

The following standard specification is intended to be edited according to the specifics of the project. Brackets [] and areas shaded in gray [e.g. format] indicate requirements that are optional depending upon the type of system being provided or per instructions associated with the [] and project requirements. Consult with University's Representative and campus stakeholders.

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SECTION 22 08 00 COMMISSIONING OF PLUMBING

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Commission all systems and equipment listed in the table below per the requirements of Section 01 91 00 Commissioning. The Installation/Start-up Verification (ISV) and Functional Performance Test (FPT) forms listed are required [and will be provided by the University]. Refer to the project website for standard commissioning forms.

[Edit the table and the checklists as required by the project.]

Equipment/System	ISV Form	FPT Form
Facility Water Distribution	ISV-22 11 00	FPT-22 11 00
Domestic Water Packaged Booster Pumps	ISV-22 11 23.13	w/ FPT-22 11 00
Facility Sanitary Sewerage	ISV-22 13 00	N/A
Facility Storm Drainage	ISV-22 14 00	N/A
Electric Domestic Water Heaters	ISV-22 33 00	w/ FPT-22 11 00
Commercial Gas Domestic Water Heaters	ISV-22 34 36	w/ FPT-22 11 00
Domestic Water Heat Exchangers	ISV-22 35 00	w/ FPT-22 11 00
Plumbing Fixtures	ISV-22 40 00	w/ FPT-22 11 00
Compressed-Air Systems for Laboratory and Healthcare Facilities	ISV-22 61 00	FPT-22 61 00
Vacuum Systems for Laboratory and Healthcare Facilities	ISV-22 62 00	FPT-22 62 00
Gas System for Laboratory and Healthcare Facilities	ISV-22 63 00	N/A
Processed Water Systems for Laboratory and Healthcare Facilities	ISV-22 67 00	FPT-22 67 00

1.2 RELATED WORK AND DOCUMENTS

- A. Section 01 79 00 Demonstration and Training
B. Section 01 91 00 Commissioning
C. Division 22 Plumbing

1.3 COMMISSIONING DEFINITIONS AND ABBREVIATIONS

- A. Refer to Section 01 91 00 Commissioning

1.4 REFERENCE STANDARDS

- A. American Society for Testing and Materials (ASTM)
B. Associated Air Balance Counsel (AABC) Guidelines for Balancing Procedures and Documentation

1.5 SUBMITTALS

- A. Submit commissioning documents for all equipment and systems listed in table above per the requirements of Section 01 91 00 Commissioning.

PART 2 - PRODUCTS

2.1 INSTRUMENTATION

- A. Refer to Section 01 91 00 Commissioning.

PART 3 - EXECUTION

3.1 INSTALLATION/START-UP VERIFICATION

- A. Perform all checks and tests included in the ISV checklists and complete the checklists as specified in Section 01 91 00 Commissioning.

3.2 FUNCTIONAL PERFORMANCE TESTS

- A. Perform all checks and tests included in the FPT checklists and complete the checklists as specified in Section 01 91 00 Commissioning.

3.3 TRAINING OF UNIVERSITY PERSONNEL

- B. Provide training of University's personnel for the number of hours specified in the table below and as specified in Section 01 79 00 Demonstration and Training.

[Edit the table as required by the project. Project Manager to coordinate with DCM Engineering and FM]

Equipment/System	Section Number	Orientation Hours	Training Hours	DVD Recording
Facility Water Distribution System	22 11 00	2	8	N/A
Facility Sanitary Sewerage System	22 13 00	2	N/A	N/A
Facility Storm Drainage System	22 14 00	2	N/A	N/A
Compressed-Air Systems for Laboratory and Healthcare Facilities	22 61 00	2	4	N/A
Vacuum Systems for Laboratory and Healthcare Facilities	22 62 00	2	4	N/A
Gas System for Laboratory and Healthcare Facilities	22 63 00	2	4	N/A
Processed Water Systems for Laboratory and Healthcare Facilities	22 67 00	2	4	N/A

END OF SECTION 22 08 00