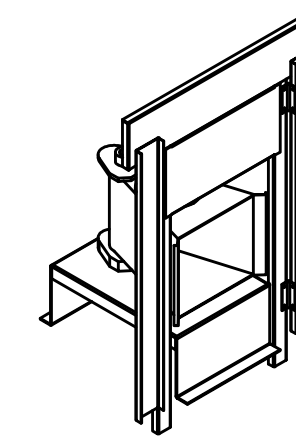
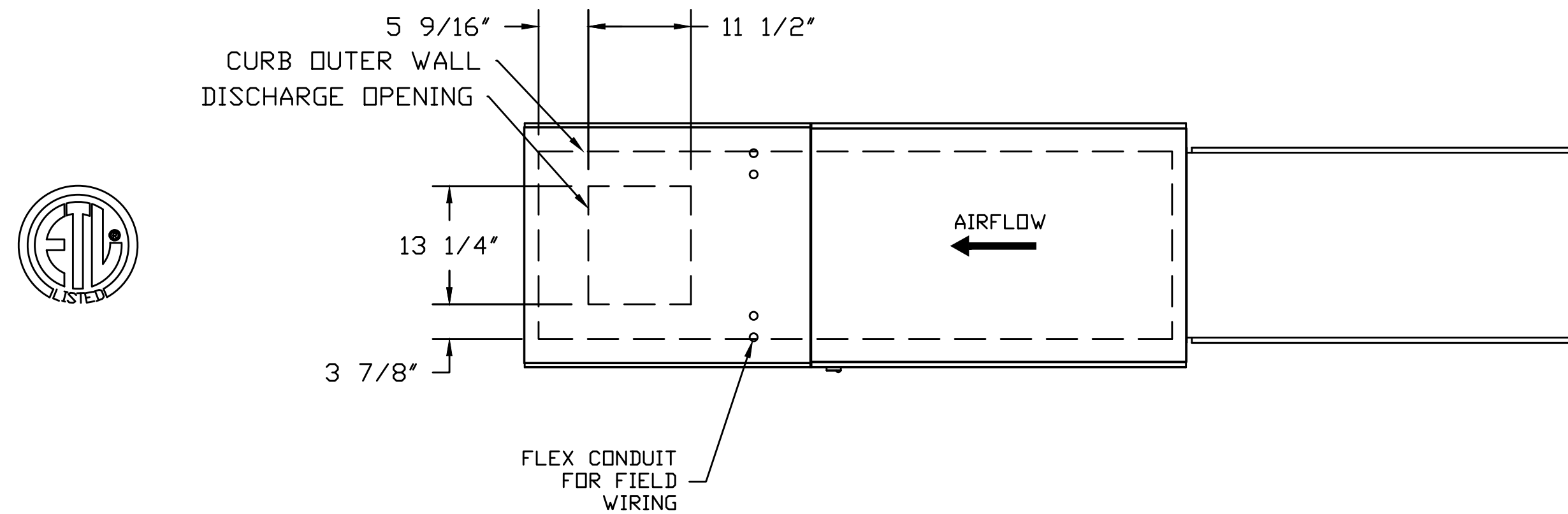


- FAN #3 A1-D.250-G10 - HEATER (MUA-1: KITCHEN)
1. DIRECT GAS FIRED HEATED MAKE UP AIR UNIT WITH 10" BLOWER
 2. INTAKE HOOD WITH EZ FILTERS
 3. DOWN DISCHARGE - AIR FLOW RIGHT -> LEFT
 4. COOLING INTERLOCK RELAY. 24VAC COIL. 120V CONTACTS. LOCKS OUT BURNER CIRCUIT WHEN AC IS ENERGIZED.
 5. MOTORIZED BACK DRAFT DAMPER 16" X 18" FOR SIZE 1 STANDARD & MODULAR HEATER UNITS W/EXTENDED SHAFT, STANDARD GALVANIZED CONSTRUCTION, 3/4" REAR FLANGE, TFB120S ACTUATOR INCLUDED
 6. LOW FIRE START. ALLOWS THE BURNER CIRCUIT TO ENERGIZE WHEN THE MODULATION CONTROL IS IN A LOW FIRE POSITION.
 7. GAS PRESSURE GAUGE, 0-35", 2.5" DIAMETER, 1/4" THREAD SIZE
 8. GAS PRESSURE GAUGE, -5 TO +15 INCHES WC., 2.5" DIAMETER, 1/4" THREAD SIZE
 9. EXTRA SET OF V-BELTS. ONLY TO BE ORDERED AS FAN OPTION AT TIME FAN IS ORDERED.
 10. 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.
 11. SEPARATE 120VAC WIRING PACKAGE FOR MAKE-UP AIR UNITS. OPTION MUST BE SELECTED WHEN MOUNTING VFD IN PREWIRE PANEL OR WITH DCV PACKAGE. PROVIDES SEPARATE 120VAC INPUT TO SUPPLY FAN. THIS 120V SIGNAL MUST BE RUN BY ELECTRICIAN FROM DCV TO MUA SWITCH.

NOTE: SUPPLY DUCT MUST BE INSTALLED TO MEET SMACNA STANDARDS. A MINIMUM STRAIGHT DUCT LENGTH EQUAL TO THREE TIMES THE SUPPLY DUCT EQUIVALENT DIAMETER MUST BE MAINTAINED DOWNSTREAM OF UNIT DISCHARGE UNLESS OTHERWISE SPECIFIED. DO NOT RELY ON UNIT TO SUPPORT DUCT IN ANY WAY.



Direct Fired (DF) Profile Plate Assembly

SUPPLY SIDE HEATER INFORMATION:

WINTER TEMPERATURE = 0°F. TEMP. RISE = 65°F.
 BTUs CALCULATED OFF ACTUAL AIR DENSITY
 OUTPUT BTUs AT ALTITUDE OF 0.0 ft. = 178329
 INPUT BTUs AT ALTITUDE OF 0.0 ft. = 193836
 OUTPUT BTUs AT ALTITUDE OF 134 ft. = 177468
 INPUT BTUs AT ALTITUDE OF 134 ft. = 192900

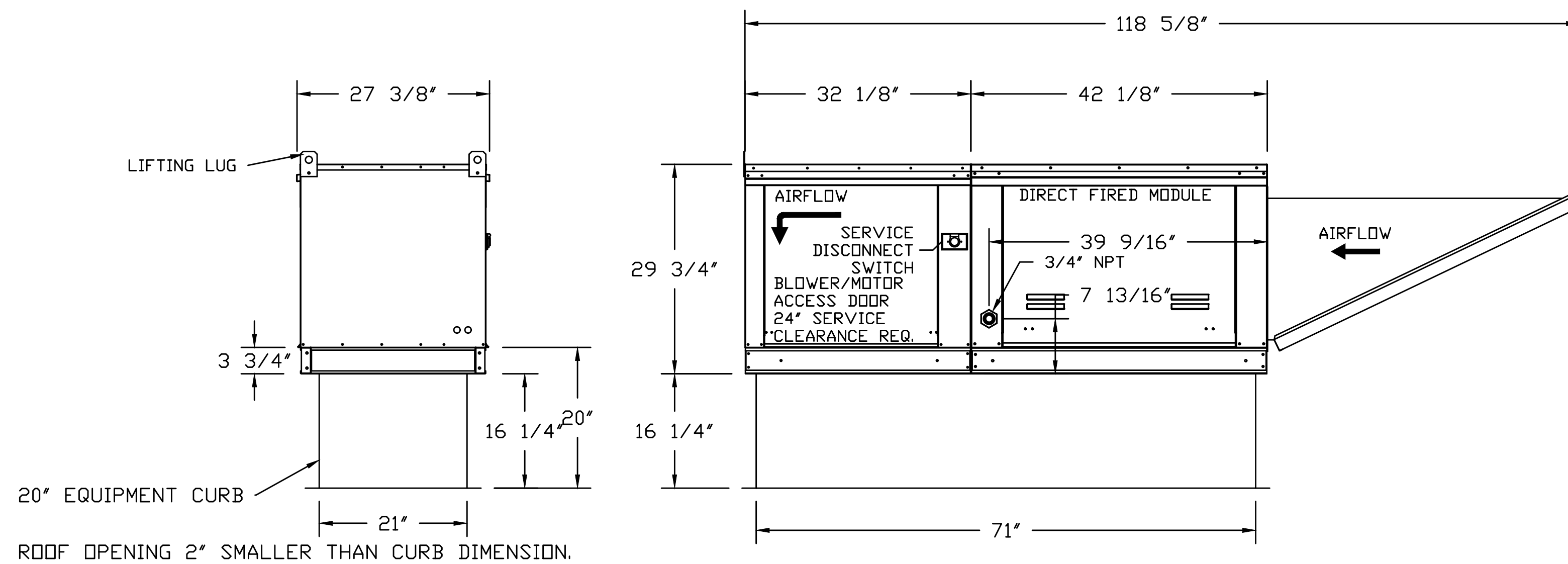
Direct Fired Profile Plate Specifications:

Description:
 Direct fired burners shall have patented (US Patent No. US6629523B2), self-adjusting profile plates designed to ensure proper air velocity and pressure drop across the burner. Profile plates shall allow burners to achieve clean combustion by limiting by-product levels to a maximum of 5ppm of carbon monoxide (CO), and 0.5ppm of nitrogen dioxide (NO2).

Application:
 Spring-loaded burner profile plates are engineered to automatically react to the momentum of a fresh air stream, without the need for any motors or actuators to mechanically adjust them. With this feature, all DF units are designed for demand control ventilation (DCV) requirements.

Certifications:
 All profile plate assemblies shall be included in the DF unit's ETL listing and comply with combined safety standards ANSI Z83.4 and CSA 3.7 (non-recirculating DF heaters) and ANSI Z83.18 (recirculating DF heaters).

General Construction:
 -Profile plates shall be formed from G90 galvanized steel.
 -Profile plates shall vary in size per unit.
 -Profile plates shall be mounted along the same plane as the discharge of the burner.
 -Design shall incorporate properly torqued, permanently mounted spring hinges.
 -Spring hinges shall be made from plated steel.



ACCESS PANELS ON LEFT SIDE IF FACING AIR INLET

"AMERICAN MANUFACTURED IS PREFERRED"

RECORD DRAWING:

THIS DRAWING HAS BEEN UPDATED TO REFLECT CHANGES MADE TO THE CONSTRUCTION. BASED UPON INFORMATION FURNISHED TO THE ENGINEER BY THE INSTALLATION CONTRACTOR. NO WARRANTY, EITHER EXPLICIT OR IMPLIED, IS GIVEN BY MEA, INC. AS TO THE ACCURACY AND/OR COMPLETENESS OF THIS INFORMATION.

AS-BUILT PREPARED 1.22.2020

FOSTER SHELTER

6144 SE FOSTER RD., PORTLAND, OREGON 97206
 CLIENT: MULTNOMAH COUNTY



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PROJECT NO. 17-0918 ISSUE DATE 05.04.2018

REVISIONS
 CHECKSHEET 5.23.2018

OWNER CHANGES 2.26.2019

SHEET

CAPTIVE AIR DETAILS

M5.1

PERMIT SET

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