



DELAWARE STATE UNIVERSITY

OFFICE OF PLANNING & CONSTRUCTION

1200 N. DuPont Highway
Dover, Delaware 19901-2277

Addendum # 1

Date: April 11, 2016
Project: Price Building 1st Floor North Window Replacement
Contract: FD-15-082

The work herein shall be considered part of the bid documents for the referenced project and carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Acknowledge receipt of addendum on the bid form as indicated.

Clarifications:

1. State of Delaware drug testing regulations for large public works projects shall apply to this project.

Changes to Specifications:

1. Section 08 16 13 Fiberglass Reinforced Polyester Flush Doors: Add this section to the Bid Documents.
2. Section 08 41 13.2 Aluminum-Framed Entrances and Storefronts-Interior: Delete this section from the Bid Documents
3. Section 08 71 00 Door Hardware: Add this section to the Bid Documents (contains hardware sets).
4. Revisions were made to section 00 41 13 - Bid Form - Bid Bond, which indicate a list of subcontractors. See attached

Changes to Drawings:

1. Drawing A3.1 – Floor Plan: Add door ID tags to Doors 001 thru 006. See attached drawing SK-A.1.

2. Drawing A3.2 – Door Schedule: Change doors 004, 005 and 006 to Fiberglass. Add hardware set numbers to all doors. Change door head detail at all doors (New head detail on sketch. See attached SK-A.2.

General Information:

1. Pre-Bid Sign-in Sheet: Please see attached sheet for a list of the attendees at the mandatory pre-bid. **See attached.**
2. Pre-Bid Meeting Minutes: These minutes are now integral to the bidding documents. **See attached.**

Questions and Answers:

1. **Question:** Architectural Page A3.2, The door schedule lists "FRP Doors", however the specification (084100) Calls for Aluminum D518 doors. Please clarify if the doors are to be Aluminum or FRP.
Answer: Doors 001, 002 and 003 are to be FRP. Doors 004, 005 and 006 are to be Aluminum. See attached SK-A.1 (Tags location of door numbers on Floor Plan) and SK-A.2 (Modifies Door Schedule and adds Head Detail). See attached specification section 08 16 13 Fiberglass Reinforced Polyester Flush Doors.
2. **Question:** Please provide a hardware specification for the Doors
Answer: See attached specification section 08 71 00 Door Hardware.
3. **Question:** Please confirm if the existing window caulking contains asbestos, if yes, who is responsible for the abatement.
Answer: The existing window caulking contains asbestos and the demolition of the windows is being done by others. See note on drawing A2.1.

END

John R. Price Building
1200 N. DuPont Highway
Dover, Delaware 19901

Project: FD-15-082- Price Building 1st Floor North Window replacement
1200 North DuPont Hwy
Dover, Delaware 19901

Mandatory Pre-bid Minutes

MEETING DATE: 04/07/2016

MEETING TIME: 1:30 pm - 2:30 pm

MEETING LOCATION: Price Building Lobby

OVERVIEW:

The scope of the Contract includes but is not limited to the following: It is the intent of Delaware State University to select a qualified contractor to provide services related to the installation of a new Windows in the Price Building First Floor North as per drawings and bid documents.

NOTES:

ATTACHMENTS:

ATTENDEES:

Name	Company	Phone Number	Email	Attendance
J. D. Bartlett	Delaware State University	Tel: (302) 857-7144	jbartlett@desu.edu	
Khalid Zerrad	Delaware State University	Tel: (302) 857-7085	kzerrad@desu.edu	
Dan Shurina	StudioJAED Architects & Engineers	Tel: (302) 832-1652	shurinad@studiojaed.com	

Uncategorized Items

No	Title	Assignment	Due Date	Priority	Status
1.1	Attendee Sign-In				Open
<p>Description: Sign-in sheet was circulated. All attendees are signed in. Sign-in sheet will be distributed as part of Addendum #1.</p>					
1.2	Responsible Parties:				Open
<p>Description:</p> <ol style="list-style-type: none"> DSU: J.D. Bartlett, Executive Director of Planning and Construction DSU: Khalid Zerrad, Construction Project Manager Studio jaed: Dan Shurina, Project Engineer and Ed Lupinek, Architect 					
1.3	Explanation of the project:				Open
<p>Description:</p> <ol style="list-style-type: none"> As outlined in the Bid Advertisement. All documents can be obtained through Procure Construction Schedule <ol style="list-style-type: none"> Earliest Start of Construction Date – Monday, May 16, 2016 Substantial Completion Date – Friday, August 19, 2016 					
1.4	Project Requirements:				Open

These meeting minutes are believed to be an accurate reflection of those items discussed and the conclusions that were reached during the referenced meeting.

Please contact John R. Price Building if there are any discrepancies or questions with the content of these minutes.

Description: 1. This project shall comply with all applicable State bid laws including, but is not limited to requirements for Bid Bonds, Payment Bonds, and Performance Bonds. 2. The State of Delaware Prevailing Wage Regulations apply to this project. Refer to the project manual for further information.				
1.5	Bid Form Review:			Open
Description: 1. The Bid Form was briefly outlined. It is essential that bid be submitted in its entirety including required forms & attachments, as indicated in the specifications. Submitted bid shall be lump sum. Submitted bid shall include pricing for each alternate. 2. Subcontractors List section of the bid form shall not be left blank for any reason. Noncompliance may result in a rejection of submitted bid. If bidding contractor is doing the work in the place of a subcontractor, indicate accordingly on said form.				
1.6	Bid Submission:			Open
Description: 1. Bids will be accepted until Friday, April 22, 2016 3:00 pm Admin				
1.7	Document Interpretations or Questions:			Open
Description: 1. All bidding related questions should be submitted in writing to ConstructionBid@desu.edu . Questions, answers to questions, and clarifications will be provided via addendum. 1. Submit all requests and questions, in writing via email, no later than Tuesday, April 19, 2016 by 4:00 pm.				
1.8	Addenda			Open
Description: 1. The final addendum will be issued on, or before, Wednesday, April 20, 2016 By 4:00 pm				
1.9	Question and Answers			Open
Description: Question: Answer:				
1.10	Conclusion			Open
Description: These notes represent the author's understanding of the issues discussed. Please contact the author with any discrepancies no later than three calendar days after receipt of these minutes. Otherwise, the contents of these minutes will be deemed accepted by all recipients.				

These meeting minutes are believed to be an accurate reflection of those items discussed and the conclusions that were reached during the referenced meeting.

Please contact John R. Price Building if there are any discrepancies or questions with the content of these minutes.



BID FORM

Project: FD-15-082 – Price Building 1st Floor North Window Replacement

Location: Delaware State University
Price Building, Main Campus
1200 North DuPont Hwy
Dover, Delaware

For Bids Due: Friday, April 22, 2016 3:00 pm

To: Delaware State University
Administration Bldg,
Purchasing, Room 321
1200 N. DuPont Highway
Dover, DE 19901-2277
Attn: Zafar Chaudhry
Associate Vice President of Procurement and Contracting

Name of Bidder: _____

Delaware Business License No.: _____ **Taxpayer ID No.:** _____
(A copy of Bidder’s Delaware Business License must be attached to this form.)

(Other License Nos.): _____

Phone No.: () _____ - _____ **Fax No.:** () _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

\$ _____ (Written Out).

(\$ _____) (Figures).

[This price includes all allowances as documented within the project manual.]

A. ALTERNATES (Note: project is subject to prevailing wages)

1. Alternates: Alternate prices conform to applicable project specification section. Refer to the drawing specifications for a complete description of the following Alternates. An “ADD” or “DEDUCT” amount is indicated by the crossing out the part that does not apply.

a. **Alternate #1:**

Net - ADD / DEDUCT

- _____ (Figures).
- _____ (Written Out).

b. **Alternate #2:**

Net - ADD / DEDUCT

- _____ (Figures).
- _____ (Written Out).

c. **Alternate #3:**

Net - ADD / DEDUCT

- _____ (Figures).
- _____ (Written Out).

B. UNIT PRICES

1. Unit prices conform to applicable project specification section. Refer to the specifications for a complete description of the following Unit Prices:

	<u>ADD</u>	<u>DEDUCT</u>
UNIT PRICE No. 1: _____ (BRIEF DESCRIPTION) _____	\$ _____	\$ _____
UNIT PRICE No. 2: _____ (BRIEF DESCRIPTION) _____	\$ _____	\$ _____
UNIT PRICE No. 3: _____ (BRIEF DESCRIPTION) _____	\$ _____	\$ _____

C. **WORK SCHEDULE**

1. We understand that this contract is governed by liquidated damages and that submission of this bid is acceptance of the proposed contract completion date. Our proposed detailed project schedule shows more fully the sequence of activities necessary to meet the specified schedule. The project schedule is a required attachment of a complete bid and failure to submit a viable schedule will be a justifiable reason to deem the bid as incomplete.

2. I/We can begin work _____ calendar days after notification of award and will require _____ calendar days thereafter to complete the work. Work on the project will begin _____ calendar days after Letter of Intent.
3. Alternative Work Hours

Work during "regular hours" at this site is being performed on a single shift, eight hours per day, 7:30 AM to 4:30 PM, and five days per week, Monday through Friday. To meet the schedule established on the basis of Item 1 above, our proposed work hours will be ____ hours per day, ____ AM to ____ PM, and ____ days per week, _____ through _____ the cost of which is reflected in our lump sum price. Our lump sum price also includes any mandatory off-hours work required per special conditions.

D. SITE SUPERINTENDANT

We propose to use _____ as our site superintendent. A resume of his/her qualifications is attached.

We understand that DSU reserves the right to interview him/her prior to contract award/prior to start of work and to reject him/her if not considered acceptable. If rejected, we will propose alternate personnel for the position who will be subject to the same review and acceptance procedure, at no increase in our lump sum proposal.

We also understand DSU reserves the right to reject our bid if we are unable to provide a site supervisor acceptable to DSU within thirty (30) calendar days after submission of this bid.

E. REMARKS

1. I/We acknowledge Addendums numbered _____ and the price(s) submitted include any cost/schedule impact they may have.
2. This bid shall remain valid and cannot be withdrawn for thirty (30) days from the date of opening of bids (60 days for School Districts and Department of Education), and the undersigned shall abide by the Bid Security forfeiture provisions. Bid Security is attached to this Bid.
3. The Owner shall have the right to reject any or all bids, and to waive any informality or irregularity in any bid received.
4. This bid is based upon work being accomplished by the Sub-Contractors named on the list attached to this bid.
5. Should I/We be awarded this contract, I/We pledge to achieve substantial completion of all the work within _____ calendar days of the Notice to Proceed.
6. Our Bid Price(s) are firm based on contract award within thirty (30) calendar days of the date of submittal of this bid.
7. I/We understand that we will not be compensated at a later date for claimed additional costs based on any information received during the bid period, but which is not identified in our proposal and subsequently accepted in writing by DSU.

The undersigned represents and warrants that he has complied and shall comply with all requirements of local, state, and national laws; that no legal requirement has been or shall be violated in making or accepting this bid, in awarding the contract to him or in the prosecution of the work required; that the bid is legal and firm; that he has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding.

Upon receipt of written notice of the acceptance of this Bid, the Bidder shall, within twenty (20) calendar days, execute the agreement in the required form and deliver the Contract Bonds, and Insurance Certificates, required by the Contract Documents.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

(State of Corporation)

Business Address: _____

Witness: _____ **By:** _____
(SEAL) (Authorized Signature)

(Title)
Date: _____

- ATTACHMENTS**
Sub-Contractor List
Non-Collusion Statement
Bid Security
Construction Schedule
Resume of Site Superintendent
(Others as Required by Project Manuals)

STATE OF DELAWARE
OFFICE OF MANAGEMENT AND BUDGET

BID BOND

TO ACCOMPANY PROPOSAL
(Not necessary if security is used)

KNOW ALL MEN BY THESE PRESENTS That: _____
_____ of _____ in the County of _____
and State of _____ as **Principal**, and _____
_____ of _____ in the County of _____ and State of _____
as **Surety**, legally authorized to do business in the State of Delaware (“**State**”), are held and firmly unto the **State**
in the sum of _____ Dollars (\$_____),
or _____ percent not to exceed _____
_____ Dollars (\$_____) of amount of bid on Contract No. _____, to be
paid to the **State** for the use and benefit of _____ (*insert State agency
name*) for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors,
administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bonded **Principal** who has
submitted to the _____ (*insert State agency name*) a certain proposal to
enter into this contract for the furnishing of certain material and/or services within the **State**, shall be awarded this
Contract, and if said **Principal** shall well and truly enter into and execute this Contract as may be required by the
terms of this Contract and approved by the _____ (*insert State
agency name*) this Contract to be entered into within twenty days after the date of official notice of the award
thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in
full force and virtue.

Sealed with _____ seal and dated this _____ day of _____ in the year of our Lord two
thousand and _____ (20____).

SEALED, AND DELIVERED IN THE
Presence of

Name of Bidder (Organization)

Corporate
Seal

By:

Authorized Signature

Attest _____

Title

Name of Surety

Witness: _____

By:

Title

SUBCONTRACTOR LIST

In accordance with Title 29, Chapter 6962 (d)(10)b Delaware Code, the following sub-contractor listing must accompany the bid submittal. The name and address of the sub-contractor **must be listed for each category** where the bidder intends to use a sub-contractor to perform that category of work. In order to provide full disclosure and acceptance of the bid by the *Owner*, **it is required that bidders list themselves as being the sub-contractor for all categories where he/she is qualified and intends to perform such work.**

<u>Subcontractor Category</u>	<u>Subcontractor</u>	<u>Address (City & State)</u>	<u>Subcontractors tax payer ID # or Delaware Business license #</u>
1. Glazing_____	_____	_____	_____
2. General Trades	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____

NON-COLLUSION STATEMENT

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this proposal submitted this date *(to the Office of Management and Budget, Division of Facilities Management)*.

All the terms and conditions of *(Project or Contract Number)* have been thoroughly examined and are understood.

NAME OF BIDDER: _____

**AUTHORIZED REPRESENTATIVE
(TYPED):** _____

**AUTHORIZED REPRESENTATIVE
(SIGNATURE):** _____

TITLE: _____

ADDRESS OF BIDDER: _____

E-MAIL: _____

PHONE NUMBER: _____

Sworn to and Subscribed before me this _____ day of _____ 20_____.

My Commission expires _____ NOTARY PUBLIC _____.

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

AFFIDAVIT OF EMPLOYEE DRUG TESTING PROGRAM

OMB Regulation 4104 for the Drug Testing of Contractor and Subcontractor Employees Working on Large Public Works Projects requires that Contractors and Subcontractors implement a program of mandatory drug testing for Employees who work on Large Public Works Contracts funded all or in part with public funds.

For more information, please refer to the following link for the full regulation: <http://regulations.delaware.gov/register/september2015/final/19%20DE%20Reg%20207%2009-01-15.pdf>

All the terms and conditions of *OMB Regulation 4104* have been thoroughly examined and are understood. We hereby certify that we have in place or will implement during the entire term of the contract a Mandatory Drug Testing Program for our employees on the jobsite that complies with this regulation:

Contractor/Subcontractor Name: _____

Contractor/Subcontractor Address: _____

Authorized Representative (typed or printed): _____

Authorized Representative (signature): _____

Title: _____

Sworn to and Subscribed before me this _____ day of _____ 20_____.

My Commission expires _____. NOTARY PUBLIC _____.

AN AFFIDAVIT SHALL BE PROVIDED BY THE BIDDER AND ALL SUBCONTRACTORS IDENTIFIED IN ATTACHED SUBCONTRACTOR LIST. STATEMENT(S) MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

SECTION 08 71 00
DOOR HARDWARE

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Hardware for wood doors.
- B. Hardware for fire-rated doors.

1.02 RELATED REQUIREMENTS

- A. Section 08 12 13 - Hollow Metal Frames.
- B. Section 08 14 16 - Flush Wood Doors.

1.03 REFERENCE STANDARDS

- A. ANSI/ICC A117.1 - American National Standard for Accessible and Usable Buildings and Facilities; International Code Council.
- B. BHMA A156.9 - American National Standard for Cabinet Hardware; Builders Hardware Manufacturers Association; 2010 (ANSI/BHMA A156.9).
- C. BHMA A156.18 - American National Standard for Materials and Finishes; Builders Hardware Manufacturers Association, Inc.; 2012 (ANSI/BHMA A156.18).
- D. BHMA A156.115W - Hardware Preparation in Wood Doors with Wood or Steel Frames.
- E. DHI WDHS.3 - Recommended Locations for Architectural Hardware for Flush Wood Doors; Door and Hardware Institute.
- F. NFPA 80 - Standard for Fire Doors and Other Opening Protectives.
- G. UL (BMD) - Building Materials Directory; Underwriters Laboratories Inc..

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate the manufacture, fabrication, and installation of products onto which door hardware will be installed.

1.05 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Manufacturer's catalog literature for each type of hardware, marked to clearly show products to be furnished for this project.
- C. Hardware Schedule: Detailed listing of each item of hardware to be installed on each door. Use door numbering scheme as included in the Contract Documents. Identify electrically operated items and include power requirements.
- D. Keying Schedule: Submit for approval of Owner.
- E. Keys: Deliver with identifying tags to Owner by security shipment direct from hardware supplier.
- F. Warranty: Submit manufacturer's warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

1.06 QUALITY ASSURANCE

PART 2 PRODUCTS

2.01 SUPPLIERS

- A. As specified in hardware schedule on construction documents..

2.02 MANUFACTURERS - BASIS OF DESIGN

- A. As specified in hardware schedule on construction documents.

- B. Substitutions: See Section 01 60 00 - Product Requirements.

2.03 DOOR HARDWARE - GENERAL

- A. Provide all hardware specified or required to make doors fully functional, compliant with applicable codes, and secure to the extent indicated.
- B. Provide all items of a single type of the same model by the same manufacturer.
- C. Provide products that comply with the following:
1. Applicable provisions of federal, state, and local codes.
 2. Fire-Rated Doors: NFPA 80.
 3. All Hardware on Fire-Rated Doors: Listed and classified by UL as suitable for the purpose specified and indicated.
 4. Hardware for Smoke and Draft Control Doors: Provide hardware that enables door assembly to comply with air leakage requirements of the applicable code.
- D. Function: Lock and latch function numbers and descriptions of manufactures series as listed in hardware schedule.
- E. Finishes: Identified in schedule.

2.04 LOCKS AND LATCHES

- A. Locks: Provide a lock for every door, unless specifically indicated as not requiring locking.
1. If no hardware set is indicated for a swinging door provide an office lockset.
 2. Trim: Provide lever handle or pull trim on outside of all locks unless specifically stated to have no outside trim.
 3. Lock Cylinders: Provide key access on outside of all locks unless specifically stated to have no locking or no outside trim.
- B. Lock Cylinders: Manufacturer's standard tumbler type, six-pin standard core.
1. Provide cams and/or tailpieces as required for locking devices required.
- C. Keying: Grand master keyed.
- D. Latches: Provide a latch for every door that is not required to lock, unless specifically indicated "push/pull" or "not required to latch".

2.05 HINGES

- A. Hinges: Provide hinges on every swinging door.
1. Provide five-knuckle full mortise butt hinges unless otherwise indicated.
 2. Provide ball-bearing hinges at all doors having closers.
 3. Provide hinges in the quantities indicated.
 4. Provide non-removable pins on exterior outswinging doors.
 5. Where electrified hardware is mounted in door leaf, provide power transfer hinges.
- B. Quantity of Hinges Per Door:
1. Doors From 60 inches High up to 90 inches High: Three hinges.
- C. Manufacturers - Hinges:
1. Assa Abloy McKinney: www.assaabloydss.com.
 2. Bommer Industries, Inc: www.bommer.com.
 3. Substitutions: See Section 01 60 00 - Product Requirements.

2.06 LOCKS AND LATCHES

- A. Locks: Provide a lock for every door, unless specifically indicated as not requiring locking.
1. Hardware Sets indicate locking functions required for each door.
 2. If no hardware set is indicated for a swinging door provide an office lockset.
 3. Trim: Provide lever handle or pull trim on outside of all locks unless specifically stated to have no outside trim.

4. Lock Cylinders: Provide key access on outside of all locks unless specifically stated to have no locking or no outside trim.
- B. Lock Cylinders: Manufacturer's standard tumbler type, six-pin standard core.
 1. Provide cams and/or tailpieces as required for locking devices required.
- C. Keying: Grand master keyed.
 1. Key to existing keying system.
- D. Latches: Provide a latch for every door that is not required to lock, unless specifically indicated "push/pull" or "not required to latch".

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that doors and frames are ready to receive work; labeled, fire-rated doors and frames are present and properly installed, and dimensions are as indicated on shop drawings.

3.02 INSTALLATION

- A. Install hardware in accordance with manufacturer's instructions and applicable codes.
- B. Use templates provided by hardware item manufacturer.
- C. Install hardware on fire-rated doors and frames in accordance with code and NFPA 80.
- D. Mounting heights for hardware from finished floor to center line of hardware item: As listed in Schedule, unless otherwise noted:
 1. For wood doors: Comply with DHI "Recommended Locations for Architectural Hardware for Wood Flush Doors."
 2. Wood doors: See Section 08 14 16.

3.03 FIELD QUALITY CONTROL

- A. Field inspection and testing will be performed under provisions of Section 01 40 00.

3.04 ADJUSTING

- A. Adjust work under provisions of Section 01 70 00.
- B. Adjust hardware for smooth operation.

3.05 CLEANING

- A. Clean adjacent surfaces soiled by hardware installation. Clean finished hardware per manufacturer's instructions after final adjustments has been made. Replace items that cannot be cleaned to manufacturer's level of finish quality at no additional cost.

3.06 PROTECTION

- A. Protect finished Work under provisions of Section 01 70 00.
- B. Do not permit adjacent work to damage hardware or finish.

Hardware Schedule
DELAWARE STATE UNIVERSITY, JOHN R. PRICE BLDG

Hardware Set #: 0001 - SGL DRS FRP DRS & ALUM FR EXTERIOR
001 002 003

Opening to Have:

Qty	Description	Finish	Mfg
1	CONTINUOUS HINGE A110HDC x SC x FULL HEIGHT	628	ABH
1	RIM CYLINDER (IC) 20-757	626	SCHLAGE
1	MORTISE CYLINDER (IC) 20-771	626	SCHLAGE
1	RIM EXIT DEVICE CD98NL-OP x 110MD/WD	626	VON DUPRIN
1	DOOR PULL 1191-4J x 12" CTC x TYPE-N MOUNT	630	TRIMCO
1	DOOR CLOSER 4041XP x SHCUSH x SRI	689	LCN
1	THRESHOLD S483APR x SRS x FHSL x FULL WIDTH	628	REESE
1	ADJUSTABLE DOOR BOTTOM SWEEP BY FRP DOOR SUPPLER (CONCEALED)		
1	JAMB SEALS BY ALUMINUM FRAME SUPPLER		

Hardware Set #: 0002 - SGL DRS ALUM DRS & ALUM FR
004 005 006

Opening to Have:

Qty	Description	Finish	Mfg
1	CONTINUOUS HINGE A110HDC x SC x FULL HEIGHT	628	ABH
1	PUSH / PULL BAR 1747-1 x (2) TYPE-N x (1) TYPE-L	630	TRIMCO
1	DOOR CLOSER 4041XP x SHCUSH	689	LCN

END OF SECTION

SECTION 08 16 13

FIBERGLASS REINFORCED POLYESTER FLUSH DOORS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Fiberglass reinforced polyester (FRP) flush doors.

1.02 RELATED SECTIONS

- A. Section 08 71 00 - Door Hardware.
- B. Section 08 11 13 – Hollow Metal Frames

1.03 REFERENCES

- A. AAMA 1503-98 - Thermal Transmittance and Condensation Resistance of Windows, Doors and Glazed Wall Sections.
- B. ANSI A250.4 - Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors and Hardware Reinforcings.
- C. ASTM B 117 - Operating Salt Spray (Fog) Apparatus.
- D. ASTM B 209 - Aluminum and Aluminum-Alloy Sheet and Plate.
- E. ASTM B 221 - Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
- F. ASTM D 256 - Determining the Pendulum Impact Resistance of Notched Specimens of Plastics.
- G. ASTM D 543 - Evaluating the Resistance of Plastics to Chemical Reagents.
- H. ASTM D 570 - Water Absorption of Plastics.
- I. ASTM D 638 - Tensile Properties of Plastics.
- J. ASTM D 790 - Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
- K. ASTM D 1308 - Effect of Household Chemicals on Clear and Pigmented Organic Finishes.
- L. ASTM D 1621 - Compressive Properties of Rigid Cellular Plastics.
- M. ASTM D 1623 - Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics.
- N. ASTM D 2126 - Response of Rigid Cellular Plastics to Thermal and Humid Aging.
- O. ASTM D 2583 - Indentation Hardness of Rigid Plastics by Means of a Barcol Impressor.
- P. ASTM D 5420 – Impact Resistance of Flat Rigid Plastic Specimens by Means of a Falling Weight.
- Q. ASTM D 6670-01 - Standard Practice for Full-Scale Chamber Determination of Volatile Organic Emissions from Indoor Materials/Products.
- R. ASTM E 84 - Surface Burning Characteristics of Building Materials.
- S. ASTM E 90 - Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions.
- T. ASTM E 283 - Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen.
- U. ASTM E 330 - Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.
- V. ASTM E 331 - Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference.
- W. ASTM F 476 - Security of Swinging Door Assemblies.

- X. NWWDA T.M. 7-90 – Cycle Slam Test Method
- Y. SFBC PA 201 - Impact Test Procedures.
- Z. SFBC PA 203 - Criteria for Testing Products Subject to Cyclic Wind Pressure Loading.
- AA. SFBC 3603.2 (b)(5) - Forced Entry Resistance Test.

1.04 PERFORMANCE REQUIREMENTS

- A. General: Provide door assemblies that have been designed and fabricated to comply with specified performance requirements, as demonstrated by testing manufacturer's corresponding standard systems.
- B. Air Infiltration: For a single door 3'-0" x 7'-0", test specimen shall be tested in accordance with ASTM E 283 at pressure differential of 6.24 psf. Door shall not exceed 0.90 cfm per linear foot of perimeter crack.
- C. Water Resistance: For a single door 3'-0" x 7'-0", test specimen shall be tested in accordance with ASTM E 331 at pressure differential of 7.50 psf. Door shall not have water leakage.
- D. Indoor air quality testing per ASTM D 6670-01: GREENGUARD Environmental Institute Certified including GREENGUARD for Children and Schools Certification.
- E. Hurricane Test Standards, Single Door with Single-Point Latching:
 - 1. Uniform Static Load, ASTM E 330: Plus or minus 75 pounds per square foot.
 - 2. Forced Entry Test, 300 Pound Load Applied, SFBC 3603.2 (b)(5): Passed.
 - 3. Cyclic Load Test, SFBC PA 203: Plus or minus 53 pounds per square foot.
 - 4. Large Missile Impact Test, SFBC PA 201: Passed.
- F. Swinging Door Cycle Test, Doors and Frames, ANSI A250.4: Minimum of 25,000,000 cycles.
- G. Cycle Slam Test Method, NWWDA T.M. 7-90: Minimum 5,000,000 Cycles.
- H. Swinging Security Door Assembly, Doors and Frames, ASTM F 476: Grade 40.
- I. Salt Spray, Exterior Doors and Frames, ASTM B 117: Minimum of 500 hours.
- J. Sound Transmission, Exterior Doors, STC, ASTM E 90: Minimum of 25.
- K. Thermal Transmission, Exterior Doors, U-Value, AAMA 1503-98: Maximum of 0.29 BTU/hr x sf x degrees F. Minimum of 55 CRF value.
- L. Surface Burning Characteristics, FRP Doors and Panels, ASTM E 84:
 - 1. Flame Spread: Maximum of 200, Class C.
 - 2. Smoke Developed: Maximum of 450, Class C.
- M. Surface Burning Characteristics, Class A Option On Interior Faces of FRP Exterior Panels and Both Faces of FRP Interior Panels, ASTM E 84:
 - 1. Flame Spread: Maximum of 25.
 - 2. Smoke Developed: Maximum of 450.
- N. Impact Strength, FRP Doors and Panels, Nominal Value, ASTM D 256: 15.0 foot-pounds per inch of notch.
- O. Tensile Strength, FRP Doors and Panels, Nominal Value, ASTM D 638: 14,000 psi.
- P. Flexural Strength, FRP Doors and Panels, Nominal Value, ASTM D 790: 21,000 psi.
- Q. Water Absorption, FRP Doors and Panels, Nominal Value, ASTM D 570: 0.20 percent after 24 hours.
- R. Indentation Hardness, FRP Doors and Panels, Nominal Value, ASTM D 2583: 55.
- S. Gardner Impact Strength, FRP Doors and Panels, Nominal Value, ASTM D 5420: 120 in-lb.
- T. Abrasion Resistance, Face Sheet, Taber Abrasion Test, 25 Cycles at 1,000 Gram Weight with CS-17 Wheel: Maximum of 0.029 average weight loss percentage.

- U. Stain Resistance, ASTM D 1308: Face sheet unaffected after exposure to red cabbage, tea, and tomato acid. Stain removed easily with mild abrasive or FRP cleaner when exposed to crayon and crankcase oil.
- V. Chemical Resistance, ASTM D 543. Excellent rating.
 - 1. Acetic acid, Concentrated.
 - 2. Ammonium Hydroxide, Concentrated.
 - 3. Citric Acid, 10%.
 - 4. Formaldehyde.
 - 5. Hydrochloric Acid, 10%
 - 6. Sodium hypochlorite, 4 to 6 percent solution.
- W. Compressive Strength, Foam Core, Nominal Value, ASTM D 1621: 79.9 psi.
- X. Compressive Modulus, Foam Core, Nominal Value, ASTM D 1621: 370 psi.
- Y. Tensile Adhesion, Foam Core, Nominal Value, ASTM D 1623: 45.3 psi.
- Z. Thermal and Humid Aging, Foam Core, Nominal Value, 158 Degrees F and 100 Percent Humidity for 14 Days, ASTM D 2126: Minus 5.14 percent volume change.

1.05 SUBMITTALS

- A. Comply with Section 01330 - Submittal Procedures.
- B. Product Data: Submit manufacturer's product data, including description of materials, components, fabrication, finishes, and installation.
- C. Shop Drawings: Submit manufacturer's shop drawings, including elevations, sections, and details, indicating dimensions, tolerances, materials, fabrication, doors, panels, framing, hardware schedule, and finish.
- D. Samples:
 - 1. Door: Submit manufacturer's sample of door showing face sheets, core, framing, and finish.
 - 2. Color: Submit manufacturer's samples of standard colors of doors and frames.
- E. Test Reports: Submit certified test reports from qualified independent testing agency indicating doors comply with specified performance requirements.
- F. Manufacturer's Project References: Submit list of successfully completed projects including project name and location, name of architect, and type and quantity of doors manufactured.
- G. Maintenance Manual: Submit manufacturer's maintenance and cleaning instructions for doors, including maintenance and operating instructions for hardware.
- H. Warranty: Submit manufacturer's standard warranty.

1.06 QUALITY ASSURANCE

- A. Manufacturer's Qualifications:
 - 1. Continuously engaged in manufacturing of doors of similar type to that specified, with a minimum of 25 years successful experience.
 - 2. Door and frame components from same manufacturer.
 - 3. Evidence of a compliant documented quality management system.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying opening door mark and manufacturer.
- B. Storage: Store materials in clean, dry area indoors in accordance with manufacturer's instructions.
- C. Handling: Protect materials and finish from damage during handling and installation.

1.08 WARRANTY

- A. Warrant doors, frames, and factory hardware against failure in materials and workmanship, including excessive deflection, faulty operation, defects in hardware installation, and deterioration of finish or construction in excess of normal weathering.
- B. Warranty Period: Ten years starting on date of shipment. In addition, a limited lifetime (while the door is in its specified application in its original installation) warranty covering: failure of corner joinery, core deterioration, delamination or bubbling of door skin.

PART 2 PRODUCTS

2.01 MANUFACTURER

- A. Special-Lite, Inc., PO Box 6, Decatur, Michigan 49045. Toll Free (800) 821-6531. Phone (269) 423-7068. Fax (800) 423-7610. Web Site www.special-lite.com. E-Mail <mailto:info@special-lite.com>.
- B. Substitutions: Section 01 60 00 - Products Requirements.

2.02 FRP FLUSH DOORS

- A. Model: SL-17 Flush Doors with SpecLite3 fiberglass reinforced polyester (FRP) face sheets.
- B. Door Opening Size: As indicated on the Drawings.
- C. Construction:
 - 1. Door Thickness: 1-3/4 inches.
 - 2. Stiles and Rails: Aluminum Alloy 6063-T5, minimum of 2-5/16-inch depth.
 - 3. Corners: Mitered.
 - 4. Provide joinery of 3/8-inch diameter full-width tie rods through extruded splines top and bottom integral to standard tubular shaped stiles and rails reinforced to accept hardware as specified.
 - 5. Securing Internal Door Extrusions: 3/16-inch angle blocks and locking hex nuts for joinery. Welds, glue, or other methods are not acceptable.
 - 6. Furnish extruded stiles and rails with integral reglets to accept face sheets. Lock face sheets into place to permit flush appearance.
 - 7. Rail caps or other face sheet capture methods are not acceptable.
 - 8. Extrude top and bottom rail legs for interlocking continuous weather bar.
 - 9. Meeting Stiles: Pile brush weatherseals. Extrude meeting stile to include integral pocket to accept pile brush weatherseals.
 - 10. Bottom of Door: Install bottom weather bar with nylon brush weatherstripping into extruded interlocking edge of bottom rail.
 - 11. Glue: Use of glue to bond sheet to core or extrusions is not acceptable.
- D. Face Sheet:
 - 1. Material: SpecLite3 FRP, 0.120-inch thickness, finish color throughout.
 - 2. Protective coating: Abuse-resistant engineered surface. Provide FRP with SpecLite3 protective coating, or equal.
 - 3. Texture: Pebble.
 - 4. Color: Submit color chart to owner for selection from list of standard colors.
 - 5. Adhesion: The use of glue to bond face sheet to foam core is prohibited.
- E. Core:
 - 1. Material: Poured-in-place polyurethane foam.
 - 2. Density: Minimum of 5 pounds per cubic foot.
 - 3. R-Value: Minimum of 9.
- F. Cutouts:
 - 1. Manufacture doors with cutouts for required vision lites, louvers, and panels.

2. Factory install vision lites, louvers, and panels.
- G. Hardware:
1. Premachine doors in accordance with templates from specified hardware manufacturers and hardware schedule.
 2. Factory install hardware.

2.03 MATERIALS

- A. Aluminum Members:
1. Extrusions: ASTM B 221.
 2. Sheet and Plate: ASTM B 209.
 3. Alloy and Temper: As required by manufacturer for strength, corrosion resistance, application of required finish, and control of color.
- B. Components: Door and frame components from same manufacturer.
- C. Fasteners:
1. Material: Aluminum, 18-8 stainless steel, or other noncorrosive metal.
 2. Compatibility: Compatible with items to be fastened.
 3. Exposed Fasteners: Screws with finish matching items to be fastened.

2.04 FABRICATION

- A. Sizes and Profiles: Required sizes for door and frame units, and profile requirements shall be as indicated on the Drawings.
- B. Coordination of Fabrication: Field measure before fabrication and show recorded measurements on shop drawings.
- C. Assembly:
1. Complete cutting, fitting, forming, drilling, and grinding of metal before assembly.
 2. Remove burrs from cut edges.
- D. Welding: Welding of doors or frames is not acceptable.
- E. Fit:
1. Maintain continuity of line and accurate relation of planes and angles.
 2. Secure attachments and support at mechanical joints with hairline fit at contacting members.

2.05 ARCHITECTURAL PANELS

- A. FRP Panels:
1. Model: SL-37 Architectural Panels with SpecLite3 FRP face sheets.
 2. Size: As indicated on the Drawings.
 3. Thickness: 1 inch.
- B. Face Sheets:
1. Material: SpecLite3 FRP, 0.120-inch thickness, finish color throughout. Abuse-resistant engineered surface.
 2. Texture: Pebble.
 3. Color: To match door color.
- C. Insulated SpecLite3 FRP Panels:
1. Insulated Panels: Two 0.120-inch minimum thickness sheets.
 2. Core: Foam polyurethane core of a minimum of 5 pounds per cubic foot density.
 3. Form components to function as single unit.
 4. R-Value: Minimum of 4 for 1-inch panels.

2.06 HARDWARE

- A. Premachine doors in accordance with templates from specified hardware manufacturers and hardware schedule.

2.07 VISION LITES

- A. Glazing: 1"inch glass.
- B. Lites in Exterior Doors: Allow for thermal expansion.
- C. Rectangular Lites:
 - 1. Size: As indicated on the Drawings.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine areas to receive doors. Notify Architect of conditions that would adversely affect installation or subsequent use. Do not proceed with installation until unsatisfactory conditions are corrected.

3.02 PREPARATION

- A. Ensure openings to receive frames are plumb, level, square, and in tolerance.

3.03 INSTALLATION

- A. Install doors in accordance with manufacturer's instructions.
- B. Install doors plumb, level, square, true to line, and without warp or rack.
- C. Anchor frames securely in place.
- D. Separate aluminum from other metal surfaces with bituminous coatings or other means approved by Architect.
- E. Set thresholds in bed of mastic and backseal.
- F. Install exterior doors to be weathertight in closed position.
- G. Repair minor damages to finish in accordance with manufacturer's instructions and as approved by Architect.
- H. Remove and replace damaged components that cannot be successfully repaired as determined by Architect.

3.04 FIELD QUALITY CONTROL

- A. Manufacturer's Field Services: Manufacturer's representative shall provide technical assistance and guidance for installation of doors.

3.05 ADJUSTING

- A. Adjust doors, hinges, and locksets for smooth operation without binding.

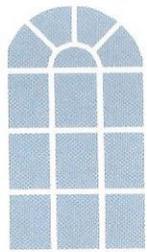
3.06 CLEANING

- A. Clean doors promptly after installation in accordance with manufacturer's instructions.
- B. Do not use harsh cleaning materials or methods that would damage finish.

3.07 PROTECTION

- A. Protect installed doors to ensure that, except for normal weathering, doors will be without damage or deterioration at time of substantial completion.

END OF SECTION

Attendee	Company Information	Attach Business Card
Printed Name: <u>Chelsea Schorman</u> Signature: <u></u> Primary Contact: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO Primary Contact: <u>Scott Schorman</u>	Company: <u>BRS Consulting Inc.</u> Email: <u>scott@brsconinc.com</u> Phone: <u>302-786-2326</u> Email Bid Updates: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
Printed Name: <u>DAVID RASOLIA</u> Signature: <u></u> Primary Contact: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Primary Contact: _____	Company: <u>ENM</u> Email: <u>DN RILEY</u> Phone: <u>302-893-3104</u> Email Bid Updates: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
Printed Name: <u>Bill McGonigal</u> Signature: <u></u> Primary Contact: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Primary Contact: _____	Company: <u>Potts Grove Glass</u> Email: <u>BillJR@PottsGroveGlass.com</u> Phone: <u>610-287-1090</u> Email Bid Updates: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<div style="text-align: right;"> <p>William McGonigal Consultant Bildor131@aol.com</p> </div> <div style="text-align: center;">  <p>Pottsgrove Glass Commercial Storefront Curtainwall Glass 480 Swamp Pike Schwenksville Pa 19473 610-587-8978 Pottsgroveglass.com</p> </div>

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Attendee	Company Information	Attach B
Printed Name: <u>Brittany Thompson</u> Signature: <u>[Signature]</u> Primary Contact: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO Primary Contact: <u>Greg Thompson</u>	Company: <u>Conventional Builders</u> Email: <u>conventionalbuilders@comcast.net</u> Phone: <u>302-422-2429</u> Email Bid Updates: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<p><i>Conventional Builders, Inc.</i> - GENERAL CONTRACTORS - P.O. BOX 47 HOUSTON, DELAWARE 19954</p> <p>846 SCHOOL STREET PHONE (302) 422-2429 FAX (302) 422-2135 conventionalbuilders@comcast.net</p> <p>BRITTANY THOMPSON</p>
Printed Name: <u>Robbie Soloway</u> Signature: <u>[Signature]</u> Primary Contact: <input type="checkbox"/> YES <input type="checkbox"/> NO Primary Contact: <u>Larry</u>	Company: <u>Kent Construction</u> Email: <u>rsoloway@kentconstructionco.com</u> Phone: _____ Email Bid Updates: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<p>GENERAL CONTRACTORS</p> <p>2 Big Oak Rd. Smyrna, DE 19977 Phone 302-653-6469 Est. Dept. Fax 302-653-4044 www.kentconstructionco.com</p> <p>Larry Scuse, Estimator larry@kentconstructionco.com</p> <p>Email Bids to: estimator2@kentconstructionco.com</p>
Printed Name: <u>Khalid</u> Signature: <u>[Signature]</u> Primary Contact: <input type="checkbox"/> YES <input type="checkbox"/> NO Primary Contact: _____	Company: <u>DSY</u> Email: _____ Phone: _____ Email Bid Updates: <input type="checkbox"/> YES <input type="checkbox"/> NO	