ACERTA

Fire sprinkler flow testing

Safeguarding your business

If your building is fitted with an Automatic Fire Sprinkler System, potentially you have one of the best safeguards against loss from fire. However, to ensure the reliability of your system, an annual water flow test must be conducted.

This test aims to prove that the available water flow and pressure is adequate to match the System's Design Requirements.

Fire Sprinkler Systems are designed specifically for your occupation and for the type of combustible storage your building contains. This design includes minimal margin for error, and relies on a water supply with specific flow and pressure characteristics, known as the System Design Requirements.

The Australian Standard that lists the maintenance requirements for Fire Sprinkler Systems is 'AS 1851:2012 – Routine service of fire protection systems and equipment'. This standard specifies that a Flow Test must be conducted annually to ensure that the available water supply meets the System Design Requirements.

In addition to annual flow testing, Fire Sprinkler Systems are required to have general service inspections carried out either weekly or monthly (depending on the date of installation). A record of these regular inspections will be recorded in a Log Book kept on site.

Sprinkler Flow testing results will be detailed in a separate report provided by your Service Contractor. The following details should be recorded on the Flow Test Report. In some cases, a water supply graph may also be provided. A sample Sprinkler Flow Test Report is provided on the reverse side of this document.

Details included in a fire sprinkler flow test

1. The physical address of the site where the test was conducted.
2. The date the test was conducted.
3. The sprinkler system's minimum water requirements expressed in terms of flow (L/min) and pressure (kPa).
4. The rate of water flow from a 15mm test valve at various water pressures during the flow test.
5. The water pressure at various rates of flow supplied by either (a) the Town's Main, or (b) the primary pump and (c) the secondary pump.
6. Water Supply Graph (optional). This is a graph plotting the various results of the flow test and comparing these results against the system's minimum flow and pressure requirements.

   Demand Point – Is the point (or points) marked on the Water Supply Graph representing the minimum water requirements of the system.
7. The name of the person who performed the test and provided the test report.
8. The conclusion, a statement as to whether the test result passed, or failed to meet the fire sprinkler system's minimum water requirements.

A successful test result Is easily identified by the Demand Point being located anywhere below the water supply curves on the Water Supply Graph. A failed result is indicated by the Demand Point being above either of the water supply curves, and requires further investigation by your Fire Services Contractor.

The numbers and titles noted above, correspond with sections of the sample report on the reverse side of this document.

Flow test results

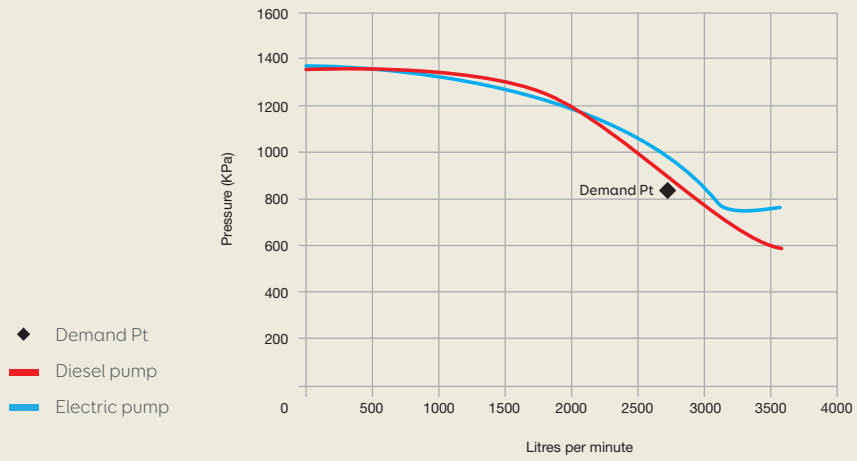
1. Location: 12 Hydraulic St Town NSW

2. Date: 5th January 2018

Apparatus: Ambit
Pump 1: Electric
Pump 2: Diesel
Annubar: 100mm 20T

Control Data		Town's Main	Electric Pump	Diesel Pump	3. System Requirements	
Inches Mercury (Hg)	4. Flow Rate (L/Min)	5(a). Pressure (kPa)	5(b). Discharge (kPa)	5(c). Discharge (kPa)	Flow (L/Min)	Pressure (kPa)
	0		1380	1370	2730	830
	1583		1255	1295		
	2239		1145	1120		
	2743		960	910		
	3167		760	670		
	3541		755	580		

6. Water supply graph



7. Test Conducted By: J Smith

8. Conclusion: Test Passed

This fact sheet has been developed by the team at Acerta to provide you with relevant information and tips to help you manage risk. As a part of the Guild Group, Acerta has extensive experience in commercial insurance and risk management. Together, your Broker and Acerta can work with you to assist in safeguarding your business by managing risk.

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