Testing and Commissioning Checklist for Fire Detection and Fire Alarm Systems

I. Reference

Project: ..... FSD Ref.: .....
Address: .....
Type of Building:
*Domestic/Industrial/Institutional/Godown/Commercial/Office/Composite/Hotel/Hospital/Others .....
..... and with/without basement.

*delete as appropriate

II. Type of Equipment

2.1 Alarm Annunciation Panel

2.1.1	Manufacturer/Model No.:	(Main panel)		
		(Sub-panel/repeater panel, if any)		
2.1.2	Type:	Conventional type	[ ]	
		Addressable type	[ ]	

2.2 Detectors

2.2.1	Heat detector	Manufacturer/Model No.:	.....	
		Type:	Fixed temperature	[ ]
			Rate-of-rise temperature	[ ]
			Combination	[ ]
			Linear cable	[ ]
			Others	
2.2.2	Smoke detector	Manufacturer/Model No.:	.....	
		Type:	Ionization	[ ]
			Optical	[ ]
			Beam	[ ]
			Aspirating	[ ]
			Others	
2.2.3	Flame detector	Manufacturer/Model No.:	.....	
		Type:	Infrared	[ ]
			Ultra-violet	[ ]
			Combination	[ ]
			Others	

2.2.4 Others Manufacturer/Model No.: .....
Type: .....

2.3 Manual Call Point
Manufacturer/Model No.: .....
Type : Break glass type [ ]
Actuation type [ ]
Others .....

2.4 Fire Alarm Sounder
Manufacturer/Model No.: .....
Type: Bell [ ]
Yodalarm [ ]
Horn [ ]
Siren [ ]
Electronic sounder [ ]
Others .....

2.5 Visual Fire Alarm Unit
Manufacturer/Model No.: .....

2.6 Smoke Detector with Sounder Base
Manufacturer/Model No.: .....

2.7 Power Supplies
Primary: Supply voltage/Phase/Hz: .....

Secondary: Type: Secondary (rechargeable) Battery [ ]
Rating: .....Voltage ..... Amp-hour
(Maintain at least ..... hrs System Operation)

Connected with:-
Emergency generator [ ]
Feed before main switch [ ]
N/A [ ]

Others .....

Fire Resisting Cables
Manufacturer/Model No.: .....
.....
.....

		Yes	No	N/A	Remarks
III. Visual Inspection					
3.1	General				
3.1.1	The initial building plans submission is received by FSD on or after ___/____/_____ (DD/MM/YYYY)	[ ]	[ ]	[ ]	.....
3.1.2	All individual components of the fire alarm system including detectors and the control panel are mutually compatible.	[ ]	[ ]	[ ]	.....
3.1.3	An as-fitted zoning schedule is provided on or adjacent to the alarm annunciation panel.	[ ]	[ ]	[ ]	.....
3.1.4	A log book is provided adjacent to the alarm annunciation panel.	[ ]	[ ]	[ ]	.....
3.1.5	The building plans submission for extensions and additions involving major alterations and additions to the building is in excess of 50% by volume and is received by FSD on or after ____/____/_____ (DD/MM/YYYY)	[ ]	[ ]	[ ]	.....
3.2	Detector				
3.2.1	The detection zonings are properly labelled at the alarm annunciation panel.	[ ]	[ ]	[ ]	.....
3.2.2	Detectors are provided in areas as indicated on approved building plans.	[ ]	[ ]	[ ]	.....
	Point type heat detector: .....nos. Linear heat detection cable: .....sets Point type smoke detector: .....nos. Beam smoke detector: .....sets Aspirating smoke detector: .....sets Flame detector: .....nos. Others: .....nos.				
3.2.3	On the floor(s) where sleeping risk exists (e.g. hotel, hospital, hostel, etc.):				
	(a) heat detector is used in kitchen and E/M plant room.	[ ]	[ ]	[ ]	.....
	(b) smoke detector is used in other areas except toilet, bathroom and staircase where sprinkler is provided.	[ ]	[ ]	[ ]	.....

		Yes	No	N/A	Remarks
3.2.4	In guestrooms of hotels / guesthouses / bedrooms of student hostels:-				
	Sounder base is provided for smoke detector except detector(s) inside concealed space.	[ ]	[ ]	[ ]	.....
3.2.5	In residential flat with open kitchen:-				
	(a) Smoke detector(s) fitted with sounder base is provided inside the flat.	[ ]	[ ]	[ ]	.....
	(b) Smoke detector(s) is provided at the common area outside the flat.	[ ]	[ ]	[ ]	.....
3.2.6	Detectors are provided to basement according to the approved building plans.	[ ]	[ ]	[ ]	.....
3.2.7	Intrinsically safe or flameproof device is used within potentially hazardous areas.	[ ]	[ ]	[ ]	.....
3.2.8	External remote indicating lamp is provided outside the doors of rooms where travel distance of the detectors inside the rooms exceeds 30 m of reach within a zone.	[ ]	[ ]	[ ]	.....
3.2.9	Remote indicating lamp are provided for ceiling void or floor void detectors, if addressable text display in conjunction with layout plans are **NOT** provided adjacent to the control and indicating equipment.	[ ]	[ ]	[ ]	.....
3.2.10	Detectors are provided for horizontal ceiling void $\geqq$800 mm high.	[ ]	[ ]	[ ]	.....
3.2.11	Clearance below detector is $\geqq$ 500 mm. (Not applicable for ceiling voids, floor voids, and area having no horizontal dimension greater than 1 m.)	[ ]	[ ]	[ ]	.....
3.2.12	Point smoke detector is installed within ceiling height limit (General) of 10.5 m. (Note: $\leqq$ 10% of ceiling area may exceed this limit and $\leqq$ 12.5 m).	[ ]	[ ]	[ ]	.....
3.2.13	Heat detector is installed within ceiling height limit (General) of 9 m for Class A1 to BS EN 54-5 and 7.5 m for other Classes. (Note: $\leqq$ 10% of ceiling area may exceed this limit and $\leqq$ 10.5 m).	[ ]	[ ]	[ ]	.....
3.2.14	Under flat ceiling, horizontal distance between any point and the nearest heat detector is $\leqq$ 5.3 m.	[ ]	[ ]	[ ]	.....

		Yes	No	N/A	Remarks
3.2.15	Under flat ceiling, horizontal distance between any point and the nearest smoke detector is ≦ 7.5 m.	[ ]	[ ]	[ ]	.....
3.2.16	In corridors ≦ 2 m wide, heat detectors are sited at intervals of ≦ 10.6 m and ≦ 5.3 m from end wall.	[ ]	[ ]	[ ]	.....
3.2.17	In corridors ≦ 2 m wide, smoke detectors are sited at intervals of ≦ 15 m and ≦ 7.5 m from end wall.	[ ]	[ ]	[ ]	.....
3.2.18	In detector installation, ceiling obstructions > 10% overall ceiling height are treated as wall. (Note: Within horizontal voids, obstructions > 10% of the height between structural floor and structural ceiling are treated as wall regardless of the void location.)	[ ]	[ ]	[ ]	.....
3.2.19	In detector installation, partitions or storage racks reaching within 300 mm of the ceiling are treated as wall.	[ ]	[ ]	[ ]	.....
3.2.20	Detectors are mounted ≧ 1 m from any air supply point of a ventilation system.	[ ]	[ ]	[ ]	.....
3.2.21	Horizontal Ceiling comprises: (a) a series of small cells (honeycomb ceiling), detector spacing is in accordance with Figure 11 & Table 1 of BS 5839-1;	[ ]	[ ]	[ ]	.....
	(b) a number of closely spaced structural beams, detector spacing is in accordance with Figure 11 & Table 2 of BS 5839-1.	[ ]	[ ]	[ ]	.....
3.2.22	Detector(s) is provided under intermediate horizontal surfaces such as ducts, loading platforms and storage racks in excess of 3.5 m in width and whose undersurface is in excess of 800 mm above the floor (other than when the side of the duct or structure is in excess of 800 mm from the wall or other ducts or structure).	[ ]	[ ]	[ ]	.....

		Yes	No	N/A	Remarks
3.2.23	Other than point type smoke and heat detectors, the following detectors are installed within ceiling height limit as specified in Technical Guidance or according to manufacturer's standard and specification.				
	(a) Carbon monoxide detectors	[ ]	[ ]	[ ]	.....
	(b) Optical beam detectors	[ ]	[ ]	[ ]	.....
	(c) Aspirating smoke detectors	[ ]	[ ]	[ ]	.....
	(d) Flame detectors	[ ]	[ ]	[ ]	.....
	(e) Conventional type linear heat detectors	[ ]	[ ]	[ ]	.....
	(f) Optical fibres linear heat detectors	[ ]	[ ]	[ ]	.....
	(g) Video fire detectors	[ ]	[ ]	[ ]	.....
	(h) Others, please specify: ……...	[ ]	[ ]	[ ]	.....
3.3	Fire Alarm Sounder				
3.3.1	The fire alarm sounder is provided in areas as indicated on FSI layout plans.				
	(a) Fire alarm sounder ……Nos.	[ ]	[ ]	[ ]	.....
	(b) External fire alarm sounder ……Nos.	[ ]	[ ]	[ ]	.....
3.3.2	External fire alarm sounders is provided at following locations:-				
	(a) "Fire Services Access Point"; or	[ ]	[ ]	[ ]	.....
	(b) Building entrance if "Fire Services Access Point" is not provided; and	[ ]	[ ]	[ ]	.....
	(c) Control and indicating equipment.	[ ]	[ ]	[ ]	.....
	The fire alarm sounder is clearly marked with the words "FIRE ALARM" (火警).	[ ]	[ ]	[ ]	.....
3.3.3	One fire alarm sounder is provided within 2 m of each hose reel point.	[ ]	[ ]	[ ]	.....
3.3.4	Each system incorporates at least two fire alarm sounders. At least one sounder is provided in each fire compartment.	[ ]	[ ]	[ ]	.....
	(Note: Meaning of fire compartment shall be as defined Code of Practice for Fire Safety in Buildings)				

3.4 Manual Call Point (MCP)

3.4.1	The MCP is provided in areas as indicated on FSI layout plans.					
	MCP: ……. nos.	[ ]	[ ]	[ ]	.....	
3.4.2	The zoning is at least one zone per floor if the total floor area of the building > 300 m^2 calculated on those portions of the premises installed with fire detectors.	[ ]	[ ]	[ ]	.....	
3.4.3	One MCP is located:					
	(a) at hose reel point;	[ ]	[ ]	[ ]	.....	
	(b) adjacent to & within 2m from storey exit (or its entrance lobby if it leads only to the storey exit);	[ ]	[ ]	[ ]	.....	
	(c) adjacent to staircase final exit to open air on G/F or place of ultimate safety.	[ ]	[ ]	[ ]	.....	
3.4.4	For exit opening ≧ 12 m in width, two MCPs are provided, one at each end of the openings before exit (or before the entrance lobby in lieu of such lobby leads only to the exit)) and within a distance of not more than 2 m from each end of the opening.	[ ]	[ ]	[ ]	.....	
3.4.5	MCP is fixed at a height of 0.9 to 1.2 m above finished floor level.	[ ]	[ ]	[ ]	.....	
3.4.6	MCPs are surface mounted or semi-recessed mounted as per manufacturer's design.	[ ]	[ ]	[ ]	.....	

3.5 Visual Fire Alarm (VFA)

3.5.1	The VFA is provided in areas as indicated on FSI layout plans and Fire Service Notes in the approved general building plan.	[ ]	[ ]	[ ]	.....	
3.5.2	VFA alarm signal is in form of flashing red light.	[ ]	[ ]	[ ]	.....	
3.5.3	Flashing light of VFA is readily visible from all normally accessible locations, throughout the area in which they are provided, under normal ambient lighting levels.	[ ]	[ ]	[ ]	.....	
3.5.4	One VFA is provided for each compartment and the distance between two VFA points ≦ 60 m.	[ ]	[ ]	[ ]	.....	
3.5.5	The mounting height of VFA is not less than 2.1 m.	[ ]	[ ]	[ ]	.....	

3.5.6 Design of VFA system conforms to Code of Practice, current Design Manual: Barrier Free Access and

(a) NFPA 72 or	[ ]	[ ]	[ ]	.....
(b) BS 5839-1	[ ]	[ ]	[ ]	.....

3.5.7 One VFA point is located near every hose reel. [ ] [ ] [ ] .....

3.5.8 The power supply of the VFA system is from:

(a) D.C. supply source with back-up supply by battery; or	[ ]	[ ]	[ ]	.....
(b) A.C. supply source with secondary supply from emergency generator; or	[ ]	[ ]	[ ]	.....
(c) A.C. supply source with secondary supply feed before main switch.	[ ]	[ ]	[ ]	.....

3.6 Cables, Wiring and Other Interconnections

3.6.1 Cables used for:
(a) Critical signal path (panel to all field devices);
(b) extra low voltage (ELV) supply from external power supply unit (charger / battery) to the system;
(c) final circuit providing primary power supply to the system; and
(d) primary power supply to the system (primary power supply to panel / charger).

shall be either one or in combination of the following (1), (2) or (3):

3.6.1 (Cont'd)	(1) For standard cables or cable systems as defined in BS 5839-1, they shall comply with:					
	(i) BS 5839-1; or	[ ]	[ ]	[ ]	.....	
	(ii) BS EN 50200 (PH30) and Annex E of BS EN 50200 (a duration of survival time of 30 minutes); or	[ ]	[ ]	[ ]	.....	
	(iii) BS EN 60702; or	[ ]	[ ]	[ ]	.....	
	(iv) BS 7629-1 (Cat. Standard 30); or	[ ]	[ ]	[ ]	.....	
	(v) BS 7846 (Cat.F2 for cables of overall diameter not exceeding 20mm or Cat. F30 for cables of overall diameter exceeding 20mm); or	[ ]	[ ]	[ ]	.....	
	(vi) BS 6387 Cat. CWZ; or	[ ]	[ ]	[ ]	.....	
	(vii) Fire resisting cables to other international standard accepted to the Director of Fire Services.	[ ]	[ ]	[ ]	.....	
	(2) For enhanced cables or cable systems as defined in BS 5839-1, they shall comply with:					
	(i) BS EN 50200 (PH120) and 8434-2 (a duration of survival time of 120 minutes); or	[ ]	[ ]	[ ]	.....	
	(ii) BS EN 60702; or	[ ]	[ ]	[ ]	.....	
	(iii) BS 7629-1 (Cat. Enhanced 120); or	[ ]	[ ]	[ ]	.....	
	(iv) BS 7846 (Cat.F2 for cables of overall diameter not exceeding 20mm or Cat. F120 for cables of overall diameter exceeding 20mm); or	[ ]	[ ]	[ ]	.....	
	(v) BS 6387 Cat. CWZ; or	[ ]	[ ]	[ ]	.....	
	(vi) Fire resisting cables to other international standard accepted to the Director of Fire Services.	[ ]	[ ]	[ ]	.....	
	(3) Cables as per Remarks Section in Appendix I of FSD Circular Letter No. 2/2017 being exempted from the requirement.	[ ]	[ ]	[ ]	.....	
3.6.2	Conductors are having a cross-sectional area of $\geqq$ 1 mm^2.	[ ]	[ ]	[ ]	.....	
3.6.3	Cables and conductors are separated from cables of other services.	[ ]	[ ]	[ ]	.....	
3.6.4	Cables carrying power in excess of extra low voltage (ELV) are segregated from extra low voltage (ELV) fire alarm circuits.	[ ]	[ ]	[ ]	.....	

3.7 Control and Indicating Equipment

3.7.1	The alarm annunciation panel is located near the main entrance without fire control centre or in fire control centre.	[ ]	[ ]	[ ]	.....
3.7.2	Manual call point zone indications are given at the control and indicating panel even if addressable text information is available.	[ ]	[ ]	[ ]	.....
3.7.3	Manual call point zone and detection zone indications are given at the control and indicating panel even if addressable text information is available, by one or a combination of the following:				
	(a) LED indicators	[ ]	[ ]	[ ]	.....
	(b) Visual display units	[ ]	[ ]	[ ]	.....
	(c) Other suitable means (Please specify ……...)	[ ]	[ ]	[ ]	.....
3.7.4	The wirings are compatible with the type of control panel as recommended by the panel manufacturer. (2-wire system/4-wire system/twisted pair/ …….....)	[ ]	[ ]	[ ]	.....
3.7.5	Operation of alarm silent facility should:				
	(a) require manual operation;				
	(b) not cancel any visual signal;				
	(c) if a new zone goes into alarm, sound any fire alarm sounders belonging to that alarm zone;				
	(d) not prevent correct operation of any control; and				
	(e) not prevent transmission of alarm to alarm receiving centre.	[ ]	[ ]	[ ]	.....

3.8 Power Supplies

3.8.1	Connections to the primary power supply is via an independent isolating protective device.	[ ]	[ ]	[ ]	.....
3.8.2	Every isolator, switch and protective device is situated in a position inaccessible to unauthorized persons or protected against unauthorized operation and is properly labelled as appropriate: (a) "FIRE ALARM" (火警警報); or (b) "FIRE ALARM. DO NOT SWITCH OFF" (火警警報，切勿切斷電源); or (c) "WARNING. THIS SWITCH ALSO CONTROLS THE SUPPLY TO THE FIRE ALARM SYSTEM" (警告，此電掣同時控制火警警報系統電源). All labels are engraved in white letter/character with a red background. The words "FIRE ALARM" (火警) with height of English and Chinese wordings ≧ 10 mm and 15 mm respectively.	[ ]	[ ]	[ ]	.....
3.8.3	Circuit supplying fire detection and fire alarm system is not protected by a residual current device. (unless necessary to comply with EECoP)	[ ]	[ ]	[ ]	.....
3.8.4	The primary power supply and the standby battery are each capable of supplying the maximum alarm load of the system.	[ ]	[ ]	[ ]	.....
3.8.5	Battery power supply is provided. (Input Voltage: ..... A.C./D.C. Output Voltage: ..... A.C./D.C. Capacity: .....Ah)	[ ]	[ ]	[ ]	.....
3.8.6	Secondary (rechargeable) battery supplies should: (a) be with an automatic charger; (b) have a life of at least 4 years; (c) have date of installation labelled; (d) have battery charger capable of recharging the battery from fully discharged to fully charged within 24 hours; and (e) have capacity sufficient to maintain the system operation.	[ ]	[ ]	[ ]	.....

IV. Testing

4.1 Detectors

4.1.1	Upon actuation of any detector in the building, the correct audio/visual warning device is initiated.	[ ]	[ ]	[ ]	.....	
4.1.2	The sensitivity of all heat/smoke/flame detectors are correctly set in full accordance with the manufacturer's recommendations.	[ ]	[ ]	[ ]	.....	
4.1.3	The zoning of detectors is correct.	[ ]	[ ]	[ ]	.....	

4.2 Manual Call Point, Alarm Sounder and Visual Fire Alarm Installations

4.2.1	Upon actuation of the detector or manual call point, alarm is given by external fire alarm sounder installed at the following locations:-					
	(a) "Fire Services Access Point"; or	[ ]	[ ]	[ ]	.....	
	(b) Building entrance if "Fire Services Access Point" is not provided; and	[ ]	[ ]	[ ]	.....	
	(c) Control and indicating equipment.	[ ]	[ ]	[ ]	.....	
4.2.2	Background noise (N) likely to persist for a period longer than 30 seconds.	[ ]	[ ]	[ ]	At .....dB(A)	
4.2.3	For domestic building, the minimum sound level of alarm sounders is measured at 3 m from the inside of the main entrance door with all doors shut off & all windows open at all flats and the result is ……..... dB(A), which is:					
	(a) $\geqq$ 60 dB(A); and					
	(b) $\geqq$ 5 dB(A) + …….. (background noise, N) = ……dB(A).	[ ]	[ ]	[ ]	.....	
4.2.4	For non-domestic building, the minimum sound level of alarm sounders is measured at 3 m from the inside of the main entrance door with all doors shut off & all windows open at all flats and the result is ……. dB(A), which is:					
	(a) $\geqq$ 65 dB(A); and					
	(b) $\geqq$ 5 dB(A) + …….. (background noise, N) = ……dB(A).	[ ]	[ ]	[ ]	.....	

4.2.5	The sound level measured right below the sounder base(s) of smoke detector and 1 m above floor level with all the guestroom/bedroom windows fully opened and doors closed is ……. dB(A), which is: (a) $\geqq$ 65 dB(A); and (b) $\geqq$ 5 dB(A) + …….. (background noise, N) = ……dB(A).	[ ]	[ ]	[ ]	.....
4.2.6	The zoning of manual call points is correct.	[ ]	[ ]	[ ]	.....
4.2.7	Upon actuation of any manual call point in the building, the fixed fire pump serving the corresponding block comes into operation regardless of the zoning of the manual call point.	[ ]	[ ]	[ ]	.....
4.2.8	Upon actuation of any manual call point in the building, the correct audio/visual warning device for the fire alarm and detection system is initiated.	[ ]	[ ]	[ ]	.....
4.2.9	The delay between operation of a manual call point and the giving of an “evacuate” signal in the alarm zone does not exceed 3 seconds.	[ ]	[ ]	[ ]	.....
4.2.10	All VFA flashing light is visible from all normally accessible locations, throughout the required protected areas when the fire alarm system is actuated.	[ ]	[ ]	[ ]	.....
4.2.11	VFA signal is clearly distinguishable from any other non-fire service visual signals.	[ ]	[ ]	[ ]	.....

4.3 Power Supplies

4.3.1 The capacity of standby batteries: -

(a) For occupied premises, the capacity of standby battery is sufficient to maintain the system in operation for at least 24 hours, plus at least 30 min. for an "evacuate" signal in all alarm zones;	[ ]	[ ]	[ ]	.....
(b) For unoccupied premises, the standby battery is sufficient to maintain the system in operation for at least 24 hours longer than maximum period likely to be unoccupied or for 72 hours in total, whichever is the less, after which to operate all fire alarm devices for at least 30 min; or	[ ]	[ ]	[ ]	.....
(c) In building with emergency generator that serves fire alarm system, battery capacity is sufficient to maintain the system in operation for at least six hours, plus at least 30 min. for an "evacuate" signal in all alarm zones.	[ ]	[ ]	[ ]	.....

4.3.2 The primary or secondary power supplies are indicated by a green indicator at main indicating equipment.	[ ]	[ ]	[ ]	.....
4.3.3 Each of the primary and the secondary power supply is capable of supplying the largest load under normal, fire and fault conditions.	[ ]	[ ]	[ ]	.....

4.4 Control and Indicating Equipment

4.4.1 Alarm is given from the external fire alarm sounder at the following locations:

(a) "Fire Services Access Point"; or	[ ]	[ ]	[ ]	.....
(b) Building entrance if "Fire Services Access Point" is not provided; and	[ ]	[ ]	[ ]	.....
(c) Control and indicating equipment.	[ ]	[ ]	[ ]	.....

4.4.2 Direct telephone link (DTL) to service provider's Computerized Fire Alarm Transmission System (CFATS) is connected. (Please state DTL no.: ……..)	[ ]	[ ]	[ ]	.....

4.4.3 Other panel function works properly:

(a) Alarm silence/reset.	[ ]	[ ]	[ ]	.....
(b) Battery supply on. (if applicable)	[ ]	[ ]	[ ]	.....
(c) Power on/failure indicator.	[ ]	[ ]	[ ]	.....
(d) Direct link failure indicator. (if applicable)	[ ]	[ ]	[ ]	.....
(e) Zone alarm/fault indicator.	[ ]	[ ]	[ ]	.....

4.4.4 Detector solely using as automatic actuating devices for fire service systems such as fire shutter, V/AC control, fixed installations other than water, fixed installation using water, pressurization system, and smoke control systems are linked to the Computerized Fire Alarm Transmission System (CFATS) via DTL.
(Remark: This linking is NOT mandatory.) [ ] [ ] [ ] .....

4.4.5 System integrity

(a) Fire detection circuit
A fault on one circuit should not affect any other circuit; a single short circuit or open circuit fault should neither disable protection with aggregate floor area of more than 2,000 m^2 nor more than one floor of a building; and two simultaneous faults on one circuit should not disable protection within a gross floor area of more than 10,000 m^2. [ ] [ ] [ ] .....

(b) Linear heat detectors
(i) Protection area ≤ 2,000 m^2, a single short circuit or open circuit fault on the linear heat detection cable should not disable protection. [ ] [ ] [ ] .....
(ii) Protection area > 2,000 m^2, duplicate linear heat detection cables with its associated control panels, should be provided. [ ] [ ] [ ] .....

(c) Fire alarm sounders and/or visual alarm device where applicable:-
A single open circuit or short circuit fault on any circuit on any floor that serves fire alarm sounders and/or visual alarm device where applicable should not disable operation of fire alarm sounders and visual alarm device where applicable on the adjacent floor below and the adjacent floor above. [ ] [ ] [ ] .....

V. Documentation

5.1	FSD approval/listing by product certification bodies are provided for the following equipment:					
	(a) Fire Alarm Control Panel;	[ ]	[ ]	[ ]	.....	
	(b) Heat Detector;	[ ]	[ ]	[ ]	.....	
	(c) Smoke Detector;	[ ]	[ ]	[ ]	.....	
	(d) Beam Detector;	[ ]	[ ]	[ ]	.....	
	(e) Smoke Detector with Integration Devices;	[ ]	[ ]	[ ]	.....	
	(f) Flame Detector;	[ ]	[ ]	[ ]	.....	
	(g) Intrinsically Safe / Explosion Proof Detector;	[ ]	[ ]	[ ]	.....	
	(h) Alarm/Sounder Integrated with Strobe Light;	[ ]	[ ]	[ ]	.....	
	(i) Manual Call Point;	[ ]	[ ]	[ ]	.....	
	(j) Alarm bell;	[ ]	[ ]	[ ]	.....	
5.2	FSD approval/listing by product certification bodies are provided for the fire resisting cables.	[ ]	[ ]	[ ]	.....	
5.3	Sound level measurement (including background noise) report for alarm sounders is provided.	[ ]	[ ]	[ ]	.....	
5.4	Calculation showing the required battery capacity is provided.	[ ]	[ ]	[ ]	.....	
5.5	Letter certifying the completion of the DTL to the FSCC / authorized service provider is provided.	[ ]	[ ]	[ ]	.....	
5.6	Confirmation or certification from panel manufacturer on the compatibility between the fire alarm control panel(s) and detectors is provided.	[ ]	[ ]	[ ]	.....	

Test conducted by:

..... (Signature)

.....
Name of FSI Contractor's Representative (in block letters)

.....
Company Chop

..... (RC /)
Name of FSI Contractor (FSI Contractor Registration Number)

Date .....