

1323.0672 SECTION 6.7.2, COMPLETION REQUIREMENTS.

Subpart 1. **Drawings.** ASHRAE Standard 90.1, Section 6.7.2.1, is amended to read:

6.7.2.1 Drawings. Construction documents shall require that within 60 days after the date of system acceptance, record drawings of the actual installation be provided to the building owner or the designated representative of the building owner. Record drawings shall include as a minimum the location and performance data on each piece of equipment, general configuration of duct and pipe distribution system including sizes, and the terminal air or water design flow rates.

Subp. 2. **Manuals.** ASHRAE Standard 90.1, Section 6.7.2.2, is amended to read:

6.7.2.2 Manuals. Construction documents shall require that an operating manual and a maintenance manual be provided to the building owner or the designated representative of the building owner within 60 days after the date of system acceptance. These manuals shall be in accordance with industry-accepted standards (see Appendix E) and shall include, at a minimum, the following:

- (a) Submittal data stating equipment size and selected options for each piece of equipment requiring maintenance.
- (b) Operation manuals and maintenance manuals for each piece of equipment requiring maintenance, except equipment not furnished as part of the project. Required routine maintenance actions shall be clearly identified.
- (c) Names and addresses of at least one service agency.
- (d) HVAC controls system maintenance and calibration information, including wiring diagrams, schematics, and control sequence descriptions. Desired or field-determined setpoints shall be permanently recorded on control drawings at control devices or, for digital control systems, in programming comments.
- (e) A complete narrative of how each system is intended to operate, including suggested setpoints.

Subp. 3. **HVAC system acceptance testing.** ASHRAE Standard 90.1, Section 6.7.2.4, is amended to read:

6.7.2.4 HVAC system acceptance testing. HVAC systems shall be tested and adjusted for function and performance to ensure that control elements are calibrated, and in proper working condition and that components, equipment, systems, and interfaces between systems conform to the construction documents. Acceptance testing and documentation shall be completed in

accordance with Sections 7.2.9, 7.2.10, 7.2.13, and 7.2.15 of ASHRAE Guideline 0-2005, "The Commissioning Process," and the documentation shall be submitted to the building official upon request.

Exceptions:

(a) Semiconditioned spaces within buildings.

(b) Buildings complying with the HVAC provisions in Appendix A of Acceptance Requirements from "Advanced Buildings: Energy Benchmark for High Performance Buildings," 2004, New Buildings Institute and documented as required by Section 6.7.2.4.

Statutory Authority: *MS s 326B.02; 326B.101; 326B.106; 326B.13*

History: *33 SR 1473*

Published Electronically: *June 17, 2009*