

DIVISION 21

210100 Fire Protection System Design

- Modified paragraph 2 of the Design Guidelines: UM Director of FPD in lieu of campus PM.
- On page 4 of 9, inserted Title for “CONTRACT DRAWINGS” and renumbered starting at 1 to better separate and identify requirements related to the contract drawings prepared by the designer prior to bidding.
- Inserted a general note on page 5 of 9, new paragraph 1.1.5 to include air venting valve(s) on drawings per NFPA 13, section 8.1.5 and 16.7.
- Removed requirement for Type S seamless steel pipe - See paragraph 7, on page 7 of 9. Industry is using Type E (Electric Resistance Welded Seam).

DIVISION 22

22 1000 Plumbing Piping and Specialties

In 2020, Q1, the above grade storm and sanitary piping was changed to solid-wall, Schedule 40, PVC pipe in lieu of cast-iron no-hub piping systems. This did not include hospital facilities or lab waste systems. See notations in left margin.

DIVISION 23

230000 Heating Ventilating and Air-Conditioning (HVAC)

- Paragraph 6.4 Chilled water coils shall be selected based on a 15° ΔT across the coil with an inlet chilled water temperature of 45 °F and an outlet temperature of 60 °F. Exceptions may apply as noted.

232100 Building Hydronic Piping and Pump Systems

Updated Design General section #2; Chilled water systems will operate at 45°F with a 15° ΔT temperature difference.

233000 HVAC Air Distribution

Added a sentence in paragraph E.1 “Insulation of the plenums must meet or exceed ASHRAE 90.1 as if semi-heated space regardless of whether the room is conditioned.”

233600 Air Terminal Units

New Details:

233600 VAV Hot Water Reheat Coil Piping Detail (MU) *NEW*

233600 VAV Hot Water Reheat Coil Piping Detail (MUHC) *NEW*

237000 Central Air Handling Units

Design General – See revisions noted in left margin

- Paragraph 2.2 – Allowed increase in maximum rows in a chilled water coil.
- Paragraph 2.4 – Cooling coils shall be selected for a 45°F with a 15° ΔT. Exceptions may apply as noted in 23 0000 HVAC.
- Paragraph 4.2 – 4.4 was redundant with requirements in 23 3400 Fans.
- Paragraph 5 – Filters: Updated minimum MERV ratings.

Specification Requirements – See revisions noted in left margin

- Paragraph 3 - Fan Section – 3.2 to 3.9 was identical to requirements in 23 34000 Fans.
- Paragraph 4.1 – 4.5 was identical to requirements in 23 3400 Fans.
- Paragraph 5 – Coils:
 - 5.2 – Was redundant with 2.2 Coils.
 - Added paragraphs 5.3 – 5.5
- Paragraph 7 – Filters: Added paragraph 7.3

237000 AHU Chilled Water Coil Piping Detail

Previously “AHU Chilled Water Coil - Single”. Updated and revised format.

237000 AHU Chilled Water Coil Piping Detail-Multiple (*NEW*)

| = Revisions. ■ = Section deletion. N = New material

237000 AHU Hot Water Heating Coil Piping Detail (NEW)

237000 AHU Hot Water Heating Coil Piping Detail-Multiple (NEW)

237000 AHU Hot Water Preheat Coil Piping Detail

Previously “AHU Hot Water Preheat Coil Piping Drawing”. Updated and revised format

237000 AHU Hot Water Preheat Coil Piping Detail-Multiple (NEW)

237000 AHU Hot Water Reheat Coil Piping Detail

Previously “AHU Hot Water Reheat Coil Piping Drawing”. Updated and revised format.

Fan Coil Unit Piping Detail (NEW)

New detail

DIVISION 26

260500 Common Work Results for Electrical

Deleted paragraph that is redundant with Paragraph 7 in Section **262726 Wiring Devices**.

262416 Panelboards

Deleted paragraph 4 as it is outdated. Deleted paragraph 7 as it is covered in **262726 Wiring Devices**.

262726 Wiring Devices

Paragraph 7 - Added a wire connector option.

DIVISION 27

27-0000 Telecom Room

Deleted and replaced with separate versions for each campus. The updated/new versions include: rated wall construction, no ceilings, fire/smoke damper and fire rated penetration call outs for the room, floor loading criteria, and a consistent equipment heat load assumption across all four campuses.

270000 Telecom Building Construction Standards MU & UMSL

Moved from FPD Documents Page to Division Guidelines on UM FPD’s website. *Revisions noted in left indent.* Additions/revisions to accommodate UMSL campus into these guidelines in red text.

270000 Telephone and Data Rooms UMKC

Numerous edits to previous edition to separate the MU campus guidelines from other campuses. See additions/revisions in red text.

270000 Telecommunications MS&T (NEW)

Design guidelines provided by Missouri S&T. Red text denotes changes to Missouri S&T’s previous version.

DIVISION 33

336113 Hydronic Energy Distribution

Numerous updates throughout.

Updated the following details (dwg and pdf):

- 336113 CW Pipe Wall Penetration Detail.dwg
- 336113 CW Vent Box Detail.dwg (*completely revised*)
- 336113 Steam Chase Crossing Detail.dwg
- 336113 Trench at Asphalt Paving Detail.dwg
- 336113 Trench at Street Detail.dwg
- 336113 Trench in Grass Detail.dwg
- 336113 Vertical Offset Detail.dwg

| = Revisions. ■ = Section deletion. N = New material

336115 Hydronic Energy Distribution Electrical Components

- Updated 1.1 Fiber Junction Boxes heading, and paragraph 1.1.1 entirely.
- Added 3” diameter to Fiber Controls conduit in 1.1.2
- Updated the following details (dwg and pdf):
 - 336115 CW Conduit Wall Penetration Detail.dwg
 - 336115 Process Control Fiber Box Detail.dwg

(end)