



600 Wabash Ave.
Terre Haute, IN 47807
812.234.5190
812.234.7346 Fax

PROJECT: Indiana State University
Science South Elevator

PROJECT NUMBER: 12.035

DATE: 01.29.13

PREPARED BY: Curt Schriener

ADDENDUM

Number: ONE

This Addendum is issued in accordance with the provisions of "The General Conditions of the Contract for Construction," Article 1, " Contract Documents " and becomes a part of the Contract Documents as provided therein. This Addendum includes:

- A. Addendum Pages: ADD1-1 through ADD1-1 as prepared by MMS-A/E, Inc.
- B. Attachments: Pre-Bid Meeting Report
Sign-In Sheet
Questions & Answers
New Bid Form
E.J. Cover – Spec.
Spec. Section #095113
Spec. Section #081113

PART 1 - BIDDING & CONTRACT REQUIREMENTS

- 1.01 Bid Form Revised by Owner

PART 2 - SPECIFICATIONS

- 2.01 Expansion Joint Cover Spec.
- 2.02 095113 Suspended Acoustical Ceilings
- 2.03 081113 Hollow Metal Doors and Frames
- 2.04 Remove 089119 Louvers and Vents from Specs

PART 3 - DRAWINGS

- 3.01

ISU Form PBA-12/AE

Pre-Bid Conference Agenda / Information

DATE: 1/28/2013
TIME: 2:00pm
LOCATION: Science Building

Introduce Project..... Science South Elevator
Architect/Engineer: **MMS-A/E, Inc.**

Main Contact: **Curt Schriener** Phone **(812)-234-5190** Fax: **(812)-234-7346**
E-mail cschriener@mmsae.com

All questions regarding this Project shall be submitted to the Main Contact

Introduce Facilities Management Team

Owner's Project Manager: Pat Teeters (812)-230-6141(cell) e-mail patrick.teeters@indstate.edu
Electrical/Mechanical Rep: Mark Pupilli (812)-237-8185 e-mail mark.pupilli@indstate.edu

Construction Documents Available at:

**The Bid Documents are available for download on-line at the ISU Plan Room website <http://www.indstateplanroom.com/> (Download of Bid Documents is free).
Note: Bidders must register for a free account the first time they access the website.**

**The Bid Documents may be ordered on CD (at a cost of \$7.50 per CD) or on paper copy (at applicable printing costs) from:
Rapid Reproductions, Inc. (812)-238-1681
129 South 11th Street
Terre Haute, IN 47807**

Forms for Bidding:

**Published Bid Form (Section 002000 of Project Manual)
Bid Bond or Check
Non-Collusion Affidavit (on Bid Form, submission of Bid confirms compliance)
Form 96A (or latest audited financial statement)
Addendums indicated (on Bid Form)
Duration of construction (on Bid Form)
Debarment Form (Section 001020 of Project Manual)
Diversity Participation List (Section 001040 of Project Manual)**

Submit Bids and other information to:

**Office of the Purchasing Department
Facilities Management and Purchasing Building
951 Sycamore Street
Terre Haute, Indiana 47809**

Bid Date: **2/6/2013** Time: **2:00pm**

Common Construction Wage Project: **No**

Supplier/Subcontractor list: **Appendix A, submit with Bid**

Unit Prices: **Appendix B, submit with Bid**

Type of Bid: **Single Prime**

Award Date: **Within seven (7) days or less**

Alternates: **Alternate No. 1: Renovation of the penthouse: This includes new floor structure, VCT flooring, wall base and painting**

Allowances: **1. \$3,000.00 shall be included in the Base Bid for the A/E to create Record Drawings” as detailed in Section 017700 Contract Closeout.**
2. \$5,000.00 shall be included in the Base Bid for Hardware.

Construction Dates: **The Contractor shall begin Work within seven (7) days after Award by preparing submittals and procuring materials. Actual Installation shall begin on May 6, 2013 with all Work shall be substantially completed by August 2, 2013. For this Project substantially completed is defined as fully inspected and accepted by the State of Indiana Elevator Safety Division and the elevator turned over to the Owner ready for use with no items remaining. Final closeout shall be by two (2) weeks thereafter.**

Tax Exempt (non profit) **Indiana State University is a Tax Exempt Institution and Indiana Sales Tax for products permanently incorporated in work shall not be included as part of the Bid or on any Application for Payment.**

Hours of Construction: **Normal 7:00am-4:00pm**

Permits and fees: **Include with Bid**

Asbestos or other hazardous materials: **None Anticipated; if suspicious material is encountered, stop work immediately and contact the Owner for clearance or removal.**

General Project Information and Requirements:

Site protection: **See Specifications Section 015010**

Material storage: **On-site and Off-site**

Parking: **See Section 003000 1.06 for requirements**

Communication: **Job Superintendent shall have a cellular phone.**

Fire Protection: **See Section 003000 1.08 C for requirements**

Salvage: **The Owner has the right of first salvage. The Owner will supply a list of any items, not slated for reuse, which the Owner wishes to salvage. All items to be salvaged will be delivered to a location on the ISU campus as directed by the Owner.**

Coordination With Owner: **A minimum of 48 Hours prior notification of any closings, areas to be blocked off or utility shutdowns.**

Smoking Policy: **See Section 003000 1.05 for Rules**

Owner Comments:

1. A new Section 002000 Bid Form will be issued by Addendum. This Bid form for shall be used for submission of Bids.
2. The demolition of the existing elevators shall be performed by a licensed Elevator Contractor. The Prime Bidder shall not utilize their own forces for the demolition of the elevator equipment.
3. The Building will be occupied at all times during this Project. Work shall be scheduled so as to not create too much disruption of building functions.
4. An active fire alarm system is in place and Bidder is warned to comply with requirements listed in Section 003000 1.11.

5. The bidder will need to make sure job site is secure at all times; utilizing full height, temporary walls with secure access door.

Consultant Comments:

- 1.
- 2.
- 3.

Contractor questions:

1. Is the elevator shaft considered to be a confined space by OSHA? No.
2. Where is the on-site storage? In the basement and within the secure temporary spaces.
3. Where is the best dumpster location? Near the North loading dock.
4. How should we get concrete to the site? Coordinate with the owner, but access with a truck is unlikely. Mix on site or use a buggy to haul from truck location to site.
5. What is the spec. and material of the expansion joint cover? Spec will be sent via addendum.
6. Is the equipment in the penthouse to be removed in Base Bid? Yes, all elevator equipment to be removed in base bid. The floor renovation is part of alternate #1.
7. Where is the floor base supposed to stop on each floor? The base should terminate at the stairs and perpendicular walls not included within the scope of the project.
8. When will be the final day to ask questions? End of the day, Thursday, January 31st.

Site Tour: **Yes**

Additional Site Tour: **None Scheduled. Contact Pat Teeters to schedule additional visits**

e.c. Electronic Project Folder

Sign-in Sheet

Meeting: Science South Elevator

Date: January 28, 2013 Time: 2:00 pm

Name	Pat Teeters		
Company	ISU Department of Facilities Management		
Phone	(812)-237-8187	Fax	(812)-237-7630
Cellular	(812)-230-6141	E-mail	patrick.teeters@indstate.edu

Name	Curt Schriener		
Company	MMS-A/E, Inc.		
Phone	(812) 234-5190	Fax	(812) 234-7346
Cellular	(317) 989-7320	E-mail	cschriener@mmsae.com

Name	Don Jenkins		
Company	Sycamore Engineering		
Phone	812-208-7452	Fax	
Cellular		Email	djenkins@syceng.com

Name	Jeff Strode		
Company	Evan & Ryan		
Phone	812-232-6662	Fax	812-232-6662
Cellular		E-mail	jstrode@evan-ryan.com

Name	Jon Smith		
Company	Evan & Ryan		
Phone	812-232-6662	Fax	812-232-6662
Cellular		E-mail	info@evan-ryan.com

Name	Shawn White		
Company	Garmong		
Phone	812-234-3714	Fax	812-234-1403
Cellular		E-mail	swhite@garmong.net

Sign-in Sheet

Meeting: Science South Elevator

Date: January 28, 2013 Time: 2:00 pm

Name	Wes Readinger		
Company	Hannig		
Phone	812-235-6218	Fax	812-235-1218
Cellular		E-mail	wreadinger@hannigconstruction.com

Name	Nick Roman		
Company	MSI Construction		
Phone	765-832-2472	Fax	765-828-9723
Cellular		E-mail	m.roman@msi-construction.com

Name	Tom McQueary		
Company	CDI Inc.		
Phone	812-232-3327	Fax	812-232-3825
Cellular		E-mail	twmcqueary@cdiinc.net

Name			
Company			
Phone		Fax	
Cellular		E-mail	

Name			
Company			
Phone		Fax	
Cellular		E-mail	

Name			
Company			
Phone		Fax	
Cellular		E-mail	

QUESTION AND ANSWERS:

Q1. The penthouse floor plan, room 400, calls for new concrete floor over steel deck as part of alternate #1, but section 1/A400 shows it as existing concrete floor slab. Please clarify?

A1. The floor in room 400 appears to be steel plate floor. Alternate #1 would remove the steel plate and replace with a new concrete floor and VCT.

Q2. On sheet A200, the floor plan calls for new 4" block wall as part of the elevator shaft nearest to the stairs but section 2/A400 shows it as 6" block. Please clarify.

A2. There is not any 6" block to be used in the project. Use 4" and 8" concrete blocks.

Q3. Is the elevator shaft considered to be a confined space by OSHA?

A3. No.

Q4. Where is the on-site storage?

A4. In the basement and within the secure temporary spaces.

Q5. Where is the best dumpster location?

A5. Near the North loading dock.

Q6. How should we get concrete to the site?

A6. Coordinate with the owner, but access with a cement mixer is unlikely. Mix on site or use a buggy to haul from truck location to site.

Q7. What is the spec. and material of the expansion joint cover?

A7. Spec will be sent via addendum.

Q8. Is the equipment in the penthouse to be removed in Base Bid?

A8. Yes, all elevator equipment to be removed in base bid. The floor renovation is part of Alternate 1.

Q9. Where is the floor base supposed to stop on each floor?

A9. The base should terminate at the stairs and perpendicular walls not included within the scope of the project.

Q10. When will be the final day to ask questions?

A10. End of the day, Thursday, January 31st.

002000
BID FORM

BASED ON BID FORM
FORM NO. 96
REVISED FORMAT 1/14/2013

GENERAL BID FOR PUBLIC BUILDING

PROJECT: SCIENCE SOUTH ELEVATOR

TO: INDIANA STATE UNIVERSITY
BOARD OF TRUSTEES
TERRE HAUTE, INDIANA

FROM:

(Name of Bidder) (Company Name)

(Address)

(City, State, Zip)

Phone Number _____

MBE/WBE BIDDING:

Is the Bidder (Prime Contractor) or any Subcontractor MBE or WBE Compliant? Yes No

See Section 00103 for requirements for MBE/WBE Compliance. Section 00104 must be **completed** by the **Apparent Low Bidder(s)** or any **MBE/WBE Bidder(s)** and submitted by 12:00 noon local time on the day following the Bid opening to the ISU Purchasing Department. Fax to (812)-237-3599

ADDENDA

The following Addenda have been received. The modifications to the bidding documents noted therein have been considered and all costs thereto are included in the Bid Sum(s).

Addendum # _____	Dated _____
Addendum # _____	Dated _____
Addendum # _____	Dated _____
Addendum # _____	Dated _____

OFFER:

Pursuant to and in compliance with 'Instructions to Bidders', and other Bidding Documents prepared by the Indiana State University Facilities Management Department for the above mentioned project, the undersigned, having become thoroughly familiar with the terms and conditions of the proposed Contract Documents and with local conditions affecting the performance and costs of the Work at the place where the Work is to be completed, and having fully inspected the site in all particulars, hereby proposes and agrees to fully perform the Work within the time stated and in strict accordance with the intent of the proposed Contract Documents, including furnishing bonds, insurance, labor, materials, and to do all the Work required to construct and complete in accordance with the proposed Contract Documents as follows:

002000
BID FORM

BASE BID

Removal of (2) traction elevators and gear complete, installation of (1) new traction elevator complete, General and Electrical construction to interface and accommodate new elevator per Drawings and Specifications.

_____ Dollars (\$ _____)
(State Amount in Words)

ALTERNATE BIDS

Alternate No. 1: Renovation of the penthouse: This includes new floor structure, VCT flooring, wall base and painting.

_____ Dollars (\$ _____)
(State Amount in Words) Add Deduct

ALLOWANCES

1. \$3,000.00 shall be included in the Base Bid for the A/E to create "Record Drawings" as detailed in Section 017700 Contract Closeout.
2. \$5,000.00 shall be included in the Base Bid for Hardware.

Indiana State University is a Tax Exempt Institution and Indiana Sales Tax for products permanently incorporated in work shall not be included as part of the Bid. All other applicable Federal, State and Local taxes shall be included in the Bid sum.

ACCEPTANCE

This offer shall be opened to acceptance and is irrevocable for the period as follows:

- Base Bid and All Alternates - One Hundred Twenty (120) calendar days from the Bid opening date.

If the Owner accepts the Bid within the time period stated above, Bidder will:

- Furnish the required bonds and insurance certificates within ten (10) calendar days of receipt of the Award Letter
- Commence work within seven (7) calendar days of receipt of the Award Letter or as Directed by the Owner.
- Execute the Contract for Construction Between Indiana State University and Contractor within seven (7) calendar days of receipt of the Contract.

The undersigned Bidder agrees to coordinate and expedite their work and that if the Award is given within fourteen (14) calendar days from the Bid opening date the work shall be substantially completed as listed in Section 001010 Instructions To Bidders 1.01. If the Award is not made within the stated fourteen (14) calendar days then the substantial completion date may be adjusted as allowed by the Contract Documents or as mutually agreed upon in writing by the Owner and Contractor.

Bidder's Authorized Representative Title

It is understood that the Owner reserves the right to waive any irregularities in Bidding and to reject any or all Bids. It is further understood on Bids with multiple Bid Packages the Owner reserves the right to selectively Award individual Bid Packages to multiple Prime Bidders submitting the lowest and best Bids for the individual Bid Packages.

002000
BID FORM

NON-COLLUSION AFFIDAVIT

The Bidder, by its officers and agents or representatives present at the time of filing this bid, being duly sworn, say on their oaths that neither they nor any of them have in any way, directly or indirectly, entered into any arrangement or agreement with any other bidder, or with any public office of the State of Indiana, of any county or municipality or other public offices whereby such affiance or either of them, has paid or is to pay to such other bidder or public officer any sum of money, or has given or is to give to such other bidders or public officer anything of value whatever, or such affiance or either of them has not, directly or indirectly entered into any arrangement or agreement with any other bidder or bidders, which tends to or does lessen or destroy free competition in letting of the contract sought for by the attached bids; that no inducement of any form or character other than which appears upon the face of the bid will be suggested, offered, paid, or delivered to any person whomsoever to influence the acceptance of the said bid or awarding of the contract, nor has this bidder any agreement or understanding of any kind whatsoever, with any person whomsoever to pay, deliver to, or share with any other person in any way or manner, any of the proceeds of the contract sought by this bid.

NON-DISCRIMINATION

The undersigned and its Subcontractors, if any, shall not discriminate against any employee or applicant for employment, to be employed in the performance of this Contract, with respect to their hire, tenure, terms, conditions or privileges of employment or any matter directly or indirectly related to employment because of their sex, race, natural origin, ancestry or religion or disability as prohibited under the Americans with Disabilities Act. Breach of this covenant may be regarded as a material breach of the Contract.

CERTIFICATION OF UNITED STATES STEEL PRODUCTS

The undersigned bidder certifies that the bidder and all Subcontractors will comply with the statutory obligations to use steel products made in the United States.

EXPERIENCE QUESTIONNAIRE

List similar projects completed by your organization:

1. Contract Amount _____
Description _____
Date Completed _____
Owner _____
(Name and phone #)

2. Contract Amount _____
Description _____
Date Completed _____
Owner _____
(Name and phone #)

002000
BID FORM

List similar projects currently under construction by your organization

1. Contract Amount _____
Description _____
Date Completed _____
Owner _____
(Name and phone #)

2. Contract Amount _____
Description _____
Date Completed _____
Owner _____
(Name and phone #)

Yes No Has your organization ever failed to complete any work awarded it?

If yes, where and why?

Yes No Does your Organization have any pending litigation or litigation completed within the past five (5) years initiated by your Organization or the Owner as a result of your work on another Project?

If yes, attach a complete listing, with your Bid, of all such litigation(s) and name(s) of Institutions and/or Parties involved with complete contact information. Failure to submit this information may result in disqualification of your Bid.

Yes No Has your Organization been cited for violation of State or Federal regulations within the past twelve months?

If yes, what was the violation and resolution?

002000
BID FORM

List references from firms for which your organization has performed work. Provide firm name, contact person name and phone number.

BIDDERS FINANCIAL STATEMENT

With their Bid or before award of the Bid, the Bidder shall submit their most current financial statement and vendor trade credit references as evidence of financial capability to perform the work.

APPENDICES

The following Appendices are submitted with the Bid:
Appendix A - Subcontractors and Material/Supplier Lists
Appendix B - Unit Prices

OATH AND AFFIRMATION

Attested to this ____ day of _____, 201 ____

By _____

ACKNOWLEDGMENT

State of _____
SS:

County of _____

_____ being duly sworn, deposes and
(Name of person)

says that he/she is _____ of
(Title)

_____ and that the
(Name of organization)
statements contained in the foregoing bid, certification and affidavit are true and correct.

Subscribed and sworn to before me by _____

this ____ day of _____, 201 ____

Notary Public

My Commission Expires _____

County of Residence _____

002000
BID FORM

SUPPLEMENTS TO BID FORM

TO: INDIANA STATE UNIVERSITY

PROJECT: SCIENCE SOUTH ELEVATOR

DATE: _____

SUBMITTED BY:
(full name)

(full address)

In accordance with Instructions to Bidders and Bid Form, we include the Supplements to Bid Form for Appendices listed below. The information provided shall be considered an integral part of the Bid Form.

Appendix A - Subcontractor and Manufacturers List (to be submitted at time of Bid)
Failure to submit may be cause to disqualify bid

(Bidder)

(Project)

The following will be performed (or provided) by the Subcontractors and Manufacturers listed herein and coordinated by us.

The Prime Contractor (Bidder) shall list all Subcontractors and Suppliers/Manufacturers called for in Appendix A of this Bid Form at the time of Bid Submission. Failure to provide this information may be sufficient cause to disallow a Bid.

The Prime Contractor (Bidder) shall use the Subcontractors, Suppliers, Materials and Equipment as listed in the Bid Form Appendix "A" submitted at the time of Bid. It is the Prime Contractor's (Bidder's) responsibility to assure they have listed the correct Subcontractors, Suppliers, Materials and Equipment on their Bid Form. THERE SHALL BE NO CHANGES PERMITTED TO THESE LISTS.

Exception: If the Owner determines the Subcontractors, Suppliers, Materials or Equipment are not acceptable, the Owner shall notify the Prime Contractor (Bidder) in writing within two (2) working days after receipt of Bids of the unacceptable Subcontractor(s), Supplier(s), Material(s) and/or Equipment(s).

(Listings begin on next page)

002000
BID FORM

SUBCONTRACTOR LIST

Bidder shall provide the names of all applicable Subcontractors

Description	Subcontractor
General Construction	_____
Ceiling Work	_____
Concrete Work	_____
Flooring Work	_____
Masonry Work	_____
Painting Work	_____
Electrical Work	_____

SUPPLIER & MANUFACTURERS LIST

Bidder shall provide the names of all applicable Suppliers and Manufacturers

	Product Description	Supplier Manufacturer
Elevator Equipment	_____	_____
Ceiling Grid	_____	_____
Ceiling Tile	_____	_____
Flooring	_____	_____
Lighting	_____	_____

Appendix B – Unit Prices

No Unit Prices Requested

END OF SECTION 002000

095113
SUSPENDED ACOUSTICAL CEILINGS

PART 1 -GENERAL

1.01 SECTION INCLUDES

- A. Suspended metal grid ceiling system and perimeter trim.
- B. Acoustical tile and panels.
- C. Non-fire rated assembly.
- D. Supplementary acoustical insulation over system units.

1.02 REFERENCES

- A. ASTM C635 - Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings.
- B. ASTM C636 - Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels.
- C. ASTM E580 - Practice for Application of Ceiling Suspended Systems for Acoustical Tile and Lay-in panels in areas requiring seismic restraint.
- D. ASTM E1264 - Classification of Acoustical Ceiling Products.
- E. Ceilings and Interior Systems Contractors Association (CISCA) - Acoustical Ceilings: Use and Practice.

1.03 SUBMITTALS

- A. Submit under provisions of Section 013200.
- B. Shop Drawings: Indicate grid layout and related dimensioning, junctions with other work or ceiling finished, interrelation of mechanical and electrical items related to system and wall layouts.
- C. Product Data: Provide data on metal grid system components, acoustical units and accessories.
- D. Samples: Submit two samples full size illustrating material and finish of acoustical units.
- E. Samples: Submit two samples each, 12 inches (300 mm) long, of suspension system main runner, cross runner, edge trim, and hold down clips.
- F. Manufacturer's Installation Instructions: Indicate special procedures, perimeter conditions requiring special attention.

1.04 QUALIFICATIONS

- A. Grid Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum three years documented experience.
- B. Acoustical Unit Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum three years documented experience.

1.05 REGULATORY REQUIREMENTS

- A. Conform to applicable code for combustibility requirements for materials.

1.06 ENVIRONMENTAL REQUIREMENTS

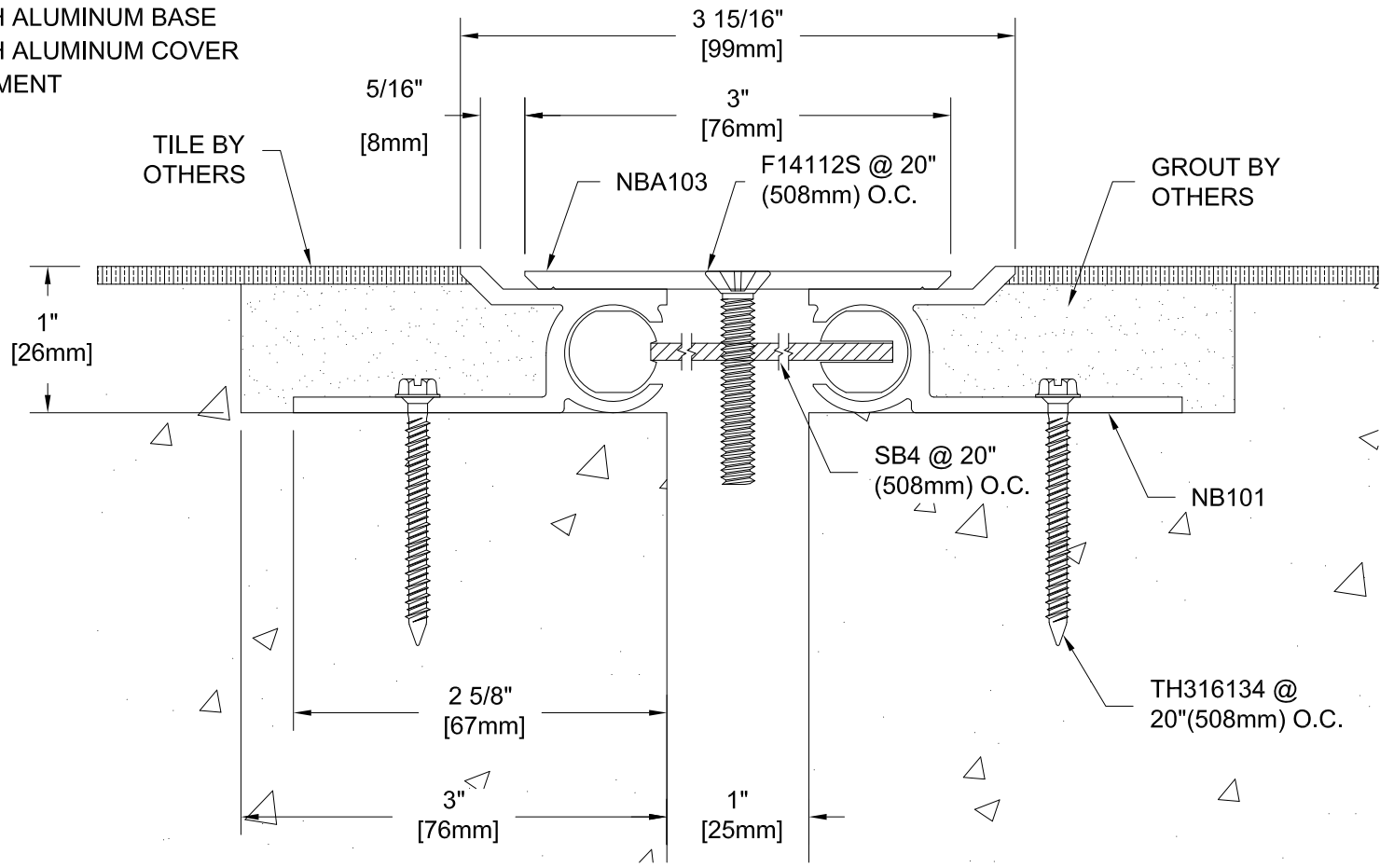
- A. Maintain uniform temperature of minimum 60 degrees F (16 degrees C), and maximum humidity of 40 percent prior to, during, and after acoustical unit installation.

1.07 SEQUENCING

- A. Sequence work to ensure acoustical ceilings are not installed until building is enclosed, sufficient heat is provided, dust generating activities have terminated, and overhead work is completed, tested, and approved.
- B. Install acoustical units after interior wet work is dry.

NBA-1

NO-BUMP FLOOR TO FLOOR SYSTEM
 MILL FINISH ALUMINUM BASE
 MILL FINISH ALUMINUM COVER
 50% MOVEMENT



Project:	
Customer:	
SO#	
Date:	
Page ___ of ___	Scale: NTS

Length	Qty.	Color

Drawn By: RJT

The information contained herein is the proprietary property of **BALCO, INC.** No portion of it may be reproduced by any means or used in any form except for the purpose for which it was furnished. All rights of design and invention are hereby reserved.



BALCO INC

2626 S. Sheridan PO Box 17249
 Wichita, Kansas 67217-0249 USA
 P: +1-316-945-9328 F: +1-316-945-0789

095113
SUSPENDED ACOUSTICAL CEILINGS

1.08 EXTRA MATERIALS

- A. Furnish under provisions of Section 017700.
- B. Provide 10 percent of total acoustical unit area of extra tile panels to Owner.

PART 2 – PRODUCTS

2.01 MANUFACTURERS - SUSPENSION SYSTEM

- A. Chicago Metallic Corp.
- B. Armstrong Contract Interiors.
- C. Donn by U.S.G. Interiors, Inc.

2.02 SUSPENSION SYSTEM MATERIALS

- A. Non-fire Rated Grid: ASTM C635, heavy duty; exposed T as indicated: components die cut and interlocking.
- B. Grid Materials: Commercial quality cold rolled steel with galvanized coating.
- C. Exposed Grid Surface Width: 15/16 inch (24 mm).
- D. Grid Finish: White and color as indicated.
- E. Accessories: Stabilizer bars clips splices edge moldings hold down clips and for suspended grid system.
- F. Support Channels and Hangers: Galvanized steel; size and type to suit application, seismic requirements, a ceiling system flatness requirement specified.

2.03 MANUFACTURERS - ACOUSTICAL UNITS

- A. U.S.G. Interiors, Inc. Product as schedule.
- B. Armstrong Contract Interiors Product as scheduled.
- C. Celotex Building Products Product as scheduled.

2.04 ACOUSTICAL UNIT MATERIALS

- A. Armstrong Type 737
 - 1. Recessed Angular Tegular
 - 2. Size: 24" x 24" x 5/8"
 - 3. Grid: 15/16" DX
 - 4. Color: White

2.05 ACCESSORIES

- A. Touch-up Paint: Type and color to match acoustical and grid units.

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Verify site conditions.
- B. Verify that layout of hangers will not interfere with other work.

3.02 INSTALLATION - LAY IN GRID SUSPENSION SYSTEM

- A. Install suspension system in accordance with manufacturer's instructions and as supplemented in this section.
- B. Install system in accordance with ASTM E580.

095113
SUSPENDED ACOUSTICAL CEILINGS

- C. Install system capable of supporting imposed loads to a deflection of 1/240 maximum.
 - D. Lay out system as indicated on reflected ceiling plans.
 - E. Supply hangers or inserts for installation with instructions for their correct placement.
 - F. Install after major above ceiling work is complete. Coordinate the location of hangers with other work.
 - G. Provide hanger clips during steel deck erection. Provide additional hangers and inserts as required.
 - H. Hang suspension system independent of walls, columns, ducts, pipes and conduit. Where carrying members are spliced, avoid visible displacement of face plane of adjacent members.
 - I. Where ducts or other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying channels to span the extra distance.
 - J. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability. Support fixture loads by supplementary hangers located within 6 inches (150 mm) of each corner; and support components independently.
 - K. Do not eccentrically load system, or produce rotation of runners.
 - L. Install edge molding at intersection of ceiling and vertical surfaces, using longest practical lengths. Miter corners. Provide edge moldings at junctions with other interruptions.
 - M. Form expansion joints as required. Maintain visual closure.
- 3.03 INSTALLATION - CONCEALED GRID SUSPENSION SYSTEM
- A. Install suspension system in accordance with manufacturer's instructions and as supplemented in this section.
 - B. Install system in accordance with ASTM E580.
 - C. Install system capable of supporting imposed loads to a deflection of 1/240 maximum.
 - D. Lay out system to a balanced grid design as indicated on reflected ceiling plans and/or electrical lighting plans.
 - E. Install after major above ceiling work is complete. Coordinate the location of hangers with other work.
 - F. Supply hangers or inserts for installation with instructions for their correct placement.
 - G. Provide hanger clips during steel deck erection. Provide additional hangers and inserts as required.
 - H. Hang suspension system independent of walls, columns, ducts, pipes and conduit. Where carrying members are spliced, avoid visible displacement of face plane of adjacent members.
 - I. Where ducts or other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying channels to span the extra distance.
 - J. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability. Support fixture loads by supplementary hangers located with 6 inches (150 mm) of each corner; and support components independently.
 - K. Do not eccentrically load system, or produce rotation of runners.
 - L. Install edge molding at intersection of ceiling and vertical surfaces, using longest practical lengths. Miter corners. Provide edge moldings at junctions with other interruptions.
 - M. Form expansion joints as required. Maintain visual closure.

095113
SUSPENDED ACOUSTICAL CEILINGS

3.04 INSTALLATION - ACOUSTICAL UNITS

- A. Install acoustical units in accordance with manufacturer's instructions.
- B. Fit acoustical units in place, free from damaged edges or other defects detrimental to appearance and function.
- C. Lay directional patterned units one way with pattern parallel to shortest room axis. Fit border trim neatly against abutting surfaces.
- D. Install units after above ceiling work is complete.
- E. Install acoustical units level, in uniform plane, and free from twist, warp and dents.
- F. Cut tile panels to fit irregular grid and perimeter edge trim. Field rabbett tile panel edge. Double cut and field paint exposed edges of tegular units.
- G. Where bullnose concrete block corners round obstructions occur, provide preformed closers to match edge molding.
- H. Lay acoustical insulation for a distance of 48 inches (1 200 mm) either side of acoustical partitions.
- I. Install hold-down clips to retain panels tight to grid system within 20 ft (6 m) of an exterior door.

3.05 ERECTION TOLERANCES

- A. Maximum Variation from Flat and Level Surface: 1/8 inch in 10 feet (3 mm in 3 m).
- B. Maximum Variation from Plumb Grid Members Caused by Eccentric Loads: 2 degrees.

END OF SECTION 095113

081113
HOLLOW METAL DOORS AND FRAMES

PART 1 – GENERAL

1.01 WORK INCLUDED

- A. Furnish all labor, materials, services, equipment and apparatus whether necessary or incidental to complete installation of all hollow metal doors and frames required for the project as shown on the Drawings and specified herein.
- B. Non-rated steel doors

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Division 00 - Bidding and Contract Requirements, including the General Conditions of the Contract
- B. Division 01 - General Requirements
- C. Section 087100 - Finish Hardware
- D. Section 099123 - Painting and Finishing

1.03 SITE INSPECTION

- A. This Contractor shall visit the site and become thoroughly familiar with all conditions. Refer to Division 1 for site examination requirements and procedures.

1.04 REFERENCE STANDARDS

- A. ANSI/S.D.I. 100 - RECOMMENDED SPECIFICATIONS STANDARD STEEL DOORS AND FRAMES, Steel Door Institute.
- B. ANSI A115 - STANDARD SPECIFICATION FOR DOOR AND FRAME PREPARATION FOR HARDWARE, American National Standards Institute.
- C. Thermal rated assemblies ASTM C236-89 or ASTM C976-90

1.05 SUBMITTALS

- A. Manufacturer's written certification that materials meet Specification requirements
- B. Submit under provisions of Section 013200
- C. Shop Drawings: Indicate door elevations, internal reinforcement, closure method, and finish.
- D. Product Data: Indicate door configurations, location of cut-outs for hardware reinforcement.
- E. Manufacturer's installation instructions: indicate special installation instructions.
- F. Manufacturer's certificate: Certify that products meet or exceed specified requirements.

1.06 QUALITY ASSURANCE

- A. Installer: Company specializing in hollow metal door and frame work of comparable scope with a minimum of three (3) years experience.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect, and handle products to site under provisions of Section 01600.
- B. Accept doors on site in manufacturer's packaging. Inspect for damage.
- C. Break seal on-site to permit ventilation.

1.08 FIELD MEASUREMENTS

- A. Verify that field measurements are as indicated on shop drawings.

1.09 COORDINATION

- A. Coordinate the work with door opening construction, door frame and door hardware installation.

081113
HOLLOW METAL DOORS AND FRAMES

PART 2 - PRODUCTS

2.01 MATERIALS - INTERIOR DOORS - GENERAL

- A. Sheet Steel: Commercial quality carbon steel, cold-rolled, annealed, and free from scale, pitting, rust or other defects - ASTM A366
 - 1. Gauges:
 - a. Interior frames - 18 gauge, mitered corners.
 - b. Interior doors - (Non-rated): SDI-100 Grade II, 18 gauge, heavy duty 1-3/4" (44mm) (Level B), Model 3 - Seamless .
 - c. Reinforcement for hardware - in accordance with Steel Door Institute Standard (S.D.I.) 100, Table IV.
- B. Primer:
 - 1. For non-galvanized steel, primer shall be manufacturer's standard rust-resistant metallic or phenol-resin primer.
 - 2. For galvanized steel, primer shall be zinc dust oxide primer, such as Porter No. 299 Zinc-dust Primer.
 - 3. Air dried.
- C. Core Filler Material:
 - 1. Non-insulated doors - manufacturer's standard cardboard honeycomb.
 - 2. Core material shall completely fill the inside of the door and be laminated to both inside faces of the panels.
- D. Acceptable manufacturers:
 - 1. Steelcraft of Masco Industries
 - 2. Republic Builders Products
 - 3. Ceco Corporation.
 - 4. Curries of L.B. Foster Co.
 - 5. Fenestra Corporation
 - 6. Emerson Engineering Company, Inc.

PART 3 – EXECUTION

3.01 FABRICATION

- A. Frames shall be set up, arc welded and ground smooth and shall have spreaders attached. Provide frame anchors of the proper type for adjoining construction. No less than three (3) wall anchors per jamb or frames to 7'-4" high, four (4) anchors per jamb for frames over 7'-4" high.
- B. Doors shall be full flush type, with seams finished so as to be invisible.
 - 1. Close top and bottom edges of door with steel channel, minimum 18 gauge, extending full width of door, and spot welded to both faces.
 - 2. Provide bevel on swing side.
 - 3. Provide adequate bracing.
 - 4. Fabricate doors with hardware reinforcement welded in place.
- C. Provide for hardware specified in Section 08700 - Finish Hardware. Provide reinforcing for hardware in accordance with ANSI A115.

081113
HOLLOW METAL DOORS AND FRAMES

- D. Provide UL labels of non-rusting metal attached with pop rivets on both doors and frames where indicated. Unless otherwise scheduled, "B label" shall be "1-1/2 hour B label".
- E. Provide screw-on glazing stops with mitered corners. Locate stops on non-security side of opening.
- F. Finishing:
 - 1. Thoroughly clean all contaminants from surface by washing with clean solvent and wiping with clean cloths.
 - 2. Treat non-galvanized items with phosphate pretreatment.
 - 3. All doors and frames shall receive a factory applied primer.
 - 4. All concealed parts of frames to be installed in masonry walls shall be coated with bituminous paint.
- G. Furnish galvanized steel shims as required to maintain 1/8" clearance between frame and door and between pairs of doors.
- H. Where indicated, provide inserted type sightproof stationary metal louvers.
- I. For openings which are to be equipped with electric door locks, modify standard frame and door construction as is necessary to accommodate the electric locks.
- J. Steel sheet: Galvanized to ASTM A525 G60.

3.02 INSTALLATION

- A. Anchor work securely to adjacent construction.
- B. Set frames accurately, plumb and square. Brace until attached to adjacent construction.
- C. Install doors in accordance with ANSI/SDI-100 and DHI.
- D. Do not use cardboard or other unspecified material for shims.
- E. Install metal doors and frames in accordance with the following standards published by the Steel Door Institute: Frames, SDI 105; Hardware, SDI 107; Doors, SDI 100.
- F. Coordinate installation of doors with installation of frames and hardware specified in Section 087100.

3.03 DISPOSAL

- A. All waste materials shall be properly and legally recycled or disposed of off the site by the Contractor. Burning on the site will not be allowed.

3.04 EXAMINATION

- A. Verify substrate conditions.
- B. Verify that opening sizes and tolerances are acceptable.

3.05 ERECTION TOLERANCES

- A. Maximum Diagonal Distortion: 1/16 inch (1.5 mm) measured with straight edge, corner to corner.

3.06 ADJUSTING

- A. Adjust work under provisions of Section 017700.
- B. Adjust door for smooth and balanced door movement.

END OF SECTION 081113