

ADDENDUM



SECTION 00 91 11.02 - ADDENDUM 002

OWNER

INDIANA UNIVERSITY

PROJECT

**20251272 BL601 MEMORIAL STADIUM - NEW
HVAC AND HEATING SYSTEM**

A/E PROJECT 100038

PURPOSE

**THIS ADDENDUM SHALL FORM PART OF THE
BIDDING DOCUMENTS. CHANGES, ADDITIONS,
CLARIFICATION OR DELETIONS HEREIN
SUPERSEDE THE DRAWINGS AND
SPECIFICATIONS. BIDDERS SHALL INCLUDE
ON THE PROPOSAL FORM
ACKNOWLEDGEMENT OF THE RECEIPT OF
THIS ADDENDUM.**

ATTACHMENTS

REISSUED SPECIFICATIONS: 23 37 00

ARCHITECT-ENGINEER

**GMB
317.641.0674
WWW.GMB.COM**

ADDENDUM



SPECIFICATION CLARIFICATIONS / REVISIONS

1.1 SECTION 23 37 00 AIR INLETS AND OUTLETS (REISSUED)

- A. Added Metalaire as an acceptable Manufacturer in sections 2.2 thru 2.4

END OF SECTION

SECTION 23 37 00 - AIR OUTLETS AND INLETS

(ADDENDUM 002)

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Diffusers:
- B. Rectangular ceiling diffusers.
- C. Registers/grilles:
 - 1. Ceiling-mounted, exhaust and return register/grilles.
 - 2. Wall-mounted, exhaust and return register/grilles.
- D. Duct-mounted supply and return registers/louvers.
- E. Goosenecks.

1.2 RELATED REQUIREMENTS

- A. Section 09 91 00 - Mechanical and Electrical Painting: Painting of ducts visible behind outlets and inlets.

1.3 REFERENCE STANDARDS

- A. ASHRAE Std 70 - Method of Testing the Performance of Air Outlets and Air Inlets.
- B. SMACNA (ASMM) - Architectural Sheet Metal Manual.
- C. SMACNA (DCS) - HVAC Duct Construction Standards Metal and Flexible.

1.4 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements for submittal procedures.
- B. Product Data: Provide data for equipment required for this project. Review outlets and inlets as to size, finish, and type of mounting prior to submission. Submit schedule of outlets and inlets showing type, size, location, application, and noise level.

1.5 QUALITY ASSURANCE

- A. Test and rate air outlet and inlet performance in accordance with ASHRAE Std 70.

PART 2 PRODUCTS

2.1 RECTANGULAR CEILING DIFFUSERS

- A. Manufacturers:
 - 1. Krueger-HVAC
 - 2. Metalaire, a brand of Metal Industries Inc: www.metalaire.com/#sle.
 - 3. Nailor Industries
 - 4. Price Industries
 - 5. Titus, a brand of Air Distribution Technologies
- B. Type: Provide square formed multi-louvered ceiling diffusers constructed to maintain four way discharge air pattern.
- C. Connections: As indicated on drawings.
- D. Frame: Provide inverted T-bar type. In plaster ceilings, provide plaster frame and ceiling frame.
- E. Fabrication: Material as indicated on drawings with baked acrylic finish.
- F. Color: As indicated on drawings.

2.2 DUCT-MOUNTED SUPPLY AND RETURN REGISTERS/LOUVERS

- A. Manufacturers:
 - 1. Anemostat
 - 2. Krueger-HVAC

3. Nailor Industries
 4. Price Industries
 5. Shoemaker Manufacturing
 6. Titus, a brand of Air Distribution Technologies
 7. Tuttle and Bailey
 8. [Metalaire, a brand of Metal Industries Inc\[<>\]: www.metalaire.com/#sle.](http://www.metalaire.com/#sle)
- B. Type: Duct-mounted, rectangular register with double-deflection grille with adjustable pivot-ended blades, end caps, and dual cover flanges with gaskets to seal flush to duct surface regardless of diameter. Performance to match manufacturer's catalog data.
- C. Fabrication: Aluminum with baked acrylic finish.
- D. Color: As indicated on drawings.
- E. Accessories: As indicated on drawings.

2.3 CEILING EXHAUST AND RETURN REGISTERS/GRILLES

- A. Manufacturers:
1. Krueger-HVAC
 2. Nailor Industries
 3. Price Industries
 4. Titus, a brand of Air Distribution Technologies
 5. Tuttle and Bailey
 6. [Metalaire, a brand of Metal Industries Inc\[<>\]: www.metalaire.com/#sle.](http://www.metalaire.com/#sle)
- B. Type: Streamlined blades, 3/4 inch minimum depth, 3/4 inch maximum spacing, with blades set at 45 degrees, horizontal face. Orient blades parallel to long dimension unless indicated otherwise.
- C. Frame: 1-1/4 inch margin with countersunk screw mounting.
- D. Fabrication: Aluminum with 20 gauge, 0.0359 inch minimum frame, or aluminum extrusions, with factory baked acrylic finish. Material as indicated on drawings.
- E. Color: As indicated on drawings.

2.4 WALL EXHAUST AND RETURN REGISTERS/GRILLES

- A. Manufacturers:
1. Krueger-HVAC
 2. Nailor Industries
 3. Price Industries
 4. Titus, a brand of Air Distribution Technologies
 5. [Metalaire, a brand of Metal Industries Inc\[<>\]: www.metalaire.com/#sle.](http://www.metalaire.com/#sle)
- B. Type: Streamlined and individually adjustable blades, 3/4 inch minimum depth, 3/4 inch maximum spacing, with spring or other device to set blades, horizontal face. Orient blades parallel to long dimension unless indicated otherwise.
- C. Frame: 1-1/4 inch margin with countersunk screw mounting.
- D. Fabrication: Aluminum with 20 gauge, 0.0359 inch minimum frame, or aluminum extrusions, with factory baked acrylic finish. Material as indicated on drawings.
- E. Color: As indicated on the drawings.

2.5 GOOSENECKS

- A. Fabricate in accordance with of minimum 18 gauge, 0.0598 inch galvanized steel.
- B. Mount on minimum 16 inch high curb base.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that roof is ready to receive work and opening dimensions are as indicated on shop drawings.

3.2 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Comply with SMACNA (ASMM) for flashing/counter-flashing of roof penetrations and supports for roof curbs and roof mounted equipment.
- C. Check location of outlets and inlets and make necessary adjustments in position to comply with architectural features, symmetry, and lighting arrangement.
- D. Install diffusers to ductwork with air tight connection.
- E. Paint ductwork visible behind air outlets and inlets matte black, see Section 09 91 00.
- F. Mount units on factory built roof mounting curb providing watertight enclosure to protect ductwork. Install roof mounting curb level.

3.3 CLOSEOUT ACTIVITIES

- A. Demonstrate operational system to Owner's representative.
- B. Instruct Owner's representative to maintain system and use occupant controls or interfaces, as required.

3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Replace, repair, or touch-up damaged products before Substantial Completion.

END OF SECTION