Critical Documentation to facilitate the Certification of the Buildings under Part B12 CATALYST

Conall Finn Sep 2024

Outline

• B12 Provision of Information

• TGD B Part B Vol 1 2024 - Part B12 Requirements

5 Sufficient information on the active fire safety systems installed for the purpose of fire safety in the building shall be provided to the building owner so that the building can be operated in order to protect the health and safety of the building occupants.



Building Regulations Technical Guidance Document B 2024

Fire Safety – Volume 1 Buildings other than Dwelling Houses





Outline

• B12 Provision of Information

Aims to ensure that adequate information is provided upon completion to ensure that the building can be effectively managed, having regard to its design.

- Sources of information
 - Critical Documentation required to achieve BCAR Certification
 - Safety File
 - 0&M information
 - Design Team information
 - Build Team information





Building Regulations Technical Guidance Document B 2024

Fire Safety – Volume 1 Buildings other than Dwelling Houses



Regulation B12 Provision of Information

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- Regulation B12 requires that the building owner is provided with information, so that the building can be operated in a way that protects the health and safety of its occupants.
- On completion of the works, the owner of the building, or person who commissions the works should be provided with sufficient information about the active systems installed for the purposes of fire safety, and their maintenance requirements, so that the building can operate as designed in the event of a fire. Such active systems may include; a fire detection and alarm system, an emergency lighting system, a sprinkler system, a smoke control system, etc., and any device activated by such a system.
- The owner must be provided with a suitable set of operating and maintenance instructions to allow for the effective use and operation of the critical safety system(s).
- The instructions should be directly related to the particular system(s) installed in the building.





B12 from a BCAR perspective

Quality/Compliance

- "The Golden Thread" as coined in the UK = BCAR + B12
- BC(A)R 2014 introduced a formal process of building control and certification of compliance that is subject to regulatory assessment and inspection informed by risk analysis
- Certification paperwork, on its own, is not sufficient however it is crucial to ensure that it can be managed for the life span of the building
- A robust process must be followed to capture the numerous strands of 'evidence' required to demonstrate compliance. This information can be leveraged for the purposes of meeting the B12 requirements
 - Catalyst's '5 Rocks'
 - Inspection Plan
 - Benchmarks (first of kind)
 - IFCOs

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• Queries



obi – BCAR Critical Documents

- Documentation is required to support Ancillary Certificates and demonstrate compliance including additional certificates, testing & commissioning, checks, warranties and other such confirmations.
- Contractor to ensure that all subcontractors provide the necessary documentation required under the applicable standards and norms – as referenced in the Technical Guidance Documents, supporting National and International standards and in the Employer's requirements and project specifications.
- We capture this compliance documentation in obi Critical Documents and it includes (in addition to ancillary certificates):
 - Subcontractor, Supplier & Specialist Confirmation Letters (Compliance of Design, Construction, Installation)
 - Product & Material Certifications (incl. FPCs, DOPs etc.)
 - Site and Laboratory Performance Tests & Testing Logs
- Technical Submittals (High Risk Work packages)
- Testing, Installation and Commissioning Certificates
- As-Built Information
- Fire Alarm Cause & Effect Matrix and Verification
- Fire Safety Management Plan

- Fire Test Reports
- obi Critical Documents generates the Annex of Supporting Documents at Completion which is a statutory document submitted with the Certificate of Compliance on Completion

	# \$	Design Discipline	Requirement Name	Details Criteria	Project Phase 🍦	Designer Stage	Document Type	To Be Submitted By	To Be Reviewed 👙 By	# Uploads	Status (%)
View Edit	11	Structural	(f) List of Civil & Structural Engineering designs and details to be completed at a later date.	On company headed paper provide a schedule/register of any such design; plans, details, calculations, specifications, particulars to be prepared at a later date including: (1) Designs and details to be completed by the Civil & Structural Engineer. (2) Designs and details to be completed by specialists or sub-contractors.	Pre- Commencement	Pre- Commencement	Supporting Documents and Drawings- Commencement	Conor Gath - i3PT	Jack Dinneen - i3PT	1 of 1	100
View Edit	12	Mechanical	(b) Mechanical Engineer Ancillary Certificate of Compliance (Ed): Design (commencement notice)	Completed Ancillary Certificate of Compliance (Ed): Design (commencement notice)	Pre- Commencement	Pre- Commencement	Ancillary Certificates- Design	Reviewer Three - XYZ	Edgar Afonso - i3PT	0 of 1	0
View Edit	13	Mechanical	(c) Part L Compliance Report	Part L Compliance Report including Building Energy Rating (Non-domestic BER) demonstrating means of achieving Part L compliance.	Pre- Commencement	Pre- Commencement	Supporting Documents and Drawings- Commencement	Reviewer Three - XYZ	Submitter Three - XYZ	0 of 1	O

BCAR Document Review Process

Key participants & roles

- □ **Uploader** (designated on the online system) The party responsible for the efficacy of the information
- Reviewer/s (designated on the online system) Design Team Lead Reviewer/ Secondary Reviewer/s Assigned Certifier
- Having a competent BCAR Coordinator and Document Controller on the Build-Team greatly improves the information efficacy
- □ Agree up-front on what will represent an acceptable Certificate
- A Schedule of Critical Documents should be collated as an early deliverable



ANCILLARY CERTIFICATES



Recap of the Process

Key participants & roles

Ancillary Certificates – Which Cert' type is appropriate for a Sub-Contractor with Installation & Design Responsibility???



PURPOSE OF PRACTICE NOTE

- A suite of the Ancillary Certificates for use with the BC(A)R regime of Building Control has been agreed between the Professional Bodies and the Construction Industry Federation (CIF) representing the principal stakeholders in the building sector.
- 2. These Ancillary Certificates were introduced in Practice Note 1.
- The primary purpose of this Practice Note 2 is to provide further guidance on the application of these Ancillary Certificates in respect of elements designed and/or constructed by Sub-contractors.
- This guidance takes the form of a series of examples of elements of building works commonly Sub-contracted, for which the appropriate Ancillary Certificates are identified in each case.
- 5. Ancillary Certificates are proposed in respect of a sample of elements which require contractor / sub-contractor certification under the Building Control Regulations. Many projects will incorporate a vast range of such elements which it will not be possible to comprehensively identify prior to the commencement of the works on site.

EXAMPLE 1

PRECAST CONCRETE UNITS

- Precast concrete units are produced by Precast Sub-Contractors in accordance with a Performance Specification (loading, spans, opes, etc.) from the Engineer.
- Based on the spans, loadings, etc. provided by the Engineer, the Precast Sub-Contractor confirms the size, reinforcement, the necessity for a structural topping, the necessity for propping during construction, etc.
- 3. Where a Precast Concrete Sub-Contractor is appointed, they must sign one of the CIF Ancillary Certificates as the party assigned "to construct, supervise and certify the Sub-Contract Works" Cs (CIF-01) or Css (CIF-02), clarifying, under "Description of the Sub-Contractor / Specialist Contractor buildings or works", whether they supplied only or supplied and installed the precast concrete units, and also fill in the Annex^o setting out the associated design work undertaken by them.
- Where a party is appointed by a Contractor/Builder to undertake design work only then that party would sign an Ancillary Certificate of Compliance: Design (Sp or Sc as appropriate).
- 5. Where a Sub-Contractor is appointed to undertake site installation only, they must familiarise themselves with the installation requirements and must complete and sign one of the CIF Ancillary Certificates as the party assigned "to construct, supervise and certify the Sub-Contract Works", Cs (CIF-01) or Css (CIF-02), with annex completed as appropriate.

Recap of the Process

Key Certification

□ Ancillary Certificates – Which is the correct Cert type for a Sub-Contractor with Design Responsibility???

ACEI Assessed Former	PENGINEERS CHARTERED RIAL		
ANCILLARY CERTIFICATI	E OF COMPLIANCE ON COMPLETION	ANNEX	ANCILLARY CERTIFICATE OF COMPLIANCE DESIGN (CONSUMERCUMNT NOTICE) TO AN INTER)
	I by Sub-Contractor / Specialist Contractor Builder / Main Contractor on Completion	Table of Drawings, Calculations, Specifications, Ancillary Certificates and Particulars used for the purpose of construction and demonstrating compliance with the requirements of the Second Schedule to the Building Regulations.	Bit Augusta de Senatoria de S
BUILDING CONTROL AUTHORITY :	CIF-01	(Details of relevant plans etc. may be listed below and attached hereeto) 1. Drewings, Calculations, Specifications and particulars provided by the Builder/Main Contractor.	
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To:	(Name of Builder/Main Contractor)	Design provided to Sub-Contractor/ Specialist	eller in gener quedit abli
From:	(Name of Sub Contractor/ Specialist Contractor)("the Main-Contract")	from the Design Team via the Builder should include FSCs & DACs where applicable	6. We surface due our gives advolutions grandfactures and predicative studied in the Schulzky on the second schulz studies and schulz schulzky our schulzk
Sub-Contract:	("the Sub-Contract")		7. Under son Conditions of Registrations is on respectively the synchronized and properties produces and and provide produces produces and and and and and produces produces and
Description of the Sub-Contractor / Specialis Design, Fabrication, Installati	st Contractor buildings or works: ion, and Commissioning of the Sprinkler System		Vis series, hence searched statutes and dispuss that hence regards to plane, subscheims, and specification which have hence prepared by an althousy during and an antibusty statutes and parallel pa
This certificate relates to the buildings or wo the attached Annex (the "Sub-Contract Wor	orks, the subject of the Sub-Contract as described above, as detailed in rks").		Adam manual Comput Neuro B Allena Dana To Ren B All
		 Associated design undertaken by Sub-Contractor/Specialist Contractor necessary for completion of the works in accordance with the Building Regulations. 	Langer The many process department for the second department of the second depart
		SCHEDULE	the design of the proceeding operations of the second seco
		Design carried out by Sub-Contractors to be clearly listed or append a Drawing and	1. We savely builty ensuined measured bill, nor call diagram that husing regard to global solutions and gate from the perpending on the husing perpending on the husing perpending on the husing perpending on the husing perpending on the hubits of perpending perpending on the hubits of per
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BCAR Certification Documentation

Key Statutory and Ancillary Documents

- Commencement Documentation Statutory Forms and supporting Documents at Commencement Stage
- Construction Documentation On-going evidence of compliant works (Inspections, Pre-Pours Check Sheets, Cube logs, Fire Stopping reports, DFT readings, Commissioning reports, installation checks, Build Team Design Team and AC inspections*).
- □ Completion Documentation Statutory Cert on Completion and supporting Documents at Completion Stage





Critical Documentation

Document Type	Description	Provided By:	Reviewed By:	
Design Information	Final Issue Design (M&E/ Architectural/ Fire/ C&S/ Façade/ etc)	Consultants	Design Certifier/ Assigned Certifier	
Materials	Material Data Sheets/ Global Test Reports/ Key Technical Submittals	Specialist Sub-Contractors/ Builder	Respective Consultant	
Critical Systems information	Commissioning Documentation Fire Detection Alarm IS 3218s Cause & Effect/ Emergency Lighting IS 3217s/ Smoke Extract Systems/ Sprinkler Systems/ Fire Rated Ducts & Damper/ Lifts etc/ Disabled Refuge/ AOV's/ Suppression Systems	Specialist Sub-Contractors/ Builder	Respective Consultant	
Passive and Active evidence of Part B compliance	Compliance Statements/ Fire Stopping Photographic log & As-Builts/	Specialist Sub-Contractors/ Builder	Fire Engineer	
Fire Safety Certificate/s	All FSC submissions	Fire Engineer	Assigned Certifier	
Ancillary Certificates	Fire Engineers Part B (Ed/Ec/Ei) Architects (Ad/Ac/Ai) C&S Engineer (Ed/Ec/Ei) Façade Engineer (Sd/Sc/Si)*	Consultants	Assigned Certifier	
Certificate of Compliance on Completion	Part A (Builder) Part B (Assigned Certifier)	Builder & AC	Assigned Certifier	



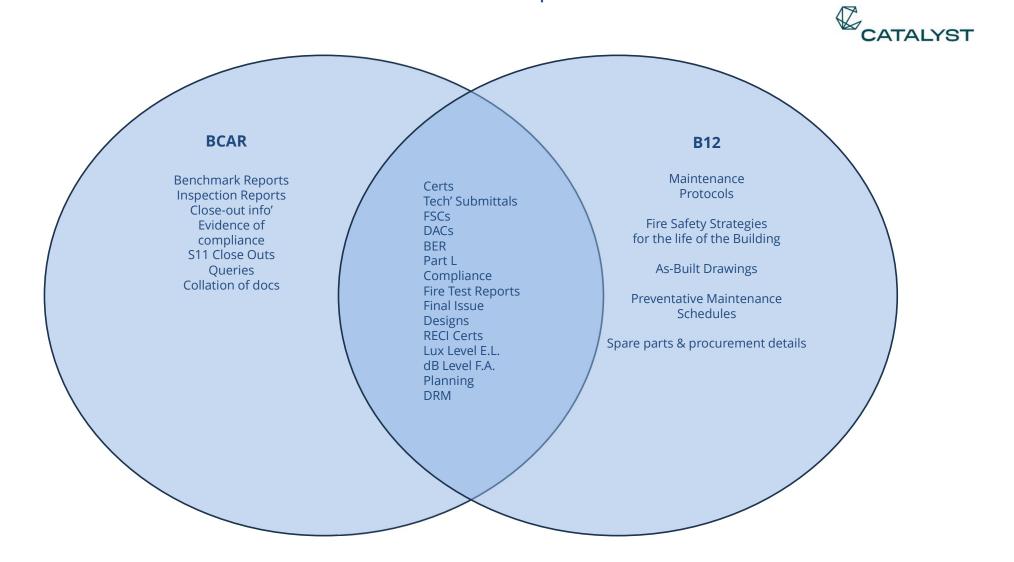
Critical Documentation

Documentation

Document Type	Description	Provided By:	Reviewed By:	
As-Built Information	As-Built Design (M&E/ Architectural/ Fire for Specialist elements/ Structural/ Façade/ etc) Fire Alarm dB and E.L. Lux ratings	Sub-Contractors	Respective Consultant	
Ancillary Certificates	Sub-Contractor & Specialist Certificates Fire Stopping/ Partitions/ Fire Doors/ Mechanical and Electrical Systems/ Lifts including FF lift/ Specialist Active systems (Sprinkler/ Gas Suppression)/ AOV's/ Smoke Curtains/ Facades etc/ Lifts/ Fire Damper	Cs/Css Sd/Sc/Si	Respective Consultant	
Systems information	Part F, L & Part M compliance	Door Installer/ Supplier	Fire Engineer	
Maintenance Protocols	Maintenance Information for Fire Safety Critical Building Elements Steel DFT Schedule/ Fire Doors/ Fire Dampers & passive fire systems	Specialist/s	Structural Engineer/ Fire Engineer	
Intumescent Paint	DFT readings/ Instructions to maintain/ Mark-Up drawings	Specialist	Fire Engineer	
Electrical Certification	RECI Cert/s	Electrical Engineer	Electrical Consultant	



BCAR - B12 overlap?



Critical Safety Systems Certification and Maintenance Information



- "The information should be formatted to ensure that the Building Owner or their representative can readily access, the necessary information to maintain life safety critical systems and building elements."
- Post Grenfell this critical information is referred to as "The Golden Thread" in the UK
- In Ireland it equates to "BCAR + B12"

What does obi® do?

Everything from quality control... to document control



A single source of truth for the project

- Quality Management
 - Inspection and Test Planning
 - Defect Management
 - Quality Benchmarking
- Query and RFI Management
- LEED and BREEAM Environmental Certification
- Change Order/Variations Manager

- Design Management
 - Technical Submittals
 - Design Review and Collaboration
 - Design Responsibility Matrix
- Common Data Environment (BIM enabled)
- Document Management
 - Critical Documentation workflows
 - Routing of files to bespoke folder structure
 - O&M Manual & Safety Files

Health and Safety

- H&S Observations log
- Incidents, Accidents and First Aids
- Meeting Minutes Tool
- Statutory Consents Tracker
- Mobile Applications in iOS and Android



Any questions, please contact

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