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 #54.0 - Boiler Systems

Revision	0	**Submittal Manager**	Alex O'Laughlin (Forge Construction LLC)
Status	In Review	**Date Created**	Mar 14, 2025
Issue Date	Jun 3, 2025	**Spec Section**	
Responsible Contractor	Temp-Con, Inc.	**Received From**	Phillip Garcia (Temp-Con, Inc.)
Received Date	Jun 3, 2025	**Submit By**	
Final Due Date	Jun 10, 2025	**Lead Time**	
		Cost Code	
Location		**Type**	Product Information
Submittal Package			
Approvers	Rebecca Eubanks (Smith & Boucher), Jared Langenfield (Smith & Boucher)		
Ball in Court	Rebecca Eubanks (Smith & Boucher), Jared Langenfield (Smith & Boucher)		
Distribution			
Description	Product info on boiler and steam systems		

Submittal Workflow

Name	Sent Date	Due Date	Returned Date	Response	Attachments
General Information Attachments					23-17 Boiler.pdf
Rebecca Eubanks	Jun 3, 2025	Jun 10, 2025		Pending	
Jared Langenfield	Jun 3, 2025	Jun 10, 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 #: 25-014

SUBMITTAL #: 23-17

BY: MICHAEL DAVIDSON

DATE: 06.03.25

FORGE NOTES:
- No concerns - mechanical engineers please review.

smith & boucher engineers

- [x] 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.

Received: 06/03/2025 2:12:34 PM

Returned: 06.05.2025 By: Jared Langenfeld, PE

TEMP-CON
A TRIPLEPOINT COMPANY

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

Submittal

Submittal#: 23.52.16

Submittal Date: 06/3/2025

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	Hot Water Boilers	For Approval	06/17/2025

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: _____

blackmore and glunt, inc.
13835 W. 107th Street Lenexa, KS 66215 Voice: 913.469.5715 Fax: 913.469.1085

- Submittal -

Date: 6/2/25 Order No.:

Job: Platte City ASC Nue Health

Contractor: Temp-Con

Engineer: Smith & Boucher

By: Nick Boehler

Equipment:

A
Two Fulton Endura EXE-399, ASME, Natural Gas Fired Boilers, 8:1 Turndown.
- Integral Boiler Control Panel included for cascade control
- BACnet Gateway included for BAS Interface
- E-Stop Switches for boiler room doors by others
- Condensate Neutralizer provided for each boiler
- Electrical: 120 Volt, 1 Phase
- Vent and Combustion Air: 4”
Tag: B-1, 2

B
Two 4” Polypro Flue Pipe Systems
- Estimated at 30 feet of run per boiler, (2) elbows, termination tee with screens, boiler starter piece
Tag: B-1, 2

C
Two B&G In-Line Pump Series Model e-80, 1.5 x 1.5 x 9.5B, SS,
3 HP, 1800 RPM, with 182JM Frame with 8.625" Impeller, STD-Buna/Carbon/Ceramic/SS/Bronze Seal, WEG Motor, ODP, NEMA Premium w/Shaft Grounding Rings, Inverter Suitable, 230/460/3/60 Motor
Capacity: 50 GPM @ 60 FT TDH
Tag: HWP-1, 2

D

Two — B&G DA-3X Suction Diffuser Plus 3 IN. NPT x 1.5 IN. NPT
Tag: HWP-1, 2

E

Two — Metraflex Model 700-3” Cast Iron Wafer Check Valve.
Tag: HWP-1, 2

F

Four — Metraflex Model MMCC-3” Flexible Connector, Stainless Steel Hose and Braid with Carbon Steel Flanged Ends.
Tag: HWP-1, 2

G

One — B&G CRS-3F Coalescing Combo Separator, 3 IN Flange, 150# WP, Standard Velocity, Removable Head, Skim Valve, Blowdown Valve and Automatic Air Vent.
Tag: AS-1

H

One — B&G D120 Series D ASME Diaphragm Tank (68 GAL)
Tag: ET-1

I

One — B&G B7-12 Pressure Reducing Valve 12 PSIG
Tag: Make-Up

J

One — Neptune Model DBF-5HP, 5 Gallon Bypass Pot Feeder, 300 PSI W.P. with Legs.
Tag: PF

K

One — Anderson Midwest Model 100-3/4” Sight Flow Indicator.
Tag: PF

TECHNICAL DATA SHEET

ENDURA XE (EXE) SERIES:
EXE-399, EXE-500, EXE-650, EXE-750

399,000 to 750,000 BTU/HR:
Stainless Steel Firetube Condensing Boilers

FEATURING PURE CONTROL

Fulton's Endura XE (EXE) line of condensing boilers are a durable inline one-pass stainless steel firetube. The packaged boiler features an ultra-compact footprint that fits through a standard doorway, reliable quiet operation, and simplified service & maintenance. The highly-engineered robust construction is built to last with low heat exchanger stress, higher-strength materials, and a premium fit and finish reflecting Fulton's paramount quality. High-turndown Flame-by-Wire™ technology utilizes the surgical precision of independent air and gas motors and continuously tunes the air/fuel ratio for ideal excess O_2 levels to automatically adjust for seasonality. This maximizes condensing potential, and outperforms all conventional platforms in durability, reliability and repeatability.

STANDARD FEATURES:

- Factory Packaged and Test Fired Boiler Assembly
- Stainless Steel Firetube Heat Exchanger
- Fully Condensing Ultra-High Efficiency Operation
- Designed for Variable Primary Flow Arrangements
- Fully Modulating Burner; Up to 15:1 Turndown
- Low NOx Emissions <20 ppm
- Flame-by-Wire™ Electronic Combustion Control
- Real-Time O_2 Compensation™; Feed Forward
- Variable Speed Combustion Blower
- Direct Spark Ignition System
- 160 PSIG Maximum Allowable Working Pressure
- 210°F Maximum Allowable Working Temperature
- Maximum Setpoint Temperature of 185°F
- UL-353 Certified Operating and High Limit
- Low Water Cut Off Probe with Manual Reset
- Air and Blocked Intake Switches
- Ventless Gas Train Utilizing Vent Limiters
- Low and High Gas Pressure Switches (Excludes 399)
- Emergency Stop (E-Stop) Contact

PURE CONTROL™ CAPABILITIES:

- Color Touchscreen Display
- Integrated Lead-Lag of 2 to 10 Boilers
- Universal Data over Ethernet/IP; No Master Boiler Req.
- BAS Integration; Modbus Communication Protocol
- Flue Gas Exhaust Temperature Monitoring
- Inlet and Outlet Water Temperature Sensors
- Combustion Air Temperature Sensor
- Outdoor Air Temperature Reset with Plant Cutoff
- Setback Modes via Internal Clock
- Accept 4-20mA Remote Setpoint Signal
- Safety Interlock Contact for External Device(s)
- General Alarm Contact
- Remote Boiler Enable/Disable Contact
- Pump or Motorized Isolation Valve Start/Stop Contact
- Variable Speed Boiler (Primary) Pump Control
- System (Secondary) Pump Start/Stop Contact
- Domestic Hot Water Pump Start/Stop Contact
- Domestic Hot Water Priority
- Two-Stage Freeze Protection

PROJECT DETAILS:

Project Name	Platte City ASC Nue Health	City, State (Province)	Platte City, MO
Date Submitted	6/2/25	Engineer of Record	Smith & Boucher
Fulton Representative	Blackmore & Glunt	Contractor	TempCon

LISTINGS & COMPLIANCE:

- cETLus Listed and Labeled to ANSI Z21.13/CSA 4.9
- ASME Section IV Pressure Vessel, "H" Stamp
- CSD-1 and CSA Compliant Controls and Fuel Train
- AXA XL Compliant; Supersedes IRI
- AHRI Certified to AHRI-1500; Supersedes BTS-2000
- Energy Star Certified Commercial Boiler
- SCAQMD Certified; TCEQ Compliant
- Federal Energy Management Program (FEMP) Compliant
- Advanced Buildings New Construction Guide Tier Two (LEED v4 ACP)

TRIM KIT ITEMS:

- ASME Safety Relief Valve (60 PSIG)
- Condensate Drain Trap
- Pressure & Temperature Gauge
- Installation, Operation and Maintenance Manual

OPTIONAL ACCESSORIES: PARTS SHIP LOOSE FOR FIELD INSTALLATION

- ☑ BACnet Protonode with Remote Cloud Access *2-45-001058*
- ☐ Lead/Lag IP Switch (16 Port, 120VAC) *2-45-315010*
- ☐ Lead/Lag IP Switch (5 Port, DIN Mount, 24VDC) *2-45-315044*
- ☐ Second (Auxiliary) Low Water Cut Off Kit *Consult Factory*
- ☐ Flue Gas Condensate pH Neutralization *4-50-000021*
- ☑ Supply Header Temperature Sensor *4-30-000405*
- ☐ Outdoor Air Temperature Sensor *4-30-000520*
- ☐ Domestic Hot Water Temperature Sensor *4-30-420500*
- ☐ Return Header Temperature Sensor *4-30-000405*
- ☐ 2-Inch Ball Valve with 120VAC 2-Position Actuator *2-30-001382*
- ☐ Dedicated Boiler Circulator Pump 20°F ΔT *Consult Factory*
- ☐ Dedicated Boiler Circulator Pump 40°F ΔT *Consult Factory*
- ☐ PVC/CPVC Flue Gas Exhaust Kit for EXE-399/500
- ☐ PVC/CPVC Flue Gas Exhaust Kit for EXE-650/750
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____

NOTE: Information provided in this document is based on standard boiler configurations only. Alternate configurations may result in deviations.

CAPACITIES: STANDARD NATURAL GAS; REFER TO PERFORMANCE DATA FOR CAPACITY AT HIGH ELEVATION

Endura XE Model		EXE-399	EXE-500	EXE-650	EXE-750
Rated Input at High Fire	**BTU/hr**	**399,000**	**500,000**	**650,000**	**750,000**
	kW	*117*	*147*	*190*	*220*
Minimum Input at Low Fire	**BTU/hr**	**50,000**	**50,000**	**50,000**	**50,000**
	kW	*14.7*	*14.7*	*14.7*	*14.7*
Rated Output (at AHRI-1500)	**BTU/hr**	**391,020**	**486,500**	**625,950**	**720,000**
	Boiler HP	11.7	14.5	18.7	21.5
	kW	*115*	*143*	*184*	*211*
Thermal Efficiency (at AHRI-1500)	**%**	**98.0**	**97.3**	**96.3**	**96.0**
Burner Turndown	**-**	**8:1**	**10:1**	**13:1**	**15:1**

NOTES:
- Minimum Input at Low Fire is 125,000 BTU/hr (36.8 kW) when operating on propane.
- The boiler may be factory configured with either a natural gas or propane burner; the burner is not field convertible.

CONNECTION SIZES:

Endura XE Model		EXE-399	EXE-500	EXE-650	EXE-750
Boiler Supply Water Outlet (NPT)	**inches**	**2**	**2**	**2**	**2**
	mm	*51*	*51*	*51*	*51*
Boiler Return Water Inlet (NPT)	**inches**	**2**	**2**	**2**	**2**
	mm	*51*	*51*	*51*	*51*
Flue Gas Condensate Drain	**inches**	**3/4**	**3/4**	**3/4**	**3/4**
	mm	*19*	*19*	*19*	*19*
Natural Gas Train Inlet (NPT)	**inches**	**1**	**1**	**1**	**1**
	mm	*25*	*25*	*25*	*25*
Min. Combustion Air Duct (ID) *(Adapter Required)*	**inches**	**4**	**4**	**6**	**6**
	mm	*102*	*102*	*152*	*152*
Min. Flue Gas Exhaust Vent (ID) *(Adapter Required)*	**inches**	**4**	**4**	**6**	**6**
	mm	*102*	*102*	*152*	*152*
Boiler Exhaust Outlet (ID)	**inches**	**3.87**	**3.87**	**5.87**	**5.87**
	mm	*98*	*98*	*149*	*149*
Boiler Exhaust Outlet (OD)	**inches**	**4**	**4**	**6**	**6**
	mm	*102*	*102*	*152*	*152*

NOTES:
- The combustion air inlet connection on all models shown is 4-inch Sch 10 pipe, appropriately sized field combustion air intake ducting requires an adapter.

FUEL REQUIREMENTS: STANDARD NATURAL GAS AT 1,020 BTU/SCF (9,082 KCAL/M³)

Endura XE Model		EXE-399	EXE-500	EXE-650	EXE-750
Fuel Usage at Rated Input	**SCFH**	**391**	**490**	**637**	**735**
	m³/hr	*11.1*	*13.9*	*18.0*	*20.8*
Minimum Gas Pressure *(Req. at High Fire)*	**in W.C.**	**3.5**	**3.5**	**3.5**	**3.5**
	kPa	*0.87*	*0.87*	*0.87*	*0.87*
Maximum Gas Pressure	**in W.C.**	**14**	**14**	**14**	**14**
	kPa	*3.5*	*3.5*	*3.5*	*3.5*

FUEL REQUIREMENTS: STANDARD HD5 PROPANE AT 2,500 BTU/SCF (22,260 KCAL/M3)

Endura XE Model		EXE-399	EXE-500	EXE-650	EXE-750
Fuel Usage at Rated Input	**SCFH**	**160**	**200**	**260**	**300**
	m³/hr	*4.5*	*5.7*	*7.4*	*8.5*
Minimum Gas Pressure *(Req. at High Fire)*	**in W.C.**	**7**	**7**	**7**	**7**
	kPa	*1.7*	*1.7*	*1.7*	*1.7*
Maximum Gas Pressure	**in W.C.**	**14**	**14**	**14**	**14**
	kPa	*3.5*	*3.5*	*3.5*	*3.5*

NOTES:

- Propane operation is suitable for use with HD5 (standard commercial) grade Liquid Petroleum Gases conforming to ASTM D1835-82.

ELECTRICAL REQUIREMENTS: APPLIES TO <20 PPM NOx STANDARD BLOWER AND CONTROL OPTIONS

Endura XE Model		EXE-399	EXE-500	EXE-650	EXE-750
Electrical Supply	**Volts**	**120**	**120**	**120**	**120**
	Ø	1	1	1	1
	Hz	*60*	*60*	*60*	*60*
Full Load Amps (FLA)	**Amps**	**8**	**8**	**8**	**8**
Minimum Current Ampacity (MCA)	**Amps**	**10**	**10**	**10**	**10**
SCCR	**Amps**	**10,000**	**10,000**	**10,000**	**10,000**

NOTES:

- Voltages under specification may result in increased amperage and burner de-rate.
- Provide separate power supplies for external devices. Do not power external devices through the boiler control circuits.

WATER AND FLOW REQUIREMENTS: SPECIFICATIONS APPLY TO 100% WATER SYSTEMS; SEE IOM FOR GLYCOL SYSTEMS

Endura XE Model		EXE-399	EXE-500	EXE-650	EXE-750
Typical Flow Rate at Rated Output 20°F ΔT	**GPM**	**38**	**48**	**62**	**72**
	LPM	*144*	*182*	*235*	*273*
Typical Flow Rate at Rated Output 40°F ΔT	**GPM**	**19**	**24**	**31**	**36**
	LPM	*72*	*91*	*118*	*136*
Water Pressure Drop at Rated Output 20°F ΔT	**PSI**	**0.6**	**0.9**	**1.4**	**1.9**
	kPa	*8.3*	*6.2*	*9.7*	*13.1*
Water Pressure Drop at Rated Output 40°F ΔT	**PSI**	**0.2**	**0.2**	**0.3**	**0.5**
	kPa	*1.4*	*1.4*	*2.1*	*3.4*
Low Fire Variable Water Flow Rate	**GPM**	**4 to 105**	**4 to 105**	**4 to 125**	**4 to 125**
	LPM	*16 to 397*	*16 to 397*	*16 to 473*	*16 to 473*
High Fire Variable Water Flow Rate	**GPM**	**16 to 105**	**20 to 105**	**26 to 125**	**30 to 125**
	LPM	*61 to 397*	*76 to 397*	*99 to 473*	*114 to 473*

NOTES:

- Flow rates specified are for water systems, minimum flow parameter will increase for glycol systems. Review Application Guide for details.
- The system will require proper design flow for the given conditions to heat the building and prevent nuisance high limit manual reset lockouts at the boiler.
- Refer to the Installation, Operation, and Maintenance Manual for the water pressure drop at flow rates not listed above.

WEIGHTS AND VOLUMES:

Endura XE Model		EXE-399	EXE-500	EXE-650	EXE-750
Dry Weight	**lbs**	**525**	**525**	**525**	**525**
	kg	*238*	*238*	*238*	*238*
Operating Weight	**lbs**	**674**	**674**	**674**	**674**
	kg	*305*	*305*	*305*	*305*
Pressure Vessel Water Volume	**Gallons**	**17.9**	**17.9**	**17.9**	**17.9**
	Liters	*67.8*	*67.8*	*67.8*	*67.8*

Endura XE Model		EXE-399	EXE-500	EXE-650	EXE-750
Combustion Air Intake Flow Rate	**SCFM**	**82**	**102**	**133**	**153**
Flue Gas Exhaust Flow Rate	**SCFM**	**88**	**110**	**143**	**165**
	ACFM	*109*	*136*	*177*	*204*
Minimum Allowable Draft Pressure	**in W.C.**	**-0.10**	**-0.10**	**-0.10**	**-0.10**
	kPa	*-0.025*	*-0.025*	*-0.025*	*-0.025*
Maximum Allowable Draft Pressure	**in W.C.**	**+1.25**	**+1.25**	**+1.25**	**+1.25**
	kPa	*+0.311*	*+0.311*	*+0.311*	*+0.311*

VENTING REQUIREMENTS:

NOTES:

- Maximum draft pressure is the total sum of the venting system and is inclusive of both the flue gas vent and combustion air intake frictional pressure losses.
- Refer to the Installation, Operation, and Maintenance Manual for complete venting guidelines including certifications, materials, common venting requirements.

Endura XE Model		EXE-399	EXE-500	EXE-650	EXE-750
NOx	**ppm**	**< 20**	**< 20**	**< 20**	**< 20**
CO	**ppm**	**< 100**	**< 100**	**< 100**	**< 100**
	lbs/hr	0.0288	0.0361	0.0470	0.0542
	g/hr	*13.1*	*16.4*	*21.3*	*24.6*
SOx	**lbs/hr**	**0.0002**	**0.0003**	**0.0004**	**0.0005**
	g/hr	*0.12*	*0.15*	*0.20*	*0.23*
Total Particulates (PM)	**lbs/hr**	**0.0030**	**0.0038**	**0.0050**	**0.0057**
	g/hr	*1.4*	*1.7*	*2.2*	*2.6*
Total Organics (TOC)	**lbs/hr**	**0.0043**	**0.0054**	**0.0070**	**0.0081**
	g/hr	*1.96*	*2.45*	*3.19*	*3.68*
Lead	**lbs/hr**	**2×10^{-7}**	**2.5×10^{-7}**	**3.3×10^{-7}**	**3.8×10^{-7}**
	g/hr	*0.8×10^{-4}*	*1×10^{-4}*	*1.3×10^{-4}*	*1.5×10^{-4}*
Volatile Organic Compounds (VOC)	**lbs/hr**	**0.0022**	**0.0027**	**0.0035**	**0.0041**
	g/hr	*1.0*	*1.2*	*1.6*	*1.8*

EMISSIONS: STANDARD NATURAL GAS AT 1,020 BTU/SCF (9,082 KCAL/M³)

NOTES:

- NOx and CO are stated at a 3% O_2 correction.
- Emissions data is typical for standard natural gas operation at maximum rated burner input.
- Emissions will vary based on site specific factors and operating parameters.
- Site specific conditions and emissions requirements will determine the appropriate CO_2 settings for each application.
- VOC, SOx, PM, TOC and Lead are achieved through calculation using the AP 42 method as published by the US EPA, and are stated at rated input.
- AP 42, Fifth Edition, Vol 1, Ch 1, Table 1.4-2 determines the emissions components that cannot be measured with a combustion analyzer.
- Jacket losses: 0.2% of output at maximum capacity, IAW ASHRAE Standard 103-2007.

Endura XE Model		EXE-399	EXE-500	EXE-650	EXE-750
Front	**inches**	**24**	**24**	**24**	**24**
	mm	*610*	*610*	*610*	*610*
Rear	**inches**	**12**	**12**	**12**	**12**
	mm	*305*	*305*	*305*	*305*
Top	**inches**	**16**	**16**	**16**	**16**
	mm	*406*	*406*	*406*	*406*
Sides	**inches**	**0**	**0**	**0**	**0**
	mm	*0*	*0*	*0*	*0*

MINIMUM CLEARANCES:

NOTES:

- Although 12-inch (305 mm) rear clearance is permitted, some installations may require or benefit from 24-inch (610 mm) rear clearance.
- Boilers exceeding 400 MBTU/hr rating are not for installation in an alcove or closet. Boilers less than 400 MBTU/hr rating may be installed in an alcove.
- Local codes may supersede Fulton requirements, the more stringent of the two shall prevail.

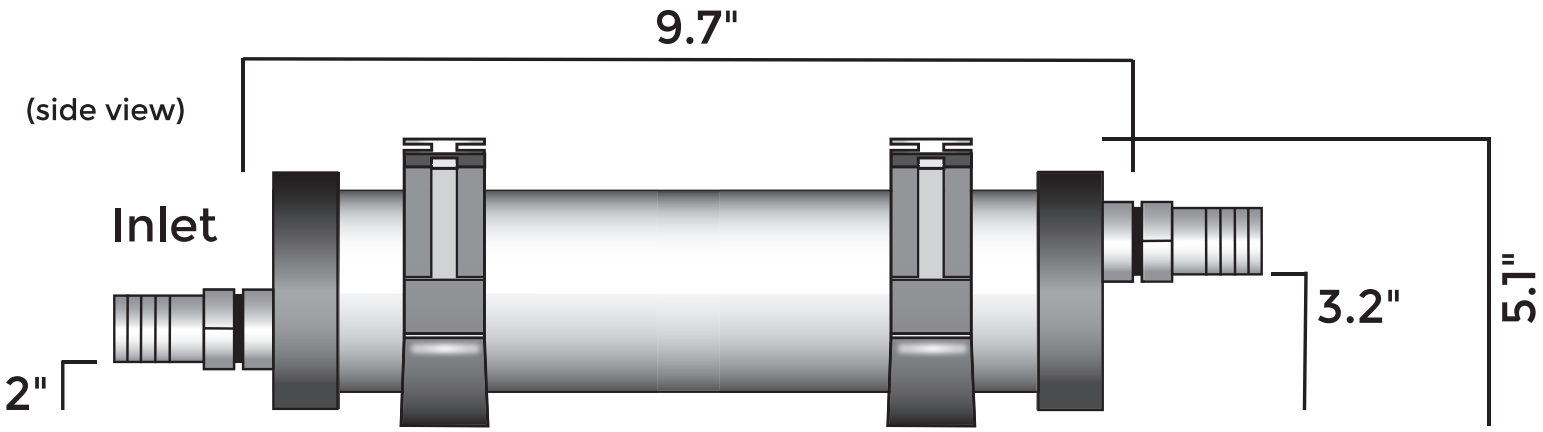
DIMENSIONS:

Refer to the 7-91 type Product Data Submittal End Assembly Drawing for dimensions.

JJM ALKALINE TECHNOLOGIES

Acidic Condensate Neutralizer
Dimensions and Parts

JJM® K-300



K-300 Included Parts
(2) Screens
(2) End-caps
(2) Mounting Brackets
(2) O-rings
(2) 3/4" Socket Adapters
(2) 3/4" Barb Fittings

Part No.	MBH	GPH	Inlet/Outlet
5101	300–400	2.4	3/4"

InnoFlue® Vent Systems

Polypropylene Single Wall Venting

Centrotherm

Specification Section:

Job Name: Platte City ASC Nue Health

Job Location: Platte City, MO

Engineer: Smith & Boucher

Approval:

Date: 6/2/25

System # (if applicable):

Contractor: TempCon

Appliance MFG: Fulton

Model #: QTY:

Appliance Type: Boiler

Adapter (if req):

Standard Compliance

Tested and listed By **InterTek**:

- UL-1738
- ULC-S636
- Category II, III – up to 230°, and IV Gas Vent BH
- Class II C Gas Vent BH

Warranty

10 Year against defects in material & workmanship from date of installation.

Pipe Diameter(s)

☐ 2" ☐ 3" ☑ 4" ☐ 6" ☐ 8" ☐ "10" ☐ 12"

System Layout Style

- ☑ Vertical through roof
- ☐ Horizontal through side-wall
- ☐ Combination vertical/horizontal through roof
- ☐ Combination vertical/horizontal through side-wall
- ☐ Air Intake in InnoFlue Vent Material

Rev:

Date: 6/2/25

Drawing #:

Specifications

- Maximum flue gas temperatures of 230°F (110°C) per UL1738 & ULC-S636
- Maximum vent pressure of 20" of water column
- Manufactured from flame resistant polypropylene
- Grey and Black - UV Rated to ASTM G23-81
- Zero clearance to combustibles
- Low temperature impact resistant (Tested at -4°F)
- Gasketed push/fit connection system
- Working temperature: 32°F - 230°F

Diameter	Wall Thickness		Max Vent Length*
	Minimum	Maximum	
2"	0.07"	0.08"	10'
3"	0.07"	0.09"	10'
4"	0.11"	0.12"	10'
6"	0.11"	0.14"	10'
8"	0.14"	0.16"	10'
10"	0.14"	0.16"	6'
12"	0.20"	0.23"	6'

Consult appliance install guide if not listed in appliance MFG instructions.

* Developed length. Deduct 3' for each 45° elbow, 5' for each 87° long radius elbow, and 8' for each 87° short radius elbow

info@centrotherm.us.com | www.centrotherm.us.com | 518.434.3400

Proudly Made in the USA

WARNING: DO NOT MIX WITH OTHER VENT MANUFACTURER'S PRODUCTS.