

Fire Safety Systems

Routine Inspection and Testing

Expectations of Your Service Provider

FIRE SERVICES

PLUMBING & GAS

ELECTRICAL SERVICES

PASSIVE FIRE SERVICES

AS 1851 - HOW DOES IT WORK?

AS 1851-2012 (current applicable edition), is the Australian Standard for the routine servicing (inspection, testing, preventative maintenance and survey) of fire protection systems and equipment.

The objective is to maintain the reliability of fire protection systems and equipment such that they continue to meet the requirements of the approved design. The documentary evidence resulting from compliance with this standard is intended to support the responsible entity to satisfy regulatory obligations.

PROCESS AND PROCEDURES

Routine service procedures shall be carried out in accordance with the relevant testing items of the AS 1851-2012 (Sections 2 to 14). Following the completion of these service procedures, it is a requirement that a service log book is completed and signed by the attending technician for some of these assets, where others have a tag stamped or marked with a service report to be provided to the client within 1 week of the service procedure being completed.

AS 1851-2012 TABLES

Each fire system asset has a unique table outlining the testing requirements required. Where assets require more than one testing table based on the stipulated frequencies for testing (monthly, 6 monthly and annual for example), these are shown under the same section but with additional tables

For example, a monthly routine inspection table of items for a sprinkler system is different to the requirements of a six monthly or annual inspection as these will involve additional testing steps.

AS 1851 Section	Asset
2	Sprinklers
3	Fire Pump sets
4	Fire Hydrants
5	Water Tanks
6	Fire Detection
7	Special Hazards
8	Lay Flat Hoses
9	Fire Hose Reels
10	Fire Extinguishers
11	Fire Blankets
12	Passive Systems
13	Mechanical Services
14	Emergency Planning

ROUTINE SERVICE ACTIVITY FAILURE

DEFECTS

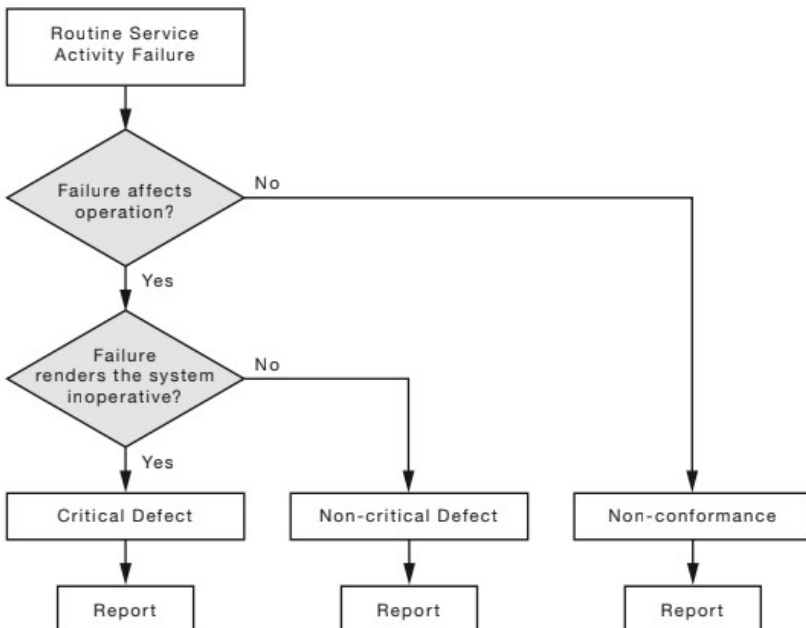
The responsible entity shall be notified of critical defects before leaving site, or where this cannot be achieved, as soon as possible. **Critical defects shall be confirmed in writing within 24 h of the defect identification.**

DEFECT CLASSIFICATION

Critical defect - A defect that renders a system inoperative. An example being an inoperative fire panel that would not warn the building occupants in the event of a fire.

Non-critical defect - A system impairment or faulty component not likely to critically affect the operation of the system. An example being an external fire bell not operating.

Non-conformance - Missing information or incorrect feature that does not affect the system operation but is required to facilitate ongoing routine service. An example being a missing spare sprinkler heads.



SERVICE PROVIDER CAPABILITIES

WHO IS ACTUALLY PERFORMING THE SERVICING?

Whilst it may be assumed that the your fire service provider of choice would have all the capabilities to perform all of the required routine servicing, this is not always the case.

A fire service provider may be well equipped to attend to fire panel testing for example, however they may need to rely on subcontractors conduct the wet fire system testing or reactive maintenance or visa versa.

Another factor to consider, is what level of competence your fire service provider has. You would expect that the service technician conducting the testing on a fire asset can competently complete all of the required testing items as per the stipulated tables in the AS 1851-2012.

An common example of this a fire hydrant technician may check all above ground hydrant valves but fail to check the inground hydrant valves as per item 3.2 of table 4.4.3 of AS 1851-2012 (annual service). The result could present an incorrect reading for hydrant flow and pressure testing.

QUESTIONS TO ASK YOUR PROPOSED FIRE SERVICE PROVIDER

- Q: Do you intend to outsource any of the required routine inspection and testing up to and including the annual servicing?
- Q: What accreditations does your organisation hold and what affiliations with professional industry organisations do you have.
- Q: Do you have a genuine after hours reactive service that operates 24/7 and is monitored locally?

SOME EXAMPLES OF PROFESSIONAL FIRE INDUSTRY ORGANISATIONS



ANNUAL DOCUMENTATION

ARE ALL SECTIONS OF THE AS-1851 BEING COMPLETED?

It is clearly stated what assets require testing and how frequently in the AS 1851-2012. To confirm this, your fire service provider should be providing you with a **yearly condition report** conforming that all systems have been tested in accordance with the standard and highlights any current defects raised that are outstanding.

Example yearly condition report.

SYSTEM CONDITION REPORT

Report Number: 000631
Period covered: 01/09/2020 to 01/09/2021
Responsible Entity:
Property Name:
Property Address:

Systems Maintained	Maintenance Standards	Installation Standards (where known)
Fire Detection Systems	AS1851-2012 Section 6	AS-1670
Fire Doorsets - Hinged & Pivoted	AS1851-2012 Section 12	AS-1906.1
Fire Extinguishers	AS1851-2012 Section 10	AS-2444
Fire Hose Reels	AS1851-2012 Section 9	AS-2441
Fire Hydrant Systems	AS1851-2012 Section 4	AS-2419
Fire Blankets	AS1851-2012 Section 11	AS-2444

Statement: I confirm that the system referred to above has been regularly inspected, tested, maintained and surveyed, to the applicable sections of AS 1851 for the period listed above. With the exception of items detailed below in 'system defects', the system has been found to be functioning correctly and capable of performing to the design Standards nominated.

System Defects				
Product Type	Quote ID	Status	Defect ID	Defect Severity

Contractor's representative:

Name: Date: 01/09/2021

Signature:

Contractor
Name: Banhams WA
Address: 15/25 Turnbull Road,
Neerabup WA

ITEMS TO LOOK OUT FOR IN YOUR BUILDING

PASSIVE FIRE

Historically a 'grey area' in the industry in WA is Passive Fire, more commonly known as 'penetration seals'.

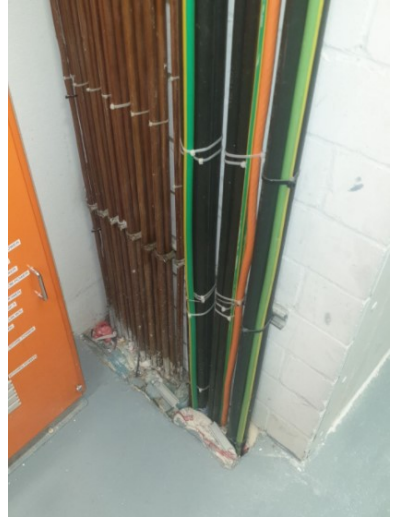
Main building services, (fire hydrant pipes, electrical/data cables etc), may run through a central building riser across multiple levels within your building. Typically, these services should be fire sealed at each level where they penetrate a fire rated floor or fire wall if they return and service a particular floor.

These seals require a certain type of product to be used and this will depend on the type of service present. These products have been tested or assessed by NATA accredited laboratories or independent Fire Testing Organisations and comply with the relevant Australian Standard (AS4072.1) and the NCC (National Construction Code).

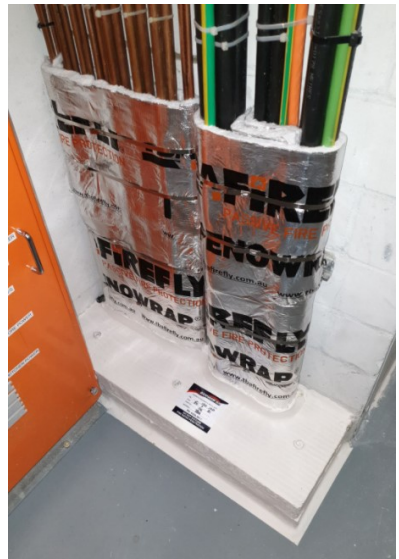
If a product has been used that has not been tested or assessed to these codes, then it may not be compliant and could present a lift risk in the event of a fire.

Just because a 'fire rated sealant' has been used on one building service, it doesn't necessarily mean it can be used on another service.

EXAMPLE OF INCORRECT FIRE SEALING



EXAMPLE OF CORRECT FIRE SEALING



ITEMS TO LOOK OUT FOR IN YOUR BUILDING

FIRE/SMOKE DOORS

Common building area fire and smoke doors are required under section 12 of AS1851-2012 to be inspected every 6 months. An inspection label should be located on the hinge side internal edge of the door which shows the date of inspection.

Fire and smoke doors act as important components in fire separation and safe evacuation of occupants in the event of a fire.

APARTMENT ENTRY DOORS

Apartment entry doors in a residential building may be fire rated. These doors should be inspected every 12 months and documented the same way as the common area fire and smoke doors.

GENERAL REQUIREMENTS

A fire door **must**:

- * Self close (Critical)
- * Self latch (Critical)
- * **Not** be wedged open for convenience purposes

EXAMPLE OF INSPECTION LABEL



FIRE DOORS SHOULD NOT BE WEDGED

OPEN



We pride ourselves on service, reliability communication and quality. As a result, we are honoured to work with some of the industry leading professional organisations.



We would be more than happy to assist further with any queries you may have through our preferred contact methods below.



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