# Commissioning and Tuning

### Credit 2

### Design Review Submission As Built Submission

|  |  |  |  |
| --- | --- | --- | --- |
| Total Points available: | 4 | Points claimed: | [#] |

The project has utilised the following commissioning, handover and tuning initiatives to ensure all building services operate to their full potential:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Criteria | Description | Points Available | Points Claimed |
| **2.1** | **Conditional Requirement** | The building has set environmental performance targets, been commissioned, and will be tuned. | 2 |  |
| **2.2** | **Services and Maintainability Review** | A comprehensive services and maintainability review of the project is performed. | 1 |  |
| **2.3** | **Independent Commissioning Agent** | An independent commissioning Agent (ICA) has been utilised to advise, monitor, and verify the commissioning and tuning of the nominated building systems throughout the design, tender, construction, commissioning, and tuning phases. | 1 |  |

## Project-specific technical questions (formerly tcs and cirs)

|  |  |
| --- | --- |
| There are no project-specific Technical Questions for this credit. |  |
| There are project-specific Technical Questions for this credit and all responses received from the NZGBC are attached. |  |

Please provide a list of defined nominated systems for the credit compliance.

2.1 Conditional Requirement

**2.1.1 ENVIRONMENTAL PERFORMANCE TARGET**

It is a conditional requirement for this credit that the project team has set and documented targets for the environmental performance of the project. The following is included in the design intent report or owner’s project requirements (OPR) document at the design phase stage:

|  |  |
| --- | --- |
| **Document Content** | **Project Document** Refer to specific relevant section of the document (page no. or section) |
| Definition of all nominated systems. | [####] |
| Description of the basic functions, operations, and maintenance of the nominated systems. | [####] |
| Detail of the main components. | [####] |
| Target for energy consumption and budget for energy. | [####] |
| Target for water consumption and budget for water. | [####] |
| Indoor environment parameters. | [####] |
| Description of metering and monitoring systems. | [####] |
| Sign-off from the asset owner. | [####] |

Note: See Compliance Requirements for further detail on document content requirements.

**2.1.2 BUILDING COMMISSIONING**

Comprehensive pre-commissioning and commissioning activities have been performed for all nominated building systems.

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| --- | --- |
| Detailed commissioning requirements for the project are listed in the contractual tender or construction documentation for each system. | ☐ |
| A commissioning plan has been developed for the project. | ☐ |

Please provide a summary of the process carried out as part of the building commissioning plan and a short description of how this requirement has been met.

Identify where this information can be found within the supporting documentation provided.

|  |  |
| --- | --- |
| **Supporting Documentation**   (Name / title / description of document) | **Reference**  (Page no. or section) |
| [####] | [####] |
| [####] | [####] |

**2.1.3 BUILDING SYSTEMS TUNING**

A tuning process is in place that addresses all nominated building systems.

|  |  |
| --- | --- |
| The owner/client has formally committed to a tuning process prior to occupation for all nominated building systems. | ☐ |
| The commitment includes quarterly adjustments and measurement for the first 12 months after occupation and a review of building system manufacturer warranties. | ☐ |
| The building tuning process requires the analysis of data from the monitoring systems and assessment of feedback from occupants on building conditions. | ☐ |
| Operating and Maintenance Manuals have been developed in accordance with approved standards and guidelines | ☐ |
| A building tuning manual or plan has been developed in accordance with the approved standards and guidelines | ☐ |
| A building tuning team has been created, including the facilities manager, the owner’s representative and the ICA (if applicable).  The head contractor and the services design professionals are available to address specific tuning issues where required. | ☐ |
| The owner has engaged parties to tune the nominated systems with requirements for:   * Verification that nominated systems are performing to their design potential at full and part load conditions; * Reviews of environmental performance against the environmental targets; * Collection of user feedback to match the system performance with the occupant’s needs; * Adjustment of all the systems to account for all deficiencies discovered; and * Management, communication, and assignment of responsibilities for the tuning process within the team. | ☐ |

Provide a short description of the building tuning commitment that has been agreed.

Identify where this information can be found within the supporting documentation provided.

|  |  |
| --- | --- |
| **Supporting Documentation**   (Name / title / description of document) | **Reference**  (Page no. or section) |
| [####] | [####] |
| [####] | [####] |

2.2 services and maintainability review

|  |  |
| --- | --- |
| A comprehensive services and maintainability review of the project has been performed during the design stage and prior to construction. | ☐ |
| The services and maintainability review and its outcomes are summarised in a ‘Service and Maintainability Report.’ This report has been agreed and signed off by the involved parties. Action items resulting from this review have been incorporated in the design intent report or OPR. | ☐ |

Please provide a short description of how this credit requirement has been met and details of those responsible for the review.

Identify where this information can be found within the supporting documentation provided.

|  |  |
| --- | --- |
| **Supporting Documentation** (Name / title / description of document) | **Reference** (Page no. or section) |
| [####] | [####] |
| [####] | [####] |

2.3 independent commissioning agent

|  |  |
| --- | --- |
| n Independent Commissioning Agent (ICA) has advised, monitored, and verified the commissioning and tuning of the nominated building systems throughout the design, tender, construction, commissioning and tuning phases. |  |

Please provide details of the Independent Commissioning Agent and the services they provided to the project.

Identify where this information can be found within the supporting documentation provided.

|  |  |
| --- | --- |
| **Supporting Documentation** (Name / title / description of document) | **Reference** (Page no. or section) |
| [####] | [####] |
| [####] | [####] |

## DISCUSSION

Outline any issues you would like to highlight and clarify with the Certified Assessor(s).

## DECLARATION

I confirm that the information provided in this document is truthful and accurate at the time of completion.

Provide author details, including name, position and email address:

[Date]

––– Report end –––