Developments in Australian Standard AS2293.2 (Emergency Lighting)

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Australian Standards Committee LG-007
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Safety of occupants in buildings - Maintenance
Legislation across Australia...

<table>
<thead>
<tr>
<th>State</th>
<th>Act</th>
<th>Regulation</th>
<th>Defined Term</th>
<th>Reporting Requirement</th>
<th>Authority</th>
<th>Responsible Entity</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT</td>
<td>Building Act 2004 Emergencies Act 2004</td>
<td>Building Regulations 2008 Fire Safety Policy 05</td>
<td>Safety Matters</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>NSW</td>
<td>Environmental Planning and Assessment Act 1979</td>
<td>Environmental Planning and Assessment Regulation 2000</td>
<td>Essential Fire Safety Measures</td>
<td>Annual Fire Safety Statement</td>
<td>Council</td>
<td>Building Owner</td>
</tr>
<tr>
<td>NT</td>
<td>Workplace Health and Safety ACT 2009</td>
<td>Workplace Health &amp; Safety Regulations 2010</td>
<td>Fire Control Equipment</td>
<td>Record of each inspection</td>
<td>NT WorkSafe</td>
<td>Employer</td>
</tr>
<tr>
<td></td>
<td>Building Act 1975</td>
<td>Building Fire Safety Regulation 2008</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>VIC</td>
<td>Building Act 1993</td>
<td>Building Regulations 2006</td>
<td>Essential Safety Measure</td>
<td>Annual Essential Safety Measures Statement</td>
<td>Municipal Building Surveyor or Chief Officer</td>
<td>Building Owner</td>
</tr>
<tr>
<td>WA</td>
<td>-</td>
<td>Building Bill 2010</td>
<td>Essential Safety Systems</td>
<td>Essential Safety Systems</td>
<td>-</td>
<td>Building Owner</td>
</tr>
</tbody>
</table>
Standards Timeline...

- AS1851.07-1984 - Fire-resistant doorsets
- AS1851.10-1989 - Emergency Warning & Intercom Systems
- AS1851.02-1992 - Fire Hydrant Systems
- AS1851.03-1997 - Fire Sprinkler Systems
- AS1851.06-1997 - Air-Handling Systems
- AS1851.09-1997 - Delivery Lay-flat Fire Hose
- AS1851.15-1997 - Local Fire Alarm Systems
- AS1851.16-1997 - Pyrogen
- AS1851:2005 (A1 26/7/06) - Maintenance of Fire Protection Systems & Equipment
- AS1851:2012 - Routine Servicing of Fire Protection Systems and Equipment
- AS2293.2:1993 - Emergency Evacuation lighting for buildings
- AS2293.2:201x - Emergency lighting and exit signs for buildings

Part 2: Routine service and maintenance

1980

1985

1990

1995

2000

2005

2010

2015

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AS1851 Adoption...

**NT** - Considered a relevant standard by Northern Territory Fire and Rescue Service Advisory Note – Maintenance of Building Fire Safety Measures

**WA** - No Restrictions

**QLD** - No Restrictions

**NSW** - No Restrictions

**ACT** - No Restrictions

**SA** - For existing buildings, the owner must apply to a regulatory authority or council for a new schedule that allows for the use of AS 1851-2012. No restrictions for buildings completed prior to

**VIC** - AS1851:2012 is considered “equivalent” to previous editions of the Standard. Owners may apply AS1851:2012 subject to specific conditions. r1205A

**TAS** - Maintenance under existing contracts for buildings constructed (or altered) on or after 1 July 2004 may—if the contract was agreed to prior to 1 January 2014—continue to use the pre 1851-2005 editions until the end of the contract at which time AS 1851-2012 must be applied. No restrictions for buildings constructed prior to 1 July 1994.
Introducing LG-007
Reasons for change...
Technology...
Photoluminescence...
AS1851 Publication

Australian Standard®

Routine service of fire protection systems and equipment

AS1851—2012
How AS2293.2 was written...
Development Procedure

1. Move AS2293.2 to collaborative work space with version control…
Development Procedure

2. Migrate from Clause Structure to Table Structure
Development Procedure

3. Identify common clauses between sections 2 and 3.
Rewrite table items to reflect writing style consistent with AS1851:2012 with Pass/Fail Criteria...
Development Procedure

5 Introduce Photoluminescent Exit Signs
Development Procedure

Consider / adopt developments in AS2293.1 and AS2293.2
Development Procedure

7

Introduce AS1851:2012 concepts...
Specific changes...
Scope

This Standard sets out the **routine service and maintenance procedures** necessary to ensure emergency evacuation lighting and exit sign systems will be in a state of readiness for operation at all times. It applies to central and single-point emergency lighting and exit sign systems, as defined in AS/NZS 2293.1.
Objective

The objective of this Standard is to establish the performance criteria for the routine service (and maintenance) of emergency luminaires and exit signs, such that they continue to safeguard occupants until the next scheduled activity from injury by having adequate emergency lighting, identification of exits and provide direction to exits in accordance with the approved design, either as a deemed to comply or alternative solution (Building solution) defined by either the Australian National Construction Code or New Zealand Building Code. The Standard contains inspection, test, preventive maintenance and survey requirements to demonstrate that the emergency lighting and exit sign system installed in a building are achieving a standard of performance to which they were designed (the approved design).
The layout has been aligned with AS 1851, Routine service of fire protection systems and equipment.
Relationships & AS2293.2
Rationalisation...

AS2293.2:1995

(s2) Central Systems
- Batteries
- Chargers
- Inverters
- Distribution & Control Equipment
- Emergency luminaires and exit signs

(s3) Single Point Systems
- Emergency luminaires and exit signs

AS2293.2:201x

Table A1, A3, A6, A8
- Table A1, A2, A5, A8
2.2 SIX-MONTHLY PROCEDURES

2.2.1 General The procedures specified in Clauses 2.2.2 to 2.2.7 inclusive shall be carried out at intervals of not greater than six months.

2.2.2 Batteries The following checks shall be made on batteries of the type which require maintenance of the electrolyte above a specified level:

(a) Check the electrolyte level in each cell and, with water complying with AS 2668, top up those cells that are markedly lower than the general level. The electrolyte level shall be checked and topped up, if necessary, before the battery is boost-charged (if this is required).
### TABLE A1

**SCHEDULE 1—SIX-MONTHLY (GENERAL REQUIREMENTS)**

<table>
<thead>
<tr>
<th>Item</th>
<th>Title</th>
<th>Activity</th>
<th>Record (Pass/Fail)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Baseline Data</td>
<td>Check the baseline data is available and legible</td>
<td>P/F</td>
</tr>
<tr>
<td>1.2</td>
<td>Maintenance Activity - All</td>
<td>Check the baseline data is available and legible</td>
<td>P/F</td>
</tr>
<tr>
<td>1.3</td>
<td>Emergency light and exit sign schedule</td>
<td>Check the emergency luminaire, exit sign and photoluminescent exit sign schedule or drawings for any condition, alteration or addition since the last scheduled maintenance activity</td>
<td>P/F</td>
</tr>
<tr>
<td></td>
<td>Six-Monthly</td>
<td>Yearly</td>
<td>Five-Yearly</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-------------</td>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>General Requirements (All Systems)</td>
<td>A1</td>
<td>-</td>
<td>A8</td>
</tr>
<tr>
<td>Emergency Luminaire and Exit Signs</td>
<td>A2</td>
<td>A5</td>
<td>A9</td>
</tr>
<tr>
<td>Central Battery Systems</td>
<td>A3</td>
<td>A6</td>
<td>-</td>
</tr>
<tr>
<td>Photoluminescent Exit Signs</td>
<td>A4</td>
<td>A7</td>
<td>-</td>
</tr>
</tbody>
</table>
Other items...
What’s been left out...

Artificial Lighting

The National Construction Code, Performance Requirement F4.2 sets out the criteria for artificial lighting in buildings installed to provide a level of illuminance appropriate to the function or use of the building to enable safe movement by occupants. Clause F4.4 of the Deemed-to-Satisfy performance provisions for the installation of Artificial Lighting.
Photoluminescence...
Summary...
Standards process (roughly)...

1. Application for Standard review
2. Establish terms of reference
3. Committee formed
4. Working groups formed
5. Draft developed
6. Public Comment
7. Review & incorporate comments
8. Review & Publish
AS2293.2:201x release?

The Standard will be published when it’s published...
Bonus Offer

For attendees to Fire Australia 2017, we have prepared a special offer for you that is only available for the next 2 weeks.

Go to http://firewize.com/fireaus2017

You will receive an eBook “AS2293.2 - Emergency Lighting Maintenance Summary” when the Standard is published...
With our team of 40+ people across Australia and abroad, Firewize remains the trusted provider for safety, reliably maintaining the fire and essential safety measures for building owners, managers and occupiers throughout Victoria.

You can contact us via telephone, web, social-media or email.