

PLANNING, DESIGN AND CONSTRUCTION

INFRASTRUCTURE PLANNING AND FACILITIES

CONSTRUCTION STANDARDS UPDATES

March 2026

Greetings,

This is the latest issue from IPF's Construction Standards Committee detailing recent changes to MSU's Construction Standards.

We hope that you will find these updates useful when planning and performing work at MSU. A comprehensive list of design and construction standards is available on the [IPF website](#).

The MSU Planning, Design and Construction Team

DESIGN GUIDELINES

New

- [Loading Docks](#)

TECHNICAL STANDARDS

New

- [044200 - Stone Assemblies](#)
- [061600 - Exterior Gypsum Sheathing](#)
- [070543.11 - Composite Cladding Support Systems](#)
- [072700 - Air Barriers](#)
- [074213.19 - Insulated Metal Wall Panels](#)
- [074213.23 - Metal Composite Material Wall Panels](#)
- [075110 - Built-Up Roofing System Alteration](#)

- [077100 - Roof Specialties](#)
- [077123 - Manufactured Gutters and Downspouts](#)
- [084413 - Glazed Aluminum Curtain Walls](#)
- [089100 - Louvers](#)

Extensive Revisions

- [042000 - Unit Masonry](#)
- [071326 - Self-Adhering Sheet Waterproofing](#)
- [072100 - Thermal Insulation](#)
- [075500 - Protected Membrane Roofing](#)
- [076200 - Sheet Metal Flashing and Trim](#)
- [084113 - Aluminum-Framed Entrances and Storefronts](#)
- [088000 - Glazing](#)
- [264113 - Lightning Protection for Structures](#)

Updated

- [223500 - Domestic Water Heat Exchangers](#)
 - 2.2.A.4. Instantaneous Heat Exchangers - Added: “Gaskets: All domestic water Shell and Tube HX gaskets shall be Corrugated Metal Core with Graphite face or Spiral Wound.”
- [226119 - Compressed Air Equipment for Laboratory Facilities](#)
 - Designer note added: “This section is under review by MSU and will have different manufacturers and model numbers depending on the use of the building. Please get with your project specific mechanical SME for the most current manufacturer and model number of compressed air equipment.”
- [230913 - Instrumentation and Control Devices for HVAC](#)
 - 2.7. Changed heading to “CONTROL DAMPER AND VALVE”
- [230923 - Direct Digital Control System for HVAC](#)
 - 2.2.B. Current Sensing Relays / Manufacturers - Adding wording: “or equivalent equal as needed to meet necessary amperage range.”
- [232113 - Hydronic Piping](#)
 - 2.2.H.4. Steel Pipe and Fittings - New wording: “Flanged Joints: Select appropriate gasket material, size, type and thickness for service application. Install gasket concentrically positioned. Use suitable lubricants on bolt threads.
 - a. Preferred gasket types:
 1. Flexible Graphite with metal core (ex. Elastagraph, Graphonic)
 2. Spiral Wound (Ex. Flexitallic)

- 3. PTFE with metal core (Ex. Elastalon, Tephonic)”
 - 3.1.J.2. Condensate-Drain Piping - Removed wording: “but not less than 1-1/2””
 - 3.1.J.4. Condensate-Drain Piping - Removed wording: “3’ intervals for PVC and”
- [232123 - Hydronic Pumps](#)
 - 2.2 Close-Coupled, In-Line Centrifugal Pumps – Designer Note - Removed “Limit to 5HP or less.”
 - 2.2.A. Manufacturers - Removed: Grundfos Pumps Corporation. Added: Armstrong International, Inc.
 - 2.3.A. Manufacturers - Added Armstrong International, Inc.
 - 2.4.A. Manufacturers - Added Armstrong International, Inc.
 - 3.2.E. Pump Installation - Updated to: “Suspend in-line centrifugal pumps no higher than 60” AFF and support independent of piping.”
 - 3.2.F. Added new wording: “Any install greater than 2 HP shall have hook or lifting source attached to motor/pump with overhead rails appropriate for pump weight. Pump assemblies greater than 25 HP shall utilize a rail system.”
 - 3.2.H. Updated wording to: “All base mounted pumps to be installed on concrete filled inertia bases. Inertia bases to be set on 4” housekeeping pad. Inertia bases to be installed with a minimum of 30” in between one another to allow for a proper maintenance and service working area. Disconnect coupling before setting. Do not reconnect couplings until alignment procedure is complete.”
 - 3.4.J. Connections - Added wording: “Allow slack in flexible electrical connection for ease of pump removal.”
- [232213 - Steam and Condensate Heating Piping](#)
 - 2.2. Steel Pipe and Fittings - Removed items previously C & D: “Malleable-Iron Threaded Fittings: ASME B16.3; Classes 150 and 300 as indicated in Part 3 piping applications articles. Malleable-Iron Unions: ASME B16.39; Classes 150, 250, and 300 as indicated in Part 3 piping applications articles.”
 - 3.5.J. Piping Installation - Added new wording: “Flanged Joints: Select appropriate gasket material, size, type and thickness for service application. Install gasket concentrically positioned. Use suitable lubricants on bolt threads.”
- [233300 - Air Duct Accessories](#)
 - 1.3.B. Removed LEED Submittal wording
 - 3.1.B. Removed Designer note referencing LEED

- 3.1.I. Extensive changes to section...please review
- [235700 - Heat Exchangers for HVAC](#)
 - 2.2.H. Products - Added: "Gaskets: All Shell and Tube HX gaskets shall be Metal Corrugated Core with Graphite Face or Spiral Wound."
- [238318 - Snow Melting Equipment](#)
 - 1.6.B.4. System Description/Design Criteria-Parameters/Heat Source - Removed: "Ethylene"

STANDARD DETAILS

New

- [230913 - Differential Pressure Sensing Device](#)
- [233600 - Terminal Unit with Hot Water Coil Schedule](#)
- [233713 - Grille, Register and Diffuser Schedule](#)

Updated

- [232123 - Base Mounted End Suction Pump Piping Diagram](#)
- [232123 - Horizontal Split Case Pump Piping Diagram](#)
- [232123 - In-line Circulating Pump Piping Diagram](#)
- [232213 - Steam Vent Connector](#)
- [232213 - Steam Drip Leg](#)
- [232500 - Chemical Shot Feeder Piping Diagram](#)
- [233600 - VAV Box Installation](#)

Removed

- 232213 - Steam Safety Drip Elbow



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