

Guidelines for Contribution Factor Forms

Infrastructure Division Environment and Engineering Branch

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Revision history

Version	Description	Date
1	First issue of guidelines for building criticality assessments requirements in chapter 2 of the Manual of Fire Protection Engineering (MFPE) – Edition 2.	08/05/2018
2	Change title to 'Guidelines for contribution factor forms' and delete reference to 'intolerable loss' to reflect changes to MFPE Edition 3 – amendment 1.	05/06/2019
3	Inclusion of Assistant Secretary Estate Planning – Estate and Infrastructure Group (E&IG) as a Capability Manager (CM) and inclusion of CM representative.	13/11/2019
4	As a result of the development of a Building Works Manual (BWM), this guide has been revised to refer to the BWM instead of the MFPE.	17/08/2020
5	Guidelines for contribution factor forms updated as a result of updates to BWM edition 1, amendment 1 and MFPE edition 4, amendment 1.	01/09/2021
6	Cover page updated to reflect name change from 'Estate and Infrastructure Group' to 'Security and Estate Group'.	10/12/2021
7	Guidelines updated as part of the release BWM edition 1, amendment 2 and MFPE edition 4, amendment 2.	01/06/2022
8	Guidelines updated as part of the release BWM edition 1, amendment 3 and MFPE edition 4, amendment 3. Defence cover page logo and template example in appendices updated.	01/12/2022
9	Guidelines updated as part of the release BWM edition 1, amendment 4, MFPE edition 4, amendment 4 and NCC 2022.	01/05/2023

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1. Introduction

Defence buildings are categorised during the project approval in accordance with their contribution to capability. This process is completed by the applicable Capability Manager (CM). The outcome of the assessment is expressed as a Contribution Factor (CF).

The CMs for determining the Contribution Factor of a building for Defence are found in the Defence Capability Manual. The CMs are:

- Chief of Navy
- Chief of Army
- Chief of Air Force
- Chief of Joint Capabilities
- Vice Chief of Defence Force
- Associate Secretary
- Director General Australian Signals Directorate
- Chief of Defence Intelligence
- Chief Information Officer
- DEPSEC SEG
- Chief Defence Scientist

A list of CM representatives and contacts is provided at Appendix A. CMs assign the responsibility for determining CFs to their delegated representative. Where the above are not the appropriate CM, then the Deputy Secretary Security and Estate Group (SEG) is the CM. This would typically occur for buildings not on the Defence Estate.

Note. The links to CM representatives in Appendix A are from an internal Defence directory. Access is restricted to personnel with Defence Protected Network (DPN) access.

The CMs representatives determination of the CF is recorded in the Garrison and Estate Management System (GEMS) and in the project documentation by the project director / manager

For both new and repurposed buildings, determination of the CF by the CM representative is undertaken early in the design process. The delivery authority engages the applicable CM representative, stakeholders and SEG zone staff to ensure that the determination is appropriate, properly recorded and applied in the project design. The CF is typically applied to the majority use of the building.

2. **CF** definitions

CF1

Major Assets provide a very high level contribution towards operational capability and are the most critical structures of a military platform, national security objective or Group objective. The loss or compromise of a Major Asset would be a major concern to Australia's national security, with repercussions such as:

- Very High impact on the overall capability of the Australian Defence Organisation (ADO); or
- Very high danger to many members of the public or the ADO.

A Major Asset should be located in a security area, protected by an approved Security Alarm System. Examples include:

- Critical command, control, intelligence and communications assets; and
- Roads, water, electricity and backup electricity for Major Assets.

CF2

Important Assets provide a direct and high level contribution towards the capability of a military platform, national security objective or Group objective. The loss or compromise of an Important Asset would be a high concern to Australia's national security, with repercussions such as:

- High impact on the overall capability of the ADO;
- High danger to many members of the public or the ADO;
- Lengthy lead times to restore extant capabilities;
- High embarrassment to the ADO; or
- Very high asset replacement costs.

An Important Asset should be located in a security area, protected by an approved Security Alarm System. Examples include:

- Essential military working accommodation and healthcare buildings;
- Storage facilities for weapons, ammunition, combustible materials and medications; and
- Roads, water and electricity for Important Assets.

CF3

Support Assets perform a capability support function to enable the efficient and effective functioning of Major and Important Assets. The loss or compromise of a Support Asset would be a moderate concern to Australia's national security, with repercussions such as:

- Short-term impairment of an Important Asset's functions;
- Danger to many members of the public or the ADO;
- Lengthy lead times to restore capability support; or
- Moderate embarrassment to the ADO.

Examples include:

- Capability support working accommodation;
- Essential training and educational assets;
- Military vehicle storage;
- High-use live-in accommodation; and
- Roads, water and electricity for Support Assets and backup electricity for Important Assets.

CF4

General Purpose Assets perform day-to-day base functions and do not generally require high security protection. The loss or compromise of a General Purpose Asset could cause the temporary impairment of a Support Asset's functions or a moderate impact to a single capability element (eg base unit). General Purpose Assets are typically:

- Low in replacement value;
- Require regular maintenance;
- Require normal fire protection; and
- Require normal security protection.

Examples include:

- Office, retail and assembly buildings;
- General live-in accommodation and detached houses; and
- General purpose utilities and engineering structures.

CF5

Low Importance Assets are typically:

- Low in replacement value;
- Require occasional maintenance;
- Require reduced fire protection; and
- Require reduced security protection.

Examples include recreation facilities, monuments, carparks, general storage, and unused buildings.

3. Building Works Manual (BWM) CF requirements

All Defence buildings are required to comply with the policy requirements of the Building Works Manual (BWM). This includes the building approval process and specific requirements contained within the policy.

The BWM and associated guides and templates can be found at the <u>Building Works Section</u> page of ERIK.

Defence policies such as the Manual of Fire Protection Engineering (MFPE) specify varying levels of fire safety protection for buildings or parts dependant on their assigned CF. The MFPE and associated guides and templates can be found at the Fire Safety Engineering page of ERIK.

An example of a completed form is provided in Appendix B.

3.1. BWM, annex 5A

Annex 5A of the BWM records the buildings assigned CF. A template contribution factor form is provided at the Building Works Section page of the ERIK website.

In addition to the requirement for a building to be assigned a CF in accordance with its majority use, it is a BWM requirement that the assessment in annex 5A identifies any level or space that has a CF1 or CF2 that is different to the entire building.

The form provided at annex 5A of the BWM is completed in consultation with stakeholders and is signed by the CM representative.

Buildings or parts identified as having a CF1 or CF2 have additional asset protection and potentially maintenance requirements. These buildings or parts have a very high or high contribution to Defence operational capability and require specific levels of fire protection as detailed MFPE chapters 8 to 12. These chapters detail the requirements for specific types of buildings. Chapter 2 of the MFPE details the requirements for buildings that are not captured in chapters 8 to 12.

The BWM specifies that the requirements of the <u>National Construction Code – Building Code of</u> <u>Australia (NCC)</u> are to be met as the minimum construction requirement for all new works.

It should be noted that – depending on the size and use of the buildings – a number of the MFPE specified systems may already be required to meet <u>NCC</u> compliance. Where not required under the <u>NCC</u>, then the MFPE policy still applies. For example:

- Chapter 2 specifies that all CF1 and CF2 buildings have a fire detection and alarm system.
- Chapter 8 includes requirements for specific CF1 and CF2 buildings that contain computing and electronic equipment and data storage. The requirements relate to:
 - Fire and smoke separation of primary and redundant elements or separate critical assets / functions from each other and from non-critical parts
 - Fire suppression and detection
 - Smoke clearance

- Chapter 9 includes requirements for CF1 and CF2 storage or workshop buildings. The requirements relate to:
 - Fire separation of primary and redundant elements or separate critical assets / functions from each other and from non-critical parts
 - Fire suppression and detection
 - Smoke management
- Chapter 10 includes requirements for CF1 and CF2 buildings that are located in a bushfire prone area. This chapter includes a requirement to comply with AS 3959 plus specific bushfire measures.
- Chapter 11 includes requirements for aircraft hangars. The major requirements relate to:
 - Fire and smoke separation of critical aircraft from each other and from ancillary areas such as annexes
 - Fire suppression and detection
 - Low level foam suppression
 - Smoke management
- Chapter 12 includes requirements for explosive ordnance buildings. The requirements relate to:
 - Non-combustible materials
 - Fire and smoke separation between EO groups and to non-EO areas
 - Fire detection

3.2. BWM, annex 5A, steps 1, 2 and 3

The 'nature of use' is what the entire building is used for such as office, storage, laboratory or the like. If the building has multiple uses such as office and store, then list all uses according to \underline{NCC} occupancy classification requirements. Note. Only describe different uses if more than 10% of the overall floor area or a specific use that the \underline{NCC} always classifies separately.

Where a part of a building has a higher CF than CF3, CF4 or CF5, then that specific use needs to be listed – ie CF2 computing equipment room.

Buildings or parts identified as having a CF1 or CF2 have additional fire protection requirements specified in the MFPE.

Step 1 on the form must always be completed.

Step 2 needs be completed where it is identified that a level or space has a CF1 or CF2 that is different to the entire buildings determination. The purpose is to ensure that the MFPE required fire safety requirements are applied to these areas of buildings.

For example, a CF4 building may have a room / area / function that is CF2. This part of the building will require specific levels of fire protection as appropriate to comply with MFPE chapters 2 and 8 to 12. If the CF2 part was a computing equipment room, then the requirements of chapter 8 of the MFPE would need to be met.

Step 3 provides space for any comments that the CMs representative wish to make. This step is optional.

Appendix A. Capability Manager (CM) representatives

Note. The links to CM representatives below are from an internal Defence directory. Access is restricted to personnel with Defence Protected Network (DPN) access.

Army – Director General Logistics Army

Army ADFHQ-Office of Chief of Army AHQ Logistics Br

Navy – Director General Navy Program Support and Infrastructure

Novy	ADFHQ-Office of Chief of Navy	Navy Plan, System &	Navy Plan, System &
INAVy	Navy	Infrastructure	Infrastructure

Air Force – Director General Logistics Air Force

Air Force ADFHQ-Office of Chief Air Force Logistics Branch-AIR FORCE Logistics Branch-AIR FORCE

CIOG – Director General Business Relationship Management

Chief Information	ICT Service Delivery &	Business Relationship	Business Relationship
Officer	Reform.	Management	Management

DSTG – Director Research Infrastructure and Science Support

Def Science & Technology Gp Research Services Div Research Inf & Admin-ACT

Joint Logistics Command – Deputy Commandant Joint Logistics and Director General Strategic Logistics

Joint Capabilities Joint Logistics Command Strategic Logistics Branch Strategic Logistics Branch

Joint Simulation, Training Area and Health – Director Simulation, Training Areas and Health Knowledge Management

Joint Capabilities Joint Information Warfare Joint Sim, TA&HIth Knowledge Managementt

Strategic Policy and Intelligence - Assistant Secretary Strategic Critical Information and Foreign Investment

Strategic Policy& Intelligence Strategic Policy Strategic Critical Inf&For Inv

SEG – Assistant Secretary Estate Planning

Security and Estate Group Infrastructure Division Estate Planning Executive





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ANNEX 5A

BUILDING CONTRIBUTION FACTOR FORM

SEG Region	[Defence estate region or sub-region]
Establishment	[Base/establishment]
Building Name	[add building name]
GEMS ID	XXXX/XXXX

Step 1 – entire building

Nature of use / function	Office/Store/Accommodation etc
(for the entire building)	
Contribution Factor (CF)	CF3

Step 2 – level/space

Nil	Level / Space	Level / Space	Level / Space	Level / Space
Nature of use / function	Computer Computer			
(for the room / area function as appropriate)	server			
Contribution Factor (CF)	CF2			
Refer to notes (a) and (b)				

Step 3 – capability manager comments

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5A-2

Step 4

	Capability Manager
Name	
Position/title	
Signature	
Date	

Notes:

- (a) Full definitions for Contribution Factor (CF) can be found in the Estate Appraisal section on the Estate Planning and Upkeep page in DEQMS. They are also duplicated in the Guidelines for Building Contribution Factor Form.
- (b) Step 1 is to record the CF for the entire building. This is generally in accordance with its major usage.
- (c) Step 2 is to identify any level or space (room or area) that has a CF1 or CF2 where this is different to the CF entire building's determination.
- (d) Buildings or parts of buildings that are CF1 or CF2 have additional asset protection requirements specified in the <u>MFPE</u>.
- (e) CFs are part of the building data recorded in the Garrison and Estate Management System (GEMS).
- (f) This process is only applicable to building works, substantial alteration and change-in-use or new leased buildings
- (g) The assessment process for a hangar aircraft area is detailed in <u>Chapter 6</u> and is to be used in combination with this form.

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