Ministerial Building Standard SA 002

Maintaining the performance of essential safety provisions

2019

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Maintaining the performance of essential safety provisions

This Standard contains performance requirements and deemed-to-satisfy solutions for the installation, maintenance and testing of essential safety provisions installed or to be installed in buildings.

This Standard is a conversion of *Minister's Specification SA 76 – Maintenance of essential safety provisions*, which has been amended to align with the proposed PDI regulation 100 and to reference the Planning, Development and Infrastructure (PDI) Act and Regulations in lieu of referencing the Development Act and Regulations. In conjunction with this Standard, the ESP forms are also being amended and updated.

Government of South Australia

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1.0 SCOPE AND APPLICATION

1.1 This standard is published as a Ministerial Building Standard under the *Planning, Development and Infrastructure Act 2016* and must be read in conjunction with the requirements of that Act and regulation 100 of the *Planning, Development and Infrastructure (General) (Development Assessment) Variation Regulations 2019* (the *regulations*).

1.2 This standard contains-

(a) a performance requirement for the maintenance of essential safety provisions (ESPs) installed in buildings;

(b) deemed-to-satisfy standards for the maintenance and testing of ESPs installed in buildings to achieve the required performance;

(c) requirements for issuing a schedule of essential safety provisions (**Form 1** - **Schedule of ESPs installed or to be installed**);

(d) requirements for providing a certificate of compliance for installed essential safety provisions (**Form 2 - ESP Compliance certificate**); and

(e) requirements for providing adequate proof to council that maintenance and testing have been carried out on essential safety provisions installed in a building (**Form 3 – ESP Maintenance verification**).

1.3 The requirements of this standard apply to any essential safety provisions installed in buildings or required to be installed in buildings under the *Building Code*, a Ministerial Building Standard or under any former regulations under the *Building Act 1971* or the *Development Act 1993*.

1.4 A reference to ‘maintenance’ in this standard includes replacing the essential safety provisions, fixing defects and keeping records relating to the maintenance and testing carried out on the essential safety provisions.

1.5 The owner of a building must, at the request of an authorised officer produce the records of maintenance and testing carried out on essential safety provisions (installed in the building) over a specified period not exceeding two years for inspection by the authorised officer, within 48 hours of the request.

2.0 ESP PERFORMANCE REQUIREMENT

2.1 The essential safety provisions installed in a building must be performing at the standard required by the installation standard that was approved at development authorisation.

2.2 Essential safety provisions installed in a building must be maintained and tested to the extent necessary to ensure that they are capable of performing to a standard no less than the standard they were originally required to achieve at installation.

3.0 ESP DEEMED-TO-SATISFY PROVISIONS

3.1 In accordance with regulation 100(5), performance requirement **2.1** is satisfied if the installer of an essential safety provision certifies that the essential safety provision has been installed in accordance with the relevant approved installation standard, by completing a **Form 2 – ESP Compliance Certificate** in accordance with section **5.0** of this standard.

3.2 Installation standards establish the performance baseline data for essential safety provisions (such as water supply details, pump test flow, mechanical ventilation rates, air velocities and associated operating pressure data, etc), which must be achieved and maintained in order to achieve the ongoing performance of an essential safety provision.

3.3 Performance requirement **2.2** can be satisfied if-

(a) maintenance and testing of essential safety provisions is carried out in accordance with the routines listed in **column 3 of section 8.0** of this standard; and

(b) routine maintenance and testing records and condition reports are maintained in accordance with the requirements of Australian Standard AS 1851 and Appendix C of this standard and retained by the building owner; and

(c) the building owner or the building manager provides annual verification to the council, in accordance with section **6.0** of this standard, that the essential safety provisions have been maintained and tested and are performing at the required standard.

4.0 FORM 1 - SCHEDULE OF ESSENTIAL SAFETY PROVISIONS

4.1 In accordance with regulation 100(4), a relevant authority or council is required to issue a schedule of essential safety provisions when-

(a) issuing a building consent for a building in which essential safety provisions are installed or required to be installed, applicable to-

(i) new building work;

(ii) alterations and additions to an existing building;

(iii) a new essential safety provision installation; and

(iv) alterations or additions to an existing essential safety provision (including work required under a fire safety notice); or

(b) assigning a change of classification (no building work) for a building in which essential safety provisions are installed; or

(c) a building owner applies for a new schedule to be issued for a building in which essential safety provisions are installed (fee payable); or

(d) certifying that building work complies with the Building Rules (eg Crown development under section 131(21) of the Act) for a building in which essential safety provisions are installed or required to be installed.

4.2 The Chief Executive has determined that the appropriate form for issuing a schedule of essential safety provisions (ESPs) is that published as **Form 1** - **Schedule of ESPs installed or to be installed** on the SA Planning Portal.

4.3 A **Form 1** must list-

(a) all the essential safety provisions for the building, ie installed or to be installed; and

(b) the maintenance and testing standards or requirements that must be undertaken to ensure that the listed essential safety provisions will continue to the meet performance required by **2.1,** which includes-

(i) the relevant installation standards to be complied with that establish the baseline data for the performance of the essential safety provisions; and

(ii) the maintenance and testing routines to be applied for maintaining the performance of the listed essential safety provisions.

4.5 Owners of existing buildings may apply to the council or a private certifier to have a new **Form 1** issued if they intend changing their maintenance and testing routines to use an updated standard (eg to use the AS 1851-2012 routines for fire protection).

5.0 FORM 2 – ESP COMPLIANCE CERTIFICATE

5.1 In accordance with regulation 100(5), a compliance certificate for each installed essential safety provision (as listed on the **Form 1**) must be provided to the relevant council or building certifier certifying that they have been installed in compliance with the approved installation standards and are performing as required by that standard.

5.2 The Chief Executive has determined that the appropriate form for certifying compliance of installed essential safety provisions is that published as **Form 2** – **ESP compliance certificate** on the SA Planning Portal.

5.3 A **Form 2** must be signed by the installer (ie the licensed building work contractor responsible for the installation of the safety provision) or if the installer is a company, by the manager responsible for the installation work and by the building owner. If more than one installer is involved in the installation of the scheduled safety provisions, a certificate must be provided by each of the installers (or their company managers) for their particular installation or part of the work.

5.4 Where a certificate of occupancy is to be issued, the **Form 2** must be forwarded to the main building contractor or the contract manager for signing and forwarding with the Statement of Compliance (required by regulation 109), to the council or building certifier responsible for issuing the certificate of occupancy.

5.5 Where a certificate of occupancy is not required, or there is no main building work contractor, the **Form 2** must be signed and forwarded to the building owner for submitting to the relevant council.

6.0 FORM 3 – ESP MAINTENANCE VERIFICATION

6.1 In accordance with regulation 100(7) and (8), a building owner must provide annual proof in the appropriate form to the relevant council that maintenance and testing have been carried out on all essential safety provisions installed in the building and that -

(a) there are no outstanding defects or failures reducing the effectiveness of the essential safety provisions and they are continuing to perform to a standard no less that the standard they were originally required to achieve; or

(b) any outstanding defects or failures from a previous year identified by the person or contractor responsible for carrying out the maintenance and testing that may have affected the

effectiveness of the essential safety provisions have been rectified or are in the process of being rectified; or

(c) any current outstanding defects or failures identified by the person or contractor responsible for carrying out the maintenance and testing that may affect the effectiveness of the essential safety provisions are in the process of being rectified; or

are in the process of being rectified.

6.3 The Chief Executive has determined that the appropriate form for providing annual proof of the maintenance, testing and performance of essential safety provisions (ESPs) is that published as **Form 3** – **ESP maintenance verification** on the SA Planning Portal.

6.4 A **Form 3** is not required to be submitted to council for the following buildings unless the building has been the subject of a notice under section 157 of the Act, or the essential safety provisions have been installed under a condition arising from a variance with the performance requirements of the Building Code-

(a) a Class 1b building; or

(b) 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.

7.0 SCHEDULE OPTIONS for completing ESP FORMS 1, 2 and 3

7.1 Section **8.0** of this standard outlines a SCHEDULE of OPTIONS to be used when completing a **Form 1, Form 2** or **Form 3** to meet the requirements of regulation 100 and this standard.

7.2 **Column 1** of the SCHEDULE OPTIONS lists the essential safety provisions that are to be installed in a building, whether applicable to the deemed-to-satisfy installation standards or the subject of a performance solution. For a particular building, the actual essential safety provisions installed or to be installed in that building are listed in the first column of each relevant form (the **Form 1**, **Form 2** and **Form 3**).

7.3 **Column 2** of the SCHEDULE OPTIONS lists installation standards that are deemed-to-satisfy the required performance for essential safety provisions listed in Column 1. Where a performance solution is proposed for the relevant essential safety provisions listed in Column 1, the baseline data required to be met at installation must be listed in **Column 2**. For a particular building, only the installation standards applicable to the essential safety provisions installed or to be installed in that building are listed in **Column 2** of the **Form 1** and the **Form 2**. Where a new schedule of essential safety provisions is prepared for an existing building, the installation standards in Column 1 may be listed as ‘existing’, provided the existing baseline data to be maintained is stated.

7.4 **Column 3** of the SCHEDULE OPTIONS lists maintenance and testing standards and requirements that, where approved, are deemed to achieve performance requirement **2.2** for the listed essential safety provisions. For a particular building, only the maintenance and testing standards that apply to the essential safety provisions installed or to be installed in that building are listed in **Column 3** of the **Form 1** and **Column 2** of the **Form 2**.

7.5 **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 that are listed in Column 3 of the SCHEDULE OPTIONS, and to elaborate on other requirements listed in column 3.

8.0 SCHEDULE OPTIONS

8.1 Structural fire protection and compartmentation

COLUMN 1 – List of essential safety provisions (ESPs) installed or to be installed in the building	COLUMN 2 - Applicable ESP installation standards (or baseline data)	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.

COLUMN 1 – List of essential safety provisions (ESPs) installed or to be installed in the building	COLUMN 2 - Applicable ESP installation standards (or baseline data)	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 tor 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 tor 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.

COLUMN 1 – List of essential safety provisions (ESPs) installed or to be installed in the building	COLUMN 2 - Applicable ESP installation standards (or baseline data)	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	NCC Volume One - Clause C3.4 and relevant parts of AS 2118.1 or AS 2118.2 as applicable.	As prescribed by AS 1851, sections 1 and 2.	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 standard C1.1and AS 2118.1 or AS 2118.2 as appropriate	As prescribed by 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 MJC, 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	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 there is minimal smoke leakage around the perimeter of the curtain (check overlapping and edge sealing). 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.
(n) Alternative solutions – structural fire protection and compartmentation	As approved by the relevant authority (insert details on Form 2)	As approved by the relevant authority (insert details on Forms 1 and 3).	Refer to Appendix A of this standard for information on alternative solutions.

3.2 Means of egress

COLUMN 1 – List of essential safety provisions (ESPs) installed or to be installed in the building	COLUMN 2 - Applicable ESP 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 and protection of openable windows.	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)- • 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) Alternative solutions – means of egress	As approved by the relevant authority (insert details on Form 2).	As approved by the relevant authority (insert details on Forms 1 and 3).	Refer to Appendix A of this standard for information on alternative solutions.

3.3 Signs

COLUMN 1 – List of essential safety provisions (ESPs) installed or to be installed in the building	COLUMN 2 - Applicable ESP 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) 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	Check monthly that exit signs are not damaged, and continue to be clearly visible to persons approaching the exit. 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).	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). 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). Refer section 3.4 of AS/NZS 2293.2 for battery replacement.
(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 relevant authority).	Check door signage six monthly to ensure signs are not damaged and continue to be clearly visible to persons approaching the doorway or exit.	Refer to items 3.1(d) and (e) for maintenance of fire and smoke door signage. Refer to item 3.8(e) for maintenance of building occupant warning systems for green flashing luminaires associated with chevron stripes, if applicable.

COLUMN 1 – List of essential safety provisions (ESPs) installed or to be installed in the building	COLUMN 2 - Applicable ESP 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) Alternative solutions – signs	As approved by the relevant authority (insert details on Form 2)	As approved by the relevant authority (insert details on Forms 1 and 3).	Refer to Appendix A of this standard for information on alternative solutions.

3.4 Emergency lighting

COLUMN 1 – List of essential safety provisions (ESPs) installed or to be installed in the building	COLUMN 2 - Applicable ESP 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) Alternative solutions – emergency lighting	As approved by the relevant authority (insert details on Form 2)	As approved by the relevant authority (insert details on Forms 1 and 3).	Refer to Appendix A of this standard for information on alternative solutions.

3.5 Fire-fighting services and equipment

COLUMN 1 – List of essential safety provisions (ESPs) installed or to be installed in the building	COLUMN 2 - Applicable ESP 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; and AS 2941	As prescribed in AS 1851, sections 1 and 3.	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. Min Spec SA H3.2 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; and AS 2419.1.	As prescribed in AS 1851, sections 1 and 4.	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 yearly verification from water supply authority of water availability and five yearly flow tests to verify performance of hydrant.	
(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.
(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.

COLUMN 1 – List of essential safety provisions (ESPs) installed or to be installed in the building	COLUMN 2 - Applicable ESP 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)
(h) Fire sprinkler installations	NCC Volume One – Clause E1.5, Table E1.5, Specification E1.5 and the relevant part of either AS 2118.1, AS2118.4 or AS 2118.6. G3.4, G3.8 and Specification G3.8 for atriums	As prescribed in AS 1851, sections 1 and 2. Where specialist systems are installed, check the relevant building and occupancy constraints are maintained (refer to (j) below).	For wet pipe systems – 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. For pre-action systems- 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. For dry pipe systems- 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.
(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).	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. 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. Refer to section 3.7 (b) below for maintenance of associated special hazard detection and alarm systems.

COLUMN 1 – List of essential safety provisions (ESPs) installed or to be installed in the building	COLUMN 2 - Applicable ESP 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 m²; or a volume >12000 m³	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 1000m³ 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) Alternative solutions – fire-fighting services and equipment	As approved by the relevant authority (insert details on Form 2).	As approved by the relevant authority (insert details on Forms 1 and 3).	Refer to Appendix A of this standard for information on alternative solutions.

3.6 Fire and smoke control features of mechanical services

COLUMN 1 – List of essential safety provisions (ESPs) installed or to be installed in the building	COLUMN 2 - Applicable ESP 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.

COLUMN 1 – List of essential safety provisions (ESPs) installed or to be installed in the building	COLUMN 2 - Applicable ESP 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 relevant authority).	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 relevant authority).	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 relevant authority).	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.

COLUMN 1 – List of essential safety provisions (ESPs) installed or to be installed in the building	COLUMN 2 - Applicable ESP 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 relevant authority).	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 relevant authority).	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 relevant authority	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 1688.1	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 relevant authority 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.	

COLUMN 1 – List of essential safety provisions (ESPs) installed or to be installed in the building	COLUMN 2 - Applicable ESP 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 relevant authority).	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) Alternative solutions – fire and smoke control features of mechanical services	As approved by the relevant authority (insert details on Form 2).	As approved by the relevant authority (insert details on Forms 1 and 3).	Refer to Appendix A of this standard for information on alternative solutions.

3.7 Microbial and contamination control

COLUMN 1 – List of essential safety provisions (ESPs) installed or to be installed in the building	COLUMN 2 - Applicable ESP 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) 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 *SA Public Health Act 2011* and the *SA Public Health (Legionella) Regulations 2013*.	Refer to the *SA Public Health (Legionella) Regulations 2013* 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) Alternative solutions – microbial and contamination control	As approved by the relevant authority (insert details on Form 2).	As approved by the relevant authority (insert details on Forms 1 and 3).	Refer to Appendix A of this standard for information on alternative solutions.

3.8 Automatic fire detection and alarm systems

COLUMN 1 – List of essential safety provisions (ESPs) installed or to be installed in the building	COLUMN 2 - Applicable ESP 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.	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.

COLUMN 1 – List of essential safety provisions (ESPs) installed or to be installed in the building	COLUMN 2 - Applicable ESP 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) Alternative solutions – automatic fire detection and alarm systems	Not applicable; as approved by the relevant authority (insert details on Form 2).	As approved by the relevant authority (insert details on Forms 1 and 3).	Refer to Appendix A of this standard for information on alternative solutions.

3.9 Lifts

Note that general maintenance of lifts is not covered under this standard 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 – List of essential safety provisions (ESPs) installed or to be installed in the building	COLUMN 2 - Applicable ESP 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) Alternative solutions – emergency lifts/vertical transportation (including floor by-pass and other fire mode controls)	As approved by the relevant authority (insert details on Form 2).	As approved by the relevant authority (insert details on Forms 1 and 3).	Refer to Appendix A of this standard for information on alternative solutions.

3.10 Emergency power supply

COLUMN 1 – List of essential safety provisions (ESPs) installed or to be installed in the building	COLUMN 2 - Applicable ESP 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.	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. **Monthly**- Inspect and test batteries for specific gravity, fluid levels, voltage and charging. Inspect coolant and fuel availability. 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. **Annually**- Inspect and test as per monthly routine above and inspect/test/replace (as appropriate) oil, oil filters, air filters and coolant. Inspect crankcase breathers, condensate traps and exhaust system. Test fuel supply quality and check spare fuel drum capacity. 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.	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. 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. 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. Emergency stand-by power systems for hospital sites may also require more frequent testing under increased loads due to their additional operational requirements. Further guidance on maintenance of standby power systems may be obtained from the following documents- Appendix B of Australian Standard 3009 (for emergency power supplies in hospitals). National Fire Protection Agency (NFPA)110 Institute of Electrical and Electronics Engineers Standard 446. Factory Mutual Data Sheets 5-20 and 5-23

COLUMN 1 – List of essential safety provisions (ESPs) installed or to be installed in the building	COLUMN 2 - Applicable ESP 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)
		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) Alternative solutions – emergency power supply	As approved by the relevant authority (insert details on Form 2).	As approved by the relevant authority (insert details on Forms 1 and 3).	Refer to Appendix A of this standard for information on alternative solutions.

3.11 Interconnections - fire safety systems

COLUMN 1 – List of essential safety provisions (ESPs) installed or to be installed in the building	COLUMN 2 - Applicable ESP 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) All fire and safety systems	As approved by the relevant authority (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.

3.12 Access for fire appliances

COLUMN 1 – List of essential safety provisions (ESPs) installed or to be installed in the building	COLUMN 2 - Applicable ESP 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) 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) Alternative solutions – Access for fire appliances	As approved by the relevant authority (insert details on Form 2).	As approved by the relevant authority (insert details on Forms 1 and 3).	Refer to Appendix A of this standard for information on alternative solutions.

3.13 Clearances for large isolated buildings

COLUMN 1 – List of essential safety provisions (ESPs) installed or to be installed in the building	COLUMN 2 - Applicable ESP 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) 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) Alternative solutions – clearances for large isolated buildings	As approved by the relevant authority (insert details on Form 2).	As approved by the relevant authority (insert details on Forms 1 and 3).	Refer to Appendix A of this stamndard for information on alternative 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 'essential safety provisions' required by the alternative 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 of ESPs** issued with the building rules consent.

Whilst the maintenance requirements may be the same as those nominated for deemed-to-satisfy installations in **Section 8.0** of this standard, they should still be identified as a separate entry on the **Form 1 - Schedule of ESPs** under 'performance solutions'. In all cases, the maintenance levels and criteria must be appropriate to maintain the safety performance and reliability of essential safety provisions installed.

For a performance solution, the relevant authority may require the frequency of inspections and/or tests to be varied if necessary for the essential safety provision/s to achieve the required ongoing performance and the **Form 3** may need to verify that no changes have occurred the performance design criteria and assumptions that might adversely affect the ongoing performance of the essential safety provisions and the building safety. Such design criteria may 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 performance solution, which also need to be considered when developing a schedule of essential safety provisions 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
- Alternative or innovative systems/services installed
- Other codes and standards (including international) on which the alternative 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 **Form 1 - Schedule of ESPs** for a building approved as an performance solution (in whole or in part). 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 100(4) of the 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 essential safety provisions in the building, whether they are proposed or existing and this **Form 1 - Schedule of ESPs** will then supersede any other Form 1 schedule or Part 59 Logbook previously issued.

When a new **Form 1** - **Schedule of ESPs** 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 essential safety provisions, previous maintenance requirements and performance solutions that need to be listed in the new schedule. If no new essential safety provisions are being installed or existing ones altered, there will be no installation standards listed in Column 1 of the **Form 1 - Schedule of ESPs**.

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

(a) Submit a **Form 2** – **ESP Compliance certificate** to council for any new or significantly changed essential safety provisions installed in the building in accordance with regulations 100(5) and r108(2)(b) of the regulations; and

(b) maintain all essential safety provisions listed in the **Form 1 - Schedule of ESPs** in accordance with requirements listed on that schedule; and

(c) unless exempted by r100(9) of the regulations, submit adequate proof to the council that maintenance and testing of all essential safety provisions in the building have been carried out and they are achieving the required performance (**Form 3- ESP Performance verification**).

B2. Alterations and/or additions to an existing building

B2.1 Where a building 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 essential safety provisions was issued pursuant to regulation 32 of the repealed *Building Regulations 1991*; or
- an Form 1 schedule of essential safety provisions was issued pursuant to regulation 76(4) of *Development Regulations 1993* or *2008* prior to adoption of the 2015 edition of *Minister's Specification SA 76*; and
- the proposed work involves any new or substantially altered essential safety provisions,

the applicable baseline data for existing essential safety provisions should be identified and a new **Form 1** - **Schedule of ESPs** issued covering all essential safety provisions in the building and consolidating all maintenance requirements into the one schedule.

It should be noted that the installation standards for existing essential safety provisions may differ from those established by the installation standards listed in column 2 of the SCHEDULE OPTIONS in **section 8.0** of this standard. However, maintenance in accordance with the standards listed in

column 3 can still be used for existing essential safety provisions once the relevant baseline data has been identified by the building owner.

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

A new schedule needs to be issued when there is a building addition that includes essential safety provisions, when additional or new items are to be installed in an existing building, or when maintenance routines are being changed to take advantage of upgraded maintenance standards.

Ideally a new **Form 1** - **Schedule of ESPs** for a 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, a **Form 1** - **Schedule of ESPs** 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** essential safety provisions in the building, whilst the **Form 2** only needs to include the newly installed essential safety provisions (and any being substantially altered) that need to be certified.

The **Form 1** - **Schedule of ESPs** should, if possible, identify and include -

(a) each essential safety provision 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 of ESPs** has been issued, the owner of the building must-

(a) provide a **Form 2 – ESP Compliance Certificate** to the relevant authority (either the council or the building certifier who issued building consent) for any new or significantly changed essential safety provisions installed - refer r100(5) and r108(2)(b) of the regulations; and

(b) maintain and test all new and existing essential safety provisions included in the new **Form 1** - **Schedule of ESPs** in accordance with requirements listed on that schedule; and

(c) unless exempted by regulation 100(9), provide adequate annual proof to the council that maintenance and testing of all essential safety provisions listed in the new schedule have been carried out, including the listing of any current ongoing or outstanding defects or failures, and they are or are not achieving the required performance (**Form 3- ESP Performance verification**).

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 n 76 of the *Development Regulations 1993* or *2008* and an edition of *Minister's Specification SA 76* adopted prior to 2015;

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 legislation; or

(b) apply to a relevant authority or council for a new schedule to be issued pursuant to regulation 100(4), which will entail the issuing of a new **Form 1** - **Schedule of ESPs** (a fee is payable for this service) covering all essential safety provisions in or related to the building.

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

(a) maintain and test all existing essential safety provisions included in the new **Form 1** - **Schedule of ESPs** in accordance with requirements listed on that schedule; and

(b) unless exempted by regulation 100(9), provide adequate annual proof to the council that maintenance and testing of all essential safety provisions listed in the new schedule have been carried out, including the listing of any current ongoing or outstanding defects or failures, and they are or are not achieving the required performance (**Form 3- ESP Performance verification**).

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 or have not been remedied.

Service records are required to be kept of all maintenance and testing of essential safety provisions undertaken in accordance with AS 1851. To adequately indicate ongoing compliance with this standard, 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
- 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 Code requires identification of sprinklered areas and their design hazard to be included at the control valve.

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 standard, including summary sheets for items that are tagged or labelled, should be kept in a single on-site maintenance logbook.

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 essential safety provisions; 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 100(6) it is an offence to use or permit the use of a building in which maintenance and testing of essential safety provisions as required by regulation 100 has not been carried out and an expiation fee can be applied.

C2 Baseline data information

Baseline data determines the performance benchmarks that fire protection systems must achieve if they are to perform as required by a development authorisation. Baseline data for fire protection systems should be recorded in the maintenance records and be readily available at the premises for checking by maintenance contractors and/or a relevant authority.

Where baseline data is not available it should be re-established in order to determine the performance benchmarks that must be maintained.

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 standard, is a reference to the relevant edition of the Standard listed in Volume One or Volume Two of the National Construction Code (NCC) that is or was current at the date of valid application for building consent. The relevant installation standards are listed in schedule 4 of Volume One of the National Construction Code.

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 standard for the maintenance and testing of essential safety provisions (ESPs).

Number	**Title**
AS 1668.2- 2012	*The use of ventilation and air-conditioning in buildings.* *Part 2 - Mechanical ventilation in buildings*
AS 1851-2012	*Routine service of fire protection systems and equipment*
AS/NZS 2293.2:1995	*Emergency evacuation lighting for buildings.* *Part 2 - Inspection and maintenance*
	SA Public Health Act 2011
	SA Public Health (Legionella) Regulations 2013