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FIRE SERVICES DEPARTMENT
LICENSING AND CERTIFICATION COMMAND
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No. 1 Hong Chong Road, Tsim Sha Tsui East
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致：消防處通函收件人

先生／女士：

消防處通函第 8/2020 號
花灑系統年檢核對表

本函旨在公布消防處推出年檢核對表，以協助註冊消防裝置承辦商（承辦商）為花灑系統進行年檢。

花灑系統年檢核對表（附件）是參考了海外相關專業團體刊發的守則及標準而制訂的，事前亦曾廣泛諮詢本地業界。此核對表詳細說明年檢的最低要求。核對表及其附錄所列明的項目，如適用於有關建築物／處所的花灑系統，均須予以檢查／測試。承辦商完成檢查後，必須填妥核對表，按適用情況標明經檢查／測試的項目是否符合《最低限度之消防裝置及設備守則》（適用於有關建築物／處所的版本）所訂明的標準／要求。

此外，承辦商亦須確切遵照本處於二零一九年十二月十三日發出的消防處通函第 4/2019 號「消防栓／喉轆系統及消防水缸年檢核對表」中有關「填妥年檢核對表」及「承辦商的職責與責任」的原則及要求。承辦商務須留意，他們有最終責任確保該等裝置在有效操作狀態，並符合《最低限度之消防裝置及設備守則與裝置及設備之檢查、測試及保養守則》所訂明的要求。

為使業界有更多時間適應新的安排和做法，花灑系統年檢核對表將於二零二一年六月一日才生效。新安排將於實施後 12 個月進行檢討，本處正擬備核對表的中文版，不久後推出，另會制定適用於其他消防裝置的核對表，適時公布。

如有查詢，請於辦公時間致電 2733 1567 與本處消防設備專責隊伍聯絡。

消防處處長

（梁冠康  代行）

連附件
二零二零年十二月十五日

Annex

Annual Inspection Checklist for Sprinkler Systems

RFSIC Ref.: .....

Serial no. of FS 251: .....

Completion Date of Annual Inspection: .....

Building/Premises Address: .....

.....

The annual inspection is conducted in accordance with the appropriate edition of the Sprinkler Installation Rules applicable to the system(s) in the building/premises. In this Checklist, items required in such Rules are inspected and/or tested.

See Table I for the Schedule of Equipment and Table II for the Water Supply Flow Rate and Pressure Testing Record.

1.	**Type of Water Supply** (Please insert a "✓" in the appropriate box)		**Remarks**
	Direct town main connection without any pump	[ ]	Where applicable, parts of the water supply portion that need inspection is listed in Appendix I.
	Sprinkler tank refilled directly from town main	[ ]	
	Sprinkler tank refilled from town main via a transfer pumping installation	[ ]	
	Internal fire main which serves more than one building and/or system.	[ ]	Where applicable, parts of the water supply portion that need inspection is listed in Appendix I.
When sprinkler tank(s) is/are involved, parts of the water supply portion that need inspection is listed in the Checklist for Supply Tanks.			

Remarks: 1. Appendix XII may be used individually if the annual inspection only involves the sprinkler installation within one or more residential flats.

2. "Yes" denotes compliance with the FSD's requirements. "No" denotes non-compliance with the FSD's requirements. "N/A" denotes not applicable

Please insert a "✓" in the appropriate box

		N/A	**Remarks**
2.	**Sprinkler Pump Installation** (where provided) The annual inspection for sprinkler pump installation, where provided, is recorded in Appendix II.	[ ]	If N/A, go to 4

3.	**Sprinkler Intermediate Booster Pump Installation** (where provided) The annual inspection for sprinkler intermediate booster pump installation, where provided, is recorded in Appendix IV.	[ ]	If N/A, go to 4

4.	**Sprinkler Inlet**		**Yes**	**No**	**N/A**	**Remarks**
	a.	The sprinkler inlet(s), including the body, couplings, hand-wheel, stems, built-in non-return valves and other accessories, where applicable, is/are intact and free from leakage and undue corrosion.	[ ]	[ ]	[ ]	....
	b.	The sprinkler inlet(s) is/are equipped with a drain cock for pressure relief, and the drain cock is tested to be in working order.	[ ]	[ ]	[ ]	....

Annual Inspection Checklist for Sprinkler Systems

			Yes	No	N/A	Remarks
	c.	The sprinkler inlet(s) is/are duly lubricated and tested to operate freely between fully open and fully closed and the internal disc assembly can manoeuvre freely through its full range of operation.	[ ]	[ ]	[ ]	....
	d.	For sprinkler inlet(s) with a built-in stop valve, which has/have been installed/subject to detailed inspection for 4 years or more, the stop valve together with the bonnet, stem, disc and disc seat assembly shall be taken out for detailed inspection to verify all components are intact, free from undue corrosion, and in working order, and the installation/last detailed inspection date is displayed conspicuously on the inlet(s).	[ ]	[ ]	[ ]	....
	e.	The sprinkler inlet cabinet(s) is/are intact and properly protect(s) the inlet(s) against corrosion and abuse.	[ ]	[ ]	[ ]	....
	f.	The sprinkler inlet cabinet(s) is/are properly labelled "SPRINKLER INLET 花灑入水掣" in lettering of at least 50 mm high.	[ ]	[ ]	[ ]	....
	g.	For buildings equipped with more than one sprinkler inlet, where the sprinkler inlets are not interconnected, each sprinkler inlet is properly labelled in terms of the block(s)/floor(s)/area(s) of the building being served as applicable.	[ ]	[ ]	[ ]	....
	h.	The sprinkler inlet(s) is/are clear of obstructions and can be used freely.	[ ]	[ ]	[ ]	....
	i.	The sprinkler inlet(s) is/are affixed with a metal identification plate raised or engraved with English and Chinese characters of at least 50 mm high.	[ ]	[ ]	[ ]	....
	j.	For systems equipped with sprinkler intermediate booster pump(s), the sprinkler intermediate booster pump start/stop buttons and the audio and/or visual alarm(s) adjacent to the corresponding sprinkler inlet(s) are intact, securely mounted, properly wired, properly labelled and free from undue deterioration.	[ ]	[ ]	[ ]	....
	k.	The sprinkler intermediate booster pump start/stop buttons and the audio and/or visual alarm(s) are tested to be in working order.	[ ]	[ ]	[ ]	....
	l.	For improvised system, the pump status indicators and pump starting button adjacent to the sprinkler inlet are intact, securely mounted, properly wired, properly labelled and free from undue deterioration.	[ ]	[ ]	[ ]	....
	m.	For improvised system, the pump status indicators and pump starting button adjacent to the sprinkler inlet are tested to be in working order.	[ ]	[ ]	[ ]	....
	n.	The cables and cable containment for all electrical components, where applicable, are intact, securely mounted, properly wired, and free from undue deterioration.	[ ]	[ ]	[ ]	....
	o.	The pipework, valves, other equipment and accessories as applicable are intact, securely supported, and free from leakage, distortion and undue corrosion.	[ ]	[ ]	[ ]	....

			Yes	No	N/A	Remarks
	p.	The support and brackets are intact and free from distortion and undue corrosion.	[ ]	[ ]	[ ]	....

5.	**Pressure Reducing Valve (PRV)** (where provided) The annual inspection for pressure reducing valve set(s), where provided, is recorded in Appendix V.	[ ]	If N/A, go to 6

6.	**Sprinkler Control Valve**					
6.1	General					
	a.	The room(s)/enclosure(s), where provided, is/are properly labelled in terms of usage.	[ ]	[ ]	[ ]	....
	b.	The sprinkler control valve set(s) including all valves, trimmings, gauges, alarm gong(s), pipework and accessories as applicable are intact, securely supported, and free from leakage, undue deterioration and corrosion.	[ ]	[ ]	[ ]	....
	c.	The stop valves are duly lubricated and tested to operate freely between fully open and fully closed.	[ ]	[ ]	[ ]	....
	d.	The sprinkler control valve(s) and alarm gong(s) are properly labelled in terms of the block(s)/floor(s)/area(s) of the building being served as applicable.	[ ]	[ ]	[ ]	....
	e.	The pressure switch(es), solenoid valve(s), air compressor(s), valve trim box(es), control/indicating panel(s), where applicable, is/are properly labelled in terms of usage.	[ ]	[ ]	[ ]	....
	f.	The manual release unit(s), where applicable, is/are properly labelled in terms of usage and the area being served.	[ ]	[ ]	[ ]	....
	g.	The upstream main stop valve, downstream main stop valve, bypass stop valve, and alarm stop valve, where applicable, are padlocked in their correct (fully open or fully closed) positions and labelled "Normally Open 常開" or "Normally Closed 常關" as appropriate.	[ ]	[ ]	[ ]	....
	h.	The cables and cable containment are intact, securely mounted, properly wired and free from undue deterioration.	[ ]	[ ]	[ ]	....
	i.	Legible as-built system schematic diagram(s) is/are displayed conspicuously at the sprinkler control valve room/enclosure/space.	[ ]	[ ]	[ ]	....
6.2	Operation of Sprinkler Control Valve (all types of control valve)					
	a.	The operation of retarding chamber(s) and alarm pressure switch(es), where provided, alarm test valve(s), alarm gong(s) are tested to be in working order. The setting of pressure switch(es), where provided, is correct and re-adjusted where necessary.	[ ]	[ ]	[ ]	....

Annual Inspection Checklist for Sprinkler Systems

			Yes	No	N/A	Remarks
	b.	For alarm valve(s) which has/have been installed/subject to internal inspection for 4 years or more, the internal of the alarm valve(s) including the clapper, valve seats and all components are inspected to be intact, free from obstruction and undue corrosion, and with all moving parts lubricated and tested to be in working order. The last installation/internal inspection date is displayed conspicuously on the alarm valve(s).	[ ]	[ ]	[ ]	.....
	c.	The strainer(s) is/are free from blockage and the screen(s) inside is/are cleaned.	[ ]	[ ]	[ ]	.....
	d.	The electrical monitoring switch(es) for stop valves, where provided, is/are intact, properly wired and tested to be in working order.	[ ]	[ ]	[ ]	.....
	e.	The water supply is tested to be capable of delivering adequate flow and pressure to the system and the results are recorded in Table II.	[ ]	[ ]	[ ]	.....
6.3	**Air Compressor** (where provided) Remark: The annual inspection for air compressor(s), where provided, is recorded in Appendix VI.				[ ]	If N/A, go to 6.5
6.4	**Operation of Dry Pipe Valve** (where provided) Remark: The annual inspection for the operation of dry pipe valve(s), where provided, is recorded in Appendix VII.				[ ]	If N/A, go to 6.5
6.5	**Operation of Pre-action Valve and/or Recycling Valve** (where provided) Remark: The annual inspection for the operation of pre-action valve and/or recycling valve, where provided, is recorded in Appendix VIII.				[ ]	If N/A, go to 6.6
6.6	**Operation of Deluge Valve** (where provided) Remark: The annual inspection for the operation of deluge valve, where provided, is recorded in Appendix IX.				[ ]	If N/A, go to 7

7.	**Water Columning Prevention Device(s)** (where provided) The annual inspection for water columning prevention device(s), where provided, is recorded in Appendix X.				[ ]	If N/A, go to 8

8.	**Flow Switch** (where provided)				[ ]	If N/A, go to 9
	a.	The flow switch(es) and the associated test valve, drain valve and pipework, where applicable, are securely supported, intact and free from leakage and undue corrosion.	[ ]	[ ]	[ ]	.....
	b.	The flow switch(es) is/are properly labelled to indicate the floor/area being served.	[ ]	[ ]	[ ]	.....
	c.	The test valves and drain valves, where provided, are padlocked at their fully closed position and are labelled "Normally Closed 常關".	[ ]	[ ]	[ ]	.....

			Yes	No	N/A	Remarks
	d.	The flow switch(es) is/are tested to be in working order.	[ ]	[ ]	[ ]	....
	e.	The cables and cable containment are intact, securely mounted, properly wired and free from cracks and undue deterioration.	[ ]	[ ]	[ ]	....

9.	**Subsidiary Stop Valve** (where provided)				[ ]	If N/A, go to 10
	a.	The subsidiary stop valve(s) is/are securely supported, intact and free from leakage and undue corrosion.	[ ]	[ ]	[ ]	....
	b.	The subsidiary stop valve(s) is/are properly labelled to indicate the floor/area being served.	[ ]	[ ]	[ ]	....
	c.	For subsidiary stop valve(s) concealed inside false ceiling, pipe duct or other enclosure, a duplicate label is fixed at a prominent position on the false ceiling or outside the pipe duct/enclosure as appropriate.	[ ]	[ ]	[ ]	....
	d.	The subsidiary stop valve(s), where provided, is/are duly lubricated and tested to operate freely between fully open and fully closed.	[ ]	[ ]	[ ]	....
	e.	The subsidiary stop valve(s) is/are padlocked at its/their fully open position and is/are labelled "Normally Open 常開".	[ ]	[ ]	[ ]	....
	f.	The electrical monitoring switch(es), where provided, for the subsidiary stop valve(s) is/are intact, properly wired, and tested to be in working order.	[ ]	[ ]	[ ]	....
	g.	The cables and cable containment are intact, securely mounted, properly wired and free from cracks and undue deterioration.	[ ]	[ ]	[ ]	....

10.	**Sprinkler and Multiple Jet Control**					
10.1	Sprinkler and Accessories (The following items are ascertained as far as reasonably practicable)					
	a.	The sprinklers, including all accessories, where applicable, are intact, properly fixed, and free from leakage, distortion and undue corrosion.	[ ]	[ ]	[ ]	....
	b.	The sprinklers are of the correct type in accordance with their application conditions.	[ ]	[ ]	[ ]	....
	c.	Except when dry pendent sprinkler(s) is/are used, sprinkler(s) in dry pipe, pre-action and/or recycling installation(s), where applicable, is/are installed upright.	[ ]	[ ]	[ ]	....
	d.	Sprinkler(s) in rack or under perforated shelf/platform/grating or other location where water from a higher sprinkler may cause wetting, where applicable, is/are fitted with a metal water shield of appropriate size.	[ ]	[ ]	[ ]	....
	e.	The sprinklers are free from any type of ornamentation or coating except as recommended by the manufacturer.	[ ]	[ ]	[ ]	....

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			Yes	No	N/A	Remarks
	f.	The sprinklers are free from any foreign covering materials.	[ ]	[ ]	[ ]	.....
	g.	Other than the exempted areas, sprinkler protection is provided throughout the building/premises.	[ ]	[ ]	[ ]	.....
	h.	The coverage area, spacing and clearance of the sprinklers are in accordance with the requirements, having taken into consideration the installation conditions and various obstructions.	[ ]	[ ]	[ ]	.....
	i.	The sprinklers are installed at the correct level(s) in relation to the apex, slab soffit, ceiling soffit, raised floor soffit, obstruction soffit, goods in storage rack/shelf or glazing as applicable, in accordance with the requirements.	[ ]	[ ]	[ ]	.....
	j.	The sprinklers are installed at the proper orientation, in accordance with the requirements.	[ ]	[ ]	[ ]	.....
	k.	Other than in-rack sprinklers and sprinklers for ceiling opening formed by escalator/stair, etc., where applicable, sprinklers are not closer than 2-m apart unless baffle plate(s) or intervening constructional feature(s) is/are present.	[ ]	[ ]	[ ]	.....
	l.	Sufficient spare sprinklers, including different types, temperature ratings and K factors installed in the system, are provided.	[ ]	[ ]	[ ]	.....
10.2	**Multiple Jet Control (MJC)** (where provided) Remark: The annual inspection for MJC(s), where provided, is recorded in Appendix XI.				[ ]	If N/A, go to 10.3
10.3	Pipework, Fitting, Valve and Accessories (The following items are ascertained as far as reasonably practicable)					
	a.	The pipework, valves, expansion joints, equipment and accessories as applicable are intact, securely supported, and free from leakage, distortion and undue corrosion.	[ ]	[ ]	[ ]	.....
	b.	The flexible drop(s), where provided, is/are installed in accordance with the listing requirements (including, inter alia, the maximum allowable number of turns, and the minimum radius of each turn required.)	[ ]	[ ]	[ ]	.....
	c.	The support and brackets are intact and free from distortion and undue corrosion.	[ ]	[ ]	[ ]	.....
	d.	The automatic air vent valve(s), where provided, is/are intact, with the vent opening unobstructed (not capped closed).	[ ]	[ ]	[ ]	.....

11.	Other Observations					
	a.	The occupancies are within the system design limitations.	[ ]	[ ]	[ ]	.....
	b.	The goods storage arrangements are within the system design limitations.	[ ]	[ ]	[ ]	.....

Annual Inspection Checklist for Sprinkler Systems

			Yes	No	N/A	Remarks
	c.	For pump rooms/enclosures, where applicable, the entrance door(s) is/are kept locked.	[ ]	[ ]	[ ]	....
	d.	For pump spaces, where applicable, the direct access to the pump space(s) is maintained available.	[ ]	[ ]	[ ]	....
	e.	The pump room(s)/enclosure(s)/space(s) as applicable is/are kept clear of storage and waste materials.	[ ]	[ ]	[ ]	....
	f.	The artificial lighting, where provided, in the sprinkler pump room/enclosure/space is in proper operation.	[ ]	[ ]	[ ]	....
	g.	The artificial lighting, where provided, in the sprinkler intermediate booster pump room/enclosure/space, where applicable, is in proper operation.	[ ]	[ ]	[ ]	....
	h.	For underground pump room, the submersible drainage pumping installation, where provided, is in working order.	[ ]	[ ]	[ ]	....
	i.	The direct access to the sprinkler control valve(s) is maintained available.	[ ]	[ ]	[ ]	....
	j.	The sprinkler control valve room(s)/enclosure(s)/space is/are kept clear of storage and waste materials and the operation of various trimmings and equipment is not obstructed.	[ ]	[ ]	[ ]	....
	k.	Every opening for the passage of pipes, cables, cable containments, etc., through all required fire barrier is protected with an appropriate fire stop to maintain the required fire resisting properties of the fire barrier.	[ ]	[ ]	[ ]	....

Note:

1. All items under part 11 - Other Observations are not related to the functionality of fire service installations and equipment (FSIs) and hence shall not be reflected in FS 251. However, owners of FSIs bear the responsibility to rectify any irregularities noted thereunder.
2. This Checklist specifies the minimum requirements for annual inspection for sprinkler systems. Incomplete inspections or inspections not conducted in full accordance with this Checklist shall not be recognised as properly completed annual inspections.

Authorized Signatory of RFSIC:

_____ (Name in Full) _____(Signature)

_____ (Date)

Registered Fire Service Installation Contractor:

_____(FSD/RC No.) _____(Company Name)

_____(Company Stamp)

Annual Inspection Checklist for Sprinkler Systems

Table I

Schedule of Equipment

Building/Premises Address: _____

Building/Block Name: _____

Sprinkler Control Valve No.	Type	Floor level/Location of Valve	Floor Level/Location/Area being Served

Key for Control Valve Type: W – Wet Pipe, D – Dry Pipe, NI – Non-interlocked Pre-action, SI – Single-interlocked Pre-action, DI – Double-interlocked Pre-action, R – Recycling, Del - Deluge

Description	Total Quantity of Equipment
Water Columning Prevention Device	
Flow Switch	
Subsidiary Stop Valve	

Remark: Use additional sheets where necessary.

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Table II

Water Supply Flow Rate and Pressure Testing Record

Building/Premises Address: _____

Building/Block Name: _____

Item no.	**Floor Level(s) to be served**	**Height of Highest Sprinkler above Control Valve** (m)	**Water Supply Source** (Remark: Insert a "✓" in the [ ] for the applicable type(s) of water supply source)	**Flow Rate** (l/min)	**Pressure** (bar)
			Jockey Pump [ ]	N/A	_____
			Sprinkler Pump No. _____ [ ]	_____ _____ _____	_____ _____ _____
			Sprinkler Pump No. _____ [ ]	_____ _____ _____	_____ _____ _____
			Sprinkler Intermediate Booster Pump No. _____ [ ]	_____ _____ _____	_____ _____ _____
			Sprinkler Intermediate Booster Pump No. _____ [ ]	_____ _____ _____	_____ _____ _____
			Sprinkler Tank Gravity Supply [ ]	_____ _____	_____ _____
			Direct Town Main Supply [ ]	_____ _____	_____ _____

Remark:

1. For jockey pump(s), only testing on zero-flow pressure (churning pressure) is required. The pressure measurement shall be taken at the sprinkler control valve.
2. Other than jockey pump(s), testing at the two rated flow characteristics (including "flow" and "maximum demand flow" as per EN 12845 (known as "low flow" and "high flow" as per BS 5306-2 and the two "characteristics not less than" as per FOC) are required. The flow and pressure measurements shall be taken at the sprinkler control valve.
3. For pumped supply where the pumps are designed to deliver up to the nominal data (nominal rating), testing at nominal data shall also be taken which shall be measured at the pump room/enclosure/space.
4. Use additional sheets where necessary.

Annual Inspection Checklist for Sprinkler Systems

Appendix I

Town Main/Internal Fire Main Connection

Remark: Appendix I is only applicable to sprinkler systems that:

(a) is fed directly from the town main without a sprinkler tank; or

(b) the sprinkler tank is refilled directly from the town main without any transfer pumping installation; or

(c) is fed from an internal fire main which serves more than one building and/or system.

If not applicable, skip this Appendix.

A1.	Town Main/Internal Fire Main Connection		Yes	No	N/A	Remarks
	a.	All pipework, stop valve(s), check valve(s) and backflow preventer(s), as applicable, are securely supported, intact and free from leakage and undue corrosion.	[ ]	[ ]	[ ]	....
	b.	All stop valves are duly lubricated and tested to operate freely between fully open and fully closed.	[ ]	[ ]	[ ]	....
	c.	All stop valves are set at their correct (fully open or fully closed) positions and labelled "Normally Open 常開" or "Normally Closed 常關" as appropriate.	[ ]	[ ]	[ ]	....
	d.	The handwheel operated stop valves other than the anti-pollution valve, where provided, are padlocked in their correct (fully open or fully closed) positions as appropriate.	[ ]	[ ]	[ ]	....
	e.	The anti-pollution valve, where provided, is labelled in terms of usage.	[ ]	[ ]	[ ]	....
	f.	The backflow preventer(s), where provided, is/are tested to be in working order.	[ ]	[ ]	[ ]	....
	g.	The electrical monitoring switch(es) for stop valves, where provided, is/are intact, properly wired, and tested to be in working order.	[ ]	[ ]	[ ]	....
	h.	The cables and cable containment for electrical monitoring switch(es), where provided, are intact, securely mounted, properly wired, and without undue deterioration.	[ ]	[ ]	[ ]	....

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Appendix II

Sprinkler Pump Installation

Remark: Appendix II is only applicable to sprinkler systems equipped with sprinkler pumps. If not applicable, skip this Appendix.

A2.		Sprinkler Pump Installation	Yes	No	N/A	Remarks
A2.1		Pump Room/Enclosure (where applicable)			[ ]	If N/A, go to A2.2
	a.	The room(s)/enclosure(s) shelter(s) the pump(s) from tampering/inclement weather.	[ ]	[ ]	[ ]	.....
	b.	The room(s)/enclosure(s) is/are properly labelled in terms of usage.	[ ]	[ ]	[ ]	.....
	c.	For diesel pump, where provided, there is sufficient ventilation to supply air for engine combustion, radiator cooling, and controlling engine maximum operating temperature.	[ ]	[ ]	[ ]	.....
A2.2		Pump Space (for pumps mounted on spreaders or flat roofs, where applicable)			[ ]	If N/A, go to A2.3
	a.	The pump space(s) is/are properly labelled in terms of usage.	[ ]	[ ]	[ ]	.....
	b.	The electrical equipment, pump control panel(s) and cable connections as applicable within the pump space(s) are protected against ingress of water.	[ ]	[ ]	[ ]	.....
A2.3		Pump Foundation				
	a.	The pump plinth(s)/spreader(s) is/are intact and free from deformation, settlement and undue corrosion.	[ ]	[ ]	[ ]	.....
	b.	The anti-vibration mounting(s), where provided, is/are intact and free from undue settlement.	[ ]	[ ]	[ ]	.....
A2.4		Pump Set (Pump and Driver)				
	a.	The pump set(s) together with the base plate(s) as applicable is/are intact, securely mounted and free from settlement.	[ ]	[ ]	[ ]	.....
	b.	The guard(s) for the coupling/shaft/belt driving parts as applicable, is/are intact and securely mounted.	[ ]	[ ]	[ ]	.....
	c.	The pump coupling cushions and shaft alignment are checked and re-aligned where necessary.	[ ]	[ ]	[ ]	.....
	d.	The belts and pulleys, where provided, are intact and without cracks, damage and undue deterioration.	[ ]	[ ]	[ ]	.....
	e.	The alignment and tightness of the belts, where provided, are tested and re-adjusted where necessary.	[ ]	[ ]	[ ]	.....
	f.	The shaft bearings and shaft coupling are lubricated.	[ ]	[ ]	[ ]	.....
	g.	The packing for the pump shaft(s) is checked and re-adjusted to suitable tightness where necessary.	[ ]	[ ]	[ ]	.....

Annual Inspection Checklist for Sprinkler Systems

			Yes	No	N/A	Remarks
	h.	An air vent valve is provided at an appropriate position of the pump casing for pump(s) which is/are capable of trapping air inside the casing.	[ ]	[ ]	[ ]	....
	i.	The pump set(s) is/are kept fully primed and pump set(s) under negative suction condition, where applicable, is/are equipped with a priming tank.	[ ]	[ ]	[ ]	....
A2.5	Pipework, Valves, Equipment and Accessories					
	a.	The pipework, valves, strainers, expansion joints, flexible connectors, equipment and accessories as applicable are intact, securely supported, and free from leakage, distortion and undue corrosion.	[ ]	[ ]	[ ]	....
	b.	The support and brackets are intact and free from distortion and undue corrosion.	[ ]	[ ]	[ ]	....
	c.	The strainer(s) is/are free from blockage and the screen(s) inside is/are cleaned.	[ ]	[ ]	[ ]	....
	d.	The stop valves are duly lubricated and tested to operate freely between fully open and fully closed.	[ ]	[ ]	[ ]	....
	e.	The stop valves are padlocked in their correct (fully open or fully closed) positions and labelled "Normally Open 常開" or "Normally Closed 常關" as appropriate.	[ ]	[ ]	[ ]	....
	f.	The electrical monitoring switch(es) for stop valves, where provided, is/are intact, properly wired, and tested to be in working order.	[ ]	[ ]	[ ]	....
	g.	The pressure switch(es), where provided, is/are intact, properly wired, and labelled in terms of usage and pressure setting.	[ ]	[ ]	[ ]	....
	h.	The reading(s) on the pressure gauge(s) is/are within the acceptable range.	[ ]	[ ]	[ ]	....
	i.	The automatic air vent valve(s), where provided, is/are intact, with the vent opening unobstructed (not capped closed).	[ ]	[ ]	[ ]	....
A2.6	Electrical Equipment, Cable and Cable Containment					
	a.	The power supply switches, busbar chamber(s), pump control panel(s) and electrical equipment are intact, securely mounted, properly labelled and free from undue corrosion.	[ ]	[ ]	[ ]	....
	b.	The fuses in the power supply circuit and control circuit as applicable are of the correct ratings and intact.	[ ]	[ ]	[ ]	....
	c.	The cables and cable containment are intact, securely mounted, properly wired, and free from undue deterioration.	[ ]	[ ]	[ ]	....
	d.	The power supply switches are tested to be operating properly and are switched on after the test.	[ ]	[ ]	[ ]	....
	e.	The components and wirings inside the pump control panel(s) are intact, properly wired and free from undue deterioration.	[ ]	[ ]	[ ]	....

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			Yes	No	N/A	Remarks
	f.	The control buttons, switches, indicators and meters as applicable are properly labelled in terms of usage.	[ ]	[ ]	[ ]	....
	g.	The reading(s) on the voltmeter(s), where provided, is/are within the acceptable range.	[ ]	[ ]	[ ]	....
	h.	The control buttons and switches are tested to operate properly and are in the correct positions.	[ ]	[ ]	[ ]	....
	i.	The switch(es) for suspending pump operation, where provided, is/are in the correct position(s).	[ ]	[ ]	[ ]	....
	j.	The indicator(s), where provided, is/are tested to operate properly and are in proper status.	[ ]	[ ]	[ ]	....
	k.	The battery(ies), where provided, is/are properly mounted, and located where they are free from excessive temperature, vibration, mechanical injury and flooding.	[ ]	[ ]	[ ]	....
	l.	The battery(ies), where provided, is/are intact and free from swelling, electrolyte creepage, cracking, scorch mark, denting, leakage, unusual high temperature, undue corrosion and loose connections.	[ ]	[ ]	[ ]	....
	m.	For unsealed type battery(ies), where provided, the electrolyte levels are correct and the battery plates are submerged, and low electrolyte level cell(s), if any, is/are topped with distilled/de-ionized water to the correct level.	[ ]	[ ]	[ ]	....
	n.	For unsealed type battery(ies), where provided, the densities of the electrolyte are tested by a hydrometer to be correct.	[ ]	[ ]	[ ]	....
	o.	For unsealed type battery(ies), where provided, the battery terminals are covered with protective gel.	[ ]	[ ]	[ ]	....
	p.	For battery(ies), where provided, the installation date is displayed conspicuously on the battery(ies), and battery(ies) which has/have exceeded its/their nominal design life (deem as 4 years if unknown) are replaced with secondary batteries having a nominal design life of not less than 4 years.	[ ]	[ ]	[ ]	....
	q.	The charger(s), where provided, is/are free from unusual loud noise, abnormally high temperature and evidence of damage.	[ ]	[ ]	[ ]	....
	r.	For charger(s), where provided, the steady state float charge voltage (i.e. at standby mode) to the battery is measured to be within the range (not too low or overcharged) as recommended by the battery manufacturer.	[ ]	[ ]	[ ]	....
	s.	For charger(s), where provided, upon simulation of a mains power supply failure to the charger(s), audio and visual fault alarm signals are properly given.	[ ]	[ ]	[ ]	....
	t.	For battery(ies), where provided, upon simulation of a battery low voltage condition, audio and visual fault alarm signals are properly given.	[ ]	[ ]	[ ]	....

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			Yes	No	N/A	Remarks
	u.	For diesel pump, where provided, having the a.c. power supply to the charger disconnected, the battery(ies) cranking voltage during all 6 attempts to start the engine exceeds 9 volts for a 12-volt system, and 18 volts for a 24-volt system.	[ ]	[ ]	[ ]	.....
A2.7	As-built Framed Schematic					
	Legible as-built system schematic diagram(s) is/are displayed conspicuously at the pump room/enclosure/space.		[ ]	[ ]	[ ]	.....
A2.8	Operation of Jockey Pump (where provided)				[ ]	If N/A, go to A2.9
	a.	The jockey pump can be started and stopped by the start and stop buttons on the pump control panel respectively.	[ ]	[ ]	[ ]	.....
	b.	The jockey pump operates upon a system pressure drop and stops when the system pressure resumes. The pressure switch setting is checked and re-adjusted where necessary.	[ ]	[ ]	[ ]	.....
	c.	For high rise system, the standing pressure (e.g. jockey pump cut-in pressure setting) at individual control valve(s) is not less than 125% of the static head difference between the highest sprinkler in individual installation(s) and the corresponding control valve(s).	[ ]	[ ]	[ ]	.....
	d.	For jockey pump equipped with a priming tank, where applicable, the jockey pump starts when the water level in the priming tank drops to two-thirds of the normal level.	[ ]	[ ]	[ ]	.....
	e.	Upon activation of the lock-off button and/or other switches, where provided, at the pump room/enclosure/space for suspending the operation of the jockey pump, the fault alarm signal(s), where provided, on the pump control panel and/or other control/indicating panel as applicable is/are in working order.	[ ]	[ ]	[ ]	.....
	f.	The thermal overload relay and/or the like, where provided, can give fault signal indication (while not stopping pump operation).	[ ]	[ ]	[ ]	.....
	g.	When the jockey pump operates, the discharge pressure reading is within acceptable range, and the discharge pressure is recorded in Table II.	[ ]	[ ]	[ ]	.....
	h.	After running the jockey pump for not less than 10 minutes, the pump operation is free from abnormal noise, excessive vibration, undue leakage, overheating and other signs of malfunction. (Remark: A small drain valve may be set to discharge to effect cooling of the pump.)	[ ]	[ ]	[ ]	.....
	i.	The jockey pump status indicator(s), where provided, on the pump control panel and/or other control/indicating panel as applicable is/are tested to be in working order by simulating respective scenarios.	[ ]	[ ]	[ ]	.....

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			Yes	No	N/A	Remarks
A2.9	Operation of Sprinkler Pump No. 1 and Sprinkler Pump No. 2 Remark: Diesel pump, where provided, shall be assigned as Pump no. 2.					
	a.	Sprinkler pump no. 1 can be started and stopped by the corresponding start and stop buttons on the pump control panel respectively.	[ ]	[ ]	[ ]	.....
	b.	Ditto but for sprinkler pump no. 2.	[ ]	[ ]	[ ]	.....
	c.	When assigned as the duty pump, sprinkler pump no. 1 runs when the system pressure drops and can only be stopped manually within the pump room/enclosure/space after the system pressure resumes. The duty pump cut-in pressure setting is higher than: (a) the static head difference between the highest sprinkler [for high-rise system, the highest sprinkler in individual installation(s)] and the corresponding pump cut-in pressure switch(es), and (b) the corresponding standby pump cut-in pressure setting.	[ ]	[ ]	[ ]	.....
	d.	Ditto but for sprinkler pump no. 2 (when pump no. 2 is motor driven).	[ ]	[ ]	[ ]	.....
	e.	When sprinkler pump no. 1 is equipped with a priming tank, where applicable, sprinkler pump no. 1 starts when the water level in the priming tank drops to two-thirds of the normal level.	[ ]	[ ]	[ ]	.....
	f.	Ditto but for sprinkler pump no. 2.	[ ]	[ ]	[ ]	.....
	g.	Upon activation of the lock-off button and/or other switches, where provided, at the pump room/enclosure/space for suspending the operation of sprinkler pump no. 1, the fault alarm signal(s), where provided, on the pump control panel and/or other control/indicating panel as applicable is/are in working order.	[ ]	[ ]	[ ]	.....
	h.	Ditto but for sprinkler pump no. 2.	[ ]	[ ]	[ ]	.....
	i.	The thermal overload relay and/or the like, where provided, for sprinkler pump no. 1 can give fault signal indication (while not stopping pump operation).	[ ]	[ ]	[ ]	.....
	j.	Ditto but for sprinkler pump no. 2 (when pump no. 2 is motor driven).	[ ]	[ ]	[ ]	.....
	k.	When started, sprinkler pump no. 1 accelerates to full speed within an acceptable time frame.	[ ]	[ ]	[ ]	.....
	l.	When started, sprinkler pump no. 2 accelerates to full speed (to crank for diesel pump, where applicable) within an acceptable time frame.	[ ]	[ ]	[ ]	.....

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			Yes	No	N/A	Remarks
	m.	After running sprinkler pump no. 1 for not less than 10 minutes (30 minutes for diesel pump), the pump operation is free from abnormal noise, excessive vibration, undue leakage, overheating and other signs of malfunction. (Remark: Check whether there is a steady flow through the circulation pipe/relief valve for proper cooling of the pump. In the absence of circulation facilities, a small drain valve may be set to discharge during pump operation.)	[ ]	[ ]	[ ]	.....
	n.	Ditto but for sprinkler pump no. 2.	[ ]	[ ]	[ ]	.....
	o.	The anti-overheating circulating pipe/relief valve, where provided, operates properly when sprinkler pump no. 1 churns.	[ ]	[ ]	[ ]	.....
	p.	Ditto but for sprinkler pump no. 2.	[ ]	[ ]	[ ]	.....
	q.	Sprinkler pump no. 1 is tested to be capable of delivering adequate flow and pressure to the system and the results are recorded in the Table II.	[ ]	[ ]	[ ]	.....
	r.	Ditto but for sprinkler pump no. 2.	[ ]	[ ]	[ ]	.....
	s.	When sprinkler pump no. 1 is delivering the rated flow, the voltage readings and current readings at all phases are within acceptable ranges.	[ ]	[ ]	[ ]	.....
	t.	Ditto but for sprinkler pump no. 2 (when pump no. 2 is motor driven).	[ ]	[ ]	[ ]	.....
	u.	The sprinkler pump no. 1 status indicator(s), where provided, on the pump control panel and/or other control/indicating panel as applicable is/are tested to be in working order by simulating the respective scenarios.	[ ]	[ ]	[ ]	.....
	v.	Ditto but for sprinkler pump no. 2.	[ ]	[ ]	[ ]	.....
	w.	When sprinkler pump no. 2 is assigned as the standby pump and when the duty pump is actuated due to system pressure drop but the system pressure continues to drop, sprinkler pump no. 2 operates automatically to take over sprinkler pump no. 1. The standby pump cut-in pressure setting is higher than the static head difference between the highest sprinkler [for high-rise system, the highest sprinkler in individual installation(s)] and the corresponding pump cut-in pressure switch(es).	[ ]	[ ]	[ ]	.....
	x.	Ditto but with sprinkler pump no. 1 assigned as the standby pump and sprinkler pump no. 2 assigned as the duty pump (applicable when both pumps are motor driven).	[ ]	[ ]	[ ]	.....
	y.	When a diesel engine driven pump is provided, additional items of inspection are required. The annual inspection for the additional items is recorded in Appendix III.			[ ]	.....

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Appendix III

Additional Inspection Items for Diesel Engine Driven Pump Set

Remark: Appendix III is only applicable to diesel engine driven pump sets. If not applicable, skip this Appendix.

A3	Diesel Engine Driven Pump Set		Yes	No	N/A	Remarks
A3.1	Pump Set (Pump and Diesel Engine)					
	a.	The engine air intake filter is inspected to be clean and replaced where necessary.	[ ]	[ ]	[ ]	.....
	b.	The fuel oil filter is inspected to be free from clogging.	[ ]	[ ]	[ ]	.....
	c.	The fuel oil filter installed 4 years ago or longer is replaced and the replacement date is displayed on the pump.	[ ]	[ ]	[ ]	.....
	d.	The lubricating oil filter is inspected to be clean and replaced where necessary.	[ ]	[ ]	[ ]	.....
	e.	The lubricating oil filter installed 4 years ago or longer is replaced and the replacement date is displayed on the pump.	[ ]	[ ]	[ ]	.....
	f.	The lubricating oil is inspected to be at a correct level and replenished to the required level where necessary.	[ ]	[ ]	[ ]	.....
	g.	The lubricating oil which was last replaced 4 years ago or longer (note: except minor topping up) is replaced and the replacement date is displayed on the pump.	[ ]	[ ]	[ ]	.....
	h.	The lubricating oil pressure shown on the lubricating oil pressure gauge, where provided, is inspected to be at a correct level.	[ ]	[ ]	[ ]	.....
	i.	The liquid in the cooling system, where applicable, is inspected to be at a correct level and topped up where necessary.	[ ]	[ ]	[ ]	.....
	j.	The exhaust pipe, silencer and insulation are sufficiently and securely supported, intact and free from leakage.	[ ]	[ ]	[ ]	.....
	k.	The exhaust pipe is terminated at the outside at a location where the exhaust will discharge safely, without affecting the pump operation, while protected from rain water entry.	[ ]	[ ]	[ ]	.....
	l.	The step-by-step sequence for emergency manual operation is displayed on the engine.	[ ]	[ ]	[ ]	.....
A3.2	Pump Operation					
	a.	The pump can be started by the emergency manual start button at the pump control panel.	[ ]	[ ]	[ ]	.....

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			Yes	No	N/A	Remarks
	b.	By closing the fuel supply valve, the starting sequence and the battery supply are tested to be capable of starting the engine for 6 attempts, and after the 6 attempts, audible and visual fault alarms are given at the pump control panel and/or other control/indicating panel as applicable.	[ ]	[ ]	[ ]	.....
	c.	The engine speed is tested to vary within ±10% when the discharge flow rate varies from zero flow to nominal data (nominal rating) and the governor setting is adjusted where necessary.	[ ]	[ ]	[ ]	.....
A3.3	Fuel Tank					
	a.	The tank structure, pipework, valves, where applicable, are intact, properly supported and free from leakage, distortion and undue corrosion.	[ ]	[ ]	[ ]	.....
	b.	The stop valve(s) at tank connection(s) is/are duly lubricated and tested to operate freely between fully open and fully closed.	[ ]	[ ]	[ ]	.....
	c.	The stop valve at tank connection(s) are padlocked in the correct (fully open or fully closed) positions and labelled "Normally Open 常開" or "Normally Closed 常關" as appropriate.	[ ]	[ ]	[ ]	.....
	d.	The tank drain valve is plugged/capped close.	[ ]	[ ]	[ ]	.....
	e.	The fuel level gauge, where provided, is intact, properly labelled and clearly indicates the fuel level.	[ ]	[ ]	[ ]	.....
	f.	The tank is properly labelled in terms of usage.	[ ]	[ ]	[ ]	.....
	g.	The tank and all fuel pipes are properly earthed.	[ ]	[ ]	[ ]	.....
	h.	The tank is topped up to the required capacity at the conclusion of the inspection.	[ ]	[ ]	[ ]	.....

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Appendix IV

Sprinkler Intermediate Booster Pump Installation

Remark: Appendix IV is only applicable to sprinkler intermediate booster pumps. If not applicable, skip this Appendix.

A4.		Sprinkler Intermediate Booster Pump Installation	Yes	No	N/A	Remarks
A4.1		Pump Room/Enclosure (as applicable)				
	a.	The room(s)/enclosure(s) shelter(s) the pumps from tampering/inclement weather.	[ ]	[ ]	[ ]	....
	b.	The room(s)/enclosure(s) is/are properly labelled in terms of usage.	[ ]	[ ]	[ ]	....
A4.2		Pump Foundation				
	a.	The pump plinth(s)/spreader(s) is/are intact, and free from deformation, settlement and undue corrosion.	[ ]	[ ]	[ ]	....
	b.	The anti-vibration mountings, where provided, are intact and free from undue settlement.	[ ]	[ ]	[ ]	....
A4.3		Pump Set (Pump and Driver)				
	a.	The pump set(s) together with the base plate(s) as applicable is/are intact, securely mounted and free from settlement.	[ ]	[ ]	[ ]	....
	b.	The guard(s) for the coupling/shaft/belt-driving parts, as applicable, is/are intact and securely mounted.	[ ]	[ ]	[ ]	....
	c.	The pump coupling cushions and shaft alignment are checked and re-aligned where necessary.	[ ]	[ ]	[ ]	....
	d.	The belts and pulleys, where provided, are intact and without cracks, damage and undue deterioration.	[ ]	[ ]	[ ]	....
	e.	The alignment and tightness of the belts, where provided, are tested and re-adjusted where necessary.	[ ]	[ ]	[ ]	....
	f.	The shaft bearings and shaft coupling are lubricated.	[ ]	[ ]	[ ]	....
	g.	The packing for the pump shaft(s) is checked and re-adjusted to suitable tightness where necessary.	[ ]	[ ]	[ ]	....
	h.	An air vent valve is provided at the appropriate position of the pump casing for pump(s) which is/are capable of trapping air inside the casing.	[ ]	[ ]	[ ]	....
A4.4		Pipework, Valves, Equipment and Accessories				
	a.	The pipework, valves, strainers, expansion joints, flexible connectors, equipment and accessories as applicable are intact, securely supported, and free from leakage, distortion and undue corrosion.	[ ]	[ ]	[ ]	....
	b.	The support and brackets are intact and free from distortion and undue corrosion.	[ ]	[ ]	[ ]	....

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			Yes	No	N/A	Remarks
	c.	The strainer(s) is/are free from blockage and the screen(s) inside is/are cleaned.	[ ]	[ ]	[ ]	....
	d.	The stop valves are duly lubricated and tested to operate freely between fully open and fully closed.	[ ]	[ ]	[ ]	....
	e.	The stop valves are padlocked in the correct (fully open or fully closed) positions and labelled "Normally Open 常開" or "Normally Closed 常關" as appropriate.	[ ]	[ ]	[ ]	....
	f.	The electrical monitoring switch(es) for stop valves, where provided, is/are intact, properly wired, and tested to be in working order.	[ ]	[ ]	[ ]	....
	g.	The pressure switch(es), where provided, is/are intact, properly wired and labelled in terms of usage and pressure setting.	[ ]	[ ]	[ ]	....
	h.	The reading(s) on the pressure gauge(s) is/are within the acceptable range.	[ ]	[ ]	[ ]	....
	i.	The automatic air vent valve(s), where provided, is/are intact, with the vent opening unobstructed (not capped closed).	[ ]	[ ]	[ ]	....
	j.	The pipes between the sprinkler inlet(s) and the intermediate booster pumps are tested to be fully primed with water.	[ ]	[ ]	[ ]	....
A4.5	Electrical Equipment, Cables and Cable Containment					
	a.	The power supply switches, busbar chamber(s), pump control panel(s) and electrical equipment are intact, securely mounted, properly labelled and free from undue corrosion.	[ ]	[ ]	[ ]	....
	b.	The fuses in the power supply circuit and control circuit as applicable are of the correct ratings and intact.	[ ]	[ ]	[ ]	....
	c.	The cables and cable containment are intact, securely mounted, properly wired, and free from undue deterioration.	[ ]	[ ]	[ ]	....
	d.	The power supply switches are tested to be operating properly and are switched on after the test.	[ ]	[ ]	[ ]	....
	e.	The components and wirings inside the pump control panel(s) are intact, properly wired and free from undue deterioration.	[ ]	[ ]	[ ]	....
	f.	The control buttons, switches, indicators and meters as applicable are properly labelled in terms of usage.	[ ]	[ ]	[ ]	....
	g.	The reading(s) on the voltmeter(s), where provided, is/are within the acceptable range.	[ ]	[ ]	[ ]	....
	h.	The control buttons and switches are tested to operate properly and are in the correct positions.	[ ]	[ ]	[ ]	....
	i.	The switch(es) for suspending pump operation, where provided, is/are in the correct position(s).	[ ]	[ ]	[ ]	....

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			Yes	No	N/A	Remarks
	j.	The indicator(s), where provided, is/are tested to operate properly and are in proper status.	[ ]	[ ]	[ ]	....
A4.6	As-built Framed Schematic					
	Legible as-built system schematic diagram(s) is/are displayed conspicuously at the pump room/enclosure/space.		[ ]	[ ]	[ ]	....
A4.7	Operation of Sprinkler Intermediate Booster Pumps					
	a.	Sprinkler intermediate booster pump no. 1 can be started and stopped by the corresponding start and stop buttons on the pump control panel.	[ ]	[ ]	[ ]	....
	b.	Ditto but for sprinkler intermediate booster pump no. 2.	[ ]	[ ]	[ ]	....
	c.	When assigned as the duty pump, sprinkler intermediate booster pump no. 1 operates upon receipt of a pump starting signal from the start button at the corresponding sprinkler inlet(s) and can only be stopped manually by pressing the stop button at the same F.S. inlet.	[ ]	[ ]	[ ]	....
	d.	Ditto but for sprinkler intermediate booster pump no. 2.	[ ]	[ ]	[ ]	....
	e.	When started, sprinkler intermediate booster pump no. 1 accelerates to full speed within an acceptable time frame.	[ ]	[ ]	[ ]	....
	f.	Ditto but for sprinkler intermediate booster pump no. 2.	[ ]	[ ]	[ ]	....
	g.	Upon activation of the lock-off button and/or other switches, where provided, at the pump room/enclosure for suspending the operation of sprinkler intermediate booster pump no. 1, the fault alarm signal(s), where provided, on the pump control panel and/or other control/indicating panel as applicable is/are in working order.	[ ]	[ ]	[ ]	....
	h.	Ditto but for sprinkler intermediate booster pump no. 2.	[ ]	[ ]	[ ]	....
	i.	The thermal overload relay and/or the like, where provided, for sprinkler intermediate booster pump no. 1 can give fault signal indication (while not stopping pump operation).	[ ]	[ ]	[ ]	....
	j.	Ditto but for sprinkler intermediate booster pump no. 2.	[ ]	[ ]	[ ]	....
	k.	The sprinkler intermediate booster pump no. 1 status indicator(s), where provided, on the pump control panel and/or other control/indicating panel as applicable is/are tested to be in working order by simulating the respective scenarios.	[ ]	[ ]	[ ]	....

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			Yes	No	N/A	Remarks
	l.	Ditto but for sprinkler intermediate booster pump no. 2.	[ ]	[ ]	[ ]	....
	m.	Sprinkler intermediate booster pump no. 1, when assigned as the standby pump, is energized within 15 seconds upon failure of sprinkler intermediate booster pump no. 2, which is assigned as the duty pump.	[ ]	[ ]	[ ]	....
	n.	Ditto but with sprinkler intermediate booster pump no. 2 assigned as the standby pump and sprinkler intermediate booster pump no. 1 assigned as the duty pump.	[ ]	[ ]	[ ]	....

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Appendix V

Pressure Reducing Valve (PRV)

Remark: Appendix V is only applicable to sprinkler systems equipped with pressure reducing valve(s). If not applicable, skip this Appendix.

A5.		Pressure Reducing Valve (PRV)	Yes	No	N/A	Remarks
	a.	The PRV(s) and the associated stop valve(s), strainer(s), pressure gauge(s), pressure switch(es), pipework and accessories, where applicable, are intact, securely supported and free from leakage and undue corrosion.	[ ]	[ ]	[ ]	....
	b.	The PRV(s) is/are labelled in terms of the pressure setting and usage.	[ ]	[ ]	[ ]	....
	c.	The stop valve(s), where provided, is/are padlocked in the correct (fully open or fully closed) position(s) and labelled "Normally Open 常開" or "Normally Closed 常關" as appropriate.	[ ]	[ ]	[ ]	....
	d.	The stop valve(s) is/are duly lubricated and tested to operate freely between fully open and fully closed.	[ ]	[ ]	[ ]	....
	e.	The strainer(s), where provided, is/are free from blockage and the screen(s) inside is/are cleaned.	[ ]	[ ]	[ ]	....
	f.	The PRV(s) is/are tested to verify the downstream pressures under flow and no-flow conditions are within the acceptable range and the PRV(s) operate(s) properly and free from any abnormal noise, excessive vibration and other signs of cavitation.	[ ]	[ ]	[ ]	....
	g.	The reading(s) on the pressure gauge(s), where provided, is/are within the acceptable range.	[ ]	[ ]	[ ]	....
	h.	For pilot operated PRV(s), where applicable, any air trapped in the cover chamber(s) is/are released and the chamber(s) is/are tested to be free from air pocket.	[ ]	[ ]	[ ]	....
	i.	The pressure switch(es), where provided, is/are intact and labelled in terms of usage and pressure setting.	[ ]	[ ]	[ ]	....
	j.	The pressure switch(es), where provided, is/are tested to be in working order. The pressure switch setting is correct and re-adjusted where necessary.	[ ]	[ ]	[ ]	....
	k.	The electrical monitoring switch(es) for stop valves is/are intact, properly wired, and tested to be in working order.	[ ]	[ ]	[ ]	....
	l.	The cables and cable containment are intact, securely mounted, properly wired and free from cracks and undue deterioration.	[ ]	[ ]	[ ]	....

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Appendix VI

Air Compressor

Remark: Appendix VI is only applicable to sprinkler systems equipped with air compressor(s). If not applicable, skip this Appendix.

A6		**Air Compressor** for Installation Operating in Dry Mode, including dry pipe, pre-action and/or recycling installations as applicable	**Yes**	**No**	**N/A**	**Remarks**
	a.	The air compressor set(s), including all valves, trimmings, gauge(s), belts and pulleys, guard, pipework and accessories, where applicable, are intact, securely supported and free from crack, undue deterioration and undue corrosion.	[ ]	[ ]	[ ]	....
	b.	The condition of the desiccant dryer(s), where provided, is inspected to be in working order and wet desiccant, if any, is replaced.	[ ]	[ ]	[ ]	....
	c.	The alignment and tightness of the belts, where provided, are tested to be acceptable and re-adjusted where necessary.	[ ]	[ ]	[ ]	....
	d.	The shaft bearings and shaft coupling, where applicable, are lubricated.	[ ]	[ ]	[ ]	....
	e.	The air supply pipe strainer(s), where provided, and the air inlet filter at the compressor(s) is/are cleaned.	[ ]	[ ]	[ ]	....
	f.	The operation of the air compressor set(s) is tested to be in working order. The settings of compressor control pressure switch(es), pressure regulating valve and pressure relief valve, where applicable, are correct as recommended by the sprinkler control valve manufacturer and re-adjusted where necessary.	[ ]	[ ]	[ ]	....
	g.	The power supply switches, pressure switch(es) and other electrical components, where applicable, are intact, securely mounted, properly wired and free from undue deterioration and corrosion.	[ ]	[ ]	[ ]	....
	h.	The cables and cable containment are intact, securely mounted, properly wired and free from undue deterioration and corrosion.	[ ]	[ ]	[ ]	....

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Appendix VII

Operation of Dry Pipe Valve

Remark: Appendix VII is only applicable to sprinkler systems equipped with dry pipe valve(s). If not applicable, skip this Appendix.

A7	Operation of Dry Pipe Valve		Yes	No	N/A	Remarks
	a.	The "low air pressure" alarm pressure switch(es) is/are tested to be in working order. The setting of the pressure switch(es) is correct as recommended by the sprinkler control valve manufacturer and re-adjusted where necessary.	[ ]	[ ]	[ ]	....
	b.	The dry pipe valve(s) is/are tested to trip properly when the system air pressure drops to the level as recommended by the sprinkler control valve manufacturer, and the "fire" alarm pressure switch(es), where provided, and the alarm gong(s) is/are in working order.	[ ]	[ ]	[ ]	....
	c.	At the conclusion of the dry pipe valve(s) operation inspection, the water entered the downstream side of the dry pipe valve(s) beyond the priming water test valve is drained away.	[ ]	[ ]	[ ]	....
	d.	The priming water at the dry pipe valve(s) is verified to be at correct level and re-primed to the correct level where necessary.	[ ]	[ ]	[ ]	....

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Appendix VIII

Operation of Pre-action Valve and/or Recycling Valve

Remark: Appendix VIII is only applicable to sprinkler systems equipped with pre-action valve(s) and/or recycling valve(s). If not applicable, skip this Appendix.

A8.		**Operation of Pre-action Valve** including non-interlocked, single interlocked and double-interlocked installations (Remark: Type 1, Type 2, Type A and Type B to FOC/LPC Rules terminology for pre-action installations) **and/or Recycling Valve** as applicable	**Yes**	**No**	**N/A**	**Remarks**
	a.	Without tripping the pre-action/recycling valve(s) as appropriate, the "low air pressure" alarm pressure switch(es), where provided, is/are tested to be in working order by releasing the system air pressure to the level as recommended by the sprinkler control valve manufacturer. The setting of the pressure switch(es) is correct and re-adjusted where necessary.	[ ]	[ ]	[ ]	.....
	b.	By opening the manual release unit, the pre-action/recycling valve(s) as appropriate is/are tested to trip properly and the "valve tripped"/"fire" alarm pressure switch(es), where provided, and the alarm gong(s) is/are in working order.	[ ]	[ ]	[ ]	.....
	c.	By opening the remote manual release unit, where provided, the pre-action/recycling valve(s) as appropriate is/are tested to trip properly and the "valve tripped"/"fire" alarm pressure switch(es), where provided, and the alarm gong(s) is/are in working order.	[ ]	[ ]	[ ]	.....
	d.	For fire detector actuated non-interlocked pre-action, single-interlocked pre-action and/or recycling valve(s), the pre-action/recycling valve(s) as appropriate is/are tested to trip properly by simulating a fire detector activated alarm signal and the "valve tripped"/"fire" alarm pressure switch(es), where provided, and the alarm gong(s) is/are in working order.	[ ]	[ ]	[ ]	.....
	e.	For double-interlocked pre-action valve(s), the pre-action valve(s) is/are tested to operate properly (i.e. without tripping) by simulating a fire detector activated alarm signal or a pilot sprinkler activated situation as appropriate.	[ ]	[ ]	[ ]	.....
	f.	For single-interlocked pre-action, double-interlocked pre-action and/or recycling valve(s), by simulating a sprinkler activated situation, the pre-action/recycling valve(s) as appropriate is/are tested to operate properly (i.e. without tripping).	[ ]	[ ]	[ ]	.....
	g.	For non-interlocked pre-action valve(s), by simulating a sprinkler activated situation, the pre-action valve(s) is/are tested to trip properly and the "valve tripped"/"fire" alarm pressure switch(es), where provided, and the alarm gong(s) is/are in working order.	[ ]	[ ]	[ ]	.....

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			Yes	No	N/A	Remarks
	h.	For double-interlocked pre-action valve(s), the pre-action valve(s) is/are tested to trip properly by simulating both: (i) a sprinkler activated situation and (ii) either a fire detector activated signal or a pilot sprinkler activated situation as applicable, and the "valve tripped"/"fire" alarm pressure switch(es), where provided, and the alarm gong(s) is/are in working order.	[ ]	[ ]	[ ]	.....
	i.	For recycling valve(s), the recycling valve(s) is/are tested to trip properly by simulating a fire detector activated alarm signal. Afterwards, by resetting the fire detector activation signal, the recycling valve(s) is/are verified to be closed properly 5 minutes (or other preset time delay as appropriate) after the signal is reset. Afterwards, by simulating a fire detector activation signal, the recycling valve(s) is/are tested to trip again properly.	[ ]	[ ]	[ ]	.....
	j.	At the conclusion of the pre-action/recycling valve(s) operation inspection, the water entered the downstream side of the pre-action/recycling valve(s) beyond the riser check valve is drained away.	[ ]	[ ]	[ ]	.....

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Appendix IX

Operation of Deluge Valve

Remark: Appendix IX is only applicable to sprinkler systems equipped with deluge valve(s). If not applicable, skip Appendix IX.

A9	Operation of Deluge Valve		Yes	No	N/A	Remarks
	a.	Without tripping the deluge valve(s), the "pilot line low pressure"/"diaphragm chamber low pressure" alarm pressure switch(es), where provided, is/are tested to be in working order by releasing the pilot line/diaphragm chamber pressure to the level as recommended by the deluge valve manufacturer. The setting of the pressure switch(es) is/are correct and re-adjusted where necessary.	[ ]	[ ]	[ ]	.....
	b.	By opening the manual release unit, the deluge valve(s) is/are tested to trip properly and the "valve tripped"/"fire" alarm pressure switch(es), where provided, and the alarm gong(s) is/are in working order.	[ ]	[ ]	[ ]	.....
	c.	By opening the remote manual release unit, where provided, the deluge valve(s) is/are tested to trip properly and the "valve tripped"/"fire" alarm pressure switch(es), where provided, and the alarm gong(s) is/are in working order.	[ ]	[ ]	[ ]	.....
	d.	For deluge valve(s) actuated by fire detectors, by simulating a fire detector activated alarm signal, the deluge valve(s) is/are tested to trip properly and the "valve tripped"/"fire" alarm pressure switch(es), where provided, and the alarm gong(s) is/are in working order.	[ ]	[ ]	[ ]	.....

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Appendix X

Water Columning Prevention Device

Remark: Appendix X is only applicable to sprinkler systems equipped with water columning prevention device(s). If not applicable, skip this Appendix.

A10.	Water Columning Prevention Device		Yes	No	N/A	Remarks
	a.	The pipework, fittings, valves, gauge(s), header tank and pressure switch(es) as applicable at the water columning prevention device(s) are intact, securely supported, and free from leakage and undue corrosion.	[ ]	[ ]	[ ]	....
	b.	The structure of the header tank(s) is intact, properly roofed, and free from leakage and obvious damage.	[ ]	[ ]	[ ]	....
	c.	The support and brackets are intact and free from distortion and undue corrosion.	[ ]	[ ]	[ ]	....
	d.	The header tank(s) is/are upholding water at the correct level.	[ ]	[ ]	[ ]	....
	e.	The water inside the header tank(s) is clean and without debris and aquatic growth.	[ ]	[ ]	[ ]	....
	f.	The header tank(s) is/are properly labelled in terms of usage and capacity.	[ ]	[ ]	[ ]	....
	g.	The reading(s) on the pressure gauge(s) is/are within the acceptable range.	[ ]	[ ]	[ ]	....
	h.	The stop valves and ball float valve at the header tank(s) are duly lubricated and tested to operate freely between fully open and fully closed.	[ ]	[ ]	[ ]	....
	i.	The stop valves at the header tank(s) are padlocked in their correct (fully open or fully closed) positions and labelled "Normally Open 常開" or "Normally Closed 常關" as appropriate.	[ ]	[ ]	[ ]	....
	j.	The pressure switch(es), where provided, is/are intact and labelled in terms of usage and pressure setting.	[ ]	[ ]	[ ]	....
	k.	The pressure switch(es), where provided, is/are tested to be in working order. The setting of the pressure switch(es) is correct and re-adjusted where necessary.	[ ]	[ ]	[ ]	....
	l.	The electrical monitoring switch(es) for stop valves, where provided, is/are intact, properly wired, and tested to be in working order.	[ ]	[ ]	[ ]	....
	m.	The cables and cable containment are intact, securely mounted, properly wired and free from cracks and undue deterioration.	[ ]	[ ]	[ ]	....

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			Yes	No	N/A	Remarks
	n.	In each water columning prevention device riser, by opening the test valve at the bottom of the lowest header tank in the riser, the ball float valve(s) at the same header tank and at the header tank(s) on higher level in the same riser open(s), if any, to fill the tank(s) and the pump starting pressure switch(es) near the topmost header tank in the riser activate(s) properly.	[ ]	[ ]	[ ]	....

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Appendix XI

Multiple Jet Control

Remark: Appendix XI is only applicable to sprinkler systems equipped with multiple jet control(s). If not applicable, skip this Appendix.

A11.	Multiple Jet Control (MJC)		Yes	No	N/A	Remarks
	a.	The MJC(s) is/are of the appropriate type(s) (e.g. size, number of outlets, rated temperature, etc.)	[ ]	[ ]	[ ]	....
	b.	The MJC(s), including the body, the heat sensing element and the metron, are intact, properly fixed, and free from leakage and undue corrosion.	[ ]	[ ]	[ ]	....
	c.	The MJC(s), including the frame arms, the heat sensing element and the metron, are free from any type of ornamentation or coating applied after dispatch from production factory.	[ ]	[ ]	[ ]	....
	d.	The MJC(s) is/are free from any foreign covering materials.	[ ]	[ ]	[ ]	....

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Appendix XII

Sprinkler Installation within Residential Flat

Remark: This Appendix may be used individually if the annual inspection only involves the sprinkler installation within one or more residential flats.

Skip this Appendix if the annual inspection for the sprinkler installation where provided within residential flats are covered in Section 10 of this Checklist.

RFSIC Ref.: .....

Serial no. of FS 251: .....

Completion Date of Annual Inspection: .....

Building/Premises Address: .....

.....

The annual inspection is conducted in accordance with the appropriate edition of the Sprinkler Installation Rules applicable to the system(s) in the building/premises. In this Checklist, items required in such Rules are inspected and/or tested.

A.12	**Sprinkler Installation within Residential Flat**					
A12.1	Sprinkler and Accessories (The following items are ascertained as far as reasonably practicable)		**Yes**	**No**	**N/A**	**Remarks**
	a.	The sprinklers including all accessories, where applicable, are intact, properly fixed, and free from leakage, distortion and undue corrosion.	[ ]	[ ]	[ ]	....
	b.	The sprinklers are of the correct type in accordance with their application conditions.	[ ]	[ ]	[ ]	....
	c.	The sprinklers are free from any type of ornamentation or coating except as recommended by the manufacturer.	[ ]	[ ]	[ ]	....
	d	The sprinklers are free from any foreign covering materials.	[ ]	[ ]	[ ]	....
	e.	Other than the exempted areas, sprinkler protection is provided throughout the premises.	[ ]	[ ]	[ ]	....
	f.	The coverage area, spacing and clearance of the sprinklers are in accordance with the requirements, having taken into consideration the installation conditions and various obstructions.	[ ]	[ ]	[ ]	....

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			Yes	No	N/A	Remarks
	g.	The sprinklers are installed at the correct level(s) in relation to the apex, slab soffit, ceiling soffit or obstruction soffit as applicable, in accordance with the requirements.	[ ]	[ ]	[ ]	....
	h.	The sprinklers are installed at the proper orientation, in accordance with the requirements.	[ ]	[ ]	[ ]	....
	i.	The sprinklers are not closer than 2-m apart unless baffle plate(s) or intervening constructional feature(s) is/are present.	[ ]	[ ]	[ ]	....
A12.2	Pipework, Fitting, Valve and Accessories (The following items are ascertained as far as reasonably practicable)					
	a.	The pipework, valves and accessories as applicable are intact, securely supported, and free from leakage, distortion and undue corrosion.	[ ]	[ ]	[ ]	....
	b.	The support and brackets are intact and free from distortion and undue corrosion.	[ ]	[ ]	[ ]	....
	c.	The automatic air vent valve(s), where provided, is/are intact, with the vent opening unobstructed (not capped closed).	[ ]	[ ]	[ ]	....

Authorized Signatory of RFSIC:

_____ (Name in Full) _____(Signature)

_____ (Date)

Registered Fire Service Installation Contractor:

_____(FSD/RC No.) _____(Company Name)

_____(Company Stamp)