

Green Star SA – Commissioning and Building Tuning Supplementary Guidance Document

25 August 2016

Introduction

The document below is intended to act as supplementary guidance to the Man-2 and Man-3 credits in the new build Green Star SA Technical Manuals. Note that compliance with all information contained within this document is mandatory to any projects that have registered after the document's release.

The main area addressed within this document is as follow:

1. Guidance on building services / sub-services included within the scope of Man-2 and Man-3.

1. Building services / sub-services included within the scope of Man-2 and Man-3.

The table below shows which services are required to be addressed under both the Man-2 and Man-3 credits, and for Man-2, shows which ASHRAE / CIBSE documents are applicable to each in terms of the credit criteria.

Where ASHRAE based Commissioning is implemented, then the only relevant codes are the two ASHRAE Guidelines mentioned in the table. Where CIBSE based Commissioning is implemented, then CIBSE Code M – Management is to be used in conjunction with the other applicable CIBSE codes and/or Nominated Commissioning where required. Where no suitable ASHRAE / CIBSE document is available, the project team's 'Nominated Commissioning' applies. Please note further guidance on 'Nominated Commissioning' given below this table.

Service / Discipline Sub-Service	Man-2 Commissioning										Man-3 Building Tuning
	Within Scope?	ASHRAE Guideline 1.1-2007 and Guideline 0-2013	CIBSE Code M - Management	CIBSE Code A - Air Distribution	CIBSE Code B - Boilers	CIBSE Code C - Auto. Controls	CIBSE Code L - Lighting	CIBSE Code R - Refrigeration	CIBSE Code W - Water Distribution	* Nominated Commissioning	Within Scope?
1 HVAC Services											
cooling plant	✓	✓	✓					✓			✓
heating plant	✓	✓	✓		✓			✓			✓
air distribution	✓	✓	✓	✓							✓
water distribution	✓	✓	✓						✓		✓
HVAC controls	✓	✓	✓			✓					✓
2 Electrical Services											
lighting (& controls) – interior	✓	✓	✓				✓				✓
lighting (& controls) - exterior	✓	✓	✓				✓				✓
electrical distribution (including controls)	✓	✓	✓						✓		✓

Service / Discipline Sub-Service		Man-2 Commissioning										Man-3 Building Tuning
		Within Scope?	ASHRAE Guideline 1.1-2007 and Guideline 0-2013	CIBSE Code M - Management	CIBSE Code A - Air Distribution	CIBSE Code B - Boilers	CIBSE Code C - Auto. Controls	CIBSE Code L - Lighting	CIBSE Code R - Refrigeration	CIBSE Code W - Water Distribution	* Nominated Commissioning	Within Scope?
3	Vertical											
	lifts/escalators	✓	✓	✓							✓	✓
4	Wet Services											
	DHW systems - boilers	✓	✓	✓		✓						✓
	DHW systems - heat pumps	✓	✓	✓				✓				✓
	DHW systems - solar	✓	✓	✓							✓	✓
	DHW systems - direct electric	✓	✓	✓							✓	✓
	water distribution	✓	✓	✓					✓			✗
	water recycling systems - black/grey/rain	✓	✓	✓					✓	✓		✓
	wet services controls	✓	✓	✓			✓					✓
5	Fire Services											
	water distribution	✓	✓	✓					✓			✗
	controls	✓	✓	✓			✓					✗
6	ICT Services											
	electrical distribution	✗										✗
	ICT controls	✗										✗
	security	✗										✗
7	Controls											
	BMS/BAS/DDC systems	✓	✓	✓			✓					✓
	metering (energy/water)	✓	✓	✓						✓		✓
8	Miscellaneous											
	irrigation controls	✓	✓	✓						✓		✓
	irrigation system	✓	✓	✓						✓		✓

Table 1: Building services / sub-services included within the scope of Man-2 and Man-3.

***Nominated Commissioning**

Where there is neither an applicable CIBSE Commissioning Code nor applicable ASHRAE Commissioning Guideline to the commissioning of systems, it is at the Project Teams' discretion as to the most appropriate commissioning methodology and process applicable to the equipment.

For a Design rating, the Project Team must demonstrate, in accordance with the Documentation Requirements of the applicable new build Green Star SA Technical Manual, that;

- Comprehensive pre-commissioning, commissioning and quality monitoring are contractually required to be performed for the specific system, by providing the nominated commissioning methodology within the Contract Documentation; and,
- The activities required by the nominated commissioning methodology are included within the project timeline/programme.

For an As Built submission, the Project Team must demonstrate, in accordance with the Documentation Requirements of the applicable new build Green Star SA Technical Manual, that;

- *The outcomes of the nominated commissioning methodology and system(s) commissioning have been included within the Commissioning Report.*