



Submittal Cover Sheet

Project Name:

Submittal Title:

Submittal Number:

Reviewer: GBA Architecture & Planning

Reviewer: Hardy Structural Engineering

Reviewer: Pearson & Associates

Reviewer: Engineering Services of Vermont

11/22/21 DPC: No exceptions taken

Submittal Manager:

Review Status: No Exceptions Taken
 Approved As Noted
 Revise and Resubmit

Date Reviewed:

Notes

AJT: Updated from previous submittal to have end discharge ILO bottom discharge as requested by ESVT.

Reviewer: Civil Engineering Associates



Order # 4938009 - 79 Pine St MAUs

Fan #1 A3-IBT-600-300-300-G18 (1792 lbs./124 curb)

Tag: MAU-1

Indirect Bent Tube Gas Fired Heater with 18" Blower, 2 Furnaces, Electronic Full Modulation, Constant 80% Efficiency, and 12:1 Max Turndown for NG, (10:1 Max Turndown for LP). Stainless Steel Burners and Heat Exchangers.

Supply Motor:

Model DTP7/54, 7.500 HP, 3 Phase, 208 V, 60Hz, 21.1 FLA, ODP, Premium (E-Plus3) Eff.

Supply Motor Pulleys:

Part Type	Qty	Browning #	Turns Out
Belt	2	BX70	
Blower Pulley	1	2BK130H	
Bushing	1	H-1 3/16	
Motor Pulley	1	2VP75X1-3/8	3.5

Burner:

Min Output BTU: 40,000 BTU/Hr
 Max Output BTU: 480,001 BTU/Hr
 Max Input BTU: 600,000 BTU/Hr
 Gas Type: Natural

Supply Performance:

Volume: 7500 cfm
 RPM: 927
 TS: 4368 ft/min
 SP: 1.893" w.g.
 1.500" Ext. + 0.348" Int. + 0.045" Opt.
 BHP: 5.839

Heating Schedule:

Altitude: 293'
 Winter Entering Air Dry Bulb Temp: 3°F
 Temp Rise: 44°F
 Output BTU: 400000
 Input BTU: 500000
 BTUs BASED OFF ACTUAL AIR DENSITY

Supply Installation Information:

Gas Inlet Pressure: 7 in. w.c. - 14 in. w.c.
 Insurance: No Insurance Requirement (ANSI)
 Unit Main Input: 29.6 Amps MCA, 50 Amps MOP, 208 V, 10 AWG Wire Min.
 Supply Unit Voltage: 3 phs 208 V 60Hz
 SCCR: 10 kAmp

**Blower:**

18" forward curved, centrifugal blower. Pillow Block ball bearings. Galvanized finish. 3500-12000 CFM. 1-3/16" x 34" Shaft. 1450 max. RPM. Used in heated and non-heated supply fans.

Temp Control:

0-150°F Discharge Temp Control • Heating Activation Based On Either Intake or Space Set Point • Manual Blower Mode

Intake:

V-Bank for Size # 3 Modular Indirect-Fired Heater with TA Filters. Includes screened intake. For outdoor installation. MERV 8 V-Bank Filters.

Filters:

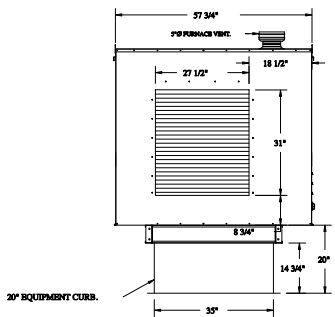
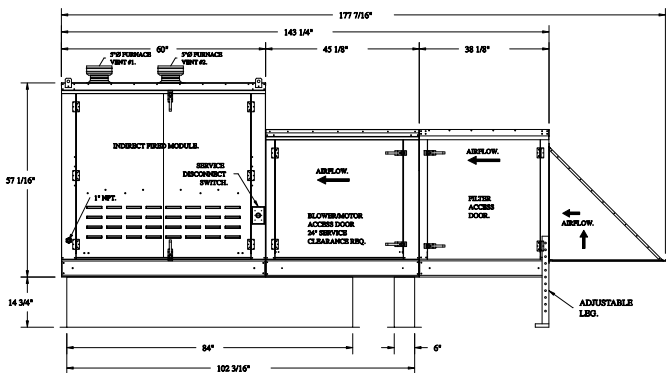
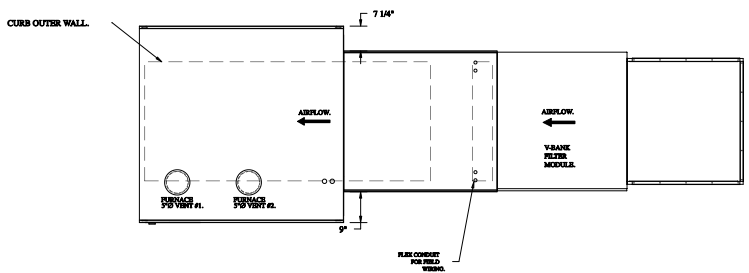
8x Filter throw away filter 20" x 25" x 2". MERV 8. (DP40), 12 per box

Curb & Supports:

ROOF CURB - 35" Width X 84" Length X 20" Supply Height, Insulated
 RAIL - 6" Width X 35" Length X 20" Height
 Adjustable Equipment Legs, 36 in. high, set of 2

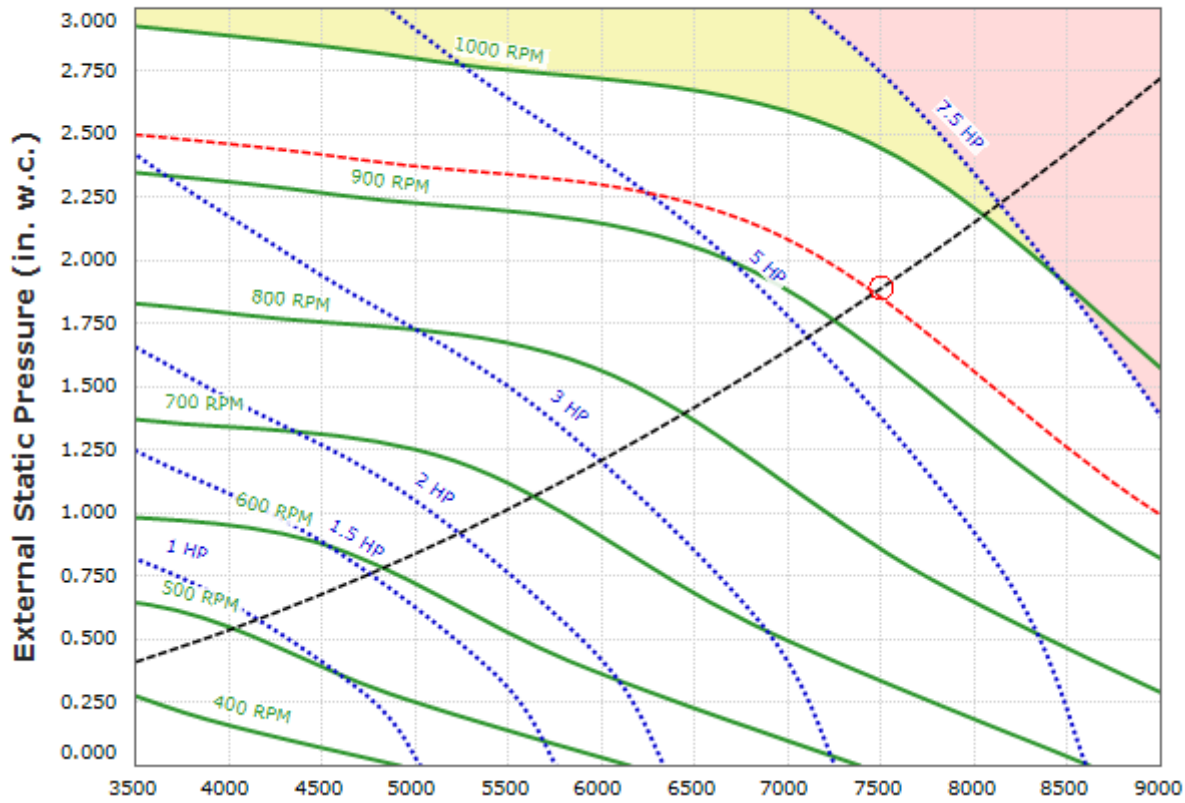
Selected Options:

- Gas Pressure Gauge, 0-35", 2.5" Diameter, 1/4" Thread Size
- Gas Pressure Gauge, 0 to +10 Inches Wc., 2.5" Diameter, 1/8" Thread Size, Rear Thread, For 2 Furnaces
- Motorized Back Draft Damper 30" X 30" for Size 3 Standard & Modular Heater Units w/Extended Shaft, Standard Galvanized Construction, 3/4" Rear Flange, Low Leakage, NFBUP-S Actuator Included
- Commercial Smoke Detector Interlock (Detector By Others)
- Extra Set of V-Belts. Only to be ordered as fan option at time fan is ordered.
- GFCI 15 amp Convenience Outlet For Heater Enclosure. Power supply by others - Includes receptacle and J box.
- Single Electrical Cabinet LED Lights Used on Modular MUA Units
- Single Point Electrical Connection for all IBT Heaters with 1 module. QNTY 1 750va Transformer Used. If a Non-DCV Prewire is used on the IBT Heater, the #28, #47, "MA", or "E2" Option Prewire must be selected. Do not provide supply starter in prewire.
- Curb Duct Hanger - 1-1/4" Angle Iron Frame Welded to Curb to support standard size ductwork. Priced per curb. Only available when curb assembly is ordered.
- VAV (Variable-Air-Volume) Wiring Package for Commercial Fans. Manual Speed Control Variable Frequency Drive Included
- Supply Variable Frequency Drive - 7-1/2 HP Max., 200/240 V, Three Phase, 23.0 A Max., NEMA 1 Enclosure, with 2RJ-45 FOR MODBUS
- VFD factory mounted and wired in unit control vestibule.
- Used with size 3 and size 4 side discharge IBT modules.



7500 CFM, 1.893 SP @ 927 RPM and 5.839 BHP at 293 feet and 3° F

* Note: Curves are adjusted to job specific temperature and altitude.
 Yellow shaded region is above the max recommended RPM.
 Red shaded region is outside the operating range of this fan.



A3-IBT-600-300-300-G18 supply sound data @ 927 RPM:

LWA: 80.8 Sones at 5 ft.: 17.8 DBA at 5 ft.: 69.3

Frequency	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Sound Power (dB)	82.5	84.1	80.5	77.6	75.5	71.5	68.4	66.1



Order # 4938009 - 79 Pine St MAUs

Fan #2 A3-IBT-600-300-300-G18 (1792 lbs./124 curb)

Tag: MAU-2

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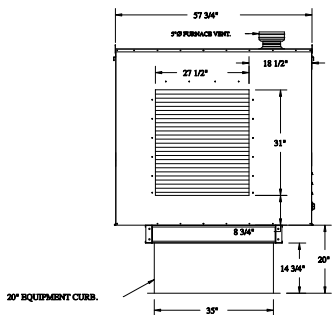
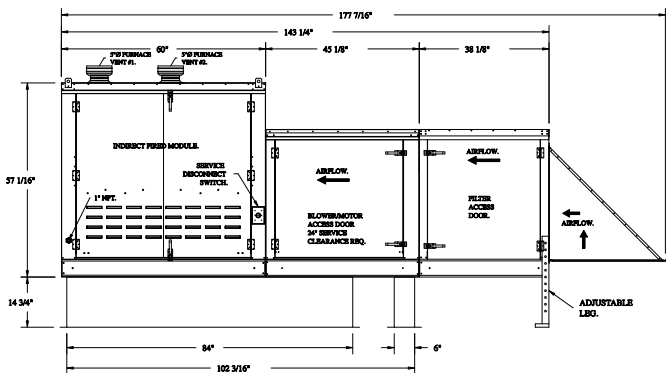
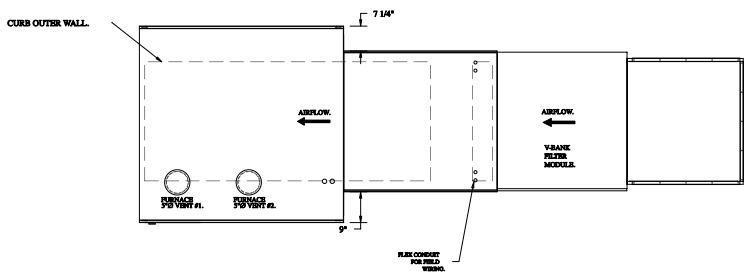
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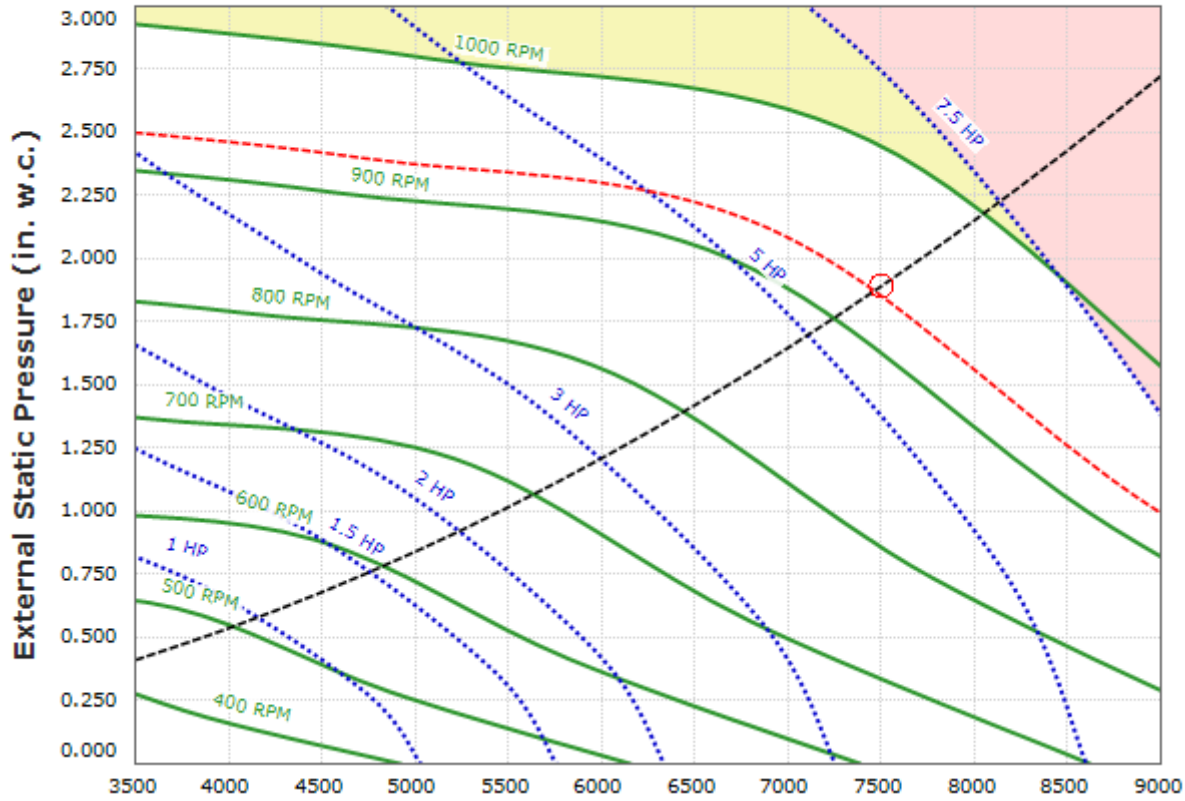
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EQUIPMENT NOTES:

- VFDs factory-installed in units
- Smoke sensor interlocks included. Sensor by others
- NEMA 3R disconnects factory installed. Non-lockable
- No shaft grounding rings