
Fire Sprinklers (A&F Sprinklers)

Contents

A&F Sprinklers
James Whitlock
jwhitlock@afsprinklers.co.uk
Unit 4 Gorrelsls
Trans-Pennie Trading Estate
Rochdale
Lancashire
OL11 2PX
0845 5051550

Contents

Scope of Works

Certificates/Warranties/Guarantees

Cleaning and Maintenance Regimes

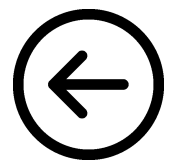
Data Sheets



winvic

winvic.co.uk

Scope of Works



winvic

winvic.co.uk

Certificates/Warranties/Guarantees



winvic

winvic.co.uk



- Certificate of - Health & Safety Accreditation

This is to certify that

A & F Sprinklers Ltd

- HAS ACHIEVED ACCLAIM ACCREDITATION -

Contractor with 5 or more employees



STEFANO MATTIELLO

Managing Director

Registration No: **88470**

Date of Assessment & Issue: **17 July 2022** Expiry Date: **17 July 2023**

This assessment was conducted by a subcontractor of Acclaim.

This certificate remains the property of Acclaim Accreditation and must be surrendered on demand

*For verification please contact Acclaim Accreditation on **0333 300 3066***

*Full validation of this certificate should be made via the SSIP portal **SSIPPortal.org.uk***

AcclaimAccreditation.co.uk

07/12/22



A&F SPRINKLERS LTD

Became a member of the Avetta Consortium on:

05/05/20

This document certifies that the company above is a Member of the Avetta Consortium. Being an Avetta Consortium Member signifies that you are part of a global effort to advance company and worker safety, sustainability, and operational excellence. Consortium Members represent a pursuit of excellence in delivery, safety and sustainability.

Arshad Matin

Arshad Matin, President and CEO



Taylor Allis

Taylor Allis, Chief Product Officer

British Automatic Fire Sprinkler Association

bafsa

This is to certify that by Order of the Council

A & F Sprinklers

Has been admitted to the

*Membership of The British Automatic Fire Sprinkler Association
Limited*

*Given under the Common Seal of
The British Automatic Fire Sprinkler Association Limited*

This 5th day of December in the year 2019

John McCann

John McCann
Chairman

Keith MacGillivray

Keith MacGillivray MBE MA BSc
Chief Executive

Certificate of Management System Registration

Certificate Number: 049-EMS

Issue: 01

A & F Sprinklers Limited

having complied with the requirements of:

ISO 14001:2015

Environmental Management Systems - Requirements with guidance for use.

are certified by BRE Global Ltd. and are authorised to use the LPCB Certification Mark on stationery and publications related to the following products and/or services:

A & F Sprinklers Limited

Unit 4, Transpennine Trading Estate
Gorrels Way
Rochdale
Lancashire
OL11 2PX
United Kingdom

Scope

Design, installation and servicing of fire sprinkler and water spray systems.

This certificate is maintained and held in force through regular surveillance activities.



Ruben Graham
Assessment Services

2 August 2022
Date of this Issue

1 August 2025
Expiry Date

2 August 2022
Date of First Issue



This certificate remains the property of BRE Global Ltd. and is issued subject to terms and conditions (for details visit www.redbooklive.com/terms).

To check the validity of this certificate and appendix please visit www.redbooklive.com/check, scan the QR tag or contact us.

BRE Global Ltd, Watford, WD25 9XX
T: +44 (0)333 321 8811 E: enquiries@breglobal.com

LPCB is a Registered Trademark of the Building Research Establishment Ltd.



Certificate of Management System Registration

Certificate Number: 049-HS

Issue: 01

A & F Sprinklers Limited

having complied with the requirements of:

ISO 45001:2018

Occupational Health and Safety Management Systems - Requirements

are certified by BRE Global Ltd. and are authorised to use the LPCB Certification Mark on stationery and publications related to the following products and/or services:

A & F Sprinklers Limited

Unit 4, Transpennine Trading Estate
Gorrels Way
Rochdale
Lancashire
OL11 2PX
United Kingdom

Scope

Design, installation and servicing of fire sprinkler and water spray systems.

This certificate is maintained and held in force through regular surveillance activities.



Ruben Graham
Assessment Services

2 August 2022
Date of this Issue

1 August 2025
Expiry Date

2 August 2022
Date of First Issue



This certificate remains the property of BRE Global Ltd. and is issued subject to terms and conditions (for details visit www.redbooklive.com/terms).

To check the validity of this certificate and appendix please visit www.redbooklive.com/check, scan the QR tag or contact us.

BRE Global Ltd, Watford, WD25 9XX
T: +44 (0)333 321 8811 E: enquiries@breglobal.com

LPCB is a Registered Trademark of the Building Research Establishment Ltd.





STANDARD



CERTIFICATE OF ACCREDITATION

This is to certify that

A & F Sprinklers Ltd

Membership No.: CHAS-0017291
Contractor - Construction

has demonstrated compliance with the CHAS standards in line with SSIP Core Criteria and UK H&S Legislation and has been awarded accreditation to the requirements of the CDM Regulations 2015

Full SSIP Core Criteria assessment carried out by Acclaim Accreditation



[Signature]

Ian McKinnon
Managing Director



MEMBERSHIP VALID UNTIL 18 MAY 2023
CERTIFICATE VALID UNTIL* 18 MAY 2023

*Certificate is only valid when accompanied with an active membership

0345 521 9111

CHAS.co.uk



Constructionline
Gold Member

CERTIFICATE OF MEMBERSHIP

A & F Sprinklers Ltd

Registration No: **88470**

Date Issued: **07 July 2022**

This certifies that the member named above has met pre-qualification requirements appropriate to public and private sector procurement.

A supplier's verification status is dynamic, this certificate proves the Supplier was verified to the named level on the day stated only. For the current status please check the Constructionline platform.





Facilitiesline

Gold Member

CERTIFICATE OF MEMBERSHIP

A & F Sprinklers Ltd

Registration No: 88470

Date Issued: 13 July 2022

This certifies that the member named above has met pre-qualification requirements appropriate to Facilities Management clients.

A supplier's verification status is dynamic, this certificate proves the Supplier was verified to the named level on the day stated only. For the current status please check the Facilitiesline platform.



Facilitiesline

PO BOX 6441, Basingstoke,
Hampshire, RG21 7FN

0333 300 3066

facilitiesline.co.uk

Certificate of Management System Registration

Certificate Number: 049

Issue: 18

A & F Sprinklers Limited

having complied with the requirements of:

ISO 9001:2015

Quality Management Systems - Requirements

are certified by BRE Global Ltd. and are authorised to use the LPCB Certification Mark on stationery and publications related to the following products and/or services:

A & F Sprinklers Limited

Unit 4, Transpennine Trading Estate
Gorrels Way
Rochdale
Lancashire
OL11 2PX
United Kingdom

Scope:

Design, installation and servicing of fire sprinkler and water spray systems.

This certificate is maintained and held in force through regular surveillance activities.



Phil Clare

13 September 2021

12 September 2024

28 October 1991

Signed for BRE Global Ltd.

BGM Assessment Services

Date of this Issue

Expiry Date

Date of First Issue



This certificate remains the property of BRE Global Ltd. and is issued subject to terms and conditions (for details visit www.redbooklive.com/terms).

To check the validity of this certificate and appendix please visit www.redbooklive.com/check, scan the QR tag or contact us.

BRE Global Ltd, Watford, WD25 9XX
T: +44 (0)333 321 8811 E: enquiries@breglobal.com

LPCB is a Registered Trademark of the Building Research Establishment Ltd.



Certificate of Installer Approval

Certificate Number: ASC-001 Issue: 6

A & F Sprinklers Limited

having complied with the requirements of the following:

LPS 1048 : Issue 5.0

Requirements for the approval of sprinkler system contractors in the UK and Ireland

for the following scope:

Design, installation, commissioning and servicing of industrial & commercial and residential & domestic fire sprinkler systems;

is certified by BRE Global Limited and is authorised to use the LPCB mark on documentation directly relating to sprinkler systems as covered by the scope above, in accordance with installation standards listed in LPS 1048 : Issue 5.0, Appendix A1.1.



A & F Sprinklers Limited

Unit 4, Transpennine Trading Estate
Gorrels Way
Rochdale
Lancashire
OL11 2PX
UK

Level 4 Approved Sprinkler Contractor for:

- A Pre-calculated ordinary hazard systems, installations, extensions and alterations (excluding water supplies)
- B Town's main water supplies
- C Pumped water supplies
- D Base build contracts (pre-calculated design principles)
- E Systems, installations and alterations involving FHC design principles

Approved to self-certificate all Categories of Work

No supervision required.

This certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.

Signed for BRE Global Limited

Martin Naylor

LPS 1048 Scheme Manager

11 April 2020

Date of Issue

10 April 2023

Expiry Date



This certificate remains the property of BRE Global Limited and is issued subject to terms and conditions (for details visit www.redbooklive.com/terms)

To check the validity of this certificate please scan the QR tag, visit www.redbooklive.com/check or contact us.

BRE Global Limited, Garston, Watford WD25 9XX.
T: +44 (0)333 321 8811 E: Enquiries@breglobal.com

LPCB is a Registered Trademark of the Building Research Establishment Limited



Certificate of Accreditation

This is to certify that
A & F Sprinklers Limited

has achieved SafeContractor accreditation

Date: 20th July 2022

This certificate is valid until: 20th July 2023

Certificate number: NE2961

Signed:

Alyn Franklin
Alcumus CEO





Schedule to SafeContractor certificate

This SafeContractor certificate is awarded for the following services:

Work Categories:

Fire Protection: Fire Sprinkler Systems Installation / Maintenance

Industry Roles:

Construction Contractor

Category Related Activities:

Ladders / Step Ladders, MEWPs, Tower Scaffolds, Working at Height, Working with Chemicals and Hazardous substances

Full validation of this certificate should be made via the SSIP Portal www.ssiportal.org.uk

SafeContractor accreditation has been achieved following an assessment of the contractor's health & safety documentation, and compared against the **SafeContractor** Charter Standards, which set out the health & safety standards required to achieve accreditation.

For more information on the Charter Standards, the **SafeContractor** scheme or for confirmation of this contractor's accreditation please telephone **SafeContractor** on 029 2026 6749.

www.safecontractor.com
www.alcumus.com

Alcumus SafeContractor Limited is owned by Alcumus Group Limited
Alcumus SafeContractor and the Alcumus SafeContractor logo are trademarks belonging to Alcumus Holdings Limited
Company registration number: 07618138

 **Alcumus**[®]
Safer, Healthier, Stronger



Certificate of Verification

This is to confirm that

A & F Sprinklers Limited

has completed the SafePQQ question set covering the following topics:

- Finance
- Environment
- Quality Management
- Equality
- Modern Slavery
- Anti-bribery
- GDPR
- Right to Work
- References
- Building Information Modelling

Registration number: NE2961

Expiry date: 20th July 2023

Signed:



Alyn Franklin
Alcumus CEO

Please note

This certificate is only valid with a SafeContractor health and safety accreditation certificate.

The SafePQQ product is aligned to the PAS91 Question set.

This certificate is the property of Alcumus SafeContractor and must be returned on request.

Alcumus SafeContractor, Ays House, Parc Nantgarw, Cardiff, CF15 7QX

T: 029 2026 6749 **E:** safecontractor@alcumusgroup.com **W:** www.alcumusgroup.com | www.safecontractor.com

PAS91

PROFESSIONAL SAFETY ADVISORY SERVICE

A&F SPRINKLERS LTD

Has retained the services of Rawlings Safety & Training Consultancy Services Ltd to act as Professional Safety Advisor for the period shown below.

FROM: 03/05/2022

TO: 02/05/2023

S. Rawlings

Steve Rawlings
Managing Director



K. Colleran

Kevin Colleran
Managing Director



Certificate of Registration under the Waste (England and Wales) Regulations 2011

Regulation authority

Name	
Address	National Customer Contact Centre 99 Parkway Avenue Sheffield S9 4WF
Telephone number	03708 506506

The Environment Agency certify that the following information is entered in the register which they maintain under regulation 28 of the Waste (England and Wales) Regulations 2011.

Carriers details

Name of registered carrier	A&F SPRINKLERS LTD
Registered as	An upper tier waste carrier and dealer
Registration number	CBDU244875
Address of place of business	A & F SPRINKLERS GORRELLS WAY ROCHDALE OL11 2PX
Telephone number	08455051550
Date of registration	1 June 2021
Expiry date of registration (unless revoked)	10 July 2024

Making changes to your registration

Your registration will last 3 years and will need to be renewed after this period. If any of your details change, you must notify us within 28 days of the change.



WEEKLY PUMP & SPRINKLER SYSTEM TEST PROCEDURE

SITE NAME

SITE ADDRESS LINE 1

SITE ADDRESS LINE 2

SITE ADDRESS LINE 3

SITE ADDRESS LINE 4

A&F Contact Details

INSERT NAME

JOB TITLE

CONTACT NUMBER

EMAIL ADDRESS

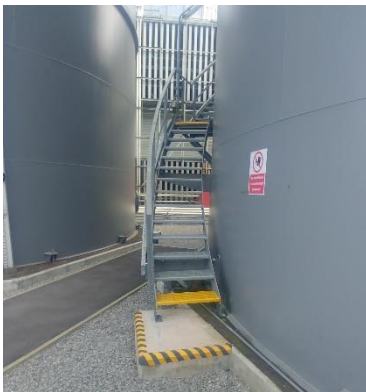
ALARMS, MONITORING STATION, KEYS & TEST CARD (s)

Before carrying out any tests on the Sprinkler system(s) or pump(s), please ensure that the alarms have been isolated (*if applicable*), the monitoring station has been informed and the system has been put on test for the required amount of time to finish the tests (*if applicable*), you have got the keys for the pump house and the valve locks.

WATER STORAGE TANK

1. Climb the access steps to the top of the tank. At the top of the access steps there is a small platform to stand on, at no time must the roof of the tank be stood on as they are very fragile.
2. Unlock and open the ball valve housing lid and check that the tank is full of water, the ball valve has shut off and the float is sat on top of the water. *If it is safe to do so depress the ball valve float until water starts to flow, slowly allow the float to rise and check that the water stops flowing.*
3. Close the housing lid and lock it.
4. Check the condition of the tank roof.
5. Descend the ladders and carry out a visual check of the tank shell for signs of leakage/damage.
6. Inspect the tank infill/pump suction pipe/s and tank drain valve lagging for any damage.
7. Check the contents gauge is reading correctly and that there are no signs of any leaks around the tank.

* *The tank infill isolation valve and tank suction valve should be padlocked and chained in the fully open position.*



ACCESS STEPS



TANK INFILL LAGGING





PUMP SUCTION LAGGING





TANK INFILL VALVE

TANK SUCTION VALVE

PPE

You must ensure you wear the correct PPE for the tasks to be undertaken in the pumphouse

- **Ear defenders** – *When running the fire pumps.*
- **Gloves & Safety glasses/goggles** – *When topping up fuel, oil, coolant levels and when checking batteries.*

			
Hi Viz EN471	Safety Gloves EN388	Hearing Protection 23dB SNR when noise levels reach 80db or above	Eye Protection EN166 When Drilling or painting
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N

PUMP HOUSE & VALVES

1. Check the lighting comes on and is working correctly.
2. The temperature inside the pump house must be kept at a minimum of 10°C for Diesel pumps and a minimum of 4°C for Electric pumps always.
3. Visually check the pipe work and Fire pumps for any signs of damage or leakage.
4. Check that the trace heating is operating correctly.

VALVES TO CHECK

- Electric, Diesel and Jockey pump suction valves to be fully open and padlocked and strapped/chained in this position.
- Electric, Diesel and Jockey pump delivery valves to be fully open and padlocked & strapped/chained in this position.
- The pump flow test return pipes gate valve and butterfly valve are to be fully closed and padlocked & strapped/chained in this position.
- The underground pipe work isolation valve to be fully open and padlocked & strapped/chained in the open position.
- Pump house protection isolation valve to be fully open and padlocked & strapped/chained in this position.



DIESEL SUCTION VALVE



ELECTRIC SUCTION VALVE



JOCKEY SUCTION VALVE



DIESEL DELIVERY VALVE



ELECTRIC DELIVERY VALVE



JOCKEY DELIVERY VALVE



DIESEL FLOW VALVE



ELECTRIC FLOW VALVE



FLOW BUTTERFLY VALVE



UNDERGROUND PIPE VALVE



PUMP HOUSE VALVE

PUMP CONTROL PANELS

- Check that the power to all pumps is switched on and there are no faults or alarms showing.

CHECKS ON DIESEL ENGINES PRIOR TO STARTING

1. Check the engine oil level with the use of the dipstick. *The fuel level must be above ¾ full always, use fuel gauge for this.*
2. Check the coolant level is satisfactory in the expansion vessel.
3. Check the 'electrolyte' level of all battery cells on a monthly basis with the use of a hydrometer.



DIESEL CONTROL PANEL



AUTO, HAND, OFF MODE



JOCKEY CONTROL



ELECTRIC CONTROL

PUMP INITIATION TESTS

LPCB INITIATION BOARD

To test the Jockey pump cut in and cut out pressures-

1. Turn the blue handled valve to the test position then slowly crack open the bottom red handled valve, observe the needle on the pressure gauge and record the pressure that the Jockey pump starts on the weekly test card.
2. Close the bottom red handled valve and turn the blue handled valve to the duty position and record the pressure that the Jockey pump stops on the weekly test card.
3. Repeat the above process to test the Electric pump/Diesel pump/s as required using the relevant valves and gauges stopping the pumps afterwards.

FM PUMP START TEST

1. To initiate a pressure drop to start the Diesel pump press the weekly test button on the LCD control panel screen. The cut in pressure is digitally set and is visible on the LCD screen, the pump will start at this pressure (see below PUMP RUNNING). Stop the pump afterwards.
2. To check this with a gauge locate the gauge and gate valves, open valve 'A' fully and crack open valve 'B' keep watching the gauge and record the pressure that the Diesel pump starts (see below PUMP RUNNING). Reverse the procedure with the valves and then stop the pump.

PUMP RUNNING

- When the Diesel pump is running carry out a visual check around the engine for any signs of a water, fuel, oil etc. leakage.
- Check that cooling water is flowing from the heat exchanger discharge line. The louvre should open automatically, and the fan should run automatically whenever the Diesel pump runs and close and switch off afterwards.
- Record the churning pressure of the pump/s.
- Keep a watch on the oil pressure and engine temperature gauges for any significant changes.

*Each Diesel pump should be run for a minimum of 30 minutes per week independently of each other.
The time is to be taken from the tachograph on the engine control panel.*

The Diesel pump/s shouldn't be left unattended when it/they are running.

Electric pumps should be run for a minimum of 10 minutes per week.

- To stop the Electric pump, press the Red Stop button on the control panel. To stop the Diesel pump either use the Stop lever on the engine or the Red stop button on the control panel. Replenish the fuel as and when necessary.

VALVE SET CHECKS AND TESTS

CHECKS

1. Check that the System Main Isolation valve, System Service valve and the ½" Bell isolation valves are fully open and padlocked and strapped/chained in this position.
2. Check that the By-pass valve, 50mm main drain valve and Weekly Test valve are fully closed and padlocked and strapped/chained in this position.

TESTS

1. Record the 'B' and 'C' gauge pressures on the weekly test card, undo the lock on the Weekly Test valve and open it quickly. Once fully open record the time it takes for the bell to ring, leave it ringing for 30 seconds then close the Weekly Test valve and lock back up. The bell will stop ringing then record the 'B' and 'C' gauge pressures again on the weekly test card.
2. Repeat the above procedure for all other wet alarm valves on site. When all valve sets have been checked and tested as above stop the pump

TAIL END AIR VALVES

The Tail End Air valves don't have bells attached to them as such there is no weekly test to carry out on them. However, a visual check should be carried out weekly on the valve sets and the compressors comprising of the following.

1. Check the valves are in the normally open/closed position as per picture.
2. Check the water and air pressure are consistent each week.
3. Check the compressors are switched on and are working correctly.
4. Check the compressor oil level regularly (once a month).

PUMP RUNNING

If all the pump/s haven't been run for the required length of time start and stop the relevant pump/s as per previous instructions.

ALARMS, MONITORING STATION, KEYS & TEST CARD/S

- After completion of all the checks and tests clear all signals from the fire alarm panel, remote sprinkler monitoring panel and reinstate the fire alarm.
- Call the monitoring station and check what signals have been received and put the system back on watch. Hand the keys in after making sure the pump house is locked up and put the weekly test cards in a safe place.

TEST CONCLUDED

This concludes the Weekly Test procedure. If any step cannot be achieved or any of the equipment is faulty please contact A&F Sprinklers Ltd head office on 0845 505 1550.

Weekly Test Card For Sprinkler Installation No.



Weekly Test

This is to ascertain that the Water Supplies, Valves and Alarm Gong are in good working order. Examine first all Main Valves, Drain and Test Valves and feed to the Alarm Gong. Any faults revealed during tests must receive immediate attention.

The following valves must be secured **open**:

All Main Valves - feed and delivery - on Towns Mains, Elevated Tank, Pressure Tank, Main Stop Valve on Installations and the valve on the Alarm Gong feed.

All Test Valves and Drain Valves are to be secured **shut**.

Fire Extinguishing Appliances

Make an inspection of all hand Fire Appliances to ensure that they are good condition and ready for use.

Routine for Testing

Check that the necessary precautions have been taken should a direct Fire Service or Central Station alarm be provided.

Manufacturers instructions should be pursued when conducting tests.

Test at Installation Valves

Note the pressure on the gauge above and below the Alarm Valve and enter in columns 2a) and 2b).

Open the 15mm (1/2") Test Valve fully and enter in column 3 the time taken for the Alarm Gong to sound: the gong should sound continuously (30 secs. Min) until shut off. Close the test valve and again note the pressure registered on the gauges and enter in columns 4a) and 4b).

Clean and service the alarm motor and gong, if necessary, on completion of test. Check that the direct connection to the Fire Service, Central Alarm Station or remote panel, if provided, has operated.

Equipment Faults

It is imperative that all equipment faults are immediately rectified or suitably actioned with specialist attendances as appropriate.

Quarterly Test on Town Main Water Supplies

The test requires carrying out a regular basis to verify the continued effectiveness of the town main. Such tests may however not be possible on some alternate installations whilst pressurised with air.

Isolate any elevated or pressure tanks prior to testing the town main.

Open 80mm test valve and record the pressure on the gauge above the alarm valve at the required flows for the installation.

If a flow meter is not fitted open the 50/80mm test valve fully and record the pressure on the gauge above the alarm valve.

Firmly close and secure the test valve and reopen valves from previously isolated supplies.

Year	Installation Valves			Electric Alarms	False Alarm Pump		Trace Heating and Lagging	Water Supply	Test and Maintenance		General Comments
	1 Is the Main Stop Valve secured open by a leather strap and padlock?	2 Pressure on Alarm Valve gauges before test a) above valve b) below valve	3 Time taken to ring the gong after the 15mm (1/2") Test Valve was fully open (secs)		4 Pressure on Alarm Valve gauges after test a) above valve b) below valve	5 Did all local and remote visual and audio alarms and Fire Service connection, if any, operate satisfactorily?			6 Is the false alarm pump operating correctly Cut in pressure Cut out pressure	7 Is the trace heating operating, is the lagging in a good condition?	
Date											
January											
February											
March											
Town Main Supply Flow Test: Running Pressure @ L/Min= bars @ L/Min= bars 50/80mm full flow = bars/PSI											
April											
Reminder About this time installations on the Alternate or Subsidiary Air Valve Systems should be charged with water. Subsidiary Stop Valves controlling sprinklers liable to be affected by frost should be opened and the drain valves shut.											
May											
June											
Town Main Supply Flow Test: Running Pressure @ L/Min= bars @ L/Min= bars 50/80mm full flow = bars/PSI											
July											
August											
Town Main Supply Flow Test: Running Pressure @ L/Min= bars @ L/Min= bars 50/80mm full flow = bars/PSI											
September											
Reminder About this time installations on the Alternate or Subsidiary Air Valve Systems should be thoroughly drained of water and charged with Air. Subsidiary Stop Valves controlling sprinklers liable to be affected by frost should be shut and the pipes thoroughly drained of water. Any electrical trace heating thermostats and indicators should be checked and made operative.											
October											
November											
Town Main Supply Flow Test: Running Pressure @ L/Min= bars @ L/Min= bars 50/80mm full flow = bars/PSI											
December											
Routine Service Completed Date: Completed by:											

																	Notes / Work Carried Out
																	Date
																	Signed



SPRINKLER SYSTEM WEEKLY TEST CARD SPRINKLER INSTALLATION

YEAR

INSTALLATION NO.

NAME AND ADDRESS

Particulars of the routine test should be recorded each week on this card at the time of the test.

Cleaning and Maintenance Regimes



winvic

winvic.co.uk



INTRODUCTION TO THE CARE & MAINTENANCE

In accordance with the relevant governing body Loss Prevention Council (LPC), Factory Mutual (FM), National Fire Protection Association (NFPA) etc. All sprinkler systems must be checked tested and maintained regularly.

The user shall ensure that a programme of inspection and checks is carried out, arrange a test, service and maintenance schedule and keep records of all work completed. These records shall be held on the premises.

The user shall arrange for the test, service and maintenance schedule to be carried out under contract by a sprinkler servicing contractor.

Any alarm receiving station(s) shall be notified of any system tests which will result in the transmission of an alarm. The alarm receiving station(s) shall be requested to verify that alarm signal(s) have been received. The alarm receiving station(s) shall be informed immediately that the test procedure have been completed.

After an inspection, check, test service or maintenance procedure the system, and any automatic pumps, storage tanks shall be returned to the normal operational condition.

If an LPC 1048 Certificate of Conformity has been issued (see part B section 5 of this manual) then see part A of this manual.



PREVENTATIVE MAINTENANCE

Preventative maintenance is conducted to keep equipment working and/or extend the life of the equipment. The primary goal is to avoid or mitigate the consequences of the failure of equipment. This may be by preventing the failure before it occurs. It is designed to preserve and restore equipment reliability by replacing worn components before they actually fail. The objective ideal would be to prevent all equipment failure before it occurs.

CORRECTIVE MAINTENANCE

Corrective maintenance is defined as maintenance necessary after equipment or component failure and should be acceptable if the cost or consequence of failure is less than that of preventative maintenance or the consequence of failure is minimal.

SATISFACTORY SPRINKLER PREVENTATIVE REGIME

A satisfactory sprinkler system preventative maintenance regime including a thorough review of hazard is critical to the continued dependable performance of all sprinkler systems.

This part outlines procedures for the care and maintenance of a sprinkler system to ensure that it remains fully operational and that periodic assessments are carried out to verify that the protection is appropriate to the hazards.

This document should be read in conjunction with the following:

- A.** Care & Maintenance
- B.** Precautions & Procedures when a system is not fully operational
- C.** If applicable, special requirements for life safety systems
- D.** Pumphouse weekly test sheet Jan to June
- E.** Pumphouse weekly test sheet July to Dec
- F.** Fig ? (Valveset sign)
- G.** Weekly bell test procedure
- H.** Replacement Sprinklers



REPLACEMENT SPRINKLERS (SEE A&F CLEARANCE CERTIFICATE)

A stock of spare sprinklers shall be kept on the premises as replacements for operated or damaged sprinklers. Spare sprinklers, together with sprinkler spanners as supplied by the supplier, shall be housed in a cabinet or cabinets located in a prominent and easily accessible position where the ambient temperature does not exceed 27 degree Celsius.

The number of spare sprinklers per system shall be no less than:

- 6 for Light Hazard (LH)
- 24 for Ordinary Hazard (24)
- 36 for High Hazard (HH)

The stock shall be replenished promptly after any spares have been used.

The testing and maintenance to the sprinkler system is to be done at regular intervals of one week, one month, quarterly, half yearly, yearly, three yearly and every ten years. Please note (with the exception of the weekly test) the testing and maintenance is to be carried out by a competent person i.e., engineer or fitter from an LPC accredited sprinkler company.

WEEKLY ROUTINE

Only appropriately trained personnel shall be permitted to undertake weekly testing of the sprinkler system or emergency actions.

Refer to:

- Weekly bell test procedure
- Pumphouse weekly test sheet Jan to June
- Pumphouse weekly test sheet July to Dec
- Fig 2 (Valveset sign)
- Weekly bell test procedure



MONTHLY ROUTINE

Each part of the monthly routine shall be carried out at intervals on no more than one calendar month in addition to the tasks identified in the weekly routine.

Check the electrolyte level of all battery cells (including diesel engine starter batteries and those for control panel power supplies) and carry out all other maintenance procedures specified by the battery manufacturer (fire pump information can be found in part 2 of this manual). Check the battery charging voltage and make sure it has not changed. Report any changes to the sprinkler service contractor.

The access ladder to all sprinkler water storage tanks shall be checked for correct housing and security and any tank ball covers shall be secured and locked.

QUARTERLY ROUTINE

The following checks and inspections shall be made at intervals of no more than 13 weeks, and shall include all the tasks identified in the weekly and monthly routines.

A review of the hazard shall be carried out by the following personnel:

1. A competent person, i.e. an engineer
2. Project Manager / Engineer or fitter from an LPC accredited sprinkler company; or
3. The user shall submit a completed return to the sprinkler servicing contractor detailing any changes as specified in "Sprinkler Quarterly Hazard Review" in this section of the manual.
4. If the system has been designed to Life Safety Requirements then each zone flow switch shall be checked either by a competent personnel or an LPC accredited company. For further information on this see section 13 within part 1 of this manual.

Please note- the review of hazard should be a continuous process undertaken by the user. Where changes occur that might change the effectiveness of the sprinkler protection, immediate remedial action should be taken.



HALF YEARLY ROUTINE

The following checks and inspections shall be made at intervals of no more than six months, and shall include all the tasks identified in the weekly, monthly and quarterly routines.

The checks and inspections shall be done by an LPC accredited sprinkler company, the checks and inspections shall include:

1. Checking the moving parts of each alarm valve
2. Conducting a flow test of all fire pumps to ensure the pump is making the required duty as indicated on the pump name plate.
3. Checking the correct settings of all pressure switches.
4. Any secondary electrical supplies from a diesel generators or other sources shall be verified by the user to the sprinkler contractor showing satisfactory operation.
5. Checking all stop valves that control the flow of water for correct operation and signals (if installed)

YEARLY ROUTINE

The following checks and inspections shall be made at intervals of no more than six months and shall include all the tasks identified in the weekly, monthly, quarterly and half yearly routines.

The checks and inspections shall be done by an LPC accredited sprinkler company, the checks and inspections shall include:

1. Checking of fire pump signals
2. Checking of float valves on all water storage tanks
3. Hazard Review
4. Any installed sprinkler heads that are damaged shall be replaced.
5. Pipework and hangers shall be checked for integrity and condition.
6. The number and condition of replacement parts as spare shall be checked
7. The electrical installation to the fire and rescue service and remote central station alarm



8. Examination of all valves and replaced or overhauled as necessary
9. In natural water supplies, settling chambers and screens shall be taken out and inspected
10. Flow switches other than those that are fitted to satisfy life safety requirements shall be checked for correct function

3 YEARLY ROUTINE

The following checks and inspections shall be made at intervals of no more than six months and shall include all the tasks identified in the weekly, monthly, quarterly, half yearly & yearly routines. The checks and inspections shall be done by an LPC accredited sprinkler company,

the checks and inspections shall include:

1. Water storage tanks shall be drained, cleaned as necessary
2. Examined internally and externally for corrosion and fit for purpose
3. Have the fabric attended to as necessary and restored in accordance with the manufacturers recommendations
4. In natural water supplies, settling chambers and screens shall be taken out and inspected and cleaned as necessary
5. Foot valves shall be serviced

10 YEARLY ROUTINE

The checks and inspections shall be done by an LPC accredited sprinkler company, the checks and inspections shall include:

A 10-year tank shall be:

1. Water storage tanks shall be drained, cleaned as necessary
2. Examined internally and externally for corrosion and fit for purpose
3. Have the fabric attended to as necessary and restored in accordance with the manufacturers recommendations



PLANNING FOR MAINTENANCE

Where maintenance of a sprinkler system or building fabric is anticipated that will result in impairment of the sprinkler protection, a written maintenance plan shall be prepared by the user and agreed with the authorities prior to commencement of the maintenance work. The

requirements shall be in line with "Precautions & Procedures When a System is Not Fully Operational" (within this manual) shall be met. If the system is for life safety see "Special Requirements for Life Safety Systems" (within this manual) shall be met.



CARE & MAINTENANCE OF THE SPRINKLER SYSTEM

The record cards in this section are provided by **A & F Sprinklers Ltd.** to enable you to record the results of the weekly tests & procedures which must be carried out as a condition of your insurance.

PROCEDURES FOR SHUT DOWN OF THE WATER SUPPLY OR ANY INSTALLATION

Your premises are vulnerable whenever your Sprinkler System is inoperative; thus, it is essential that the following precautions be taken. Any shut down of the water supply to the sprinkler system or any action that results in the protection being rendered inoperative must be notified to your insurers **IMMEDIATELY.**

1. Alterations & repairs to the water supply or the installation should be carried out only during normal working hours so far as is practicable, & all efforts must be made to ensure the sprinklers remain inoperative for as short a time as possible.
2. As much of the sprinkler system as possible must remain operative during progress of the work, particularly where the work cannot be completed in one day.
3. Before the water supply is turned off, a thorough examination of every part of the premises must be made to ascertain that there is no indication of fire.
4. When sprinkler protection is shut down during working hours, Managers & Supervisors must be notified, so that vigilance can be maintained. Where practical, fire doors must be closed, smoking prohibited & hazardous operations controlled, suspended or avoided.
5. When sprinkler protection is shut down outside working hours, before the water supply is turned off, in addition to the precautions outlined in 4 above, a special fire watch by trained personnel may be advisable. In this event fire extinguishers & hose reels should be strategically deployed in readiness for immediate use.
6. The Public Fire Brigade should also be informed.
7. After completion of the work, test the installation & water supply to ensure that they function correctly & that all blank flanges or spades have been removed.

Whenever practicable, maintenance work should be planned in advance & only undertaken after consultation with your insurers.

Always follow installer & manufacturer's instructions.

Only trained personnel or an LPCB approved contractor should undertake tests or maintenance.

Data Sheets





OPERATION & MAINTENANCE MANUAL

CONTRACT NO.	
SITE ADDRESS	
PREPARED BY	
ISSUE NO.	
ISSUE DATE	

P A R T A

1 COMPANY CERTIFICATION

2 WHY SPRINKLERS ARE NEEDED

3 SPRINKLER DESIGN SPECIFICATION

4 EMERGENCY PROCEDURES

5 INTRODUCTION TO CARE & MAINTENANCE

6 CARE & MAINTENANCE

7 SPECIAL REQUIREMENTS FOR LIFE SAFETY

8 PRECAUTIONS & PROCEDURES

9 QUARTERLY HAZARD REVIEW

10 WEEKLY TEST PROCEDURE

11 FIGURE 2

12 WEEKLY TEST CARD (A3)

13 ZONE VALVE DETAILS

14

15



WHY SPRINKLERS ARE NEEDED

Sprinklers have become by far the most widely used and most reliable automatic means of fire protection. Sprinkler systems automatically detect fire. Transmit an alarm as a result of waterflow and suppress or extinguish the fire. They are located in places where people cannot always be present **and operate only as needed in the immediate vicinity of the fire.** Because of the care given to design, construction and assembly, and because of the rigid approval tests required, the reliability of conventional sprinkler systems are unequalled.

Time in firefighting is a critical factor. Automatic sprinklers give the firefighting effort a big jump on the fire. A building fire generally starts small, however, with sufficient fuel to feed it, the amount of heat, flame and smoke can increase to such a degree that manual firefighting can be severely hindered, if not totally ineffective. Sprinklers on the other hand, can detect and control fire effectively to minimise property loss.

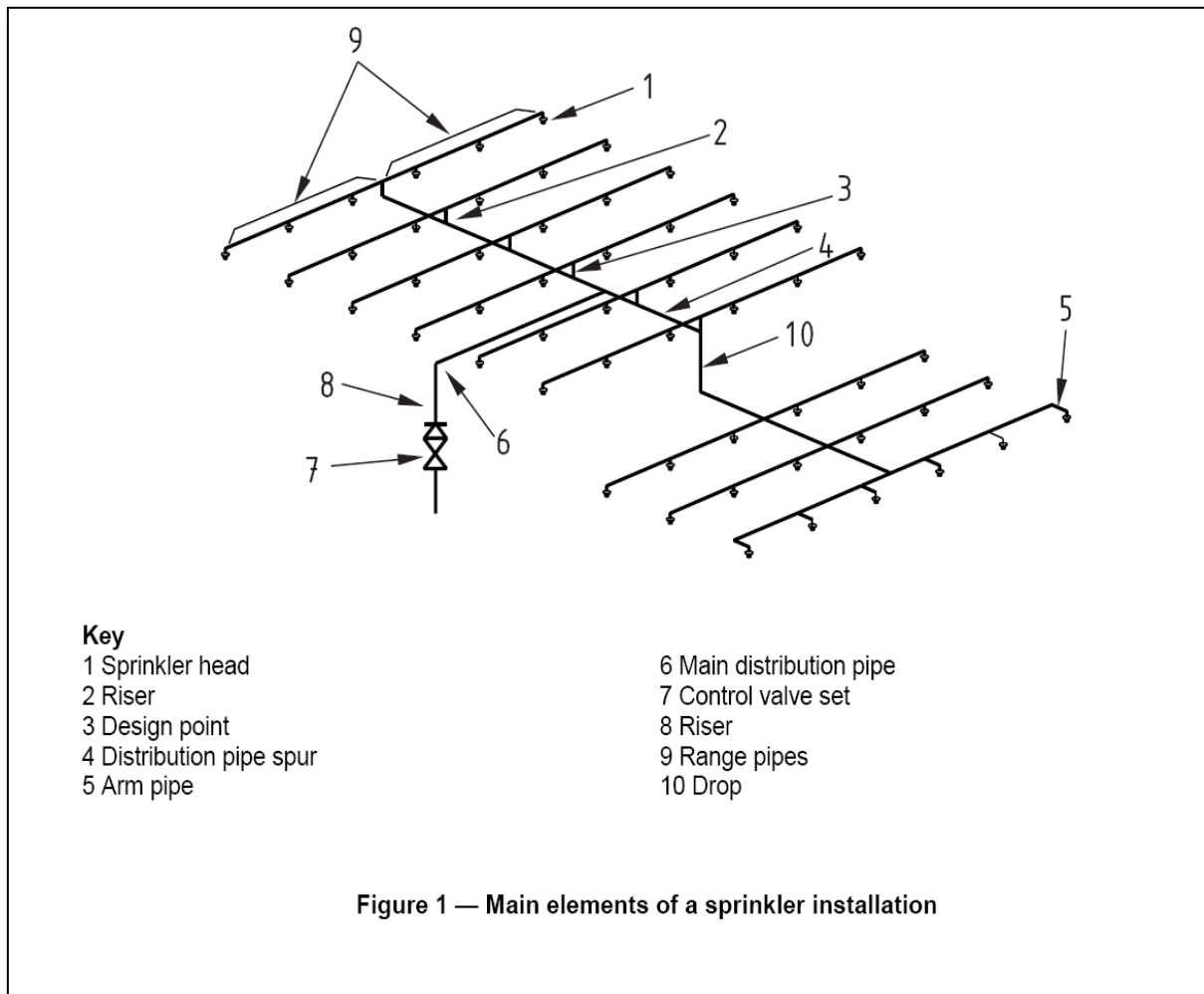
The idea that automatic sprinklers introduce a serious water damage hazard is a myth. Properly installed, maintained and adequately supplied with water, the sprinklers system works with water saving efficiency. **Only sprinklers needed over and immediately adjacent to the fire operate.** On the other hand, hose streams directed through windows from out-doors often drench an entire floor area without beneficial effect particularly where fire is hidden by smoke. Hose streams also use more water and cause much more water damage than would be expected with sprinklers. Many sprinklers are so large or so high that much of their area is beyond the reach of outside hose streams.

In summary, automatic sprinklers can prevent fires from reaching destructive proportions and may mean the difference between a minor interruption and a prolonged or permanent shutdown.

DESCRIPTION OF A SPRINKLER SYSTEM

A sprinkler system consists of a water supply (or supplies) and one or more sprinkler installations; each installation consists of a set of installation main control valves and a pipe array fitted with sprinkler heads.

The sprinkler heads are fitted at specified locations at the roof or ceiling, and where necessary between racks, below shelves, and in ovens or stoves. The main elements of a typical installation are shown in **Figure 1**.



The sprinklers operate at predetermined temperatures to discharge water over the affected part of the area below.

The flow of water through the alarm valve initiates a fire alarm. The operating temperature is generally selected to suit ambient temperature conditions.



ONLY SPRINKLERS IN THE VICINITY OF THE FIRE, I.E. THOSE WHICH BECOME SUFFICIENTLY HEATED, OPERATE.

The sprinkler system is intended to extend throughout the premises with only limited exceptions.

In some life safety applications, an authority might specify sprinkler protection only in certain designated areas and solely to maintain safe conditions for the evacuation of persons from the sprinkler protected areas.

It should not be assumed that the provision of a sprinkler system entirely obviates the need for other means of fighting fires, and it is important to consider the fire precautions in the premises.

Structural fire resistance, escape routes, fire alarm systems, particular hazards needing other fire protection methods, provision of hose reels and fire hydrants and portable fire extinguishers, etc., safe working and goods handling methods, management supervision and good housekeeping all need consideration.

It is essential that sprinkler systems should be properly maintained to ensure operation when required. This routine is liable to be overlooked or given insufficient attention by supervisors.

It is, however, neglected at peril to the lives of occupants of the premises and at the risk of crippling financial loss. The importance of proper maintenance cannot be too highly emphasized.

When sprinkler systems are out of service extra attention should be paid to fire precautions and the appropriate authorities informed.



SPRINKLER SYSTEM DESIGN SPECIFICATION

Roof Installations - Marshalling	
Occupancy	Warehouse
Hazard Classification	High Hazard Storage
Category of Goods	Category 4
Storage Height of Goods	Free Standing to 2.0m (max)
Design Density of Discharge	25 mm/min
Assumed Area of Operation	260m ²
System Type	Wet Systems
No. of Installations	10 x 200mm
Sprinkler/s Employed	20mm K242 68°C Standard Response SSP/SSU Brass
Water Supply Duration	90 mins
Hose Allowance	n /a

Roof Installations - Roof Above West Mezzanine	
Occupancy	Warehouse
Hazard Classification	High Hazard Storage
Category of Goods	Category 4
Storage Height of Goods	Free Standing to 2.0m (max)
Design Density of Discharge	16.5 mm/min
Assumed Area of Operation	260m ²
System Type	Wet Systems
No. of Installations	2 x 200mm
Sprinkler/s Employed	20mm K160 68°C Quick Response SSP Brass
Water Supply Duration	90 mins
Hose Allowance	n /a



Roof Installations – Roof Above VNA, Wide Aisle, High Value Goods Racking & East Mezzanine	
Occupancy	Warehouse
Hazard Classification	High Hazard Storage
Category of Goods	Unexpanded Plastics in Cardboard Boxes
Storage Height of Goods	14.6m (With In-Rack Sprinklers at a max of 9.1m) TB209 Table 3
Assumed area Of Operation	12 x Sprinklers
Operating Pressure	3.6 Bar
System Type	Wet Systems
No. of Installations	10 x 200mm
Sprinkler/s Employed	20mm K242 74°C ESFR Pendent Brass
Water Supply Duration	60 mins
Hose Allowance	n /a

Roof Installations – Roof above Ugly Racks	
Occupancy	Warehouse
Hazard Classification	High Hazard Storage
Category of Goods	Category 4
Storage Height of Goods	14.550m
Design Density of Discharge	10 mm/min
Assumed Area of Operation	260m ²
System Type	Wet Systems
No. of Installations	2 x 200mm
Sprinkler/s Employed	20mm K115 68°C Quick Response SSP Brass
Water Supply Duration	90 mins
Hose Allowance	n /a



Roof Installations – Roof Above Aerosol Cage	
Occupancy	Warehouse
Hazard Classification	High Hazard Storage
Category of Goods	Category 4
Storage Height of Goods	14.550m
Design Density of Discharge	25 mm/min
Assumed Area of Operation	300m ²
System Type	Wet Systems
No. of Installations	1 x 200mm
Sprinkler/s Employed	20mm K242 141°C Quick Response SSP/SSU Brass
Water Supply Duration	90 mins
Hose Allowance	n / a

Canopy Systems – Canopy No. 1 & No.3	
Occupancy	Canopy
Hazard Classification	High Hazard
Category of Goods	n/a
Storage Height of Goods	n/a
Design Density of Discharge	10 mm/min
Assumed Area of Operation	260m ²
System Type	Wet Systems (Trace Heated & Lagged)
No. of Installations	Fed From Roof Systems
Sprinkler/s Employed	20mm K115 68°C Quick Response SSP Brass
Water Supply Duration	90 mins
Hose Allowance	n / a



Pallet Rack Installations – VNA, Wide Aisle & High Value Goods	
Occupancy	In Rack
Hazard Classification	High Hazard Storage ST4
Category of Goods	Category B – Cat I, II & III + Unexpanded Plastics in Cardboard Boxes
Storage Height of Goods	14.558m
No. Levels of Storage	VNA- 7 Levels Wide Aisle – 9 Levels in Type A, 7 Levels in Type B High Value Goods – 9 Levels in Type D, 7 Levels in Type E
No. Sprinkler levels	1
No. Sprinklers in Operation	12 heads @ 1.563 bar (250 l/min)
System Types	Wet Systems
No. of Installations	15 x 150mm
Sprinkler/s Employed	20mm K200 74°C ESFR Pendent Brass
Water Supply Duration	60 mins
Hose Allowance	n /a

Rack Installations – Ugly Racks	
Occupancy	In Rack
Hazard Classification	High Hazard Storage ST15/16
Category of Goods	Category 4
Storage Height of Goods	14.558m
No. Levels of Storage	9
No. Sprinkler levels	8
No. Sprinklers in Operation	9 – (3 heads x 3 levels x 1 rack)
System Types	Wet Systems
No. of Installations	4 x 150mm
Sprinkler/s Employed	20mm K115 68°C Quick Response SSP Brass
Water Supply Duration	90 mins
Hose Allowance	n /a



Rack Installation – Aerosol	
Occupancy	In Rack
Hazard Classification	High Hazard Storage ST4
Category of Goods	Aerosols
Storage Height of Goods	13.958m
No. Levels of Storage	9
No. Sprinkler levels	9
No. Sprinklers in Operation	9 - (3 heads x 3 levels x 1 rack)
System Types	Wet Systems
No. of Installations	1 x 150mm
Sprinkler/s Employed	20mm K115 68°C Quick Response SSP Brass
Water Supply Duration	90 mins
Hose Allowance	n /a

Mezzanine Installations – Underside West Mezzanine	
Occupancy	Mezzanine
Hazard Classification	High Hazard Storage
Category of Goods	Category 4
Storage Height of Goods	TBA
Design Density of Discharge	25 mm/min
Assumed Area of Operation	300m ²
System Type	Wet Systems
No. of Installations	1 x 200mm
Sprinkler/s Employed	20mm K242 68°C Quick Response SSU Brass
Water Supply Duration	90 mins
Hose Allowance	n /a



Mezzanine Installations – Underside East Mezzanine	
Occupancy	Mezzanine
Hazard Classification	High Hazard Storage
Category of Goods	Exposed Unexpanded Plastics
Storage Height of Goods	7m (Based on 8m High Mezzanine)
Assumed area Of Operation	12 x Sprinklers
Operating Pressure	3.6 Bar
System Type	Wet Systems
No. of Installations	1 x 200mm
Sprinkler/s Employed	20mm K242 74°C ESFR Upright Brass
Water Supply Duration	60 mins
Hose Allowance	n /a

Offices Installation – Hub/Transport & Main offices	
Occupancy	OFFICES
Hazard Classification	Ordinary Hazard 3
Category of Goods	N/A
Storage Height of Goods	N/A
Assumed area Of Operation	216m ²
Operating Pressure	0.35 Bar
System Type	Wet Systems
No. of Installations	1 x 150mm
Sprinkler/s Employed	15mm K80 68°C SSU/SSP Brass/White
Water Supply Duration	90 mins
Hose Allowance	n /a



EMERGENCY PROCEDURES

Note: In the event of an actual fire the Sprinkler Equipment and Fire Pumps should not be isolated – switched off by anyone other than the Fire & Rescue Service.

In the event of a false sprinkler activation (Non-Fire Situation) the following must be adhered to:

1. Shut the gate / butterfly valve that is relevant to the protected area, please consult the fire block plan in **Part B Section 1**, or located within the pumphouse, gate-house or reception.
2. Open the main installation control valve drain. (see fig 2, **Part A Section 11**)
3. Stop the fire pump. Press the button marked “**stop**” or pull lever.

For further details see **Part B Section 5** located within this O&M manual for fire pump information.

4. Ring A&F main office number 0845 505 1550. This number is available 24/7.



SPECIAL REQUIREMENTS FOR LIFE SAFETY SYSTEMS

CONTROL VALVE SET

During servicing and maintenance of the installation alarm valves, the sprinkler installation shall be fully operational in all aspects.

ADDITIONAL PRECAUTIONS FOR MAINTENANCE

Only one zone of a multi-zone installation shall be shut down at a time. An installation or zone shall be shut down for the minimum time necessary for maintenance.

The partial or complete shut-down of a life safety sprinkler installation shall be avoided wherever possible. Only the smallest part of the installation necessary shall be isolated.

When a zone (or zones) is charged or recharged with water after draining, the flushing valve/s shall be used to check that water is available in the zone/s.

Individual alarm valves in a duplicate control valve set, where required, shall be separately serviced, provided the water alarm supply to the installation is maintained.

THE FOLLOWING PROCEDURE SHALL BE FOLLOWED BEFORE SERVICING DUPLICATE CONTROL VALVE SETS:

- The stop valves to the duplicate alarm valve shall be opened. The stop valves to the alarm valve to be serviced shall be closed and an alarm test carried out immediately on the other alarm valve.
- If water is not available, the stop valve shall be opened immediately, and the fault rectified before proceeding.



PRECAUTIONS & PROCEDURES WHEN A SYSTEM IS NOT FULLY OPERATIONAL

MINIMISING THE EFFECTS

Maintenance, alterations and repair of systems which are not fully operational should be carried out such as to minimise the time and extent of non-operation.

When an installation is rendered inoperative the user should implement the following measures:

- The authorities and any central monitoring station should be informed
- Alterations and repairs to an installation or its water supply (except possibly a life safety installation, see Special Requirements for Life Safety Systems within this manual.
- Supervisory staff in the areas affected should be notified and the area should be patrolled continuously
- Any hot works should be subject to a permit to work system. Smoking and naked lights should be prohibited in affected areas during the progress of works
- When an installation remains inoperative outside working hours all fire doors and fire shutters should remain closed
- Fire extinguishing appliances should be kept in readiness, with trained personnel available to handle them
- As much as possible of the installation should be retained in an operative condition by blanking off pipework feeding the parts or parts where work is taking place
- In the case of manufacturing premises, when the alterations or repairs are extensive, or it is necessary to disconnect a pipe exceeding 40mm nominal diameter, or to overhaul or remove a main stop valve, alarm valve or non-return valve, every effort should be made to carry out the work while the machinery is stopped.
- Where possible parts of installations should be reinstated to provide some protection overnight by using blinders and blanks within the pipework; the blinders and blanks should be fitted with visible indicator tags numbered and logged to aid timely removal



PRECAUTIONS & PROCEDURES WHEN A SYSTEM IS NOT FULLY OPERATIONAL

PLANNED SHUTDOWN

Only the user should give permission for a sprinkler installation or zone to be shut down for any reason other than an emergency.

Before a system is wholly or partly shut down every part of the premises should be checked to ensure that there is no indication of fire.

Where premises are subdivided into subdivided into separate occupancies constituting buildings in communication or at risk, protected by common sprinkler systems or installations, all occupiers should be advised that the water is to be turned off.

Particular attention should be given to situations where installation pipework passes through walls or ceilings where these may feed sprinklers in areas needing special consideration.

UNPLANNED SHUT-DOWN

When an installation is rendered inoperative as a matter of urgency or by accident, the above precautions should be observed as far as they are applicable with the least possible delay. The authorities concerned should also be notified as soon as possible.

ACTION FOLLOWING SPRINKLER OPERATION

Following shut-down after operation of an installation, the operated sprinkler heads should be replaced by heads of the correct type and temperature rating, and the water supply restored. Unopened sprinklers around the area in which operation took place should be checked for damage by heat of other cause and replaced as necessary.

The water to an installation or zone of an installation that has operated should not be shut off until all fire has been extinguished.

The decision to shut down an installation or zone which has operated because of a fire should be taken only by the fire service.

Components removed from the system should be retained by the user for possible examination by an authority

INSTALLATIONS PROTECTING COLD STORAGE WAREHOUSES (AIR CIRCULATION REFRIGERATION)

The installation should be dismantled for drying out after each operation.



PRECAUTIONS & PROCEDURES WHEN A SYSTEM IS NOT FULLY OPERATIONAL

FALSE ALARMS

Leaks and damaged sprinkler heads can cause the alarm to sound. Repair and reinstatement should be carried out immediately.

False alarms can also be caused by pressure surges in town main water supplies. If this problem occurs the fire insurer should be consulted and the sprinkler servicing contractor should be asked to modify the system as necessary.

INCIDENT REPORT

The fire insurer should be informed of any incident whether or not an insurance claim is made.



QUARTERLY SPRINKLER HAZARD REVIEW

Contract Name	
Contract Number	

Notes to Client:

As part of the continued maintenance of both your sprinkler system and its compliance with the design standard and LPS 1048 Certificate of Conformity (if applicable).

Failure to carry out/or have carried out at intervals no more than 13 (thirteen) weeks including tasks identified in the weekly and monthly routines (see O&M Manual or other A&F documents) could result in the revoking or voiding of any warranties or the 1048 Certificate of Conformity.

This review shall be carried out by either of the following:

- a) A competent person, for example by an engineer from a 1048 sprinkler service company.
- b) The users appointed fire safety official.

The entire premises should be checked thoroughly during the review hazard which shall include the following:

	Yes	No
Have any structural alterations been made since the last review which necessitates modifications to the sprinkler system (including low level office installation and partition relocation)?	<input type="checkbox"/>	<input type="checkbox"/>
Are there any new buildings, mezzanines or extensions?	<input type="checkbox"/>	<input type="checkbox"/>
Has there been a change of use to all or any part of the protected building?	<input type="checkbox"/>	<input type="checkbox"/>
Is the ambient temperature range still within acceptable limits for the design of the sprinkler	<input type="checkbox"/>	<input type="checkbox"/>
Has any painting or decoration been undertaken since the last inspection?	<input type="checkbox"/>	<input type="checkbox"/>
Have there been any significant changes to plant or equipment (quantity and location) or changes in production?	<input type="checkbox"/>	<input type="checkbox"/>
Is the storage type still consistent with the sprinkler system design (i.e. free standing storage has not been changed to rack storage)?	<input type="checkbox"/>	<input type="checkbox"/>
Is the design of the rack sprinklers consistent with the storage category?	<input type="checkbox"/>	<input type="checkbox"/>
Are flues (horizontal & vertical) within the storage rack kept clear as designated by the design	<input type="checkbox"/>	<input type="checkbox"/>
Are minimum clearances maintained between stored items and sprinkler heads?	<input type="checkbox"/>	<input type="checkbox"/>
Has the nature of goods stored or their packaging changed. Does this alter the category of stored	<input type="checkbox"/>	<input type="checkbox"/>
Have there been any changes to storage arrangements (plastic pallets, shelving, drum dollies, boxes or totes)?	<input type="checkbox"/>	<input type="checkbox"/>
Have there been any changes in storage height?	<input type="checkbox"/>	<input type="checkbox"/>
Where a smoke or heat detector system interacts with a sprinkler system, is a suitable maintenance contract in force?	<input type="checkbox"/>	<input type="checkbox"/>
Have there been any problems with the sprinkler system?	<input type="checkbox"/>	<input type="checkbox"/>
Have there been any alterations to the sprinkler system?	<input type="checkbox"/>	<input type="checkbox"/>

If the answer to any question above is YES please provide further details

and contact your service provider / 1048 issuing company for further review.



QUARTERLY SPRINKLER HAZARD REVIEW

Flow Switches

Flow switches in life safety systems may be in inaccessible locations and therefore difficult to test. Flow switch functional tests in life safety should be carried out by a competent person for example an engineer. Please also refer to the "Life Safety" section of this manual if the system is to life safety requirements.

	Yes	No
• Are there any life safety flow switches installed?	<input type="checkbox"/>	<input type="checkbox"/>
• If YES have they been functional tested?	<input type="checkbox"/>	<input type="checkbox"/>

Print		Position	
Signed		Date	



TRAINING ATTENDANCE RECORD

Course Title	SPRINKLER SYSTEM & FIRE PUMP WEEKLY TEST & EMERGENCY DRAIN DOWN PROCEDURE
Location	
Trainer Name	
Date	
Signature of Trainer	

SPRINKLER EQUIPMENT DETAILS AND TRAINING PROVIDED

Familiarization and training on the following:

- Sprinkler Tank infill valves
- Sprinkler Tanks and ancillaries
- Sprinkler tank & pump suction valves
- Fire Pumps
- Wet Valvesets
- Pre-action valvesets
- Compressor for pre-action system
- Control panel for pre-action system
- Sprinkler system isolation valves
- Isolation of sprinkler systems in case of false activation
- Location of sprinkler system drain valves
- Isolation of fire pumps in case of false activation
- Emergency drain down procedure in case of false activation
- Operation and status of any isolation valves
- Pumphouse ancillary equipment
- Weekly test operation and checks required
- Sprinkler System Remote Alarm Panel
- Bunded fuel tank operation



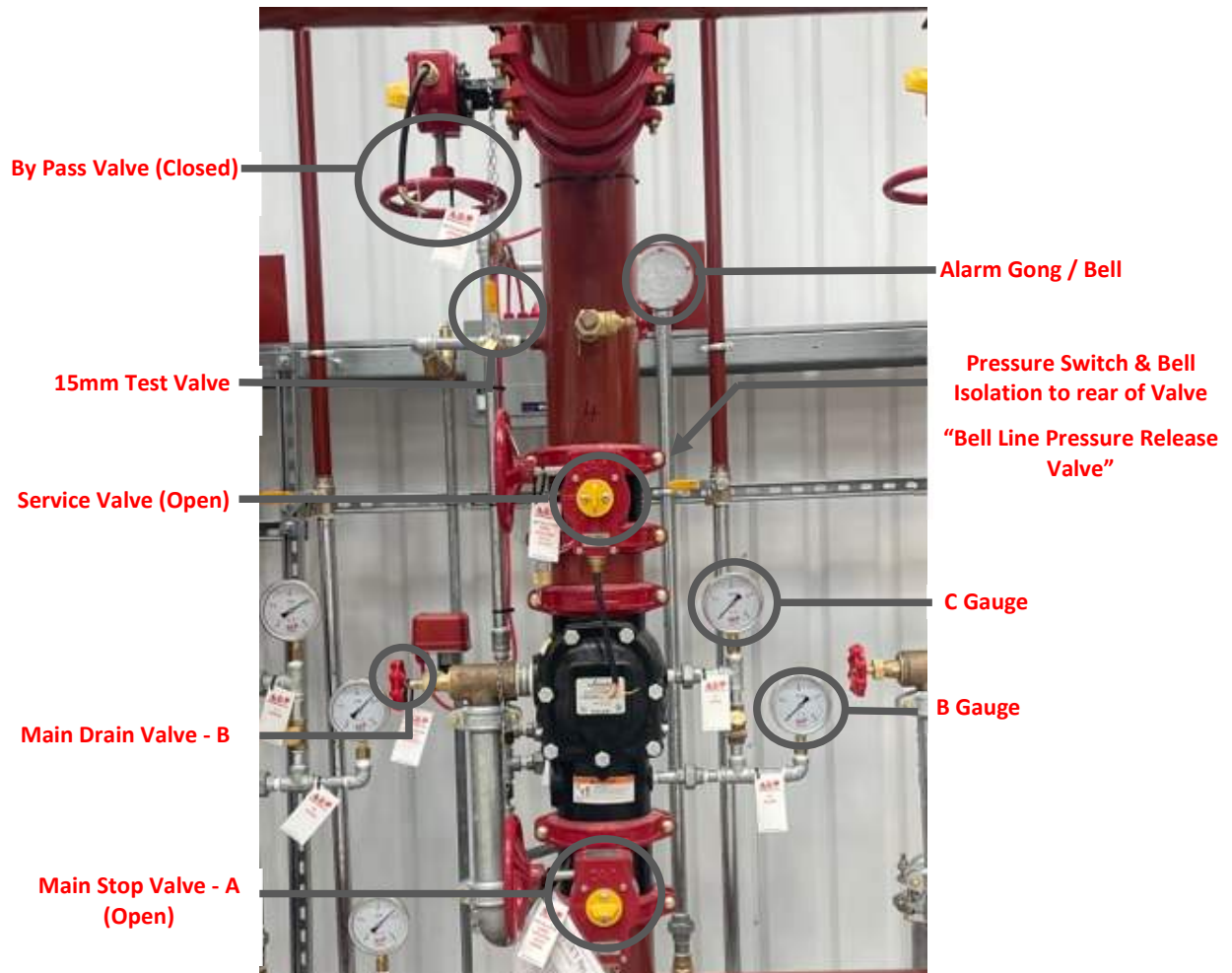
SPRINKLER VALVE WET SET

IN THE EVENT OF A FIRE, CALL THE FIRE & RESCUE SERVICE

Please ensure that in the event of a fire, the only people to isolate the sprinkler system are the Fire and Rescue Service.

If there has been accidental damage, please follow the following steps to isolate and drain down the sprinkler system.

- Close Main **Stop Valve A** (Turn Clockwise).
- Open Main **Drain Valve B** (Turn 90 degrees).
- Stop Fire Pump (Push **Red** Stop Button).



Weekly test procedure

1. Record **B & C Gauge** pressures.
2. Fully open **15mm Test Valve**.
3. Count time until Alarm Bell sounds.
4. Close test valve & check that the bell stops. (This may take a few seconds).
5. Press the "bell line pressure release" plunger
6. If bell doesn't stop after a few seconds, repeat steps 2-5.