary due to changes to the type or quantity of materials stored, displayed or used in the building.
(e) Kitchen exhaust systems, including grease filters	NCC Volume One - Clause F4.12, AS/NZS 1668.1 and AS 1668.2.	As prescribed in AS 1851, sections 1 and 13.	Refer tables 13.4.1.16 and 13.4.1.17 of AS 1851 for monthly and yearly routine service schedules for kitchen exhaust systems and 13.4.1.2 and 13.4.1.3 for three monthly and yearly routines for associated fans and motors.
(f) Electric duct heaters	AS/NZS 1668.1	As prescribed in AS 1851, sections 1 and 13.	Refer table 13.4.1.15 of AS 1851 for yearly routine service schedule for electric duct heaters – duct or unit mounted.
(g) Performance solutions – fire and smoke control features of mechanical services	As approved by the <i>relevant authority</i> (insert details on Form 2).	As approved by the <i>relevant authority</i> (insert details on Forms 1 and 3).	Refer to Appendix A of this specification for information on performance solutions.

Minister's Specification SA 76 2015 edition
Maintenance and testing of essential safety provisions

3.7 Microbial and contamination control

COLUMN 1 - Items to be inspected or tested as nominated by the <i>relevant authority</i>	COLUMN 2 - Deemed to satisfy Installation standards	COLUMN 3 – Standards or other requirements for maintenance and testing of <i>ESPs</i>	COLUMN 4 – Informative (provided for guidance only – refer to standards or other requirements in Column 3 for specific detail)
(a) Microbial control in hot water, warm water and cooling water systems such as cooling towers, and the components of evaporative air-cooling equipment	NCC Volume One - Clause F2.7, AS 1668.2 and AS/NZS 3666.1	Maintenance for microbial control is required under other State legislation, ie the <i>SA Public Health Act 2011</i> and the <i>SA Public Health (Legionella) Regulations 2013</i> .	Refer to the <i>SA Public Health (Legionella) Regulations 2013</i> for the maintenance requirements for microbial control in hot water, warm water and cooling systems.
(b) Automatic monitoring of atmosphere contaminants for car-parks and other vehicle enclosures	AS 1668.2	Three monthly inspections to monitor atmospheric contaminants (ie carbon monoxide), recalibrate sensor and check operation of system. Replace sensor interference filter annually. Keep records in accordance with AS 1668.2, Appendix M	
(c) Performance solutions – microbial and contamination control	As approved by the <i>relevant authority</i> (insert details on Form 2).	As approved by the <i>relevant authority</i> (insert details on Forms 1 and 3).	Refer to Appendix A of this specification for information on performance solutions.

Minister's Specification SA 76 2015 edition

Maintenance and testing of essential safety provisions

3.8 Automatic fire detection and alarm systems

COLUMN 1 - Items to be inspected or tested as nominated by the relevant authority	COLUMN 2 - Deemed to satisfy Installation standards	COLUMN 3 – Standards or other requirements for maintenance and testing of ESPs	COLUMN 4 – Informative (provided for guidance only – refer to standards or other requirements in Column 3 for specific detail)
(a) Self contained smoke and heat alarms	NCC Volume One - Specification E2.2a and AS 3786 NCC Volume Two - Clause 3.7.2.2 and AS 3786 for Class 1b buildings	As prescribed in AS 1851, sections 1 and 6.	Refer tables 6.4.2.2 and 6.4.2.3 of AS 1851 for six monthly and yearly service schedules for smoke alarms and heat alarms.
(b) Fire detection and alarm systems	NCC Volume One - Clause E2.2 and Specification E2.2a and AS 1670.; G3.8 and Specification G3.8 for atriums	As prescribed in AS 1851, sections 1 and 6; and NCC Volume 1 Specification E1.5a	Refer tables 6.4.1.2, 6.4.1.3, 6.4.1.4 and 6.4.1.5 of AS 1851 for monthly, six monthly, yearly and five yearly service schedules.
(c) Interconnected smoke alarms for occupant warning systems and emergency light actuation for Class 1b buildings	NCC Volume One - Specification E2.2a and AS 3786 NCC Volume Two clauses 3.7.2.2 and 3.7.2.5 and AS 3786 for Class 1b buildings.	As prescribed in AS 1851, sections 1 and 6 and for Class 1b buildings, check activation of lighting by smoke alarm.	Refer tables 6.4.2.2 and 6.4.2.3 of AS 1851 for six monthly and yearly service schedules for smoke alarms and heat alarms.
(d) Building occupant warning systems	NCC Volume One - Specifications E1.5 and E2.2a, AS 1670.1 and AS 2293.1.	As prescribed in AS 1851, sections 1 and 6.	Refer tables 6.4.3.1, 6.4.3.2 and 6.4.3.3 of AS 1851 for monthly, yearly and five yearly service schedules for emergency warning systems
(e) Sound systems and intercom systems for emergency purposes, including (where applicable) break glass devices, flashing strobe luminaires, green flashing exit identification luminaires, recorded and visual messages	NCC Volume One - Clause E4.9 and AS 1670.4	As prescribed in AS 1851, sections 1 and 6.	Refer table 6.4.4.1 of AS 1851 for, yearly service schedule of emergency sound and intercom system and tables 6.4.3.1, 6.4.3.2 and 6.4.3.3 of AS 1851 for monthly, yearly and five yearly service schedules for emergency warning systems. Note – refer to 3.3(d) above for chevron striping on exit doors associated with green flashing luminaires if applicable.

Minister's Specification SA 76 2015 edition

Maintenance and testing of essential safety provisions

COLUMN 1 - Items to be inspected or tested as nominated by the relevant authority	COLUMN 2 - Deemed to satisfy Installation standards	COLUMN 3 – Standards or other requirements for maintenance and testing of ESPs	COLUMN 4 – Informative (provided for guidance only – refer to standards or other requirements in Column 3 for specific detail)
(f) Performance solutions – automatic fire detection and alarm systems	Not applicable; as approved by the <i>relevant authority</i> (insert details on Form 2).	As approved by the <i>relevant authority</i> (insert details on Forms 1 and 3).	Refer to Appendix A of this specification for information on performance solutions.

3.9 Lifts

Note that general maintenance of lifts is not covered under this specification as it is regulated under other State legislation and is required as part of the registration of lifts under the *Work Health and Safety (WHS) Regulations 2012 (SA)*

COLUMN 1 - Items to be inspected or tested as nominated by the relevant authority	COLUMN 2 - Deemed to satisfy Installation standards	COLUMN 3 – Standards or other requirements for maintenance and testing of ESPs	COLUMN 4 – Informative (provided for guidance only – refer to standards or other requirements in Column 3 for specific detail)
(a) Lifts providing a stretcher facility	NCC Volume One - Part E3	Annual inspection to check stretcher facility is available.	
(b) Operation of lifts by fire services in event of an emergency	NCC Volume One - Part E3 and Specification E3.9	Annual inspection to check activation and operation.	
(c) Fire service controls in lifts (buildings over 12m in effective height)	NCC Volume One - Part E3 and Specification E3.1	Annual inspection to check activation and operation of fire service controls	
(d) Performance solutions – emergency lifts/vertical transportation (including floor by-pass and other fire mode controls)	As approved by the <i>relevant authority</i> (insert details on Form 2).	As approved by the <i>relevant authority</i> (insert details on Forms 1 and 3).	Refer to Appendix A of this specification for information on performance solutions.

3.10 Emergency power supply

COLUMN 1 - Items to be inspected or tested as nominated by the relevant authority	COLUMN 2 - Deemed to satisfy Installation standards	COLUMN 3 – Standards or other requirements for maintenance and testing of ESPs	COLUMN 4 – Informative (provided for guidance only – refer to standards or other requirements in Column 3 for specific detail)
(a) Emergency and stand-by power systems	NCC Volume One - Item 6 of Specification G3.8 and E3.4 (d) as applicable.	<p>Maintenance and testing shall extend to both the diesel/gas generating power unit and the alternating unit, including switching equipment, based on the following as a minimum.</p> <p>Monthly- Inspect and test batteries for specific gravity, fluid levels, voltage and charging. Inspect coolant and fuel availability.</p> <p>Run driver unit for 30 mins under no load capacity, with assessment of speed governor operation, excess vibration and heat. Inspect after operation. Check alternator and electrical connections.</p> <p>Annually- Inspect and test as per monthly routine above and inspect/test/replace (as appropriate) oil, oil filters, air filters and coolant.</p> <p>Inspect crankcase breathers, condensate traps and exhaust system. Test fuel supply quality and check spare fuel drum capacity.</p> <p>In lieu of running the driver unit under no load as per monthly routines, simulate power failure and run system for not less than 2hrs at full load to verify required system operation and check operation of transfer switching.</p>	<p>Maintenance of specific standby power supply systems should be carried out in accordance with the manufacturer's recommendations for the particular type of system and with consideration to the critical nature of the system. The frequency of maintenance routines and the test loading may need to increase accordingly.</p> <p>Monthly testing of the driver unit should be undertaken under part load for installations deemed to be of a more critical nature. The driver unit should not be run for more than 30 mins under no load as it this can cause glazing of the bores.</p> <p>Particular attention should be given to the battery condition, quality of fuel stored on site, functionality of automatic changeover systems and periodic load testing to confirm output capacity and prevent glazing of the bores.</p> <p>Emergency stand-by power systems for hospital sites may also require more frequent testing under increased loads due to their additional operational requirements.</p> <p>Further guidance on maintenance of standby power systems may be obtained from the following documents-</p> <p>Appendix B of Australian Standard 3009 (for emergency power supplies in hospitals).</p> <p>National Fire Protection Agency (NFPA)110</p> <p>Institute of Electrical and Electronics Engineers Standard 446.</p> <p>Factory Mutual Data Sheets 5-20 and 5-23</p>

Minister's Specification SA 76 2015 edition

Maintenance and testing of essential safety provisions

COLUMN 1 - Items to be inspected or tested as nominated by the <i>relevant authority</i>	COLUMN 2 - Deemed to satisfy Installation standards	COLUMN 3 – Standards or other requirements for maintenance and testing of <i>ESPs</i>	COLUMN 4 – Informative (provided for guidance only – refer to standards or other requirements in Column 3 for specific detail)
		Record results of all tests completed on instrument readings, phase current/voltage, time run, test date, defects identified, repaired or replaced and the name of the person who carried out the test and/or maintenance.	
(b) Performance solutions – emergency power supply	As approved by the <i>relevant authority</i> (insert details on Form 2).	As approved by the <i>relevant authority</i> (insert details on Forms 1 and 3).	Refer to Appendix A of this specification for information on performance solutions.

3.11 Interconnections - fire safety systems

COLUMN 1 - Items to be inspected or tested as nominated by the <i>relevant authority</i>	COLUMN 2 - Deemed to satisfy Installation standards	COLUMN 3 – Standards or other requirements for maintenance and testing of <i>ESPs</i>	COLUMN 4 – Informative (provided for guidance only – refer to standards or other requirements in Column 3 for specific detail)
(a) All fire and safety systems	As approved by the <i>relevant authority</i> (this may include hot smoke tests etc)	Annual test of interconnection of all fire and safety systems for correct operation under automatic alarm (not simulation).	Figure 1.12 in AS 1851 provides an example of a typical systems interface diagram.

Minister's Specification SA 76 2015 edition
Maintenance and testing of essential safety provisions

3.12 Access for fire appliances

COLUMN 1 - Items to be inspected or tested as nominated by the <i>relevant authority</i>	COLUMN 2 - Deemed to satisfy Installation standards	COLUMN 3 – Standards or other requirements for maintenance and testing of <i>ESPs</i>	COLUMN 4 – Informative (provided for guidance only – refer to standards or other requirements in Column 3 for specific detail)
(a) Vehicular access for fire appliances	NCC Volume One - Clause C2.4	Annual inspection to ensure unobstructed access to buildings and fire fighting facilities is maintained	
(b) Performance solutions – Access for fire appliances	As approved by the <i>relevant authority</i> (insert details on Form 2).	As approved by the <i>relevant authority</i> (insert details on Forms 1 and 3).	Refer to Appendix A of this specification for information on performance solutions.

3.13 Clearances for large isolated buildings

COLUMN 1 - Items to be inspected or tested as nominated by the <i>relevant authority</i>	COLUMN 2 - Deemed to satisfy Installation standards	COLUMN 3 – Standards or other requirements for maintenance and testing of <i>ESPs</i>	COLUMN 4 – Informative (provided for guidance only – refer to standards or other requirements in Column 3 for specific detail)
(a) Clearances for large isolated buildings	NCC Volume One - Clause C2.3	Annual inspection to ensure ongoing compliance of open space and vehicular access provisions.	
(b) Performance solutions – clearances for large isolated buildings	As approved by the <i>relevant authority</i> (insert details on Form 2).	As approved by the <i>relevant authority</i> (insert details on Forms 1 and 3).	Refer to Appendix A of this specification for information on performance solutions.

APPENDIX A – PERFORMANCE SOLUTIONS

A1 Schedule considerations

Where an approved Performance Solution relies on the inclusion/installation of safety provisions to achieve the required performance, those safety provisions will be deemed 'ESPs' required by the performance solution and the *relevant authority* must nominate them and the nature of inspection and/or test and frequency required to be undertaken to maintain their approved performance on the Form 1 schedule issued with the *building rules consent*.

Whilst the maintenance requirements may be the same as those nominated for deemed-to-satisfy installations in section 3 of this specification, they should still be identified as a separate entry on the Form 1 schedule under 'Performance Solutions'. In all cases, the maintenance levels and criteria must be appropriate to maintain the safety performance and reliability of *ESPs* installed. The *relevant authority* may therefore require the frequency of inspections and/or tests to be varied in accordance with the approved Performance Solution.

In addition, the schedule of *ESPs* may need to include annual examination of the criteria or assumptions on which the performance fire design was approved, and onsite inspections to ensure that no changes have occurred that might adversely affect the ongoing performance of the building.

Such criteria include-

- the function or use of the building
- occupant profile and characteristics
- fire load
- potential fire intensity
- fire hazards
- fire safety systems installed in the building

Other features that may have formed an integral part of an agreed Building Solution, which will also need to be considered when developing a schedule of *ESPs* include-

- Evacuation plans and drills, including arrangements for managing people with disabilities
- Management and staff training in emergency procedures
- Restricted fire load areas (process or storage)
- Limited or specific occupancy areas/functions
- Secure or controlled areas
- Safe refuge areas
- Revisions to conventional or prescribed construction or services installations
- Performance or innovative systems/services installed
- Other codes and standards (including international) on which the performance approved design was based requiring specialised design parameters for building and occupancy

The above list has been included for guidance to relevant authorities preparing a schedule of *ESPs* for a building approved as a Performance solution (in whole or in part). More extensive guidance on design and evaluation criteria used in developing a Performance Solution to meet the NCC Performance Requirements can be found in the 2005 edition of the *International Fire Engineering Guidelines*, published by the Australian Building Codes Board. Specific maintenance requirements for items that are essential to a Performance Solution may also have been listed in the Fire Engineer's Report.

Consideration also needs to be given to non-essential services or systems that may become essential when relied upon in a Performance Solution. For example, if approval is given to use a public address system for early warning of occupants in an emergency, that address system becomes an essential safety provision that needs to be listed and maintained. The testing frequency for the address system should also take into account regular checking that occurs through daily operation of the system.

APPENDIX B – EXISTING BUILDINGS

B1 Change in classification of an existing building

B1.1 Where a building owner applies for a change in classification of an existing building, a new Form 1 schedule of *ESPs* must be issued in accordance with regulation 76(4) of the Regulations. This applies whether or not any building work is being carried out at the time. The new Form 1 must list all the *ESPs* in the building, whether they are proposed or existing and this Form 1 schedule will then supersede any other Form 1 schedule or Part 59 Logbook previously issued.

When a new Form 1 schedule is being issued for an existing building, the existing Form 1 (or its equivalent, eg a Part 59 Logbook) should be sourced if possible from the building owner or the *relevant authority* in order to identify any existing *ESPs*, previous maintenance requirements and Performance Solutions that will need to be identified and listed in the new schedule.

B1.2 Once a new schedule of *ESPs* has been issued for an existing building, the building owner must-

- (a) provide a certificate of compliance (*Form 2, Schedule 16*) to the *relevant authority* (either the *council* or the private certifier who issued *building rules consent* - refer regulations 76(4a) and 83(2)(b) of the Regulations) for any new or significantly changed essential safety provision installed in the building; and
- (b) maintain all *ESPs* listed in the Form 1 schedule in accordance with requirements listed on that schedule; and
- (c) unless exempted by regulation 76(9), provide adequate annual proof (*Form 3, Schedule 16*) to the *council* that maintenance and testing of all *ESPs* in the building have been carried out (regulations 76(7) and 76(8) of the Regulations).

B2. Alterations and/or additions to an existing building

B2.1 Where a *building rules consent* is being sought for development work that involves extensive alterations and/or additions to an existing building for which either-

- a logbook was required to be kept and maintained pursuant to Part 59 of the repealed Building Regulations 1973; or
- a schedule of *ESPs* was issued pursuant to regulation 32 of the repealed Building Regulations 1991; or
- a Form 1 schedule of *ESPs* was issued pursuant to regulation 76(4) of Regulations prior to adoption of the 2015 edition (including Amendment 1) of Minister's Specification SA 76; and
- the proposed work involves any new or substantially altered *ESPs*,

a new Form 1 schedule should be issued for the whole building and the building owner must then maintain all listed *ESPs* in accordance with the maintenance and testing requirements identified by the *relevant authority* on that schedule.

It should be noted that the installation standards for existing *ESPs* may differ from those established by the installation standards listed in column 2 of the **SCHEDULE OPTIONS** in section 3 of this specification. However, maintenance in accordance with the standards listed in column 3 is required and may require baseline data relevant to an *ESP* to be identified by the building owner to enable maintenance routines to be carried out to achieve ongoing performance at that identified level.

B2.2 For minor alterations to *ESPs*, eg where the work only involves adjustments to existing items, it may not be necessary to issue a new Form 1 schedule, however, a Form 2 will still need to be issued and submitted to *council* in relation to the installation of those items.

A new Form 1 schedule needs to be issued when there is a building addition that includes *ESPs*, when additional or new items are to be installed in an existing building, or when maintenance routines are being upgraded to take advantage of AS 1851. Ideally a new Form 1 schedule for a

Minister's Specification SA 76 2015 edition
Maintenance and testing of essential safety provisions

building should be issued in its entirety, however, in cases where there are only a few additional safety provisions (already listed in an existing Form 1) or there is a new item (not previously listed) being added to the schedule, the Form 1 schedule could be issued as a supplement to an existing Form 1 schedule, provided it is clearly marked as such.

When a new Form 1 and new Form 3 are issued by the *relevant authority*, they must include all new **and existing** *ESPs* in the building, whilst the Form 2 only needs to include the newly installed *ESPs* (and any being substantially altered) that need to be certified.

The Form 1 schedule should, if possible, identify and include -

- (a) each *ESP* installed in the entire building or required to be installed in the building; and
- (b) the nature of inspection and testing (maintenance routine) to be undertaken in order to achieve the performance requirement (ie the performance level established by the installation standards).

B2.3 Once the new Form 1 schedule has been issued, the owner of the building must-

- (a) provide a Form 2 certificate of compliance to the *relevant authority* (either the *council* or the private certifier who issued *building rules consent* - refer regulations 76(5) and 83(2)(b) of the Regulations) for any new or significantly changed *ESPs* installed; and
- (b) maintain and test all new and existing *ESPs* included in the new Form 1 schedule in accordance with requirements listed in that schedule (refer regulation 76(6) of the Regulations); and
- (c) unless exempted by regulation 76(9), provide adequate annual proof to the *council* that maintenance and testing of all *ESPs* listed in the new schedule has been carried out (refer regulations 76(7) and 76(8) of the Regulations).

B3 Optional maintenance procedures for existing buildings

B3.1 When no building work is proposed and no change of classification is being sought, the owner of any building for which maintenance was required -

- pursuant to Part 59 of the repealed Regulations under the *Building Act 1971*; or
- pursuant to regulation 76 and an earlier edition of Minister's Specification SA 76;

the owner may either-

- (a) elect to continue the use of the Part 59 Logbook or an existing essential safety provision schedule as applicable (or otherwise prescribed by the above applicable legislation); or
- (b) apply to a *relevant authority* or *council* for a new schedule to be issued and Form 3 to be issued pursuant to regulation 76(4) of the Regulations, which will entail the issuing of both a new Form 1 and a new Form 3 as per Schedule 16 of the Regulations (Item 4 of schedule 6 of the Regulations prescribes the fee payable for this service).

B3.2 Where a new schedule is sought and subsequently issued for an existing building, the building owner must -

- (a) maintain all new and existing *ESPs* included in the new Form 1 schedule in accordance with requirements listed in that schedule (refer regulation 76(6) of the Regulations); and
- (b) unless exempted by regulation 76(9), provide adequate annual proof to the *council* that maintenance and testing of all *ESPs* listed in the new schedule has been carried out (refer regulations 76(7) and 76(8) of the Regulations).

APPENDIX C – MAINTENANCE RECORDS

C1 Routine service records and condition reports

Systematic records are required to be kept of all maintenance procedures carried out in a building in order to ensure that every prescribed fire safety element has been identified, inspected and, where appropriate, any defects have been remedied.

Service records are required to be kept of all maintenance and testing of *ESPs* undertaken in accordance with AS 1851. To adequately indicate ongoing compliance with this specification, the performance benchmarks that are to be assessed when undertaking maintenance need to be permanently recorded and be readily available at the premises. AS 1851 also requires that any critical defects identified during maintenance procedures are to be reported in writing to the building owner or his/her agent within 24 hours of being identified, and non-critical defects and non-conformities are to be reported within one week of being identified.

Records kept must indicate the pass/fail criteria and may be in the form of a hard copy logbook, electronic log, or tags and labels with hard copy summary records as per the requirements of AS 1851. A site specific logbook is required that incorporates the baseline data required by AS 1851 to establish the benchmarks of the systems or equipment and should include (but not be limited to) -

- Baseline data information (as advised in AS 1851, Appendix C).
- Layout Plans for each fire safety item required to be maintained, eg portable fire extinguishers, fire hose reels, smoke spill fans etc.
- A Maintenance Log Sheet appropriate to each fire safety item required to be maintained.

Layout Plans should be clear, simple, diagrammatic plans that identify the fire safety items to be inspected and maintained. It is recommended that Layout Plans -

- be A4 or A3 size scaled (or non-scaled but proportioned) sketch plans of each floor of the building, or part floor plans showing separate segregated areas or zones as appropriate.
- include separate plans for each different type of fire safety item, eg portable fire extinguishers, fire hose reels, smoke spill fans etc.
- use consistent, recognised symbols on plans that indicate the location and type of fire safety item.
- allocate an identification number/code to each fire safety item that can also be used on Defect Report Sheets to identify a particular item and its location. In multi-storeyed buildings the identification code should therefore also indicate on what floor the item is located.

AS/NZS 2293.1 requires the provision of an operating and maintenance manual for each emergency lighting installation that contains relevant maintenance data, together with either 'as-installed' plans showing location of all emergency lighting equipment, or a detailed schedule listing the required information.

Note (a) Fire sprinkler heads need not be specifically shown on Layout Plans, as the sprinkler standards requires identification of sprinklered areas and their design hazard to be included at the control valve (for AS 2118.1 systems) and at the alarm initiating device (for AS 2118.4 systems).

Note (b) AS 1670 fire detection systems need not specifically be shown on Layout Plans as the documentation required at the fire indicator panel includes block plans that show the location and identification number of equipment installed.

Logbooks - Hard copies of all maintenance and service records carried out in accordance with this specification, including summary sheets for items that are tagged or labelled, should be kept in a single on-site maintenance logbook.

Minister's Specification SA 76 2015 edition
Maintenance and testing of essential safety provisions

Service record sheets prepared and kept in the logbook for essential safety items covered by AS 1851 or AS/NZS 2293.2 must contain the following information and this information can also be used to form the basis of maintenance record sheets prepared for essential safety items not covered by those standards -

- identification and location of the building;
- the date and frequency of the maintenance/service routine undertaken;
- the essential safety provision serviced and/or checked and its location;
- the maintenance routine performed and its 'pass' or 'fail' status;
- details of any non-conformance or defect, including its classification, location and any rectification completed;
- the name of the building owner or person responsible for maintaining the *ESPs*; and
- the name of the person who carried out the maintenance.

Yearly condition reports, which summarise the service records for the year's maintenance activities, are also required under AS 1851 to be provided by maintenance service providers to building owners each year. Yearly condition reports must contain the information required by AS 1851, which includes details of all outstanding defects and non-conformances, and building owners must be notified if any fire system or equipment is no longer operational due to outstanding defects.

Building owners should note that under regulation 76(6) of the Regulations it is an offence for them to use or permit the use of a building in which maintenance and testing of *ESPs* as required by regulation 76 has not been carried out.

APPENDIX D – REFERENCED DOCUMENTS

D1 Standards applicable at installation

A reference to an Australian Standard under the heading '**Installation standards/codes/conditions of approval**' in section 3 **SCHEDULE OPTIONS** of this specification, is a reference to the relevant edition of the Standard listed in Volume One or Volume Two of the NCC that is or was current at the date of valid application for *building rules consent*. Standards referenced in the NCC are listed in Schedule 4 of Volumes One and Two.

D2 Schedule of referenced Australian Standards and other documents

The following standards are referenced in column 3 of the table of **SCHEDULE OPTIONS** in section 3 of this specification for the maintenance and testing of *ESPs*.

Number	Title
AS 1668.2 - 2012	<i>The use of ventilation and air-conditioning in buildings. Part 2 - Mechanical ventilation in buildings</i>
AS 1851 - 2012	<i>Routine service of fire protection systems and equipment</i>
AS 2118.1 - 2017	<i>Automatic fire sprinkler systems - General systems (incorporating amendment 1)</i>
AS 2118.2 - 2010	<i>Automatic fire sprinkler systems - Drencher systems</i>
AS/NZS 2293.2 - 1995	<i>Emergency evacuation lighting for buildings. Part 2 - Inspection and maintenance</i>
	<i>SA Public Health Act 2011</i>
	<i>SA Public Health (Legionella) Regulations 2013</i>
FPA101D	<i>Automatic Fire Sprinkler System Design and Installation - Drinking Water Supply</i>
FPA101H	<i>Automatic Fire Sprinkler System Design and Installation - Hydrant Water Supply</i>