Government of Western Australia
Department of Fire & Emergency Services

DFES
Department of Fire & Emergency Services

DFES DBA CONNECTION CODE

REQUIREMENTS FOR CONNECTION TO THE DIRECT BRIGADE ALARM NETWORK

Last Updated: 10 Mar 2016

DOCUMENT CONTROL

DATE	DOCUMENT REVISION ID	CHANGES MADE
2013-02-11	v2.0	• Reformatting • Update to DFES from DFES • Inclusion of NFIA Members as Industry Certification Requirement
2013-05-01	v2.0 JM	• Receipt from Jeff Morton with Content additions/ changes
2013-05-01	v2.0 AC	• Reformatting
2013-05-09	v2.0 AC	• Addition of FIP Clearance Information
2014-02-05	v3.0 JM	• Full Document Review • Addition of C7 and C8 information • Update of Contact Details for FAMS
2016-03-10	V3.0 JM	•

1. CONTENTS

2. INTRODUCTION

The purpose of this document is to provide the standards required to connect a protected premises fire alarm to the Department of Fire and Emergency Services (DFES) monitored Direct Brigade Alarm (DBA) network. These standards are to be used in conjunction with the relevant Australian Standards for the installation of fire alarm monitoring equipment.

This document is reviewed periodically and changes made when required. Therefore, fire alarm agents should ensure that they understand the requirements of the latest version, prior to the request for connection to the DBA network or undertaking alterations to an existing alarm.

Any queries regarding this document or the requirements for compliance to connect to the DBA network should be made with the DFES Contract Manager (refer to the contact details listed in section 10**.** of this document).

All other queries such as the request for connection or queries regarding the DBA costs should be made with the Fire Alarm Monitoring Services (FAMS) 24/7 Customer Service Centre (refer to the contact details listed in section 10 of this document).

The DFES DBA monitoring agreement, known as the End User Agreement (EUA), requires that the client comply with this connection code as well as relevant Australian Standards, and the Building Code of Australia (BCA).

Fire alarm technicians must be employed by a company registered with the Fire Protection Association of Australia (FPAA), and/or the National Fire Industry Association (NFIA). Membership of a fire alarm industry peak industry body is mandatory.

Clause 5.1 of the EUA requires that the client shall not make, cause, suffer or permit to be made any alteration or addition to the Alarm without the prior written approval of DFES. DFES requires that the agent notify the DFES DBA Manager prior to any works being undertaken. DFES require the DFES C8 form to be submitted and approved PRIOR to all works being initiated on any alarm system connected as a DBA.

This includes all parts of a fire alarm system, be it sprinkler, gas suppression, drenchers, or simple point type detection.

DFES further require that the agent shall submit all required certification and compliance documents within 10 working days of any upgrade works being completed.

Failure to comply shall see the fire alarm agent reported to the FPAA (or NFIA), and further, the alarm may be placed OFFLINE till the matter is resolved.

If the FPAA, or NFIA, revoke, suspend, or cancel an agent's membership, DFES will no longer permit that agent (the agents company) from working on any alarm system connected as a DBA. Failure to comply shall see the alarm placed OFFLINE.

Further information re the DBA and FAMS network may be obtained by visiting:

http://firealarmmonitoringservices.com.au/

3. WIRING

3.1. WIRING TO TELSTRA LINES

(AS 1670.1 (2004), AS 3013, AS 3000 & ACMA REQUIREMENTS)

Note: *All fire alarm cabling shall be installed by a suitably licensed, or under the direct supervision of a licensed cabler.*

The cable from the FIP ASE Terminal strip to the MDF J Box shall be compliant to 2 core 1.5mm WS51W rated fire cable.

Note: *Asbestos coated cable is not permissible.*

3.2. WIRING FROM SIGNALING DEVICES

The wiring from unsupervised circuit devices, i.e. from pressure switches used in sprinkler systems and such, unless they are connected to a fire indicator panel, shall be run in flexible conduit to provide mechanical protection and shall be fire rated cable meeting the appropriate standard.

3.3. LIGHTNING PROTECTION EARTH

3.3.1. Earth

The DFES Alarm Signalling Equipment (ASE) requires a Lightning Protection Earth (LPE) installed from the FIP ASE Terminal Strip direct to the nearest distribution MEN (Mains Earth Neutral). A DC resistance of 1 ohm or less is required from the earth point at the FIP to the MEN.

3.3.2. Wiring

All lightning protection earth cabling must be a minimum of 6mm squared Yellow/Green cable and must be permanently labelled as such. The installation of this cable shall comply with the requirements of AS/NZS3000 (2000).

Note: *Should there be a requirement for a Telecom Reference Conductor (TRC) i.e. the phone system requiring an earth for correct operation, the earth rules become more complex and the CCM rules shall override the DFES connection requirements.*

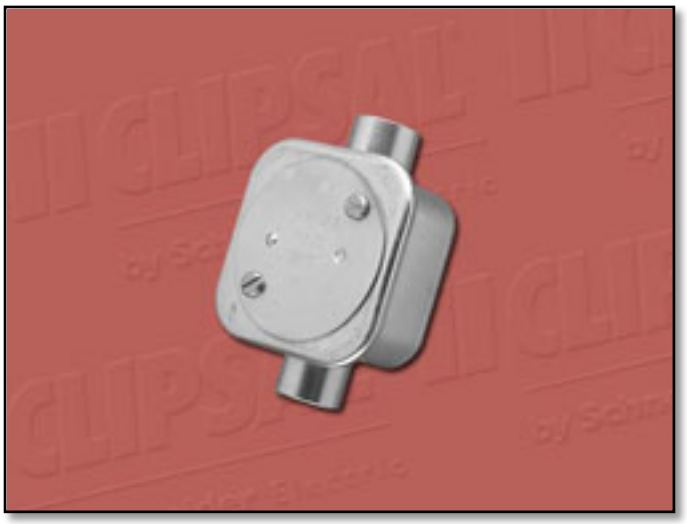
4. SPECIFIC REQUIREMENTS

4.1. TELSTRA MDF

DFES require that the connection from the FIP ASE Terminal Strip to the PSTN Secondary Communications Path shall be 2 core fire rated cable in accordance with Clause 3.1.

The fire rated cable shall be terminated with pressure plated connectors in a metal J box which should have at least one (1) free 20mm screwed entry for DFES cabling to the MDF, i.e. the j-box shall be a double entry j-box with 20mm screwed entry points to allow for (1) the cable from the FIP, and (2) the DFES connection to the MDF. In addition, the cable must never enter the j - box except through the manufacturer specified entry points, i.e. not through the rear casing or the lid of the j – box. The J Box must use opposite entry points, not 90 degree to each entry point.

The J Box shall be a Clipsal 1239P20/2 Metal Junction (J) Box only (as pictured below).



Note: *The J box must be mounted within 500mm of the MDF to allow for the connection of the DFES patch cord. Additionally, there must be at least 200mm of tail left in the j – box for use by the DFES technicians + the external insulation must be stripped back level with the gland.*

Diagram: *Refer to Appendix A for the required PSTN Installation diagram.*

4.2. EQUIPMENT

4.2.1. Manual Push Button

System having no detection, but Manual Call Points (MCP), may be connected to a Fire Indicator Panel (FIP). The FIP must be installed as per the requirements of AS1670.1 (2004).

IN addition, ***each*** individual MCP shall be identified on the FIP and Zone Plan as an *individual alarm zone* for prompt and easier identification and location.

4.2.2. FIP Master Alarm Function Requirements

Fire Panels connected in Western Australia may not have a MAF Isolate Relay that is capable of isolating all (FIRE, FAULT, ISOLATE) outputs to the Alarm Signalling Equipment. The ASE is capable of being placed into 'TEST' or 'ISOLATE', thus any ensuring signals to the fire brigade can be isolated.

Additionally, no FIP may be fitted with door micro switches capable of isolating any functions on the FIP, be it OWS, sounder, or MAF outputs.

1.1. FIRE INDICATOR PANELS & OCCUPANT WARNING SYSTEMS

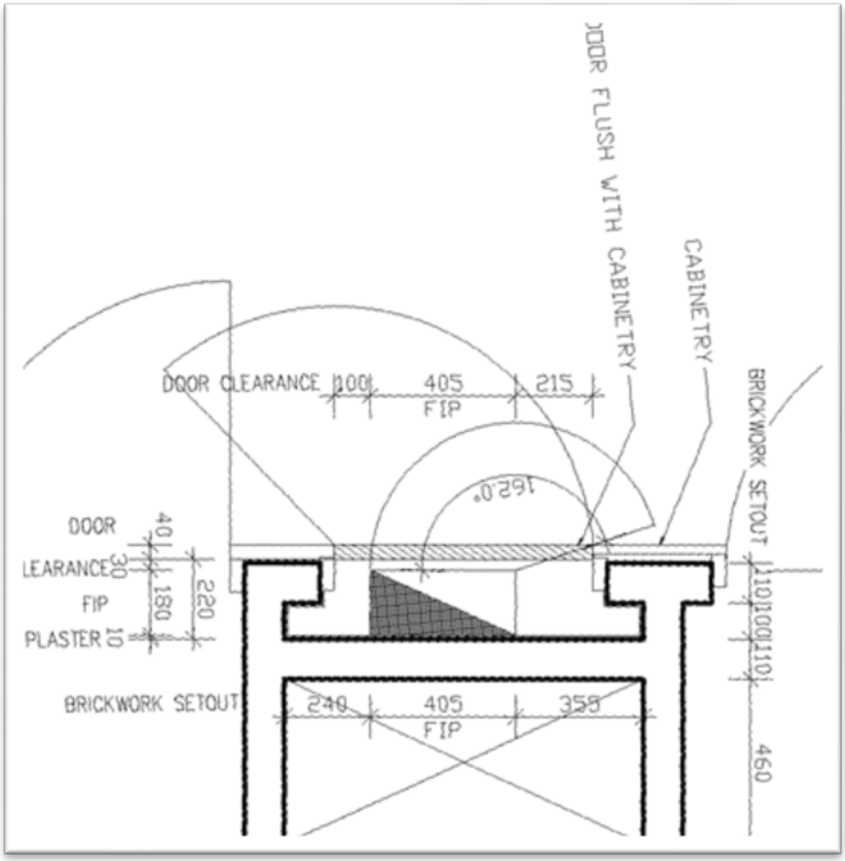
AS1670.1 (2004) Clause 3.9.2 indicates a FIP can be installed within in a cupboard, but Clause 3.9.4 requires 600mm clearance either side of the FIP WITHIN the cupboard. This has been confirmed by Standards Australia.

However, DFES will accept a FIP within a cupboard provided that the following **minimum** requirements are all met:

- Provided the FIP door can open to a **minimum** of 130º, DFES prefer 180º
- The cupboard door can open to 180^0;
- There is a **minimum** of 100mm clearance between the FIP (lock side) and the side of the cupboard;

DFES will allow the FIP to be installed within a cupboard provided these minimum requirements are met.

See illustrations below for more details:



Warning: *All Fire Indicator Panels being connected to the Direct Brigade Alarm network shall comply with AS1670.1 (2004). There will be no exceptions to this rule unless DFES grants written approval.*

1.1.1. ASE Mounting

The ASE main unit shall be mounted inside the FIP lockable doors.

The ASE will be mounted by DFES or approved technicians only.

It is the fire alarm installer's responsibility to ensure there is adequate room within the FIP for the ASE to be installed. However, where there is no room inside the FIP, then the ASE Main Unit shall be mounted inside an external enclosure adjacent to the FIP

The ASE is considered to form part of the FIP Control & Indicating Equipment (CIE) as determined by AS1670.1 (2004). Therefore, the ASE shall be mounted in accordance with AS1670.1 (2004) Clause 3.9. This requires it to be no less than 750mm from floor height and no higher than 1850mm floor height.

Warning: *Under no circumstance will agents be allowed to mount the ASE unless written approval is obtained from the DFES DBA Contract Manager. This includes removing the ASE from one FIP to mount in a replacement FIP.*

Diagram: *Refer to Appendix B for the current ASE physical drawing*

1.1.2. Fire Indicator Panel Bells & Strobes

All FIP's must have a strobe complying with AS1670.1 (2004) Clause 3.8

In addition to complying with this requirement, an external bell shall be mounted in parallel with the external strobe circuit to provide an audible reference. The bell shall comply with AS1603.6 (1987).

Note: *The bell is not required where the premises are classed as an Aged Care Facility, Hospital, or Residential Apartment Complex. However, at all other times, an external bell shall be installed.*

Sub Indicator Boards connected to an FIP that is fitted with an ASE shall also comply with this requirement. However, in large complexes with multiple SIB's, then external bells may not be required. Please contact the DFES DBA Contracts Manager to confirm this requirement prior to installation. NOTE – External strobes will however be required in all instances.

Note: *The bell and strobe must be mounted in such a position that they are visible from the nearest or main approach to the FIP. FIP's not complying with this requirement will not be connected. The MAXIMUM / MINIMUM height of the bell/strobe shall not exceed 3 meters AFL nor be lower than 2.7 meters AFL. Any variation to these height requirements must be approved by the DFES DBA Contracts Manager.*

In addition, the bell and strobe shall be installed such that they face onto the street (or Designated Site Entry Point) and not up the street or down onto the path/ground/floor.

1.1.3. Data Gathering Panels

Data Gathering Panels may be used in networking various alarm systems back to a single FIP. Where a DGP is used, then it must have its controls blanked off and be marked –

'DATA GATHERING PANEL – NON FIRE BRIGADE USE'

The wording shall be RED lettering on a WHITE background and the lettering shall be no less than 30mm in height.

The DGP compliance requirements are slightly less onerous than a Sub Indicator Board, however, AS1670.1 (2004) compliance documents will be required, along with correct As Builds and the 7.3 Battery Log.

1.1.4. Tactical Fire Plans

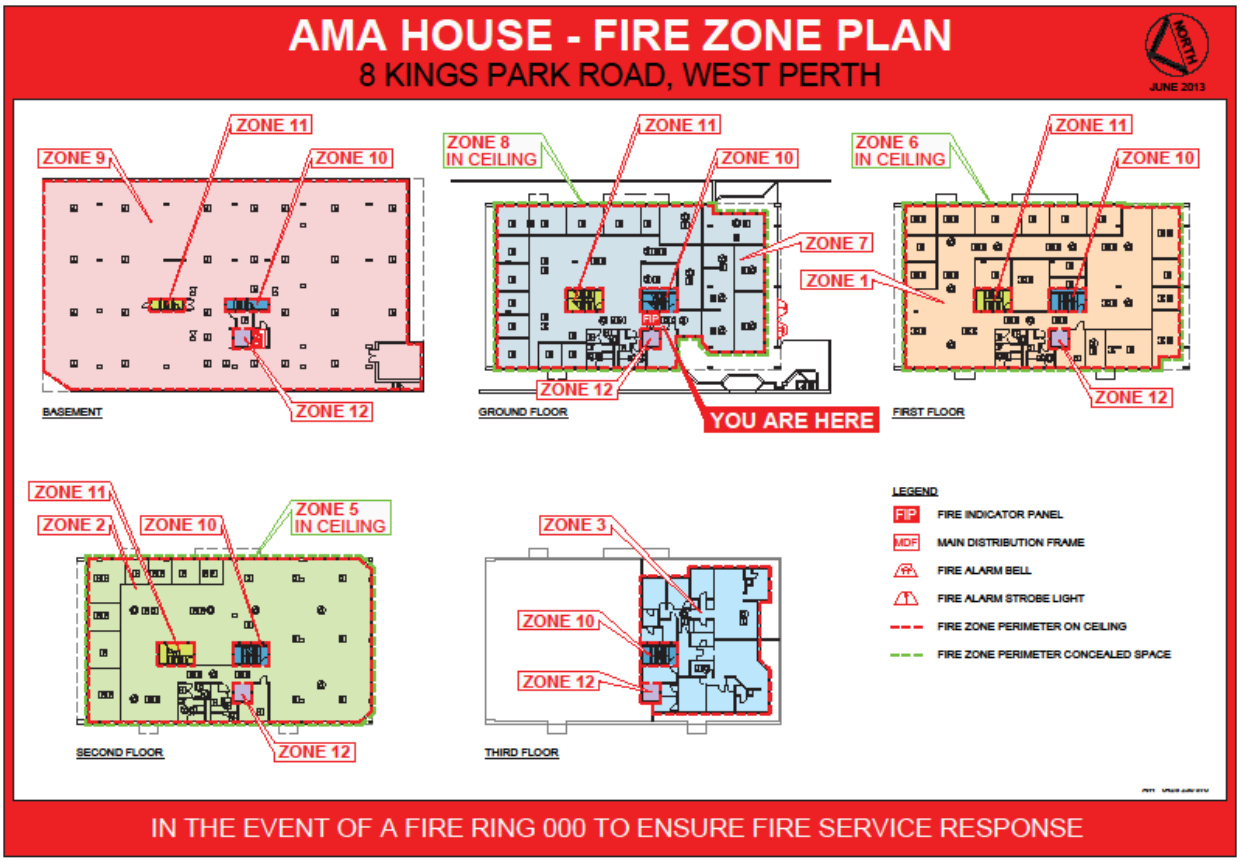
All FIP's shall have a Zone Plan located adjacent to the FIP and be clearly visible and labelled as a Zone Plan. The Zone Plan shall comply with the requirements of AS1670.1 (2004)

However, common sense should prevail in this situation and the Zone Plan should not be constructed in such a manner that there is too much information on the Zone Plan. This would defeat the purpose of a Zone Plan, which is to provide a quick and easy reference for the attending Fire & Rescue Service (FRS) personnel to locate the active zone.

The Zone Plan shall be mounted securely to the wall in such a manner that it cannot be removed easily.

The Zone Plan shall be a minimum A4 size (preferably A3) and be either laminated and mounted on a back board secured to the wall, or preferable using a picture frame securely mounted to the wall The use of a picture type hook and hanging the Zone Plan from this hook is not acceptable.

The zone plan shall be in colour. By this DFES require that all individual alarm zones be identified with coloured areas, as per example attached.



The above is an example only, used to indicate the application of colour for individual zone identification.

1.1.5. FIP Terminal Strip

The FIP shall have a pressure plated terminal strip located within 400mm of the ASE to allow for the connection of the ASE Main Unit cables to the FIP. The terminal strip shall be pressure plated and permanently labelled with clearly written labels.

Diagram: *Refer to Appendix C for the Terminal Strip for DFES Monitored systems diagram.*

Where a hinged panel is to be used, the ASE Display shall be mounted on the panel. Cabling from the ASE main unit to the display should be sufficient to allow the hinged panel to open fully with minimal cable duress.

1.1.6. OWS/EWIS Installation Requirements

The OWS/EWIS CIE shall be compliant to the installation requirements of AS1670.1 (2004) and AS1670.4 (2004).

All OWS/EWIS Control & Indicating Equipment (CIE) shall be co-located with the FIP CIE
All BOWS and EWIS systems shall have a single point of control.

Where the EWIS CIE is remote from the FIP CIE, then prior installation approval shall be sought from DFES re the location of the EWIS CIE.

1.1.7. OWS/EWIS Emergency Lighting Requirements

AS1670.4 (2004) Clause 2.1.2 (a) requires emergency lighting compliant to AS2293.1. However, AS2293.1 does not define the minimum LUX reading for this emergency light. Therefore, to assist the industry with this requirement, DFES have determined that an Emergency Light must be installed no further than 3 meters (celling level distance) from the FIP/EWIS.

1.1.8 Compliance to AS3000

AS1670.1 (2004) requires the electrical installation to the Fire Indicator Panel to comply with AS3000.

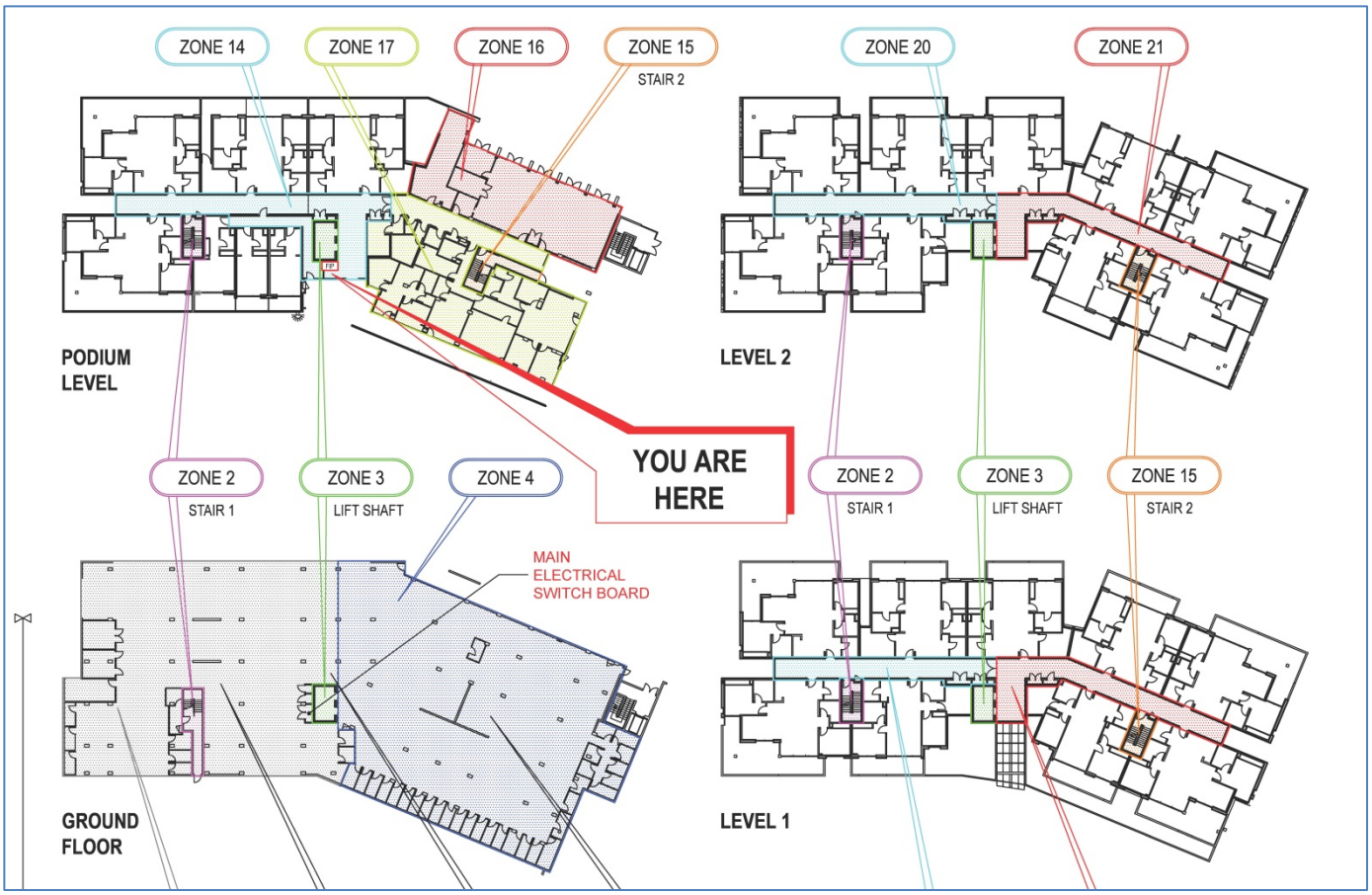
AS3000 (2007) requires that the supply to the FIP be specifically compliant to Clauses 2.9.2.4 & 7.2.6.2.

These requirements are not the obligation of the fire alarm agent, but the electrician, and the contractor connecting the essential primary supply to the FIP.

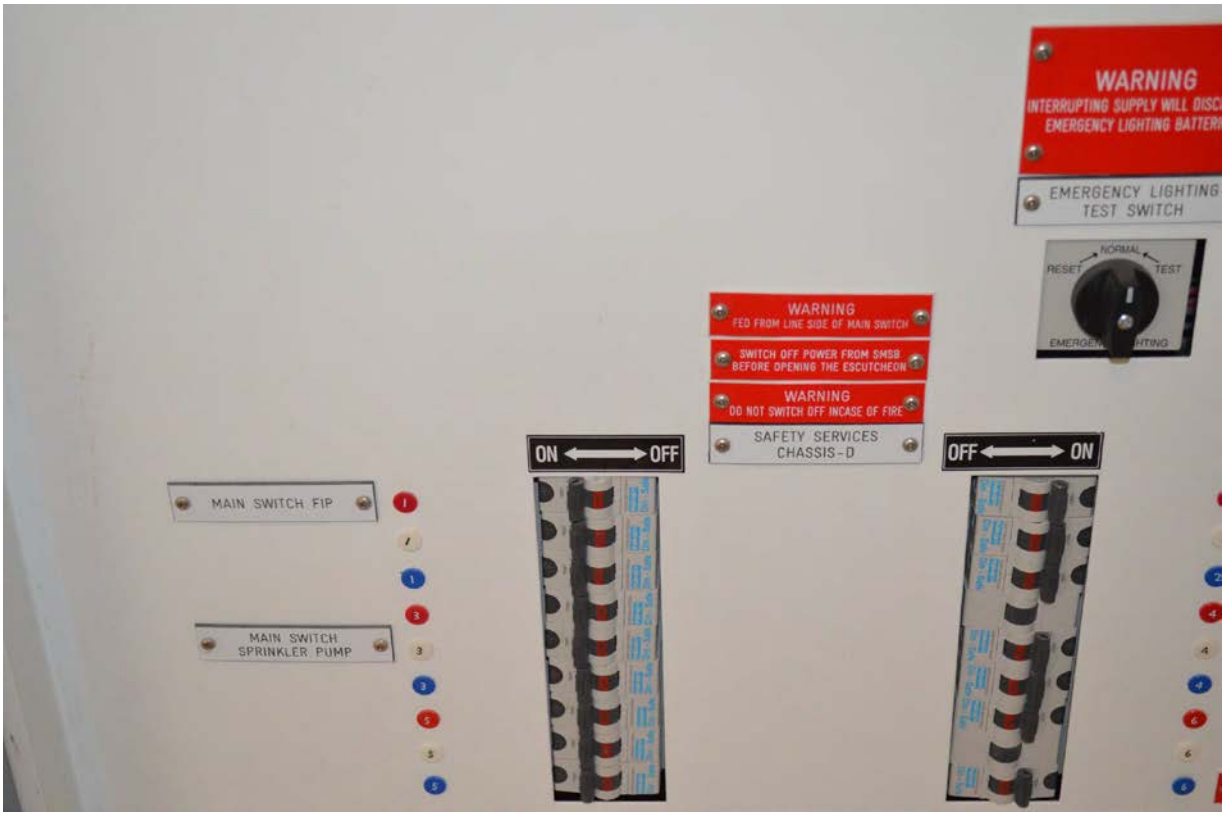
The signage at the entrances maybe resolved by placing the Main Switch Board location on the FIP zone plan, or they may elect to install the signage as required. The wording, if placed on the FIP Zone Plan, shall be specifically '***MAIN ELECTRICAL SWITCH BOARD'*** and not MSB, MEB, or MAIN SWITCH BOARD.

Attached are examples of the signage requirement and labelling requirement:

EXAMPLE OF ZONE PLAN SHOWING MAIN ELECTRICAL SWITCH BOARD LOCATION



EXAMPLE OF TYPICAL SWITCH BOARD FIP CCB LABEL



1.1. SIGNALS

Warning: *All FIP circuits must be protected from accidental voltages appearing on the terminal strip which could activate or operate any system attached to the FIP, i.e. automatic smoke vents.*

Note: *FIP's must only provide a panel voltage of either 12V DC or 24V DC only.*

1.1.1. FIP Signalling

a) Thermal, combustion (smoke), beam detectors, and manual call points (MCP) must provide a dedicated common alarm signal only;
b) Sprinkler systems shall provide a dedicated sprinkler signal only;
c) Gas systems shall provide a dedicated gas discharge signal only (see section dealing with gas systems);
d) Sub Indicator Boards shall provide a dedicated signal only. Grouping of SIB's is not permitted unless installed in a high-rise building. (See section dealing with High Rise Buildings). Grouping may be allowed only if authorised by the DFES Contract Manager;
e) Where a sprinkler system or other sub system, i.e. pumps, valve tamper, low tank level and the like, is monitored through an ASE in an FIP, then that system shall be monitored through the FIP using a dedicated zone or group. In addition, each of these sub systems shall provide its own dedicated signal to the ASE;
f) Fault and Isolate signals shall comply with AS 4428.1 (1998). In addition, fault and isolate signals shall provide dedicated fault and isolate signals only to the ASE;

g) Low battery signal can be monitored by ASE, only if Fire Agent programs FIP relay to output Low Battery Signal;

h) An ASE can monitor up to 42 alarm signals as required. However, additional expansion boards will be required for FIPs with more than 6 alarm signals. Additional installation labour and equipment will be applicable for these types of systems;

i) When the FIP is powered on and in Normal Condition (no alarms – active inputs), all relay contacts are to be in the normal open state and they shall be voltage free;

Diagram: *Refer to Appendix D for the Fire Agent Wiring diagrams.*

Note: *When the FIP is Powered Up in a Normal Condition (No Alarms – Active Inputs), all Relay contacts must be in the normally open state.*

1.1.2. Sprinkler Signalling

a) Pressurised systems not fitted with a retard chamber *must be fitted with a low-pressure indication* using normally closed contacts from a differential pressure switch. Pressurised systems in addition to the DBA pressure switch shall also be fitted with a differential pressure switch indicating “Low Pressure” fault signal. It shall be set to an early warning of a leak or drop in water pressure, i.e. approximately 200 KPA above the DBA pressure switch setting;

Note: Pressurised sprinkler systems shall be fitted with two differential pressure switches, one to indicate DBA and the other to indicate Low Water Pressure

1.1.3. Gas Signalling

a) Gas systems connected directly to a Fire Control Station shall provide two signals to the Fire Control Station. One to indicate a common alarm signal if one or more zones have gone active, and a gas discharge signal, if and only if the gas has actually been discharged. They shall also meet the requirements of all associated standards;

b) Gas systems connected via a sub indicator board (SIB) shall also provide two signals to the Fire Control Station. One to indicate SIB activation , and the other to indicate actual gas discharge;

1.1.4. High Rise Buildings

a) Only in High Rise Buildings (HRB) will the grouping of sub systems be allowed. Therefore, if a HRB has more than one (1) sub board, gas, or sprinkler system, then grouping of those systems will be allowed provided each group is of a similar group, i.e. sprinklers cannot be grouped with gas and so forth;

b) However, each group must still provide its own dedicated signal to the ASE;

c) Each sub system shall have its own dedicated zone allocated on the FIB. The outputs of these systems may be grouped for ASE indicating purposes only;

The reasoning for this is quite simple. The FRS on SIB signalling will always try to respond directly to the site of the SIB activation. On all sites except HRB’s this will reduce the operational

response and total incident time, thus allowing more time to respond to other incidents if required. However, for HRB sub board activation, the attending appliance can still only park at the main entrance to the HRB. Very little time gain is achieved by having multiple SIB signals in a High Rise Building, therefore grouping of sub board outputs to the ASE is permitted, and on the proviso each sub system has its own zone or group identified on the FIP.

1.1.5. Sub Indicator Boards

a) With the advances in telemetry technology available to DFES, the FRS and DFES are discouraging SIB signalling to a FIP, preferring sub boards as a direct connection. However, SIB signalling is still allowed in accordance with AS 1670.1 (2004), the exception being the practice of connecting one SIB to another SIB.

The exceptions to DFES accepting a SIB signal to an ASE are many and varied. The principle objection is distance for the attending FRS appliance to travel from the FIP to the SIB. If the distance involved is such that the attending crews have to travel to the SIB with their appliance from the FIP, then DFES may reject the connection on such grounds that the initial response time is too great to affect an adequate response to an incident involving life within the building encompassing the SIB;

It is strongly recommended that all agents and consultants request information on this issue whilst the pending alarm is still in the planning stage. Information and advice can be obtained from the DFES Contract Manager (refer to the contact details in section 10.2 of this document);

b) All sub indicator boards connected to an FIP shall comply with AS1670.1 (2004) and all requirements of this connection code;
c) All SIB's shall have their own zone or group allocated on a FIP, and be clearly labelled or indicated as such;
d) Each SIB shall provide its own dedicated signal to the ASE, except HRB's, which may group the SIB's signals, or where authorised by the DFES Contract Manager;
e) All SIB's shall be indicated on a ZONE Fire Plan at the FIB and a ZONE Fire Plan shall also be provided at the SIB;
f) Under no circumstances, regardless of AS1670.1 (2004), no sub indicator board shall be connected to another sub indicator board. Data Gathering Points (DGP) may be connected provided there is no requirement for the attending FRS appliance to ever attend that DGP to affect any purpose;

1.1.6. Sub Indicator Boards (Shopping Centres)

g) For a variety of operational reasons, DFES will not allow SIB's to be installed in Shopping Centres. If a Tenancy requires a SIB, then PRIOR written approval must be obtained from the DFES DBA Contract Manager before the SIB is installed.
h) Shopping Centre tenancies may have no control what so ever over the Building Occupant Warning System. All BOWS shall be controlled from the Shopping Centre Fire Indicator Panel.

1.1.7. Multiple ASE Installation

a) Where a site has multiple buildings requiring connection to a Fire Control Station as dictated by the BCA, then additional ASE(s) will be required to be installed;
b) The cabling for the PSTN back up line shall be fire rated to meet AS1670.1 (2004) requirements; This cabling can be installed from each building FIP to each building MDF, OR by installing the fire rated cabling from each FIP to the site Telstra MDF;

1.1.8. AS3786 Smoke Alarms

Residential smoke alarms that are 240v are AS3786 compliant devices. and they are not allowed under any circumstances to be connected to a AS1670.1 Direct Brigade Alarm connected Fire Indicator Panel.

Whilst AS1670.1 does allow for those types of devices to be connected to a FIP, the restriction is that they MUST not transmit a DBA signal. DFES experience is that whilst this may be configured correctly upon commissioning, over time, the configuration is eventually modified and these devices do activate a DBA signal.

Therefore, DFES will not allow AS3786 devices to be connected to any DBA connected FIP.

2. AS1668.1 SMOKE MANAGEMENT SYSTEMS

AS1668.1 (1999) details the compliance required for smoke management systems.

DFES will require copies of all compliance documents where a smoke management system has been installed to AS1668.1 (1999) Sections 4, 6, 7, 8, 9, & 10.

AS1668.1 (1999) 4.1 SCOPE OF SECTION

This Section sets out the general requirements for air-handling systems used for smoke control. The requirements of this Section shall be applied to all mechanical air-handling systems required to incorporate smoke control provisions in conjunction with the specific requirements of Sections 6, 7, 8, 9 and 10, as appropriate.

C4.1 There are various air-handling system arrangements which can be used to achieve the objectives of smoke control required by Clause 1.2. AS1668.1 (1998) sets out requirements for those components and aspects common to such air-handling systems.

Special attention shall be paid to Sound Pressure Levels.

AS1668.1 (1999) Clause 4.6 states:

AS1668.1 (1999) 4.6 NOISE

The noise level during operation of the smoke control systems (including smoke-spill fans and air pressurization fans) shall not exceed 65 dB(A) in occupied spaces or 5 dB(A) above the ambient noise levels to a maximum level of 80 dB(A). Noise levels in fire-isolated exits shall not exceed 80 dB(A).

C4.6 *During emergency egress situations, system noise levels may interfere with command conversation, which may represent a threat to safe occupant evacuation or may contribute to occupant distress in the event of a fire. For this reason, the maximum sound pressure level generated by smoke control systems should not exceed 65 dB(A) and never exceed 80 dB(A) in the occupied space. On reaching the safety of a fire- isolated exit, occupants can egress with considerably less verbal direction and, as such, can safely sustain higher sound levels. To this end, the maximum sound pressure level in the fire isolated exits should not exceed 80 dB(A). The designer should select mechanical equipment that will not increase noise to above these levels. Certainly, the noise generated by the supply air fan to pressurize a stair shaft should not deter people from entering the stair shaft*.

Testing criteria is detailed in AS1668.1 (1998) Clauses 4.16 - 4.19. DFES will require copies of all test results to ensure compliance.

AS1668.1 (1999) 4.16 TESTING

4.16.1 General

Each air-handling system incorporating smoke control provisions shall be tested.

NOTE: Guidance on appropriate test procedures is given in Appendix F.

C4.16.1 Testing requirements form a very important part of any smoke control system to ensure that it will function as intended during a fire. As system designs vary to match building configurations, test procedures need to be developed to encompass the specifics of individual systems. Typical examples of commissioning procedures are given in AS1668.1 (1999) Appendix F.

3. FIRE SAFETY ENGINEERING REPORTS / ALTERNATIVE SOLUTIONS SIGNAGE & POST COMPLETION REPORTS

FSER Post Completion Reports (PCR)

DFES requires that where a building is subject to an FSER, then an FSER Post Completion Report (PCR) shall be provided by the fire engineer author prior to the DBA connection being authorised.

The FSER PCR shall state that it is an FSER Post Completion Report (NOT a Post Completion Inspection) and shall list all Alternative Solutions that the FSER contains and the level of compliance that has been achieved. This may state that this is partly based on contractor's certificates, in which case, those certificates shall form part of the FSER PCR.

DFES Built Environment Branch (BEB) has published a guideline in relation to FSER's and it is recommended that this guideline be reviewed to ensure BEB compliance has also been achieved.

3.1.1. FSER Permanent Notice

DFES requires that any building subject to an FSER / Alternative Solution in its design or construction shall have a permanent notice mounted adjacent to the Fire Indicator Panel (FIP) advising that the building is subject to a Fire Safety Engineering Report (FSER), with a clear description of the Alternative Solution/s provided on the notice.

This notice shall be of a minimum A4 size, mounted within a permanent frame and securely fastened to the wall adjacent to the FIP or Zone Plan.

4. EXISTING CONNECTIONS

***Warning:** DFES must be informed all changes to FIP's so that accurate turnout records can be maintained. This is a requirement of the "agreement" between DFES and the client.*

4.1. UPGRADING/RELOCATION

a) Fire Service Agents are required to submit a C6 form for any of the following planned work:
- FIP Replacement (changeover) – same location
- FIP Replacement/ Relocation – new location

b) Any work which may compromise the DBA compliance of a site must be preceded by the submission of a C8 form. A C8 form is required where a contractor (fire service agent or other) is making any changes to the fire system that result in a modification to the As Builts, Block/Zone Plan or compromise continuity of DBA compliance to all relevant standards. This includes:
- Addition, removal, relocation of devices or fire system components
- Addition to, or modification of existing FIP, detection or suppression system

A C8 form is not required for:
- Repairs to FIP components
- Repair/ replacement of fire system devices (of same type; in same location)

c) Replacing or upgrading the FIP will usually involve removing and re-installing the ASE. Under no circumstances are agents or their servants to re-install the ASE. A C6 DBA form will need to be

lodged with the FAMS Customer Service Centre who will organise a compliance check with the DFES Contract Manager and re-install the ASE to ensure the integrity of the connection;

d) The C6 DBA form should be lodged no later than 72 hours prior to the anticipated changeover date to allow for scheduling. Where this is not possible emergency appointments may be possible but are not guaranteed;

e) It is recommended that DFES requirements for monitoring be prepared beforehand on the FIP so that the ASE can be changed over early in the upgrade so that the customer can have almost continuous monitoring during an extensive circuit change over period;

f) If the FIP is merely being moved from one location to another and the FIP and the ASE retain their integrity, i.e. they are not removed from each other, then DFES will only be required to conduct an inspection after the move and will not be required during the changeover. However, DFES will be required to be advised of the new FIP location so that their turn out records can be suitably amended;

g) FIP relocations are subject to DFES compliance approval;

h) Agents have 10 working days upon completion of the 'upgrade' or 'relocation' to submit all final certifications/drawings/commissioning & test results to the DFES DBA Manager. Failure to comply may see the alarm placed OFFLINE.

4.2. ADDITIONS OR MODIFICATIONS

a) Any modifications, additions, or changes to a DBA connected FIP, must comply with all the associated requirements of clauses 4.3 and 4.4 and any other relevant clause in this connection code. This includes advising the FAMS Customer Service Centre or the DFES Contract Manager of these changes prior to them being implemented;

i) Fire Service Agents are required to submit a C6 form for any of the following planned work:

- FIP Add Function – modification or addition to monitored signals/ systems;

b) The C6 DBA form should be lodged no later than 72 hours prior to the anticipated changeover date to allow for scheduling. Where this is not possible emergency appointments may be possible but are not guaranteed;

c) FIP add functions are subject to DFES compliance approval;

d) Agents have 10 working days upon completion of the 'upgrade' or 'relocation' to submit all final certifications/drawings/commissioning & test results to the DFES DBA Manager. Failure to comply may see the alarm placed OFFLINE, and the agent will be reported to the FPAA.

	FIP Upgrade	FIP Relocation FIP Input Modification
Perth Metro Area **(within 100km of Perth GPO)**	3 working days from submission and acceptance of C6 form	3 working days from receipt of DFES Compliance Approval
Regional Service Centre Area **(within 100km of Service Centre GPO)**	3 working days from submission and acceptance of C6 form	3 working days from receipt of DFES Compliance Approval
Regional Service Centre Area **(101km - 300km from Service Centre GPO)**	4 working days from submission and acceptance of C6 form	4 working days from receipt of DFES Compliance Approval
Remote Area* **(>300km from Service Centre GPO)**	7 days from submission and acceptance of C6 form	7 days from receipt of DFES Compliance Approval

5. COUNTRY CONNECTIONS

a) All country connections shall follow the same standards as the metropolitan connections;

b) Country quotes can be obtained by contacting the FAMS Customer Service Centre (refer to the contact details in section 10.1 of this document);

6. FAILURE TO COMPLY

a) In order to maintain the highest standard of the DBA network, the DFES reserves the right under Clause 8.1 of the "agreement" between DFES and the client, to "offline" the alarm if it is found that any of the requirements indicated in this code are breached;

b) DFES maintains the right to reject an alarm for connection to the DBA network for any pending alarm failing to meet any of the requirements indicated in this code;

c) For those alarms failing to meet the requirements of this code, if the client or the agent fails to address the issues raised by DFES, then the matter will be referred to the DFES Built Environment Branch (BEB), the Principle Building Surveyor of the Authority Having Jurisdiction (AHJ), and the Insurance Council of Australia;

d) Agents have 10 working days upon completion of the 'upgrade' or 'relocation' to submit all final certifications/drawings/commissioning & test results to the DFES DBA Contract Manager. Failure to comply may see the alarm placed OFFLINE.

7. AGENTS RESPONSIBILITIES

It is the agent's responsibility to ensure that any work they complete on a fire alarm system connected to the DBA network, is compliant with all aspects of this connection code.

Any work which may compromise the DBA compliance of a site must be preceded by the submission of a C8 form.

A C8 form is required where a contractor (fire service agent or other) is making any changes to the fire system that result in a modification to the As Builts, Block/Zone Plan or compromise continuity of DBA compliance to all relevant standards. This includes:

- Addition, removal, relocation of devices or fire system components
- Addition to, or modification of existing FIP, detection or suppression system

A C8 form is not required for:

- Repairs to FIP components

Repair/ replacement of fire system devices (of same type; in same location)

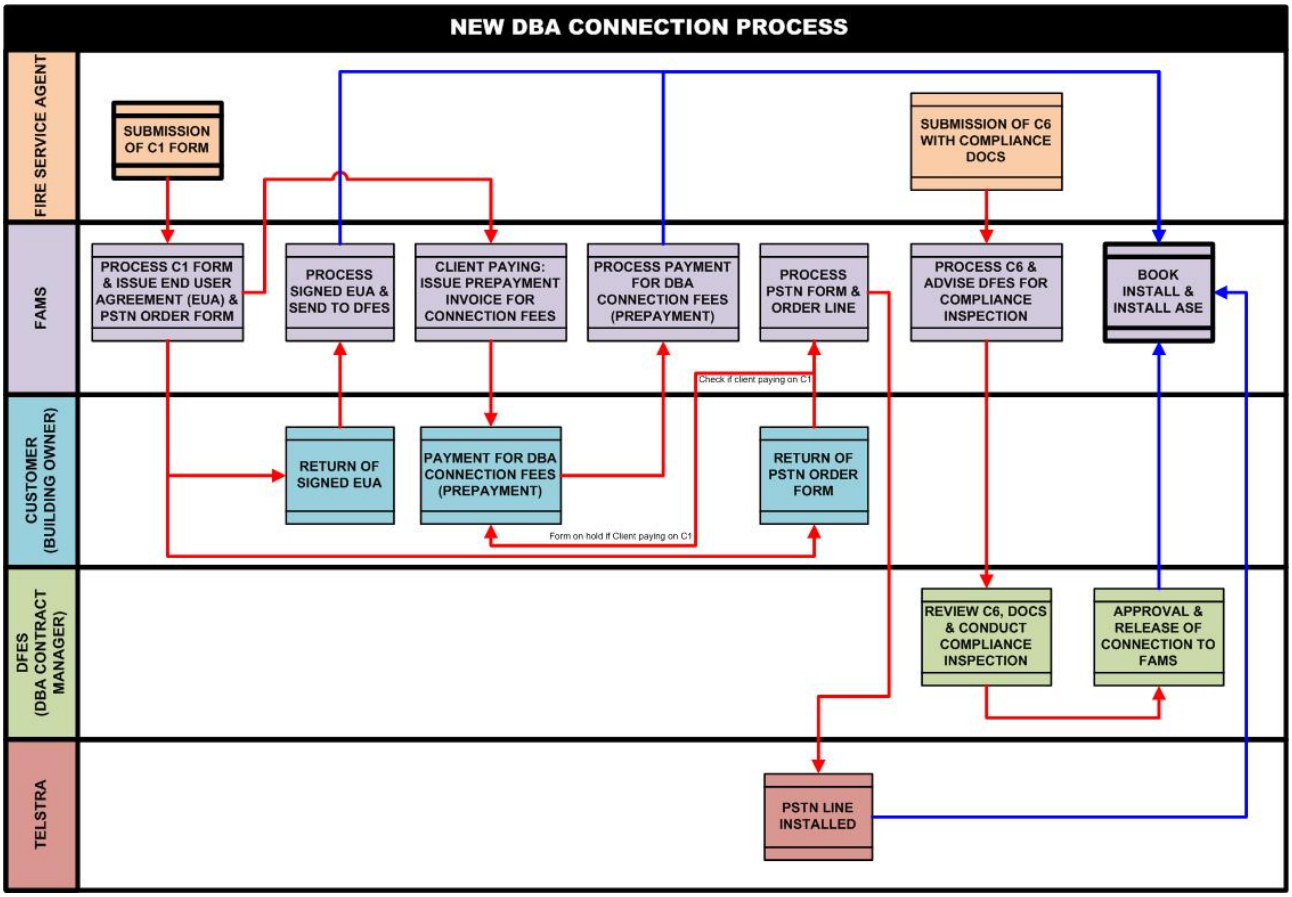
Failure to meet this requirement may result in the alarm being placed OFLINE till compliance can be assured. The compliance requirements are the fire alarm agent's responsibility to supply to DFES.

8. REQUEST FOR CONNECTION

Agents can request connection to the DBA network by completion of a C6 form (refer to section 11 of this document for a complete list of forms) and submitting this to the Chubb Customer Service Centre (refer to the contact details listed in section 10.1 of this document).

Note: *A DBA application form (C1) must be completed prior to the submission of the connection request form (C6).*

Where a Client is nominated on the C1 to pay the DBA Connection Fees, prepayment will be required prior to the PSTN line being ordered and DBA Connection can occur.



8.1. PSTN LINE ORDER PROCEDURE & PSTN ORDER AUTHORISATION FORM

The DFES ASE unit utilizes a PSTN fixed phone service as the secondary path of communications. Only a DFES owned PSTN service may be used for a DBA connection. A PSTN Line Order Authorisation form must be received by the FAMS CSC before the required Telstra PSTN line can be ordered.

DFES will pay for the connection and line rental of the PSTN line installed by Telstra. These costs will be recovered from the clients by DFES through the DBA connection fees and the annual monitoring fee paid by the customer.

This form must be signed by the organization responsible for the building (generally, the building owner). It is the **clients'** responsibility to complete this form. DFES will accept for the client to direct the architect/ consultant or builder to sign on their behalf.

Where the Fire Agent is nominated to pay the DBA Connection fee (on the C1 form):
- This form will be processed immediately upon acceptance by Chubb FAMS.

Where the Client is nominated to pay the DBA Connection fee (on the C1 form):
- The PSTN Order Authorisation form will not be processed until payment is received for the prepayment invoice for DBA Connection fees.

Line rental on the PSTN line begins accruing immediately following connection by Telstra. Upon DBA connection, the Telstra rentals arrears associated with the connected line will be charged to organization nominated as being financially responsible for the DBA Connection Fees (as completed on the C1 form).

9. COMPLIANCE DOCUMENTS

Most Australian Standards require that the compliance documents either be supplied to the client or left at the Fire Indicator Panel or Sprinkler Valve Set.

DFES require ***copies*** of those documents in order to ensure that compliance has been achieved.

DFES reserve the right to require that compliance documentation be completed to a level and standard that is of such a quality that review of such documents is not inhibited by poor completion, i.e. hand written documents will not be accepted. Documents must be completed either with WORD or a similar application.

Where DFES reject compliance documents, and the reasons are many and varied, then DFES will require that the re submitted documents have the date placed on the revised sets to reflect the date the documents were amended.

In addition to the connection request (C6) form required by the Chubb Customer Service Centre, the following proof of documentation is required by the DFES Contract Manager.

1) ACMA TCA1 Cabling Advice;
2) DFES C6 request for connection form;
3) AS1670.1 Appendix E & F;
4) AS1670.1 – 7.3 Battery Log
5) Soft (electronic) copies of Zone Plan, hard copies if necessary;
6) Soft (electronic) copies of 'as built' drawings, hard copies if necessary;

a. As build drawings shall be in colour, show all Fire Rated Cable (FRC), show the location of the MDF, show the location of any mech services control boards, and use symbology in accordance with AS1670.1 (2004) Appendix D. (the MINIMUM level of colour is that ALL cabling must be clearly coloured to identify which is TPS and which is FRC)

7) AS2118.10 Third Party Certificate (if applicable) for any installed sprinkler / drencher systems;
8) C7 Sprinkler Certification form for any installed sprinkler / drencher systems
9) Where site is subject to a Fire Safety Engineered Report (FSER), a statement of compliance will be required from the author of the FSER to indicate that the building has been completed to the requirements of the FSER. This statement of compliance is known as a FSER Post Completion Report (PCR).
10) Where AS1670.4 Sound Systems & Intercom Systems for Emergency Purposes are installed, then AS1670.4 Appendix D & E compliance documents are required in addition to copies of the 'as installed drawings'. Special attention should be given to the requirements of STI readings;
11) AS1670.4 – Clause 6.4.2 Battery Log (where applicable)
12) Where AS1668 smoke hazard management services are integral to the design and/or function of the fire alarm detection/suppression system, then a Mechanical Services compliant statement will be required for all AS1668 controls and equipment

a. Special attention shall be paid to the mechanical services compliance documents required by AS1668, these including Sound Pressure Levels (SPL) readings for all mech services in tenable areas.
b. A Fire Fighter Control Panel (FFCP) mechanical services schematic to be installed at the FIP.
c. A FFCP Operator Instructions to be installed at the FIP.
d. Copies of all of the above to be supplied to DFES

As Build Drawings (Detection & EWIS) – all Sound Pressure Levels (SPL) must be shown against EACH speaker/sounder. Speech Intelligibility Test (STI) results may be recorded either against each speaker or at multiple paths of egress for each EWIS zone.

The aforementioned are mandatory and no alarm will be considered for connection to the DFES DBA network unless this information is made available and found to be compliant.

All documents are required to be typed and submitted electronically. Hand written documentation will not be accepted..

Where compliance documents are rejected and required to be resubmitted, then the date of the revision will be required to be placed on each page and initialled.

Agents shall allow a minimum 10 working days in the Perth metropolitan area for the compliance check to be performed by the DFES Contract Manager and the ASE connection to be completed by the Fire Alarm Monitoring Customer Service Centre. Western Australian country area installation will require at least 20 days warning in order for travel arrangements to be made.

9.1. SPRINKLER COMPLIANCE DOCUMENTATION (3RD PARTY CERTIFICATE)

DFES require a 3rd Party Certificate for all sprinkler systems when the systems are installed within the protected building, irrespective of the type of system installed, the number of heads installed, or if its connected or not connected to the Fire Indicator Panel.

The sprinkler 3rd Party Certifier shall word his 3rd Party Statement in such a way that there is no ambiguity as to the level of compliance.

The 3rd Party Certificate must include the following statement:

The sprinkler system installed at 'x' has been 'designed, installed, & commissioned to' the 'Australian Standard xx'

A typical example of a correctly worded 3rd Party is:

The Wall Wetting Drencher System has been designed, installed and commissioned in the 'DFES Emergency Services Centre at 20 Stockton Bend Cockburn Central' in accordance with Australian Standard 2118.2 (2010) "Automatic fire sprinkler systems Part 2: Drenchers systems" and the Building Code of Australia.

The Statement should include, where required or necessary:

BCA and relevant standards, Australian Standards (list the applicable Australian Standards), & Fire Engineered Alternative Solution Report (Ref Number and Date).

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10. CONTACT DETAILS

10.1. FIRE ALARM MONITORING SERVICES (FAMS)

Customer Service Centre (24/7)

Phone: 1300 793 722
Fax: (08) 9499 7885
Email: wacsc@chubb.com.au
Post: PO Box 3238 Success WA 6964
Deliveries: 120 Cutler Rd Jandakot WA 6164

10.2. DFES

Direct Brigade Alarm Contract Manager

Name: Jeff Morton
Phone: (08) 9395 9865
Mobile: 0408 958 483
Fax: (08) 9395 9319
Email: jeff.morton@dfes.wa.gov.au
Post: GPO Box P1174 Perth WA 6844
Deliveries: 20 Stockton Bend Cockburn Central WA 6164

11. STANDARD FORMS

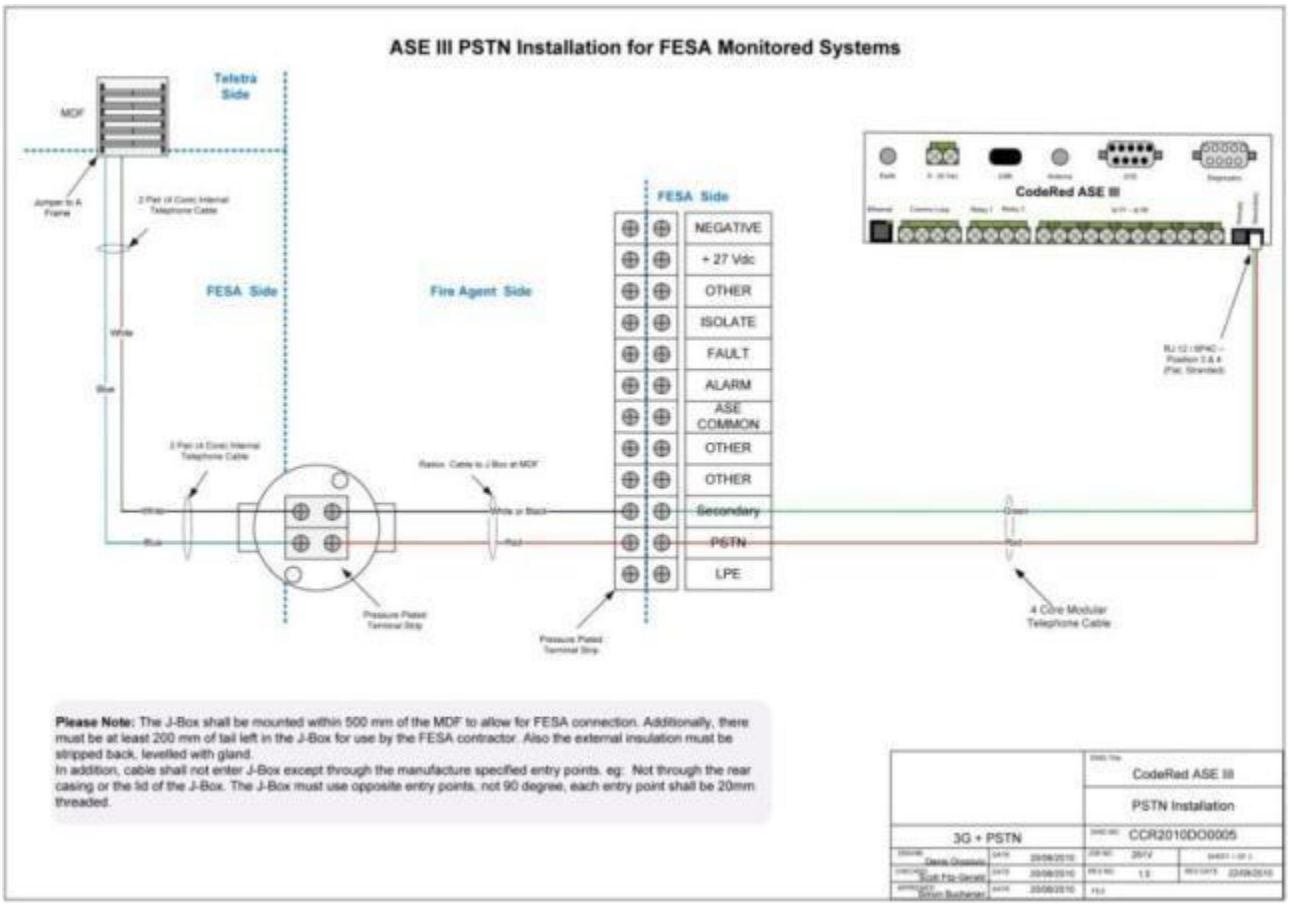
The following table lists the required forms for DBA application, connections, compliance and change. Up to date copies can be obtained from the FAMS Customer Service Centre (refer to the contact details in section 10**.** of this document).

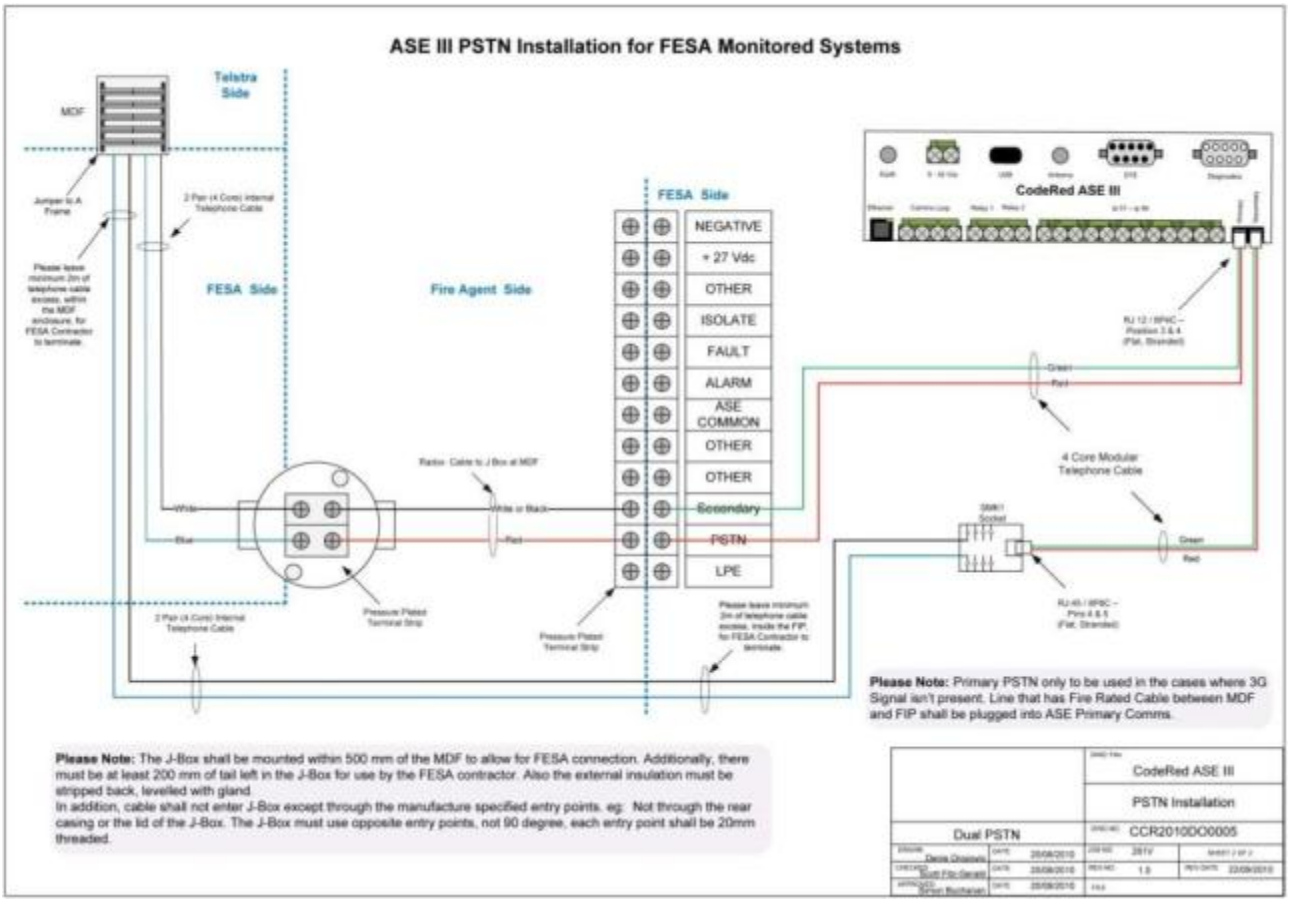
Reference	Name	Description
C1	DBA Request	Application for DBA Connection
C6	DBA Commissioning	Application to commission a DBA Alarm
	8.5 Telstra Order Authorisation Form	Application to Request PSTN Line
C7	Sprinkler Certification	Application to Connect Sprinkler/ Drench System
C8	DBA Amendment	Notice to Change/ Amend DBA System
C2	DBA Owner Transfer	Notice of Change to DBA Ownership
C3*	DBA Change of Details	Notice of change to DBA Details
C4	DBA Disconnection	Application to Request DBA Disconnections
C10	iButton Request	Request for Technician iButtons

*C3: Changes to DBA Details includes:

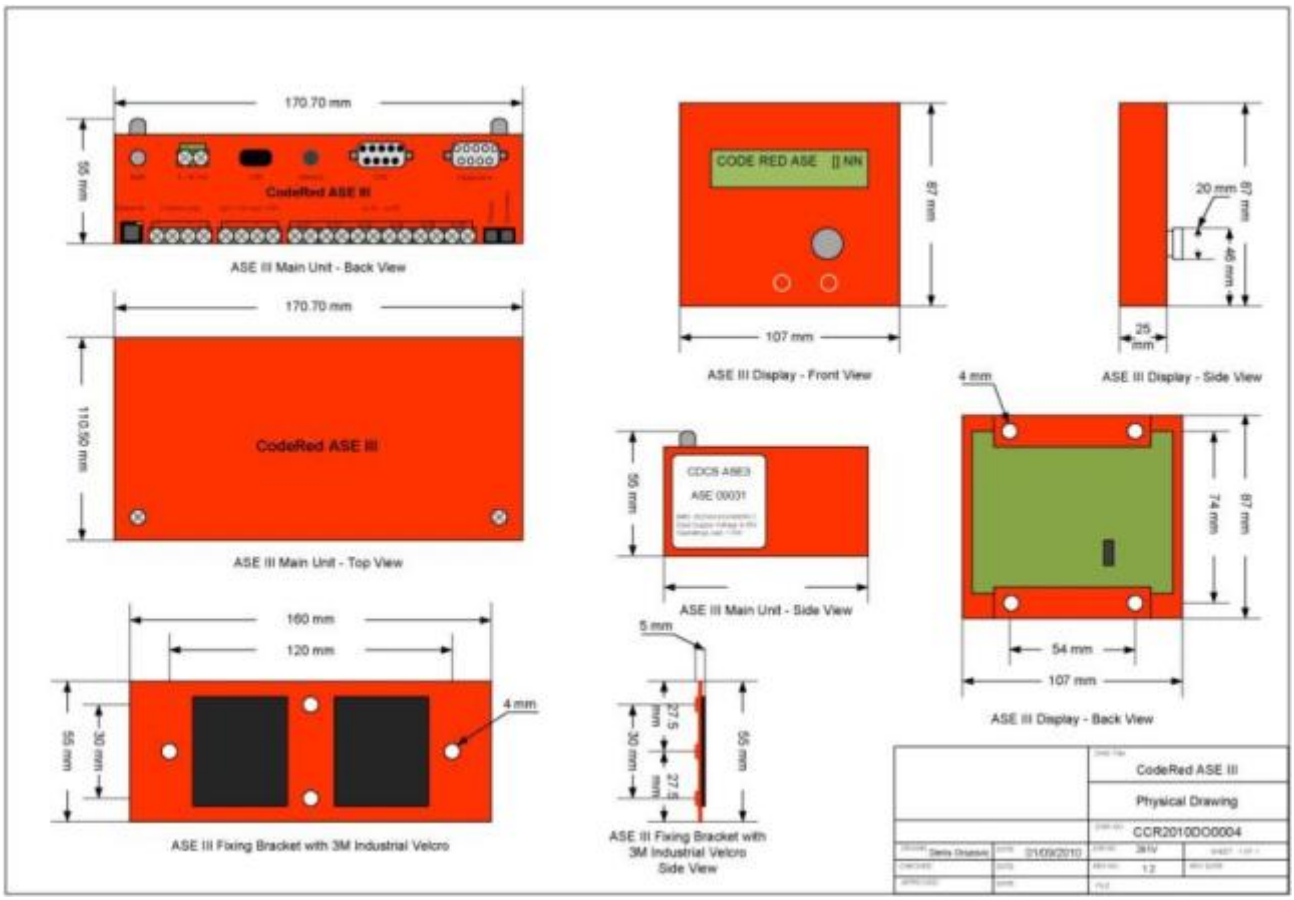
- Change to billing contacts/details
- Change to site/afterhours contacts
- Change to details of Premises (approval required)

12. APPENDIX A - PSTN INSTALLATION DIAGRAMS

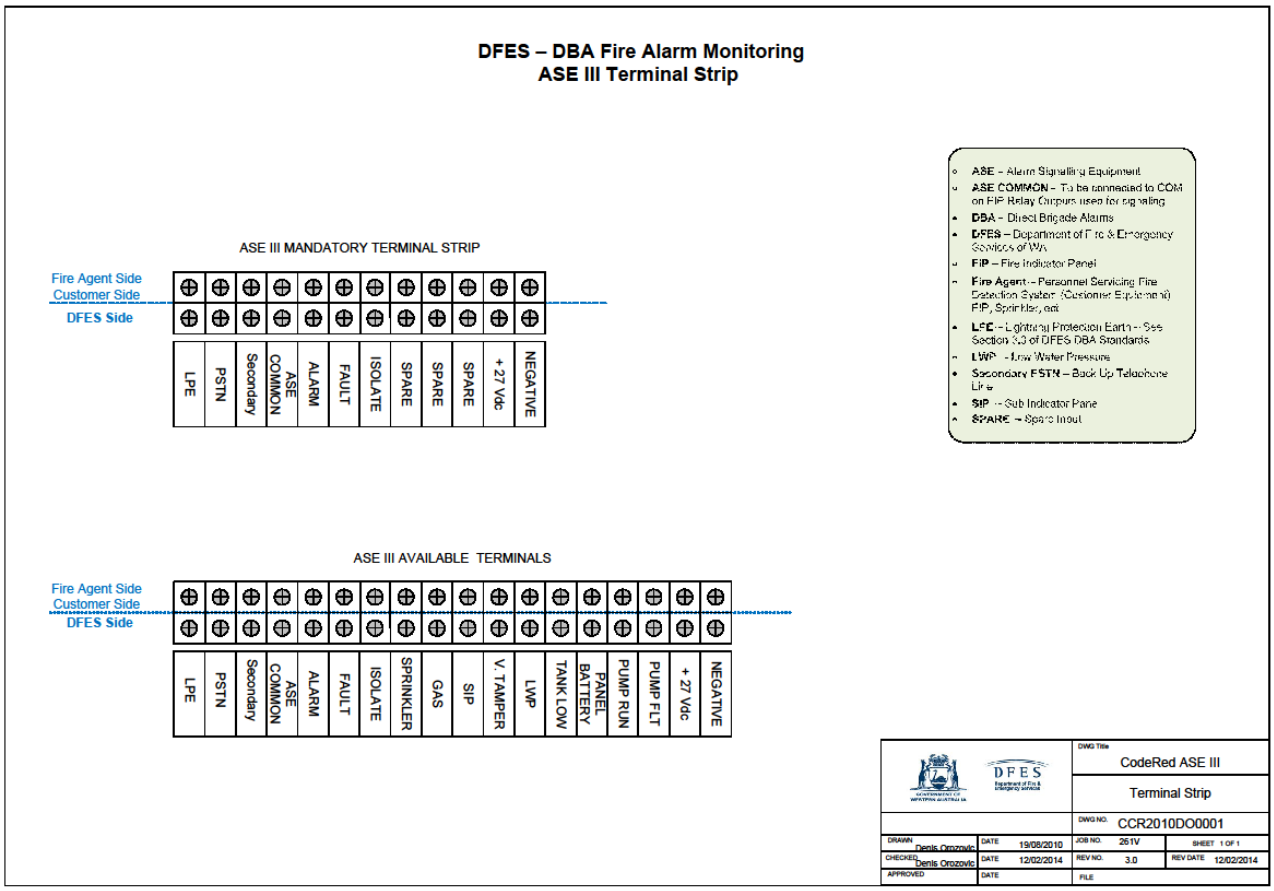




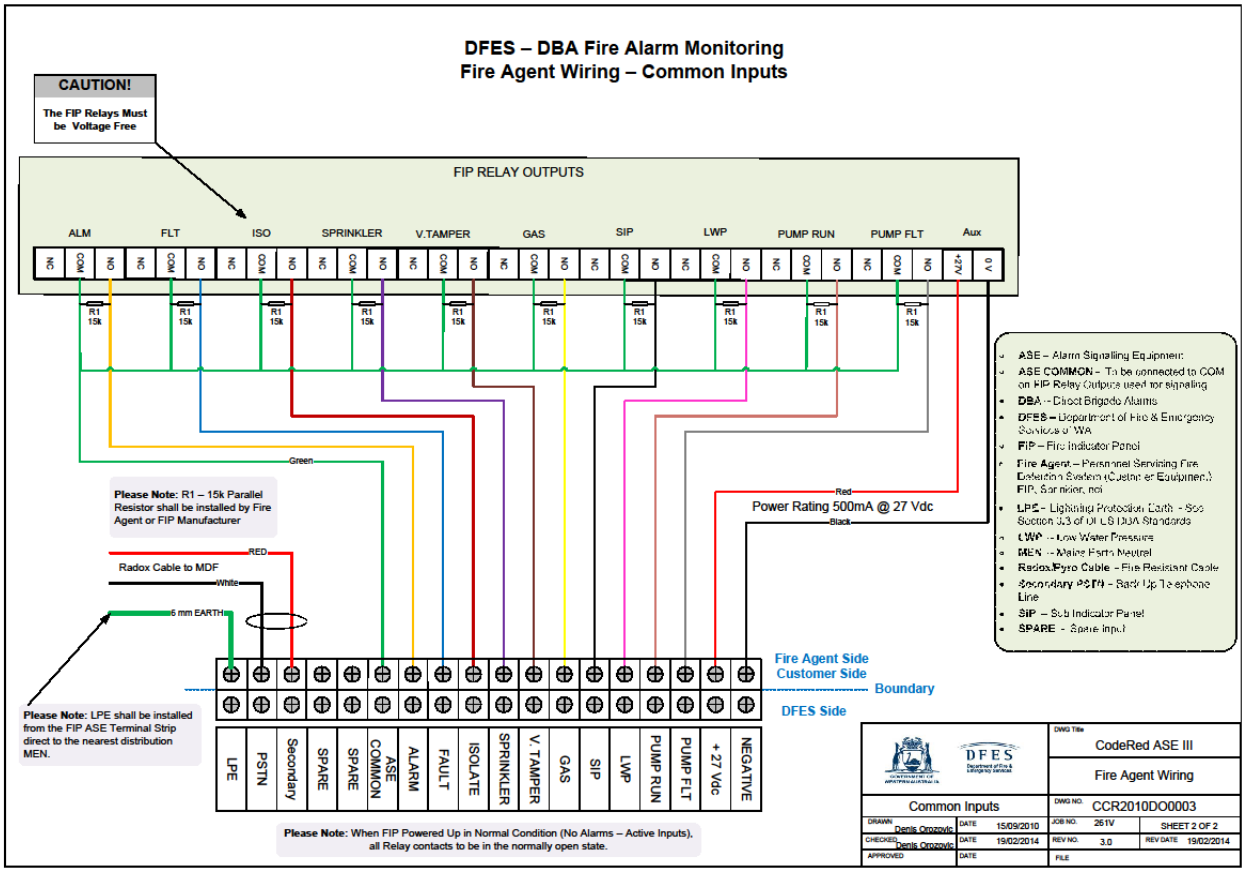
13. APPENDIX B – CODE III ASE PHYSICAL DRAWING

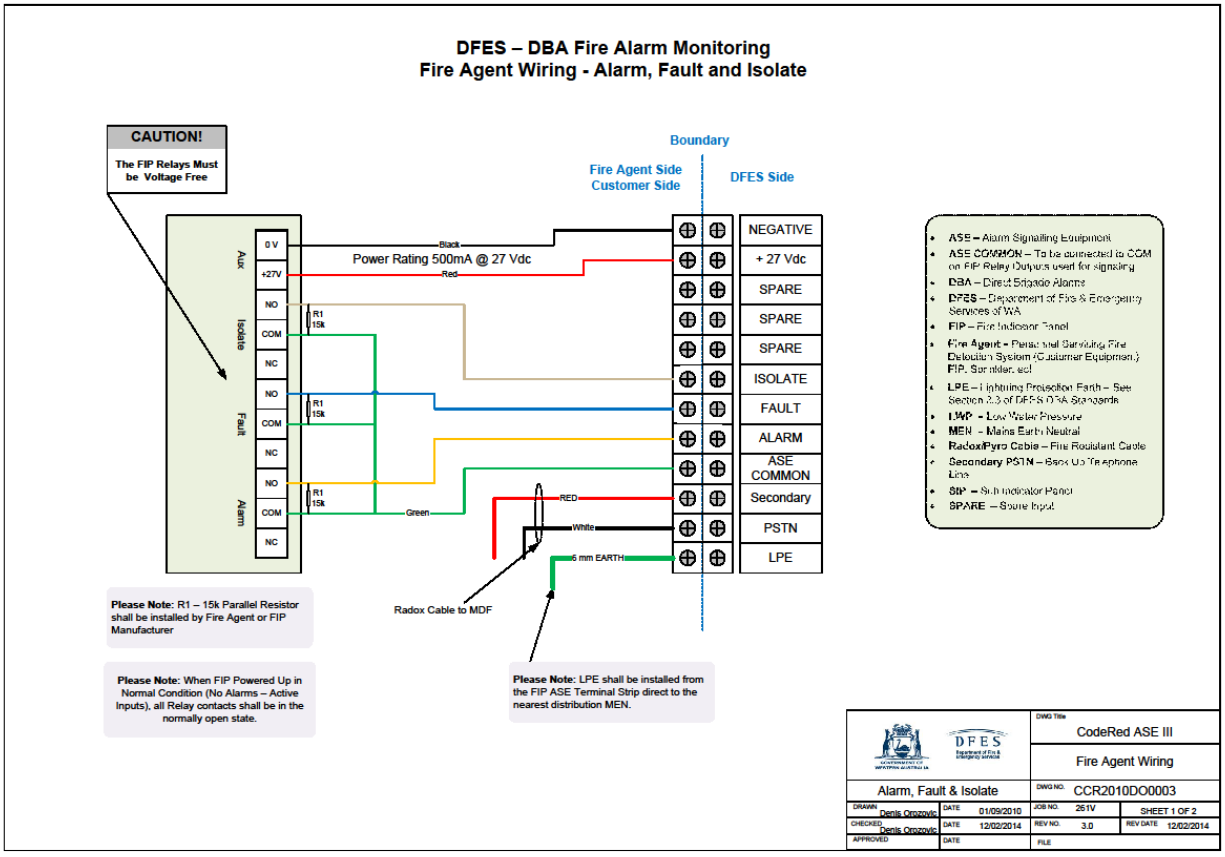


14. APPENDIX C – TERMINAL STRIP DIAGRAM



15. APPENDIX D – FIRE AGENT WIRING DIAGRAM





16. ABBREVIATIONS

ACMA	Australian Communications and Media Authority
AFL	Above Floor Level
AHJ	Authority Having Jurisdiction
AS	Australian Standards
ASE	Alarm Signalling Equipment
BCA	Building Code of Australia
BEB	Built Environment Branch
CCM	Customer Cabling manual
CIE	Control & Indicating Equipment
DBA	Direct Brigade Alarm
DFES	Department of Fire & Emergency Services
DGP	Data Gathering Point
EWIS	Emergency Warning Intercommunication System
FAMS	Fire Alarm Monitoring Services
FIP	Fire Indication Panel
FRS	Fire & Rescue Service
J Box	Junction Box
HRB	High Rise Building
MCP	Manual Call Points
MDF	Main Distribution Frame
MEN	Mains Earth Neutral
MIMS	Metal Insulated Metal Sheath
OWS	Occupant Warning System
PSTN	Public Switched Telephone Network
SIB	Sub Indicator Board
SIP	Sub Indicator Panel
TFP	Tactical Fire Plan
TRC	Telecom Reference Conductor

17. TECHNICAL BULLETINS

Technical Bulletins are issued as a means of clarifying information re DFES DBA Connection Code requirements. This bulletins also issue mandatory compliance advice.

When the DBA Code is reviewed (every 1 – 2 years), the bulletins will be encompassed within the actual DBA Code, not as an attachment.

However, in the meantime, these bulletins are considered as being a mandatory requirement of this Code for enforcement requirements.

DEPARTMENT OF FIRE AND EMERGENCY SERVICES

DIRECT BRIGADE ALARM (DBA) TECHNICAL BULLETIN

JULY 2014 (ADVICE 1)

AS1670.1 (2004) Clause 3.19 requires detectors to be installed on either side of the door in line with the centre of the door opening and no less than 300mm and no more than 1500mm horizontal distance from the door opening.

It does NOT require the detectors to be installed immediately above the door opening where the ceiling is at a considerable height above the top of the door frame.

Smoke & Fire Door detectors shall be installed at ceiling height, irrespective of the door frame height.

For further advice or clarification re this issue, contact the DBA Contracts Manager at DFES on 08 395 9865 or 0408 958 483, or email jeff.morton@dfes.wa.gov.au

DEPARTMENT OF FIRE AND EMERGENCY SERVICES

DIRECT BRIGADE ALARM (DBA) TECHNICAL BULLETIN

JULY 2014 (ADVICE 2)

DFES require a 3rd Party Certificate for all sprinkler systems when the systems are installed within the protected building, irrespective of the type of system installed, the number of heads installed, or if its connected or not connected to the Fire Indicator Panel.

The sprinkler 3rd Party Certifier shall word his 3rd Party Statement in such a way that there is no ambiguity as to the level of compliance.

The Certification must clearly identified as a 3rd Party Certification, i.e. it must state 'SPRINKLER 3rd PARTY CERTIFICATE'

The 3rd Party Certificate must include the following statement:

The sprinkler system installed at 'x' has been 'designed, installed, & commissioned to' the 'Australian Standard xx'

A typical example of a correctly worded 3rd Party is:

The Wall Wetting Drencher System has been designed, installed and commissioned in the 'DFES Emergency Services Centre at 20 Stockton Bend Cockburn Central' in accordance with Australian Standard 2118.2 (2010) "Automatic fire sprinkler systems Part 2: Drenchers systems" and the Building Code of Australia.

The Statement should include, where required or necessary:

BCA and relevant standards, Australian Standards (list the applicable Australian Standards), & Fire Engineered Alternative Solution Report (Ref Number and Date).

For further advice or clarification re this issue, contact the DBA Contracts Manager at DFES on 08 395 9865 or 0408 958 483, or email jeff.morton@dfes.wa.gov.au

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DEPARTMENT OF FIRE AND EMERGENCY SERVICES

DIRECT BRIGADE ALARM (DBA) TECHNICAL BULLETIN

JULY 2014 (ADVICE 3)

AS1670.1 (2004) requires the electrical installation to the Fire Indicator Panel to comply with AS3000.

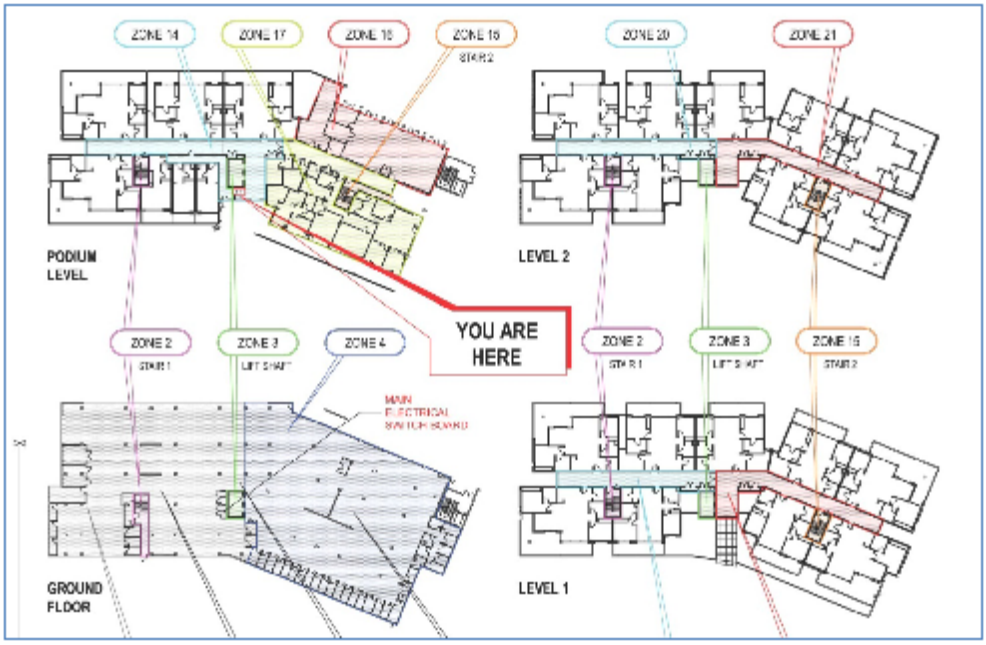
AS3000 (2007) requires that the supply to the FIP be specifically compliant to Clauses 2.9.2.4 & 7.2.6.2.

These requirements are not the obligation of the fire alarm agent, but the electrician, and/or the contractor connecting the essential primary supply to the FIP.

The signage at the entrances maybe resolved by placing the Main Switch Board location on the FIP zone plan, or they may elect to install the signage as required.

The wording, if placed on the FIP Zone Plan, shall be specifically '***MAIN ELECTRICAL SWITCH BOARD***' and not MSB, MEB, or MAIN SWITCH BOARD.

Attached are examples of the signage requirement and labelling requirement:



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DEPARTMENT OF FIRE AND EMERGENCY SERVICES

DIRECT BRIGADE ALARM (DBA) TECHNICAL BULLETIN

JULY 2014 (ADVICE 4)

DFES requires that any building subject to an Fire Safety Engineering Report (FSER) / Alternative Solution in its design or construction shall have a permanent signage/notice mounted adjacent to the Fire Indicator Panel (FIP) advising that the building is subject to a Fire Safety Engineering Report (FSER), with a clear description of the extent of the *Alternative Solution(s)* provided on the notice/sign.

This notice shall be of a minimum A4 size, mounted within a permanent frame and securely fastened to the wall adjacent to the FIP or Zone Plan.

Below is an example of a permanent signage:

NOTICE

This building is subject to a Fire Safety Engineering Report (FSER)

1. Extended Egress – Travel distances from the most remote areas of Levels 1 & 2 office tenancy exceed the Building Code of Australia (BCA) Deemed to Satisfy (DTS) requirements.

   The building is fully protected with an AS1670.1 (2004) compliant fire detection system connected to the Department of Fire and Emergency Services (DFES) Direct Brigade Alarm (DBA) network.

Signage shall be black lettering on a white background and meet these minimum requirements of size:

NOTICE – Times New Roman 15mm high capitals

Remaining Lettering – Times New Roman 12mm high

For further advice or clarification re this matter, contact the DBA Contracts Manager at DFES on 08 9395 9865 or 0408 958 483, or email jeff.morton@dfes.wa.gov.au

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DEPARTMENT OF FIRE AND EMERGENCY SERVICES

DIRECT BRIGADE ALARM (DBA) TECHNICAL BULLETIN

AUGUST 2014 (ADVICE 5)

DFES have concerns with AS1670.1 (2004) & AS1670.4 (2004) installations where it appears there is some confusion or misunderstanding re the separation and segregation rules of detection cabling.

AS1670.1 (2004) requires strict compliance to AS/CA S009 (2013)

AS1670.1 & AS1670.4 quite clearly defines the minimum installation requirements of cabling associated with fire alarm systems, i.e. 24V DC TPS cabling for detectors.

Fire alarm detection cabling is defined as being Extra Low Voltage (ELV). ELV is specified as not exceeding 42.4 V peak or 60 V d.c. (AS/NZS 60950.1)

AS/CA S009 (2013) Clause 16.3.1 requires permanent separation from any Low Voltage cable. Low Voltage is specified as a voltage exceeding ELV limits but not exceeding 1000 V a.c. or 1500 V d.c (AS/NZS 3000).

AS/CA S009 (2013) Clause 16.3.1 states that the permanent separation may be achieved by one of the following methods:

(a) a minimum distance of 50mm

(b) Subject to the requirements of AS/CA S009 Clause 16.3.2, a barrier of durable insulating material or metal

Note 1: Compliance with item (b) may be achieved by the enclosure of either the cable or LV cable in conduit.

DFES DBA Connection Code requires that the cabling be certified by a Registered Cabling Installer, hence the requirement for a ***copy*** of the TCA1 form.

It is therefore the responsibility of the individual signing the TCA1 to ensure compliance with AS/CA S009 (2013). DFES accept no responsibility for delays to the DBA network due non-compliance to AS1670.1 (2014) and/or AS/CA S009.

Fire alarm agents and installers should also be aware that, regardless of what the DFES DBA Connection Code requires, completion of a TCA 1 form is a mandatory requirement

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DEPARTMENT OF FIRE AND EMERGENCY SERVICES

DIRECT BRIGADE ALARM (DBA) TECHNICAL BULLETIN

AUGUST 2014 (ADVICE 6)

The Department of Fire and Emergency Services (DFES) require that any Fire Indicator Panel (FIP) being considered for connection to the DFES DBA network have adequate room within the FIP for the Alarm Signalling Equipment.

It is also a requirement that the ASE be mounted in such a way that it complies with AS1670.1 (2004) Clause 3.9.1.

This means the ASE must be installed at a height no lower than 750mm or more than 1850mm from the floor.

It is the responsibility of the Fire Service Agents to ensure that DFES have sufficient spacing on the back plate of FIP to mount the ASE main unit.

If the FIP is recessed, DFES will continue to use the FIP side panels to secure the ASE mounting bracket on it by the use screws or rivets.

However, if the Fire Panel is not recessed, or flush mounted, the DFES will not be able to install the ASE mounting bracket as the exposed screws and/or rivets are visible.

It is the fire alarm agents responsibility to ensure there is adequate room available within the FIP for the DFES ASE. If this requires a battery enclosure to be installed to allow space for the DFES ASE, then it is strongly recommend that this be considered.

This defect notice applies to all Fire Indicator Panels and is effective immediately. For fire panels already on order, the issue must be discussed with the Chubb FAMS Lead Technician.

For further advice re this issue, contact the Chubb FAMS Lead Technician, Denis Orozovic on 1300 793 722 or email denis.orozovic@chubb.com.au

Or, the issue may be discussed with the DBA Contracts Manager at DFES on 08 9395 9865 or 0408 958 483, or email jeff.morton@dfes.wa.gov.au

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DEPARTMENT OF FIRE AND EMERGENCY SERVICES

DIRECT BRIGADE ALARM (DBA) TECHNICAL BULLETIN

SEPTEMBER 2014 (ADVICE 7)

AS1670.1 (2004) Clause 3.8 requires that an external strobe be installed to indicate the Designated Building Entry Point (DBEP).

IN addition, the DFES DBA Connection Code requires that a red bell, compliant to AS1603.6 (1987) be installed in parallel with the external strobe.

There appears to be some confusion as the mounting requirements for these items, therefore the purpose of the TECH ADVICE is to clarify DFES requirements.

The bell shall have the word 'FIRE' written on it, or the word 'FIRE' shall be installed as additional signage as required by AS1670.1 (2004) Clause 3.8

In addition, DFES require that the bell and strobe be installed in such a manner that it is facing onto the street, or Designated Site Entry Point, and in a vertical manner. It may not be installed such that it is installed in a horizontal manner, i.e. facing down onto the ground.

Below are two examples of how it should not be done.

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DEPARTMENT OF FIRE AND EMERGENCY SERVICES

DIRECT BRIGADE ALARM (DBA) TECHNICAL BULLETIN

NOVEMBER 2014 (ADVICE 8)

AMENDMENT TO TECH ADVICE 4 (FSER SIGNAGE)

DFES requires that any building subject to an Fire Safety Engineering Report (FSER) / Alternative Solution in its design or construction shall have a permanent signage/notice mounted adjacent to the Fire Indicator Panel (FIP) advising that the building is subject to a Fire Safety Engineering Report (FSER), with a clear description of the extent of the *Alternative Solution(s)* provided on the notice/sign.

This notice shall be of a minimum A4 size, mounted within a permanent frame and securely fastened to the wall adjacent to the FIP or Zone Plan.

Below is an example of a permanent signage:

NOTICE

This building is subject to a Fire Safety Engineering Report (FSER)

1. Extended Egress – Travel distances from the most remote areas of Levels 1 & 2 office tenancy exceed the Building Code of Australia (BCA) Deemed to Satisfy (DTS) requirements.

   The building is fully protected with an AS1670.1 (2004) compliant fire detection system connected to the Department of Fire and Emergency Services (DFES) Direct Brigade Alarm (DBA) network.

Signage shall be black lettering on a white background and meet these minimum requirements of size:

NOTICE – Times New Roman 15mm high capitals

Remaining Lettering – Times New Roman (minimum 6mm high)

For further advice or clarification re this matter, contact the DBA Contracts Manager at DFES on 08 9395 9865 or 0408 958 483, or email jeff.morton@dfes.wa.gov.au

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DIRECT BRIGADE ALARM (DBA) TECHNICAL BULLETIN

NOVEMBER 2014 (ADVICE 9)

DFES advise the following clarifications re FIP locations.

Where a Fire Indicator Panel (FIP) is being connected to the Direct Brigade Alarm (DBA) network, it shall comply with AS1670.1 (2004) Clause 3.9.1, which requires a FIP to be within the Designated Building Entry Point (DBEP), i.e. the main entrance, or a Fire Control Room (FCR).

The DBEP shall be at the main entry (inside the building proper, i.e. in the foyer, reception area, lift lobby or area designated as the entry point) to the building unless an alternative entry, that is acceptable to DFES is used. This is to prevent obstruction by people evacuating and to make entry easy for the fire brigade to gain access, while the building is being evacuated.

Therefore, DFES require that the FIP, Fire Control Centre (FCC) and FCR be located with direct access and within and near the Designated Building Entry Point.

With Reference to the FIP location, it must be noted that the FCR must comply with the requirements of the BCA Spec E1.8 Clauses 1 – 12, otherwise DFES will consider the room as a FCC instead and it will be deemed non-compliant. This will compromise the DBA Connection and may delay building occupancy

AS1670.1 (2004) Clause 3.9.1 quite clearly requires a FIP to be within either the Designated Building Entry Point (DBEP), i.e. the main entrance, or at a Fire Control Room. A FCC is not acceptable unless it complies with one of these two locations.

The FIP shall be clearly visible and readily accessible within the DBEP or the FCR.

This requirement will be strictly enforced and no exception will be accepted unless prior consultation with DFES, including the Direct Brigade Alarm Contract Manager , has been entered into.

For further advice or clarification re this matter, contact the DBA Contracts Manager at DFES on 08 9395 9865 or 0408 958 483, or email jeff.morton@dfes.wa.gov.au

Additional information can be obtained from the DFES website, specifically Guideline GL-04

http://www.dfes.wa.gov.au/regulationandcompliance/buildingplanassessment/Guidelines)

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Department of Fire & Emergency Services

DFES

DEPARTMENT OF FIRE AND EMERGENCY SERVICES

DIRECT BRIGADE ALARM (DBA) TECHNICAL BULLETIN

February 2015 (ADVICE 10)

DFES advise the following clarifications re Remote Indicators, Concealed Areas, Restricted Fire Brigade Access, and Individual Alarm Zoning

AS1670.1 (2004) Clause 3.7 allows for individual device indication at the FIP where the FIP is an addressable system. This is a 'generalised' statement, and Clauses mentioned later in the Standard are specific to individual requirements.

Concealed Areas:

Clause 3.25.4 specifies what constitutes a concealed area (Clause 3.26 (b) also adds some clarity) and Clause 3.25.4.3 states that no remote indication is required where the detector location is specified at the FIP (Clause 3.7 applies)

Sole Occupancy Apartments (SOU):

Clause 3.25.9 states that no remote indication is required where the detector location is specified at the FIP (Clause 3.7 applies)

Restricted Fire Brigade Access:

Clause 3.25.8 requires where access to the fire service is restricted, then alarm indication for each restricted area shall be by means of either a remote LED at the main entrance to the restricted area, or the restricted area being individually zoned. (Clause 3.7 does not apply)

Air Handling Systems:

Clause 3.25.3 requires all devices installed within air handling systems (both supply air and return air) to be individually alarm zoned. (Clause 3.7 does not apply)

Note

The main area of concern appears to be store rooms. Store rooms in essence are just a small room, but if access to the fire service is restricted, then Clause 3.25.8 applies and therefore either remote indication is required, or each room shall be individually alarm zoned.

Further clarification may be sought from DFES prior to installation and commissioning.

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DIRECT BRIGADE ALARM (DBA) TECHNICAL BULLETIN

July 2015 (ADVICE 11)

DFES advise the following clarifications

SPRINKLER FIT OUTS AND MINOR WORKS

DFES advise that due to uncertainty within the sprinkler industry re the requirement for Independent Certification (3rd Party Certification), the following is now a mandatory requirement with immediate effect.

Where the works only involve any changes effecting five (5) heads or less, then only a Standard Installers Completion Form is required.

This includes the deletion or addition of any heads or relocation of any heads, provided the total sum of heads involves is five (5) or less, then NO Independent Certification is required.

However, where the sum exceeds six (6) heads or more, then Independent Certification (3rd Party Certificate) will be required.

This includes the deletion or addition of six (6) heads or more, the relocation of six (6) heads or more, or a combination of both. Any works involving six (6) heads or more, then a 3rd Party Certificate will be required.

The 3rd Party Certifier will indicate if an updated sprinkler block plan is required, however, DFES reserve the right to request updated sprinkler block plans where the works involve six (6) heads or more

NOTE: Where the works involve the change of classification of any heads (irrespective of number), then an Independent Certification (3rd Party Certificate) will be required.

All contractors are to take note that a DFES C8 form shall be required prior to any sprinkler (including drencher and deluge) works commencing on any DBA connected premises.

The C8 should specify the number of heads involved, this will assist determine the level of compliance required.

DFES conduct random audits on DBA connected premises, so it is incumbent upon the contractor to ensure all information presented on the C8 is correct and accurate.

Further clarification may be sought from DFES re this matter

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AUGUST 2015 (ADVICE 12)

AS1670.1 (2004) requires that the signal path from the sprinkler pressure switch or the flow switches where the sprinkler system does not utilise a pressure switch, to the Fire Indicate Panel (FIP) shall be fire rated to WS51W

It has come to the attention of DFES that fire alarm agents are installing I/O devices at the sprinkler valve set/s and that these I/O devices are not fire rated.

That compromises the integrity of the fire rated path from the sprinkler pressure switch, or flow switch, to the FIP.

Flow switches are not required to be connected using WS51W cable unless the system does not use a pressure switch, in which case all flow switches shall be connected to the FIP using WS51W fire rated cable

Therefore, DFES advise that all future DBA connections will be rejected if the I/O installed at the valve set/s is not installed within a fire rated enclosure or junction box.

In addition, there is some ambiguity where an addressable network is installed as to what part of the path has to be fire rated to WS51W.

DFES require that the one side of the network path shall be fire rated to the ***last*** I/O where a sprinkler or flow switch is being connected. The 'return' path may be either non fire rated or fire rated as seen fit by the installer.

For further advice or clarification re this matter, contact the DBA Contracts Manager at DFES on 08 9395 9865 or 0408 958 483, or email jeff.morton@dfes.wa.gov.au

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DECEMBER 2015 (ADVICE 13)

Department of Fire and Emergency Services (DFES) will commence charging a fee for false fire alarm attendances to DBA premises on 11 January 2016.

As a result of this, the fire alarm industry may be asked by many clients to alter existing smoke detection to heat detection in a bid to mitigate a false fire alarm fee.

HEAT DETECTION

Australian Standard (AS) 1670.1 (2004) Clause 3.25.1(b) states that the use of heat detections in lieu of smoke detectors is not recommended.

In addition, the Building Code of Australia (BCA) requires certain buildings to have smoke detection, not heat detection. By changing the smoke detection to heat detection, these requirements may compromise the Building Occupancy Certificate.

Therefore, DFES will not approve any smoke detection to be changed to heat detection unless the relevant Permit Authority, i.e. the Local Government Authority, is made aware of the changes and issues approval.

Private Surveyors may be employed to assist with this process, however they are not empowered to authorise any such changes unless consultation and approval by the Permit Authority has occurred.

Note – For simple change of detector type due to spurious false alarms caused by incorrect installation, i.e. a smoke detector installed over cookers at local shopping centre, agents should contact DFES and discuss the proposal prior to any potential change being made..

ALARM DELAYS

Clients may also request a delay be incorporated into the Fire Indicator Panel (FIP) programming, so the Master Alarm Function (MAF) does not initiate the alarm relay to the Alarm Signalling Equipment (ASE) immediately upon alarm activation.

This is permissible in certain extenuating circumstances and AS1670.1 (2004) provides various options for alarm delays, i.e. AVF, AIF, and AAF, however in all circumstances where these delays are considered, the client must consult a Building Surveyor to present a case to the Permit Authority to obtain permission to set an alarm delay.

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