



**Issued:** November 2019  
**Valid:** November 2020  
**Authorised:** District Officer Building Plans Assessment

## **GL-07: SUBMISSION OF DOCUMENTS TO DFES FOR ASSESSMENT**

### **1. Purpose:**

This guideline (GL) relates to the requirement for plans and specifications to be submitted to the Department of Fire and Emergency Services (DFES) under the building permit application process.

Regulation 18B(1) of the Building Regulations 2012 (as amended) requires the submission of plans and specifications '*in sufficient detail*' **at least** 15 business days before the signing of a Certificate of Design Compliance for Class 2 to 9 buildings. The submission of the plans and specifications allow DFES to assess compliance with operational requirements.

This documentation may include Deemed-to-Satisfy plans and specifications, or where Performance Solutions are proposed, a Fire Engineering Brief (FEB) and a Fire Engineering Report (FER). Where an FEB / FER are provided this guideline should be read in conjunction with DFES Guideline GL-15 [1] – Fire Safety Engineered Performance Solutions. In the case of alterations or additions to an existing building, any Performance Solutions that previously applied must also be included with the submission.

It is important that a complete and accurate submission, including all required documentation is lodged with DFES to avoid unnecessary delays with the assessment.

On completion of the assessment DFES will provide written comments to the **Building Surveyor**. One exception to this will be in the case of an FEB, where the notified person will be the **Fire Engineer**.

The Fire Engineer is expected to make a formal response to DFES FEB written advice letter; this can be included in a revised FEB or within the FER. (See example of response layout in Appendix A).

Appendix B shows a flow chart of the expected submission process.

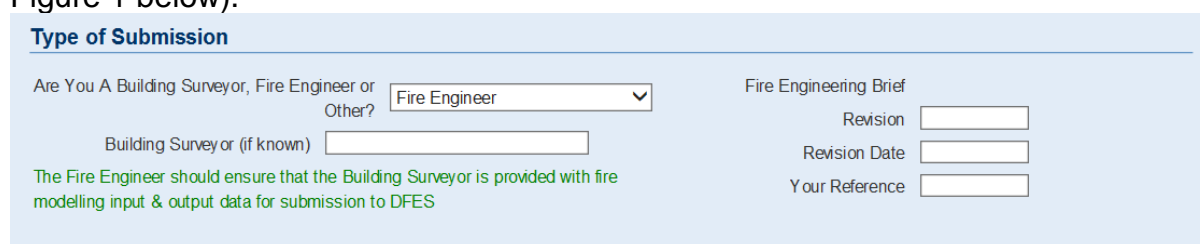
## 2. How to Lodge Documents with DFES:

The supply of documents to DFES for comment must occur in conjunction with the completion and submission of the Electronic Lodgement Form, found at the following link: [DFES Electronic Lodgement Form](#).

Depending on the type of documents being submitted this form will need to be completed by either the Building Surveyor or the Fire Engineer.

### 2.1 Fire Engineering Brief (FEB)

If the building is subject to any Performance Solutions an FEB will be required, this is to be submitted by the **Fire Engineer** using the Electronic Lodgement Form (refer Figure 1 below).



The screenshot shows a form titled "Type of Submission". It contains a dropdown menu for "Are You A Building Surveyor, Fire Engineer or Other?" with "Fire Engineer" selected. Below this is a text input field for "Building Surveyor (if known)". To the right, there are three text input fields: "Fire Engineering Brief", "Revision", "Revision Date", and "Your Reference". A green note at the bottom left states: "The Fire Engineer should ensure that the Building Surveyor is provided with fire modelling input & output data for submission to DFES".

Figure 1 - FEB Submission

DFES considers the requirements of the International Fire Engineering Guidelines (IFEG) [3] Chapters 1.2 & 2.2 should be met in the FEB.

Floor plans and relevant drawings should be appended to the FEB to allow for efficient review. If the FEB lacks sufficient detail for DFES to assess against operational requirements, a revised FEB including more detail may be requested.

DFES expects the Fire Engineer to respond to the FEB advice letter. This can be done using the PDF letter or creating a response table similar to shown in Appendix A. The response should be included either in a revised FEB or in the FER.

#### Please note:

Where it is considered that a Performance Solution has the potential to impact DFES firefighter operations (directly or indirectly) a meeting prior to submission of the FEB should be sought with DFES Fire Engineers. Refer [BEB Request for Consultation Form](#) or email [fireengineers@dfes.wa.gov.au](mailto:fireengineers@dfes.wa.gov.au) for further information.

### 2.2 Building Permit / Certificate of Design Compliance (CDC)

The Building Surveyor should complete and submit the Electronic Lodgement Form and forward the accompanying documentation. This includes the plans and specifications outlined in Section 3 of this guideline for Deemed-to-Satisfy submissions, and includes the additional requirements where a Performance Solution has been provided (FER and modelling files (where applicable)). Refer Figure 2 below.

Type of Submission	
Are You A Building Surveyor, Fire Engineer or Other?	<input type="text" value="Building Surveyor"/>
Plans (DTS)?	<input type="radio"/> Y <input type="radio"/> N
Plans (DTS) + Final Revision of FER	<input type="radio"/> Y <input type="radio"/> N
Is this Building a Fit-Out?	<input type="radio"/> Y <input type="radio"/> N
Document Transmittal Including Plan Numbers	<input type="radio"/> Y <input type="radio"/> N
Plans Submitted	<input type="checkbox"/> ARCHITECTURAL <input type="checkbox"/> ELECTRICAL <input type="checkbox"/> FIRE SERVICES <input type="checkbox"/> HYDRAULIC <input type="checkbox"/> MECHANICAL

**Figure 2 - Deemed-to-Satisfy / FER Submission**

It is important that the Electronic Lodgement Form is completed in full and that the information supplied is accurate. This will minimize any delays with the assessment particularly if further information or clarification of detail is sought. This may result in the project being suspended pending provision of suitable material.

### 3. Required Plans and Specifications:

Plans and specifications, as relevant from the list below are required by DFES in hardcopy. Please note that the only documents that DFES can receive electronically are the FEB and the FER (however a colour hardcopy of each is also required).

Please note that only 1 (one) copy of each of the documents is required by DFES and that they must be the **same revision number as those being submitted to the Permit Issuing Authority with the Certificate of Design Compliance.**

It is also essential that all plans and specifications are **single sided, true to scale** (see below for detail), and **all text is legible**. Failure to do so may result in the assessment being put on hold, until suitable plans are received.

**Please Note: A2 drawings or larger must be submitted to DFES.**

#### 3.1 Hydraulic Fire Services

- Drawings showing compliant hose coverage from installed hydrants and/or fire appliance.
- Where it is proposed to use street hydrants, mark their location and show how compliant hose coverage will be achieved.
- Current and complete pressure and flow test results to be supplied where the hydrant and/or sprinkler system will rely on street mains performance or where firewater tank capacity relies on in-fill (to be dated within 12 months of submission date).
- Location and sufficient details of ring mains, isolation valves, booster assembly, pumps and tanks including hard suction connections, pump controls and indicators and access for the fire brigade.
- A schematic drawing is required for multi-level buildings.
- Location of appropriate fire brigade vehicle access and hard-standing.

- Fire sprinkler drawings showing the grade of water supply, design flow rate, booster assembly, control assembly/s, pumps and drenchers.

**Please note:**

Where the building is sprinklered, a **Direct Brigade Alarm (DBA)** is required, the DFES DBA Manager should be contacted as follows: (08) 9395 9987, or via email [dbaadmin@dfes.wa.gov.au](mailto:dbaadmin@dfes.wa.gov.au). Further information is available at <http://www.firealarmmonitoringservices.com.au/>.

### **3.2 Mechanical Fire Services**

- Ductwork layout including fire and smoke dampers.
- Roof/ceiling plans where high-level smoke venting or extraction is proposed.
- Smoke exhaust and vent outlet locations, exhaust fan capacities and area of inlets.
- Stairwell pressurisation inlet and relief grille locations.

### **3.3 Electrical Fire Services**

- The type of fire detection and alarm systems, including EWIS, BOWS, DBA.
- The location of the fire indicator panel and mimic panels.
- The location of the main electrical switchboard and any high voltage installations including transformers and distribution boards. This includes alternative energy systems (e.g. Solar panels) that may be installed in addition to conventional power supplies.

**Please note:**

Where the fire detection and alarm system for the building is proposed to be connected to the DBA system, the DFES DBA Manager should be contacted as follows: (08) 9395 9987, or via email [dbaadmin@dfes.wa.gov.au](mailto:dbaadmin@dfes.wa.gov.au). Further information is available at <http://www.firealarmmonitoringservices.com.au/>.

### **3.4 Architectural Drawings**

#### **3.4.1 Site Plan**

A plan drawing (not less than 1:500 scale) showing:

- If part of an existing building, clear indication of the area that is the subject of the current submission.
- Street name/s, boundaries, main entry, vehicular access and north point.
- The dimensioned position of the proposed building and clear representation of existing buildings on the site (including existing floor area calculations and existing fire services).
- Levels of the site in relation to the street.

- Retaining walls, embankments, fences, electronic gates or other impediments to fire brigade entry onto the site or into the building.

### **3.4.2 Floor Plan**

Dimensioned and to scale not less than 1:100 showing:

- If part of an existing building, clear indication of the area that is the subject of the current submission.
- Each storey, including basements and mezzanine levels.
- Clear and accurate indication of any fire and smoke compartmentation including floor areas (and volume of fire compartments).
- Fire resistance level (FRL) of firewalls and fire doors.
- Height and layout of any storage racking.
- If applicable, detail of materials to be stored in quantities that require a Dangerous Goods License.

### **3.4.3 Elevations and Sections**

- Height of each level or storey.
- The effective building height as defined in the Building Code of Australia (BCA) (for multi-storey buildings).
- Fire and smoke compartmentation.

## **3.5 Performance Solutions**

Following DFES assessment of the FEB, the FER with all the appropriate plans and specifications documentation should then be lodged by the **Building Surveyor** in conjunction with the Electronic Lodgement Form.

Refer to [DFES Guideline GL-15](#) and [Guidance on Fire Safety Performance Solutions](#) for complete information on submitting fire safety engineered Performance Solutions to DFES for assessment.

**NOTE:** Where fire or evacuation modelling has been conducted as part of a Performance Solution, the modelling input and output files should be submitted in a usable format (i.e. electronic data on CD, DVD, USB drive or hard drive). DFES considers the FER and supporting evidence form part of the '*plans and specifications for the building in sufficient detail*' specified in Regulation 18B(1).

#### 4. Definitions:

The following definitions apply for the purpose of this guideline:

**Fire Engineer:** A suitably qualified, experienced and accredited fire safety engineer as outlined in the Building Commission Guideline on Performance Solutions [4].

The Building commission guideline states “*it is expected that fire safety Performance Solution designs are carried out by fire engineers with sufficient skills, qualifications and experience for the specific project.*” and “*Fire engineering may include qualifications such as an undergraduate degree in Fire Safety Engineering, a post graduate qualification in fire engineering and may also include registration with a relevant association such as the National Engineering Register, or being a registered fire engineer for the purposes of Building Code compliance in another State*”.

**Building Surveyor:** A private building surveyor or building surveyor employed by the local government, who is registered to carry out building surveying work, or for the purposes of providing certificates of compliance.

**Certificate of Design Compliance (CDC):** A certificate for a Class 2-9 building design, signed by the registered Building Surveyor confirming that the design complies with the edition of the building code (BCA) referenced within the certificate.

**Fire Engineering Brief (FEB):** Means the Fire Engineering Brief which is developed in accordance with the principles of the IFEG which states “*A documented process that defines the scope of work for the fire engineering analysis and the basis for analysis as agreed by stakeholders*”. DFES considers the FEB should include (as a minimum):

- (i) Relevant stakeholders (including input / review and acceptance).
- (ii) Occupant Characteristics.
- (iii) General Objectives (Building and Regulatory).
- (iv) Hazards and preventative and protective measures.
- (v) Trial design for evaluation including:
  - a. Non-compliance identified and relevant Performance Requirements.
  - b. Proposed approach and proposed methods of analysis.
  - c. Acceptance criteria.
- (vi) Standards of construction, commissioning, management, use and maintenance.
- (vii) Appended plans or specifications including:
  - a. Site plan, Floor plans, Elevations and sections (as relevant to the proposed Performance Solutions).
  - b. Test reports or specifications for performance based systems specified in the brief.

**Fire Engineering Report (FER):** The Fire Engineering Report containing the evaluation that the assessment (of Performance Solution(s)) has demonstrated compliance with the relevant BCA Performance Requirements.

The FER is submitted under the requirements of Building Regulation 18(b), and should be prepared in accordance with the principles of the IFEG.

**Performance Solution:** Means a method of complying with the Performance Requirements of the BCA other than by a prescriptive Deemed-to-Satisfy Solution (the Performance Solution may contain proponents of a Deemed-to-Satisfy Solution). Previously referred to as Alternative Solution in preceding editions of the BCA.

For further clarification on the above definitions (where applied outside the scope of this guideline) please refer to the relevant documents referenced below.

## 5. References:

1. GL-15 (2012) Department of fire and emergency services, Built environment branch, Guideline 15, Fire engineered performance solutions. [ONLINE] Available at:  
<https://www.dfes.wa.gov.au/regulationandcompliance/buildingplanassessment/pages/publications.aspx> [Accessed 11 June 2018].
2. National Construction Code (2019) Australian Building Codes Board, ACT, Australia.
3. International Fire Engineering Guidelines, (2005), Australian Building Codes Board, ACT, Australia.
4. Guidance on fire safety Performance Solutions, Building Commission, Department of Mines, Industry Regulation and Safety. [ONLINE] Available at:  
[https://www.commerce.wa.gov.au/sites/default/files/atoms/files/guidance\\_on\\_fire\\_safety\\_performance\\_solutions\\_0.pdf](https://www.commerce.wa.gov.au/sites/default/files/atoms/files/guidance_on_fire_safety_performance_solutions_0.pdf) [Accessed 11 June 2018].
5. A guide to the building approvals process in Western Australia, Building Commission, Department of Mines, Industry Regulation and Safety. [ONLINE] Available at:  
[https://www.commerce.wa.gov.au/sites/default/files/atoms/files/guidance\\_on\\_fire\\_safety\\_performance\\_solutions\\_0.pdf](https://www.commerce.wa.gov.au/sites/default/files/atoms/files/guidance_on_fire_safety_performance_solutions_0.pdf) [Accessed 11 June 2018].

## 6. Legislation:

Building Act 2011

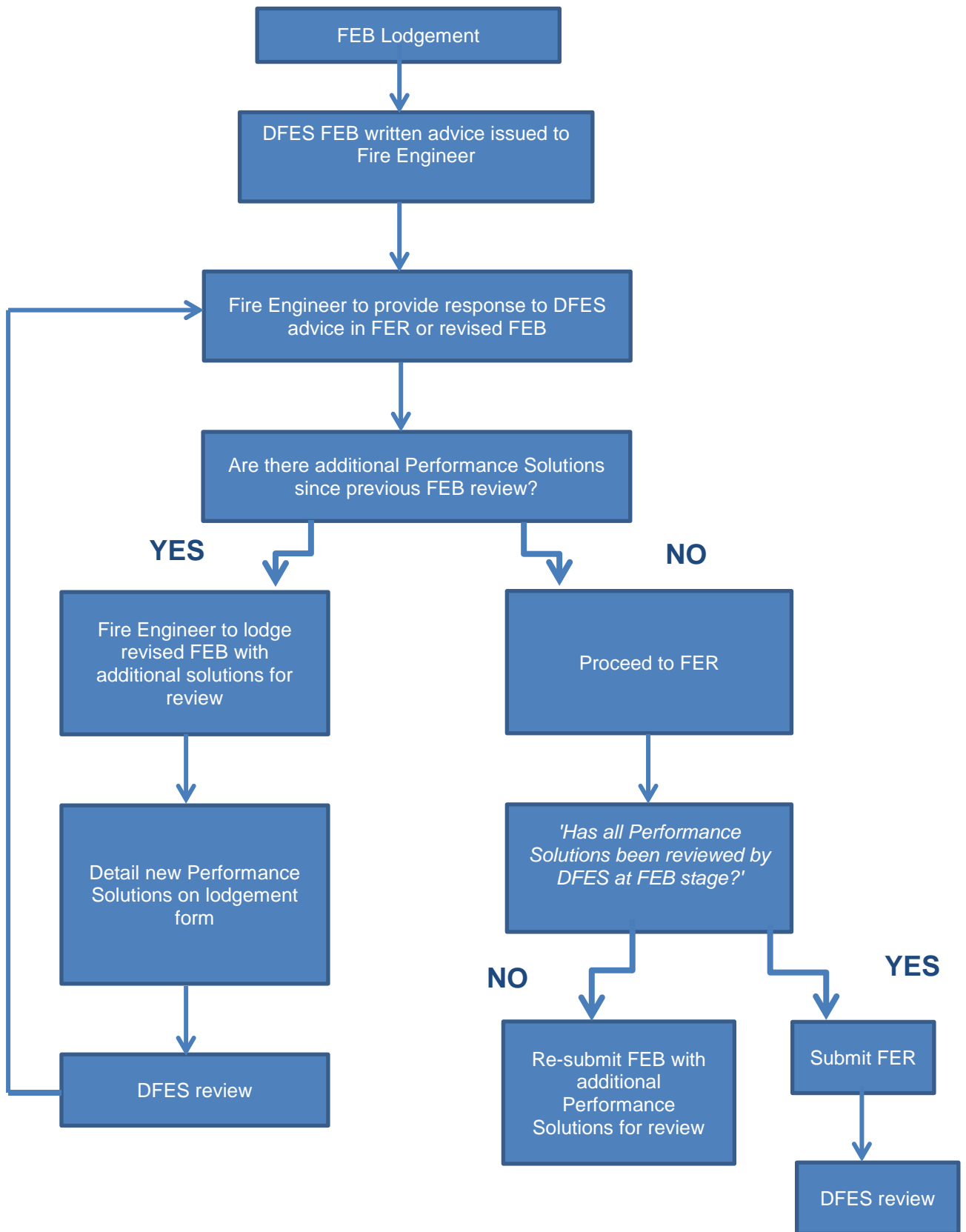
Building Regulations 2012 (as amended)

**7. Appendix A:**

DFES Advice	DFES advice incorporated? Y/N	Consultant Engineers Response*
1. xxx	xx	xx



8. Appendix B:



**Please note:** This is a controlled document. DFES guidelines are available on the DFES Website: [www.dfes.wa.gov.au](http://www.dfes.wa.gov.au) under Regulation and Compliance, Building Plan Assessment then click on Publications/Guidelines.

Should the information provided in this guideline require further clarification, please contact DFES Built Environment Branch via email [beadmin@dfes.wa.gov.au](mailto:beadmin@dfes.wa.gov.au).

**Disclaimer**

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