



ADDENDUM NO. #1 – MEP

DATE: 04/28/2026

PROJECT: BL000B Multi Building:
BL414 Myles Brand, BL059 Lindley Hall, BL157 Fine Arts Classroom
Renovation
Indiana University - Bloomington

IU PROJECT NUMBER: 20251264

TEC PROJECT NUMBER: 25033

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MECHANICAL, ELECTRICAL

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This Addendum is issued in accordance with the provisions of The Project Manual for Construction, dated 04/07/2026, and becomes a part of the Contract Documents as provided therein. The information contained herein modifies the original Bidding Documents dated 04/07/2026 and all prior Addenda as applicable. Requirements of the original Bidding Documents and previous Addenda remain in effect except as modified by this Addendum. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

1. Added Titus HVAC to the acceptable manufacturers list for Specification Sections 23 36 00 SF – Fan Coil Units and 23 37 13 SF_T – Diffusers, Registers, and Grilles, dated 04/28/2026.

END OF MEP ADDENDUM NO. 01

SECTION 23 3600
FAN COIL UNITS

SECTION 233600 – FAN COIL UNITS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
1. Modulating, single-duct air terminal units.
 2. Casing liner.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of air terminal unit.
- B. Shop Drawings: For air terminal units.
1. Include plans, elevations, sections, and mounting details.
 2. Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
 3. Include diagrams for power, signal, and control wiring.

1.3 INFORMATIONAL SUBMITTALS

- A. Field quality-control reports.

1.4 CLOSEOUT SUBMITTALS

- A. Operation and maintenance data.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a Qualified Electrical Testing Laboratory, and marked for intended location and application.

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- B. ASHRAE 62.1 Compliance: Applicable requirements in ASHRAE 62.1, Section 5 - "Systems and Equipment," and Section 7 - "Construction and System Start-up."

2.2 MODULATING, SINGLE-DUCT AIR TERMINAL UNITS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Carrier Global Corporation.
2. International Environmental Corporation.
3. Trane.
4. Titus.

- B. Casing: Minimum 18-gauge- thick galvanized steel.
1. Air Inlet: duct collar for duct attachment.
 2. Air Outlet: duct collar for duct attachment.
 3. Access: Removable panels for access to parts requiring service, adjustment, or maintenance; with airtight gasket.
- C. Velocity Sensors: Multipoint array with velocity inlet sensors.
- D. Attenuator Section: Casing material and thickness matching associated air terminal unit casing. Provide attenuator integral with the air terminal unit, with noise transmission loss performance as required in schedules on Drawings.
- E. Hydronic Heating Coils: Copper tube, with mechanically bonded aluminum fins spaced no closer than 0.08 inch (2.0 mm). Include manual air vent and drain valve. Provide hydronic heating coils for air terminal units scheduled on Drawings.
- F. Direct Digital Controls: re-use existing.

2.3 CASING LINER

- A. Casing Liner, Fibrous Glass: Fibrous-glass duct liner, complying with ASTM C1071, NFPA 90A or NFPA 90B, and with NAIMA AH124.
1. Minimum Thickness: 1/2 inch (13 mm).

2.4 SOURCE QUALITY CONTROL

- A. AHRI 880: Test and rate assembled air terminal units in accordance with AHRI 880.

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- B. Water Coils: Factory pressure test to 300 psig (2070 kPa) in accordance with AHRI 410 and ASHRAE 33.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Install fan coil units according to NFPA 90A.
- B. Install fan coil units level and plumb. Maintain sufficient clearance for normal service and maintenance.
- C. Re-use existing controls.

3.2 PIPING CONNECTIONS

- A. Where installing piping adjacent to fan coil unit, allow space for service and maintenance.
- B. Hydronic Piping: Comply with requirements in Section 232113 "Hydronic Piping" and Section 232116 "Hydronic Piping Specialties," and connect coil to supply piping with shutoff valve, strainer, control valve, and union or flange; and to return piping with balancing valve and union or flange.

3.3 DUCTWORK CONNECTIONS

- A. Comply with requirements in Section 233113 "Metal Ducts" for connecting ducts to fan coil units.
- B. Make connections to fan coil units with flexible connectors complying with requirements in Section 233300 "Duct Accessories."

3.4 ELECTRICAL CONNECTIONS

- A. Install field power to each fan coil unit electrical power connection. Coordinate with air terminal unit manufacturer and installers.
- B. Connect wiring in accordance with Section 260519 "Low-Voltage Electrical Power Conductors and Cables."

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- C. Ground equipment in accordance with Section 260526 "Grounding and Bonding for Electrical Systems."
- D. Install electrical devices furnished by manufacturer, but not factory mounted, in accordance with NFPA 70 and NECA 1.
- E. Install nameplate for each electrical connection, indicating electrical equipment designation and circuit number feeding connection.
 - 1. Nameplate shall be laminated acrylic or melamine plastic signs, as specified in Section 260553 "Identification for Electrical Systems."

3.5 CONTROL CONNECTIONS

- A. Install control and electrical power wiring to field-mounted control devices.
- B. Connect control wiring in accordance with Section 260523 "Control-Voltage Electrical Power Cables."

3.6 IDENTIFICATION

- A. Label each fan coil unit with drawing designation, nominal airflow, maximum and minimum factory-set airflows.

3.7 STARTUP SERVICE

- A. Perform startup service.
 - 1. Complete installation and startup checks in accordance with manufacturer's written instructions.
 - 2. Verify that inlet duct connections are as recommended by air terminal unit manufacturer to achieve proper performance.
 - 3. Verify that controls and control enclosure are accessible.
 - 4. Verify that control connections are complete.
 - 5. Verify that nameplate and identification tag are visible.
 - 6. Verify that controls respond to inputs as specified.
 - 7. .

3.8 ADJUSTING

- A. Comply with requirements for fan coil unit testing, adjusting, and balancing.

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3.9 FIELD QUALITY CONTROL

- A. Testing Agency: Contractor will engage a qualified testing agency to perform tests and inspections.
- B. Perform the following tests and inspections:
 - 1. After installing fan coil units and after electrical circuitry has been energized, test for compliance with requirements.
 - 2. Leak Test: After installation, fill water coils and test for leaks. Repair leaks and retest until no leaks exist.
 - 3. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation.
 - 4. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- C. Fan coil unit will be considered defective if it does not pass tests and inspections.
- D. Prepare test and inspection reports.

3.10 DEMONSTRATION

- A. Train Owner's maintenance personnel to adjust, operate, and maintain fan coil units.

END OF SECTION 233600

SECTION 23 3713
DIFFUSERS, REGISTERS, AND GRILLES

SECTION 233713 - DIFFUSERS, REGISTERS, AND GRILLES

PART 1 - GENERAL

1.1 Refer to Plans and Schedules.

PART 2 - PRODUCTS

2.1 TERMINAL OUTLETS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. Price Industries.
 2. METALAIRE, Inc.
 3. Nailor Industries Inc.
 4. Titus.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install diffusers, registers, and grilles level and plumb.
- B. Ceiling-Mounted Outlets and Inlets: Drawings indicate general arrangement of ducts, fittings, and accessories. Air outlet and inlet locations have been indicated to achieve design requirements for air volume, noise criteria, airflow pattern, throw, and pressure drop. Make final locations where indicated, as much as practical. For units installed in lay-in ceiling panels, locate units in the center of panel. Where architectural features or other items conflict with installation, notify Architect for a determination of final location.
- C. Install diffusers, registers, and grilles with airtight connections to ducts and to allow service and maintenance of dampers, air extractors, and fire dampers.

3.2 ADJUSTING

- A. After installation, adjust diffusers, registers, and grilles to air patterns indicated, or as directed, before starting air balancing.

END OF SECTION