

## **ADDENDUM NUMBER 2**

Giles County Public Schools  
Macy McClougherty Elementary/Middle School Renovations  
Pearisburg, Virginia

ZMM  
ARCHITECTS ENGINEERS

A/E Commission No. 2022088

November 1, 2023

This addendum contains 2 pages and the listed attachments. These form a part of the bidding documents and modify the Project Manual and Drawings. Acknowledge receipt of this addendum on the bid form. Failure to acknowledge the receipt of this addendum may disqualify the bid.

### **GENERAL:**

1. The attached Mandatory Pre-Bid Conference Sign-In Sheet is included as part of this addendum.
2. **The deadline for questions is Monday, November 13, 2023 at 5 p.m.**

### **SPECIFICATIONS:**

#### **Section 00003 – TABLE OF CONTENTS**

1. Add Section 011000A - DAVIS-BACON ACT APPLICABLE WAGE SCALE DECISION
2. Add Section 233716 – FABRIC AIR-DISTRIBUTION DEVICES

#### **Section 00020 – INVITATION TO BID**

1. Add paragraph as follows:
  9. Davis-Bacon Act and Buy America Act: Bidders should be aware that the Davis-Bacon Act applies to this project. Applicable wage scale decision for this project is contained within the specifications as an attachment to Section 011000. Buy America Act does not apply to this project; however, awards made under the CRRSA Act and ARP Act are subject to 2 CFR § 200.322 which establishes domestic preferences for procurements under Federal grants that are subject to the Uniform Guidance.
2. Paragraph 2 – Change to read as follows:

“Bids shall be received until 2:00 P.M. local prevailing time on **November 21st**, 2023, in the Board Room of the Giles County Public Schools, 151 School Road, Pearisburg, VA 24134, at which time they will be opened publicly and read aloud. Bids received after this time will not be accepted. All interested parties are invited to attend.”

**Section 00100 – INSTRUCTIONS TO BIDDERS**

- 1. Add paragraph as follows:

**U. Davis-Bacon Act and Buy America Act**

1. Bidders should be aware that the Davis-Bacon Act applies to this project. Applicable wage scale decision for this project is contained herein as an attachment to Section 011000. Buy America Act does not apply to this project; however, awards made under the CRRSA Act and ARP Act are subject to 2 CFR § 200.322 which establishes domestic preferences for procurements under Federal grants that are subject to the Uniform Guidance.

**Section 011000 – SUMMARY OF THE WORK**

- 1. Add paragraph as follows:

**1.18 DAVIS-BACON ACT AND BUY AMERICA ACT**

A. Bidders should be aware that the Davis-Bacon Act applies to this project. Applicable wage scale decision for this project is attached to this Section 011000. Buy America Act does not apply to this project; however, awards made under the CRRSA Act and ARP Act are subject to 2 CFR § 200.322 which establishes domestic preferences for procurements under Federal grants that are subject to the Uniform Guidance.

**Section 233716 – FABRIC AIR-DISTRIBUTION DEVICES**

- 1. Add section in its entirety as attached to this Addendum.

**DRAWINGS:**

**Sheet M113**

- 1. Replace with Sheet M113R1 as attached to this Addendum.

**Sheet M133**

- 1. Replace with Sheet M133R1 as attached to this Addendum.

**END OF ADDENDUM NUMBER 2**

Addendum Total No. of Pages: 2

Attachments to Addendum No. 2:

**Pre-Bid Sign in Sheet**

**Section 011000A - DAVIS-BACON ACT APPLICABLE WAGE SCALE DECISION**

**Section 233716 – FABRIC AIR-DISTRIBUTION DEVICES**

**Sheet M113R1**

**Sheet M133R1**



**MANDATORY PRE-BID CONFERENCE  
Sign-In Sheet**

**PROJECT:** GILES COUNTY PUBLIC SCHOOLS  
MACY MCCLAUGHERTY  
ELEMENTARY/MIDDLE SCHOOL RENOVATIONS  
PEARISBURG, VIRGINIA

**DATE:** October 31, 2023

**TIME:** 10:00 A.M.

**A/E COMM. NO.:** 2022088

NAME OF PERSON ATTENDING & TITLE	COMPANY NAME AND ADDRESS	PHONE NO. & FAX NO.	EMAIL ADDRESS <i>(Please write legibly)</i>
(1) Randy Jones Project Manager	ZMM ARCHITECTS ENGINEERS 1116 South Main Street. Blacksburg, VA 24060	OFFICE: 540.552.2151 MOBILE: 540.250.3025	rjones@zmm.com
(2) Dr. Michael Brown Director of Operations	Giles County Public Schools 151 School Rd. Pearisburg, VA 24134	PH: 540-921-1421 FAX:	mbrown@gilesk12.net
(3) Dr. Terry Arbogast Superintendent	Giles County Public Schools 151 School Rd. Pearisburg, VA 24134	PH: 540-921-1421 FAX:	tarbogast@gilesk12.net
(4) Dewayne Brooks	AHS 4513 Hartsville MD 20708	PH: 689-500-1538 FAX:	William @ AHSTeam.com
(5) Hayden Rice	WACO Inc.	PH: 540-494-6655 FAX:	hrice@wacoinc.net
(6) Artie Moore	Heffman Building Technologies	PH: 540-588-6266 FAX:	Artie.Moore@hbtech.com
(7) Jesse King	Apex Glass	PH: 434-401-6058 FAX:	jking@apexattaxglass.com
(8) Marcel Alben	Frye Roofing, inc	PH: 304-327-5314 FAX:	Marcel@fryeroofing.com

(9) CHRIS RANSOM	KREIDER MECH	PH: 540 343 7612	chris.r@kmechinc.com
ESTIMATOR	1130 Patterson Ave Roanoke	FAX: 540 343 7725	
(10) Rocky Price	Kreider Mech	PH: 540-343-7612	r.price@kmechinc.com
PR/EST.	1130 Patterson Ave Roanoke	FAX:	
(11) ADAM SARVER	EASTERN DOOR ? GLASS, LLC	PH: 304-425-1983	M.a.sarver@outlook.com
OWNER	PO BOX 1737 PRINCETON WV	FAX: 304-425-2171	
(12) Bryan Petzke	KNA Contracting	PH: 540 759 1817	estimating@knacontracting.com
Vice President	2609 McVittu Rd. Roanoke, VA	FAX:	
(13) Jerney Reed	Southern Air	PH: 276-722-2743	jerney.reed@southern-air.com
Project Manager	Mercer Mall Rd. Bluefield WV	FAX:	
(14) BRANDON RATLIFF	JOHN T. MORGAN ROOFING	PH: 540-342-7498	ber@johnnmorganroofing.com
ESTIMATOR	1620 6TH ST NE, ROANOKE, VA 24012	FAX: 540-345-2959	
(15) Ben Davis	Varney Inc.	PH: 804-350-9222	bdavis@varneyinc.com
Estimator	1401 Municipal Rd. Roanoke	FAX:	
(16) Landon Sheets	Roofing Solutions Inc.	PH: 434-432-4602	landonsheets@roofingsolutionsofva.com
Field Manager	190 Grubb Rd. CHATHAM VA 24531	FAX:	
(17) Luke Schrage	Douglas Equipment	PH: 304-327-0149	Luki@douglasequipment.us
	301 N. St. Bluefield, WV 24704	FAX:	
(18) Mike Lumsden	Chill Refrigeration	PH: 540-892-9911	mike.l@chillrefrigerationllc.com
PM / Est	1129 Florida St, Salem VA 24153	FAX:	
(19)		PH:	
		FAX:	
(20)		PH:	
		FAX:	

(21)	Scott Gibson Roger Copp	911 Pocahontas Ave Roanoke, VA 24019	PH: 540-655-2862 FAX:	62 scott.gibson@comfortsystem5usa.com
(22)	Jeb Ginter	Thor Construct. VA	PH: 540-580-4050 FAX:	JGinter@thorconstruct.us.com Estimating@thorconstruction.com
(23)	AVIS Construction Jack Buiks	521 Rutherford Ave NE Roanoke, VA 24016	PH: 540-982-3558 FAX:	buiks@avisconstruction.com
(24)	RUSTY BROWN SRC, Inc	5711 Grandale Road Richmond, VA 23224	PH: 804-417-6602 FAX: RB cell 540-969-9761	bids@src-inc.net
(25)	Rachel Carnes	SBO GCPS executive asst.	PH: 540-921-1421 FAX:	
(26)			PH: FAX:	
(27)			PH: FAX:	
(28)			PH: FAX:	
(29)			PH: FAX:	
(30)			PH: FAX:	
(31)			PH: FAX:	
(32)			PH: FAX:	

(33) Bryson Murphy Swope Co.	1325 Bluefield Ave, Bluefield WV 24701	PH: 304 860 0238 FAX:	bmmurphy@swopeco.com
(34) Wesley Cotner F&S Building Innovations	2944 Orange Ave Roanoke VA 24012	PH: 540 <del>783</del> 580-2491 FAX:	Wesley@fsbuildinginc.com
(35) Ed Greer Price Buildings	1111 Callaway Road Rocky Mount, VA 24151	PH: 540 483 1561 FAX:	edgreer@pricebuildingsinc.com
(36) Dee Braun DCI/Shires, Inc.	DCI/SHIRES, INC. PO BOX 1259, BLUEFIELD WV 24701 PH 304-323-1996 FAX 304-323-3037 EMAIL: robertdeeb@dcishires.com	PH: FAX:	
(37)		PH: FAX:	
(38) Jason Slowalter Varney Inc.	P.O. Box 7266 Roanoke, VA 24019	PH: 540-343-0155 FAX:	
(39) JAMES HUGHES VARNEY INC.	<del>PO Box</del> P.O. Box 7265 Roanoke VA 24019	PH: 434 974 5890 FAX:	JHUGHES@VARNEYINC.COM
(40) Kevin King	R.L. Price Construction, Inc. 2166 Salem Industrial Dr. Salem VA 24153	PH: 540.375.3200 FAX:	bidroom@rlprice.com
(41)		PH: FAX:	
(42) Keith Andrews	AAR Roofing	PH: FAX:	Keith@aarnc.com
(43)		PH: FAX:	
(44)		PH: FAX:	

"General Decision Number: VA20220163 08/19/2022

Superseded General Decision Number: VA20210163

State: Virginia

Construction Type: Building

County: Pulaski County in Virginia.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none"><li>. Executive Order 14026 generally applies to the contract.</li><li>. The contractor must pay all covered workers at least \$15.00 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2022.</li></ul>
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none"><li>. Executive Order 13658 generally applies to the contract.</li><li>. The contractor must pay all covered workers at least \$11.25 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022.</li></ul>

The applicable Executive Order minimum wage rate will be

adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Modification Number	Publication Date
0	01/07/2022
1	02/25/2022
2	07/01/2022
3	08/19/2022

ASBE0024-006 04/01/2021

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR - MECHANICAL (Duct, Pipe & Mechanical System Insulation).....	\$ 39.27	18.67+a

a. PAID HOLIDAYS: New Year's Day, Martin Luther King Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, the day after Thanksgiving and Christmas Day provided the employee works the regular work day before and after the paid holiday.

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BOIL0045-003 01/01/2021

	Rates	Fringes
BOILERMAKER.....	\$ 42.62	24.81

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ELEC0466-001 06/01/2021

	Rates	Fringes
ELECTRICIAN.....	\$ 38.15	21.97

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\* ENGI0147-019 05/01/2022

	Rates	Fringes
POWER EQUIPMENT OPERATOR		

Cranes 90 tons & over capacity; Tower & Climbing Cranes with Controls 100 ft. above ground.....	\$ 34.17	15.21
Cranes under 90 tons.....	\$ 33.26	15.12

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IRON0005-010 06/01/2022

	Rates	Fringes
IRONWORKER.....	\$ 34.85	24.84

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\* UAVG-VA-0001 01/01/2019

	Rates	Fringes
PIPEFITTER.....	\$ 32.11	17.81

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\* SUVA2013-047 01/11/2016

	Rates	Fringes
BRICKLAYER.....	\$ 23.54	6.73
CARPENTER.....	\$ 14.81 **	2.19
IRONWORKER, REINFORCING.....	\$ 25.36	6.68
LABORER: Common or General, Including Pipelaying.....	\$ 11.34 **	2.00
LABORER: Mason Tender - Brick...	\$ 13.41 **	3.15
LABORER: Mason Tender - Cement/Concrete.....	\$ 15.32	0.00
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 16.24	0.87
OPERATOR: Bobcat/Skid Steer/Skid Loader.....	\$ 18.95	4.03
OPERATOR: Bulldozer.....	\$ 16.00	0.00
OPERATOR: Forklift.....	\$ 19.40	7.00
OPERATOR: Loader.....	\$ 21.28	3.17
OPERATOR: Roller.....	\$ 16.25	4.88

PAINTER (Brush and Roller).....	\$ 20.01	0.00
PLUMBER.....	\$ 21.15	3.92
ROOFER.....	\$ 16.17	3.73
SHEET METAL WORKER, Includes HVAC Duct Installation.....	\$ 18.38	3.30
TILE FINISHER.....	\$ 23.40	0.00
TILE SETTER.....	\$ 27.80	10.25
TRUCK DRIVER: Dump Truck.....	\$ 16.58	1.73

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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\*\* Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$15.00) or 13658 (\$11.25). Please see the Note at the top of the wage determination for more information.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.

Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

SECTION 233716

FABRIC AIR-DISTRIBUTION DEVICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes continuous, tubular, fabric air-distribution devices and suspension systems.
- B. Related Sections:
  - 1. Section 230593 "Testing, Adjusting, and Balancing for HVAC" for testing, adjusting, and balancing requirements for nonmetal ducts.
  - 2. Section 233113 "Metal Ducts" for single- and double-wall, rectangular and round ducts.
  - 3. Section 233300 "Air Duct Accessories" for dampers, duct-mounting access doors and panels, turning vanes, and flexible ducts.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
  - 1. Data Sheet: Indicate materials of construction, finish, and mounting details; and performance data including throw and drop, static-pressure drop, and noise ratings.
- B. Shop Drawings: For fabric air-distribution devices.
  - 1. Include plans, elevations, sections, and suspension and attachment details indicating compliance with air volumes and directions shown on the Mechanical Sheets. Manufacturer's drawings shall indicate the locations and types of all accessories required for the installation.
- C. Samples for Initial Selection: For diffusers with factory-applied color finishes.
- D. Samples for Verification:
  - 1. For diffusers, in manufacturer's standard sizes to verify vent sizes and orientation and color selected.
  - 2. For custom logos, printed in selected color on fabric color selected.
- E. Diffuser Schedule: Use same designations indicated on Drawings. Indicate room location, quantity, model number, size, and accessories furnished.

1.4 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Reflected ceiling plans, drawn to scale, on which the following items are shown and coordinated with each other, using input from Installers of the items involved:
  - 1. Ceiling suspension assembly members.
  - 2. Method of attaching hangers to building structure.
  - 3. Ceiling-mounted items including lighting fixtures, diffusers, grilles, speakers, sprinklers, access panels, and special moldings.
- B. Source quality-control reports.

1.5 WARRANTY

- A. Manufacturer shall provide a 5 year Product Warranty for the fabric products of this system as well as a Design and Performance Warranty.

1.6 QUALITY ASSURANCE

- A. Applicable requirements in ASHRAE 62.1, Section 5 - "Systems and Equipment" and Section 7 - "Construction and System Start-up."
- B. Applicable requirements in ASHRAE/IESNA 90.1, Section 6.4.4 - "HVAC System Construction and Insulation."
- C. Air permeability of fabric will comply with ASTM D737.
- D. NFPA Compliance:
  - 1. NFPA 90A, "Installation of Air Conditioning and Ventilating Systems."
  - 2. NFPA 90B, "Installation of Warm Air Heating and Air Conditioning Systems."

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. DuctSox Corp.
  - 2. FabricAir Inc. (Basis of Design)
  - 3. KE Fibertec

2.2 CONTINUOUS TUBULAR DIFFUSERS

- A. Description: Fabric shall be “Combi” by FabricAir or equal by other approved manufacturer.

1. Fabric shall be 100% fire retardant, classified by Underwriters Laboratories in accordance with the requirements of NFPA 90A and AC 167.
2. Fabric Porosity: 2 (+2/-1) cfm/sf per ASTM D737, Frazier.
3. Shape: Round.
4. Air-Outlet Configuration: Linear vents.
5. Color shall be selected by Architect.

B. System Requirements:

1. Air dispersion accomplished by linear vent and permeable fabric. Linear vents must be sized in 1 cfm per linear foot increments (based on 0.5” static pressure), starting at 1 cfm through 90 cfm per linear foot. Linear vent is to consist of an array of open orifices rather than a mesh style vent to reduce maintenance requirements. Linear vents shall also be designed to minimize dusting on fabric surface.
2. Refer to Mechanical Sheets for size of and location of vents. Sizes and locations of vents to be reviewed and approved by Manufacturer.
3. Inlet connection to metal duct via fabric draw band with anchor patches as supplied by manufacturer. Anchor patches to be secured to metal duct via zip screw fastener – supplied by Contractor.
4. Inlet connection includes zipper for easy removal / maintenance.
5. Lengths shall include required zippers as specified by Manufacturer.
6. System to include adjustable flow devices to balance turbulence, airflow and distribution as needed. Flow restriction devices shall include the ability to adjust the airflow resistance from 0.06 – 0.60 in w.g. static pressure.
7. Fabric system shall include connectors to accommodate suspension system.
8. Any deviation from a straight run shall be made using a gored elbow or an efficiency tee. Normal 90-degree elbows are 5 gores, and the radius of the elbow is 1.5 times the diameter of the duct.

C. Design Parameters:

1. Textile air diffusers shall be designed from 0.25” water gage minimum to 3.0” maximum, with 0.5” as the standard.
2. Textile air diffusers shall be limited to design temperatures between 0 degrees F and 180 degrees F.
3. Design CFM, static pressure and diffuser length shall be reviewed and approved by the manufacturer.

### 2.3 HANGERS AND SUPPORTS

- A. Suspension: The suspension system shall include manufacturer’s standard components for maintaining duct shape even when there is no air flowing through it. These components shall attach directly to a single tension cable located directly above the duct (12 o’clock position).
- B. Tension cable hardware includes stainless steel cable, eye bolts, thimbles, cable clamps and turnbuckles as required.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Drawings indicate general arrangement of ducts, fittings, and accessories. Air outlet 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. Where architectural features or other items conflict with installation, notify Architect for a determination of final location.
- B. Install suspension system per the Manufacturer's written instructions.
- C. Install fabric duct system per the Manufacturer's written instructions, ensuring the fabric duct is fully clipped at each support location.

3.2 CLEANING AND PROTECTION

- A. Clean air handling unit and metal ductwork prior to the installation of the fabric duct system. Clean external surfaces of foreign substance which may cause corrosive deterioration of facing.
- B. Temporary Closure: At ends of ducts which are not connected to equipment or distribution devices at time of ductwork installation, cover with polyethylene film or other covering which will keep the system clean until installation is complete.
- C. If fabric duct systems become soiled during installation, they shall be removed and cleaned per the Manufacturer's standard terms of laundry.

3.3 START UP

- A. Air Balance: Comply with requirements in Section 230593 "Testing, Adjusting, and Balancing for HVAC."

END OF SECTION



