



Forge Construction LLC
 1307 Union Ave
 Kansas City, Missouri 64101
 P: (816) 608-1800

Project: 25-004 Platte City ASC
 1101 Kentucky Avenue
 Platte City, Missouri 64079

Submittal #98.1 - REV1 VAV Terminal Units

Revision	1	Submittal Manager	Alex O'Laughlin (Forge Construction LLC)
Status	In Review	Date Created	Jun 6, 2025
Issue Date	Jun 11, 2025	Spec Section	
Responsible Contractor	Temp-Con, Inc.	Received From	Phillip Garcia (Temp-Con, Inc.)
Received Date	Jun 11, 2025	Submit By	
Final Due Date	Jun 18, 2025	Lead Time	
		Cost Code	
Location		Type	
Submittal Package			
Approvers	Rebecca Eubanks (Smith & Boucher), Jared Langenfield (Smith & Boucher)		
Ball in Court	Rebecca Eubanks (Smith & Boucher), Jared Langenfield (Smith & Boucher)		
Distribution			
Description	REV1 product info on VAV units		

Submittal Workflow

Name	Sent Date	Due Date	Returned Date	Response	Attachments
General Information					
Attachments					23-11 VAV's REV1.pdf
Rebecca Eubanks	Jun 11, 2025	Jun 18, 2025		Pending	
Jared Langenfield	Jun 11, 2025	Jun 18, 2025		Pending	

**CONTRACTOR REVIEW ONLY
FORGE CONSTRUCTION**

Contractor's review is for general compliance with the information provided in the Contract Documents and for general conformance with the design concept of the project. Any action noted herein is subject to the requirements set forth in the Contract Documents. Subcontractor and/or Supplier shall be responsible for all dimensions and techniques of construction; the coordination of Subcontractor's work with that of all other trades; and the performance of Subcontractor's work in accordance with Contract Documents.

PROJECT #: 25-004

SUBMITTAL #: 23-11 Rev 1

BY: MICHAEL DAVIDSON

DATE: 06.11.2025

FORGE NOTES:

- Mechanical engineers please review.



- Reviewed no exceptions.
- Make corrections noted; resubmittal not required.
- Make corrections noted; revise and resubmit indicated items only.
- Revise and resubmit entire submittal.
- Reviewed for coordination/information only; refer to comments if any.

Review of this submittal is only for general conformance with the design concept of the project and-for general compliance with those portions of the Contract Documents prepared by Smith & Boucher. Notes, corrections or comments made on the submittals during this review do not relieve the Contractor from responsibility for: Compliance with the requirements of the plans and specifications; Dimensions to be confirmed and correlated at the jobsite; Information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction; Coordination of the Work with that of all other trades; Assemblies of which a specific reviewed item is a component; and performance of all work in a safe and satisfactory manner.

**Coordinate handing with mechanical contractor.
Some units will be LH and others will be RH.**

Received: 06/11/2025 2:40:46 PM

Returned: 06.19.2025 By: Jared Langenfeld, PE

TEMP-CON

A TRIPLEPOINT COMPANY

15670 S. Keeler
Olathe KS 66062
(913) 768-4888

Submittal

Submittal#: 23.36.00 REV1

Submittal Date: 05/28/2025

To: FORGE CONSTRUCTION
1307 Union Avenue
Kansas City, MO 64101

Project: 250017
Platte City ASC - NueHealth
1101 Kentucky Avenue
Platte City, Missouri 64079

Prepared By: Phillip Garcia

Item	Description	Action Required	Date Required
001	VAV Terminals	For Approval	06/11/2025

Please sign and date this form as proof that you are in receipt of the above listed items.
Return form to Temp-Con, LLC

Signed: _____ Date: _____

AIR TERMINAL UNITS

SINGLE DUCT VAV BOXES

Titus model DESV single duct variable air volume boxes with DDC controls furnished by others and mounted by Titus, control enclosures, center averaging airflow sensors, 1/2" fibre free liner, disconnect switches and hot water coils.

NOTE: Contractor to verify left- or right-hand configuration of boxes.

See attached schedule for quantities, sizes and performance.

PROJECT: PLATTE CITY ASC NUEHEALTH
LOCATION: PLATTE CITY, MISSOURI
SUB-CONT: TEMP-CON, INC.
DATE: JUNE 10, 2025
M:\SUBMITTALS\2025\PLATTE CITY ASC NUEHEALTH RESUB/KP

SUBMITTED BY: JOE MARIN
TRIANGLE SALES, INC
P.O. BOX 14628
LENEXA, KS 66285
(913) 541-1800
(913) 541-0011 FAX

jmarin@trianglesales.com

Single Duct Terminal Unit Schedule

Platte City ASC NueHealth

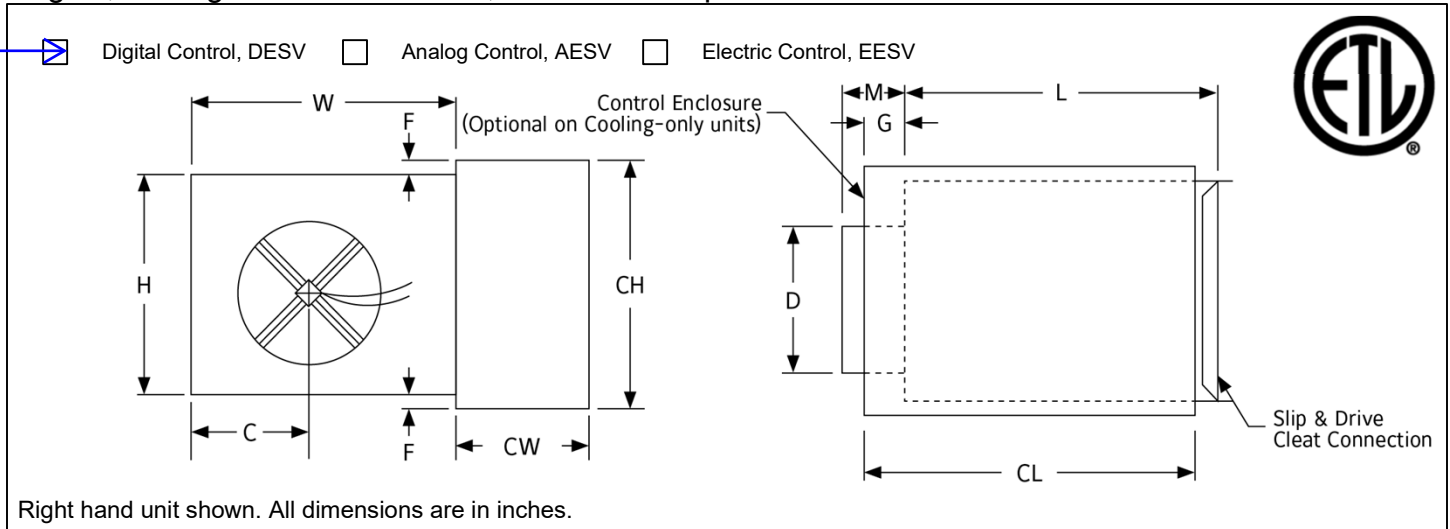
Tag	AHU Tag	Room	Model	Unit	Size Outlet	CFM		Static Pressure			NC Levels		Hot Water Heat Coil										Unit Information	
						Max	Min	Inlet	Down	Min	Rad	Dis	CFM	MBH	EAT	EWT	LAT	APd	GPM	LWT	WPd	Rows	FPI	Hand
VAV 1-01			DESV	12	16x15	1375	360	1	0.25	0.3	19	25	750	28.5	55	140	90	0.29	4.2	126.2	1.32	2-RH	10	RH
VAV 1-02			DESV	08	12x10	450	200	1	0.25	0.16	17	25	350	13.7	55	140	91	0.15	2.4	128.4	0.83	2-RH	10	RH
VAV 1-03			DESV	08	12x10	475	225	1	0.25	0.26	17	25	475	20.6	55	140	95	0.25	2	119.3	0.34	3-RH	10	RH
VAV 1-04			DESV	06	12x8	325	225	1	0.25	0.17	17	23	225	6.1	55	140	80	0.08	1.8	133.1	1.35	1-RH	12	RH
VAV 1-05			DESV	06	12x8	250	250	1	0.25	0.14	14	23	250	9	55	140	88.1	0.09	1.2	124.8	0.22	2-RH	10	RH
VAV 1-06			DESV	06	12x8	350	350	1	0.25	0.26	17	23	350	12.2	55	140	87	0.16	2.5	130.1	0.69	2-RH	10	RH
VAV 1-07			DESV	06	12x8	375	325	1	0.25	0.28	18	24	325	8.1	55	140	78.1	0.17	0.7	117.3	0.11	2-RH	10	RH
VAV 1-08			DESV	06	12x8	200	100	1	0.25	0.06	13	22	100	3.4	55	140	86.1	0.03	0.9	132.4	0.37	1-RH	10	RH
VAV 1-09			DESV	08	12x10	700	400	1	0.25	0.32	20	28	400	14.4	55	140	88.1	0.3	2.1	126.1	0.65	2-RH	10	RH
VAV 1-10			DESV	06	12x8	300	300	1	0.25	0.19	15	22	300	7.9	55	140	79.1	0.12	0.7	117.8	0.11	2-RH	10	RH
VAV 1-11			DESV	06	12x8	200	150	1	0.25	0.09	13	22	200	7.2	55	140	88	0.06	0.8	122.7	0.14	2-RH	10	RH
VAV 1-12			DESV	06	12x8	200	150	1	0.25	0.09	13	22	200	7.2	55	140	88	0.06	0.8	122.7	0.14	2-RH	10	RH
VAV 1-13			DESV	08	12x10	700	375	1	0.25	0.49	20	28	500	18.4	55	140	89	0.47	1.5	114.3	0.24	3-RH	10	RH
VAV 1-14			DESV	08	12x10	475	200	1	0.25	0.17	18	27	280	13.2	55	140	98.6	0.16	8.4	136.8	8.89	2-RH	10	RH
VAV 1-15			DESV	06	12x8	250	150	1	0.25	0.19	14	23	200	9.8	55	140	100	0.14	0.8	113.5	0.18	3-RH	10	RH
VAV 1-16			DESV	04	12x8	150	125	1	0.25	0.08	18	32	150	7	55	140	98	0.04	1.3	129.2	0.24	2-RH	10	RH
VAV 2-01			DESV	10	14x12.5	800	525	1	0.25	0.32	19	24	525	25.6	43	140	88	0.31	1.7	109.6	0.22	3-RH	10	RH
VAV 2-02			DESV	08	12x10	525	325	1	0.25	0.2	18	27	325	14.1	43	140	83	0.19	1.7	122.7	0.42	2-RH	10	RH
VAV 2-03			DESV	08	12x10	650	300	1	0.25	0.29	20	28	300	15	43	140	89	0.27	3.7	131.8	1.88	2-RH	10	RH
VAV 2-04			DESV	08	12x10	575	575	1	0.25	0.35	19	27	575	23	43	140	80	0.34	1.7	111.8	0.28	3-RH	10	RH

- Notes:
1. Selections are based on Titus as Manufacturer.
 2. All performance based on tests conducted in accordance with ASHRAE 130-2008 and AHRI 880-2011.
 3. All NC levels determined using AHRI 885-2008 Appendix E.
 4. All airflow, pressure losses and heating performance values have been corrected for altitude.
 5. Units of measure: dimensions (in), airflow (cfm), water flow (gpm), air pressure (in wg), water head losses (ft) and temperatures (degF).
 6. Water pressure drop (WPd) units is in ft. water.

ESV

Single Duct Terminal Unit

Digital, Analog or Electric Control, Pressure Independent



Size	CFM Range	D (H x W)	C	F	G	H	L	M	W	CH	CL	CW
4	0-225	3 ⁷ / ₈	6 ¹ / ₂	2 ¹ / ₈	7 ³ / ₈	8	15 ¹ / ₂	5 ³ / ₈	12	12 ¹ / ₄	18	6 ¹ / ₂
5	0-350	4 ⁷ / ₈	6 ¹ / ₂	2 ¹ / ₈	7 ³ / ₈	8	15 ¹ / ₂	5 ³ / ₈	12	12 ¹ / ₄	18	6 ¹ / ₂
6	0-500	5 ⁷ / ₈	6 ¹ / ₂	2 ¹ / ₈	7 ³ / ₈	8	15 ¹ / ₂	3 ³ / ₈	12	12 ¹ / ₄	18	6 ¹ / ₂
7	0-650	6 ⁷ / ₈	6	1 ¹ / ₈	7 ³ / ₈	10	15 ¹ / ₂	3 ³ / ₈	12	12 ¹ / ₄	18	6 ¹ / ₂
8	0-900	7 ⁷ / ₈	6	1 ¹ / ₈	7 ³ / ₈	10	15 ¹ / ₂	3 ³ / ₈	12	12 ¹ / ₄	18	6 ¹ / ₂
9	0-1050	8 ⁷ / ₈	7	-	5 ³ / ₈	12 ¹ / ₂	15 ¹ / ₂	3 ³ / ₈	14	12 ¹ / ₄	18	6 ¹ / ₂
10	0-1400	9 ⁷ / ₈	7	-	5 ³ / ₈	12 ¹ / ₂	15 ¹ / ₂	3 ³ / ₈	14	12 ¹ / ₄	18	6 ¹ / ₂
12	0-2000	11 ⁷ / ₈	8	-	5 ³ / ₈	15	15 ¹ / ₂	3 ³ / ₈	16	12 ¹ / ₄	18	6 ¹ / ₂
14	0-3000	13 ⁷ / ₈	10 ¹ / ₂	-	3 ³ / ₈	17 ¹ / ₂	15 ¹ / ₂	3 ³ / ₈	20	12 ¹ / ₄	18	6 ¹ / ₂
16	0-4000	15 ⁷ / ₈	13 ¹ / ₂	-	3 ³ / ₈	18	15 ¹ / ₂	3 ³ / ₈	24	12 ¹ / ₄	18	6 ¹ / ₂
20	0-2000	7 ¹ / ₂ x 12 ¹ / ₄	8	1 ¹ / ₄	3	10	15 ¹ / ₂	3 ³ / ₈	16	10 ¹ / ₄	15 ¹ / ₄	6 ¹ / ₂
30	0-4000	7 ¹ / ₂ x 23 ³ / ₄	13 ⁵ / ₈	1 ¹ / ₄	3	10	15 ¹ / ₂	3 ³ / ₈	27 ¹ / ₄	10 ¹ / ₄	15 ¹ / ₄	6 ¹ / ₂
40	0-8000	15 ⁷ / ₈ x 23 ⁷ / ₈	19	1 ¹ / ₈	5 ³ / ₈	18	15	3 ³ / ₈	38	12 ¹ / ₄	18	6 ¹ / ₂
5E	0-350	4 ⁷ / ₈	6	2 ¹ / ₈	7 ³ / ₈	10	15 ¹ / ₂	3 ³ / ₈	12	12 ¹ / ₄	18	6 ¹ / ₂
6E	0-500	5 ⁷ / ₈	6	2 ¹ / ₈	7 ³ / ₈	10	15 ¹ / ₂	3 ³ / ₈	12	12 ¹ / ₄	18	6 ¹ / ₂
7E	0-650	6 ⁷ / ₈	7	1 ¹ / ₈	5 ³ / ₈	12 ¹ / ₂	15 ¹ / ₂	3 ³ / ₈	14	12 ¹ / ₄	18	6 ¹ / ₂
8E	0-900	7 ⁷ / ₈	7	1 ¹ / ₈	5 ³ / ₈	12 ¹ / ₂	15 ¹ / ₂	3 ³ / ₈	14	12 ¹ / ₄	18	6 ¹ / ₂
1E	0-1400	9 ⁷ / ₈	8	-	5 ³ / ₈	15	15 ¹ / ₂	3 ³ / ₈	16	12 ¹ / ₄	18	6 ¹ / ₂
2E	0-2000	11 ⁷ / ₈	10	-	3 ³ / ₈	17 ¹ / ₂	15 ¹ / ₂	3 ³ / ₈	20	12 ¹ / ₄	18	6 ¹ / ₂
4E	0-3000	13 ⁷ / ₈	12	-	3 ³ / ₈	18	15 ¹ / ₂	3 ³ / ₈	24	12 ¹ / ₄	18	6 ¹ / ₂

This submittal is meant to demonstrate general dimensions of this product. The drawings are not meant to detail every aspect of the product. Drawings are not to scale. Titus reserves the right to make changes without written notice.

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General Description

- Heavy gauge G40 galvanized steel housing. Mechanically sealed and gasketed, leak resistant construction. Less than 2% of nominal cfm at 1.5" sp wg.
- Dual density internal insulation, treated to resist air erosion. Meets requirements of NFPA 90A and UL 181.
- Units equipped with the Titus II velocity controller can either be direct acting or reverse acting, with the damper either normally open or normally closed. Controller maintains constant span and start point. (Span and start point are adjustable.)
- Rectangular discharge opening is designed for slip and drive cleat duct connection.
- Multipoint center averaging inlet velocity sensor.
- Control packages can be factory mounted by Titus.
- Choice of right hand or left hand control location.
- Units equipped with the Titus I velocity controller are available in both direct acting / normally open and reverse acting / normally closed operating modes.
- Model DESV without coils can be installed horizontally, vertically, or at any angle. Operation is not affected by position. For units with coils, consult technical support.
- Gauge tees for cfm measurement.
- OSHPD Seismic Certification: OSP-0352-10
- Only Titus Alpha digital and pneumatic controls approved for seismic installation.

Accessories (Optional)

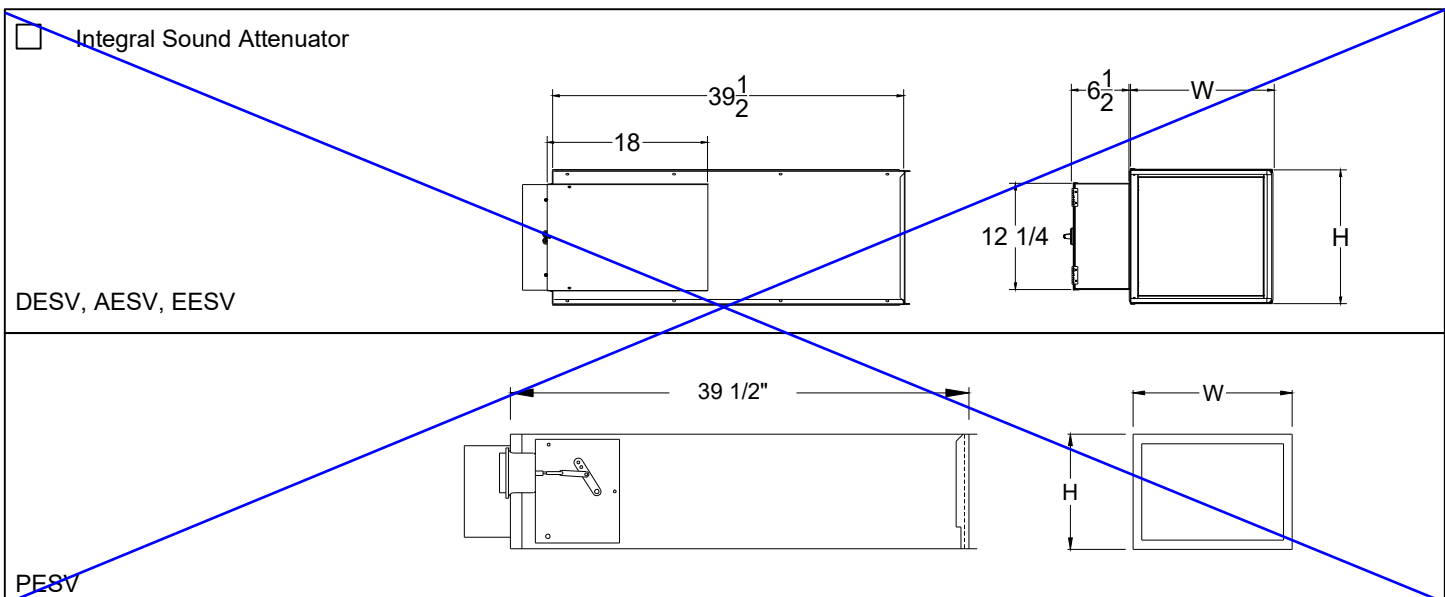
Check if provided.

- 24 V Control Transformer
- Dust Tight Enclosure Seal
- Fibre Free Liner
- 1/2" EcoShield Liner
- 1/2" Fibre Free Liner

- 1" Fiberglass Liner
- 1" EcoShield Liner
- 1" Fibre Free Liner
- Low Leakage Seal/Test/Certify
- SteriLoc Liner

- UltraLoc Liner
- 1/2" EcoShield Liner (Foil Face)
- 1" EcoShield Liner (Foil Face)
- Disconnect Switch
- Hanger Brackets

- Removable Air Flow Sensor
- Bottom Access Door
- OSP & IBC -S Seismic Certification
- Red List Compliant "Google" Gasketing
- Stainless Steel Construction
- _____



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Accessories (Optional)

Hot Water Coil Section

- Aluminum ripple fins, 10 per inch
- Coil pipe connections are male, sweat, type "L" copper.
- Connection sizes: Unit sizes 04-08: 1/2" OD on 1 row coils and 5/8" OD on 2 row coils. Unit sizes 09-40: 7/8" OD for all coils
- Coil is installed at discharge of unit.
- On units with attenuators, coil are installed at the discharge of attenuator.
- Coils rated and certified to AHRI Standard 410

1 Row
 2 Row
 3 Row
 4 Row

Electric Coil Section Optional Lynergy Controlled Electric Heater

Standard Features

- Single side access to low voltage, high voltage, and electric heater controls.
- Automatic reset thermal cutouts, one per element
- Manual reset secondary protection.
- Positive pressure flow switch
- Magnetic contactor for each step.
- Slip and drive cleat discharge duct connection.

Options

- Fuse Block
- Disconnect switch, door interlock type
- Dust tight construction
- Mercury contactors

Supply Voltage

- 120V, 1 ph, 60Hz
- 208V, 1 ph, 60Hz
- 240V, 1 ph, 60Hz
- 277V, 1 ph, 60Hz
- 208V, 3 ph, 60Hz
- 480V, 3 ph, 60Hz (4 wire wye standard)

DES, AESV, EESV

PESV

Size	H	W	Water Coil	
			L (1-2 Row)	L (3-4 Row)
4	8	12	5	7 1/4
5	8	12	5	7 1/4
6	8	12	5	7 1/4
7	10	12	5	7 1/4
8	10	12	5	7 1/4
9	12 1/2	14	5	7 1/4
10	12 1/2	14	5	7 1/4
12	15	16	5	7 1/4
14	17 1/2	20	7 1/2	9 3/4
16	18	24	7 1/2	9 3/4
20	10	16	5	7 1/4
30	10	27 1/4	5	7 1/4
40	18	38	5	7 1/4

The total length of the ESV unit is the summation of the unit length (with or without attenuator) and the length of the optional water coil.

This submittal is meant to demonstrate general dimensions of this product. The drawings are not meant to detail every aspect of the product. Drawings are not to scale. Titus reserves the right to make changes without written notice.