

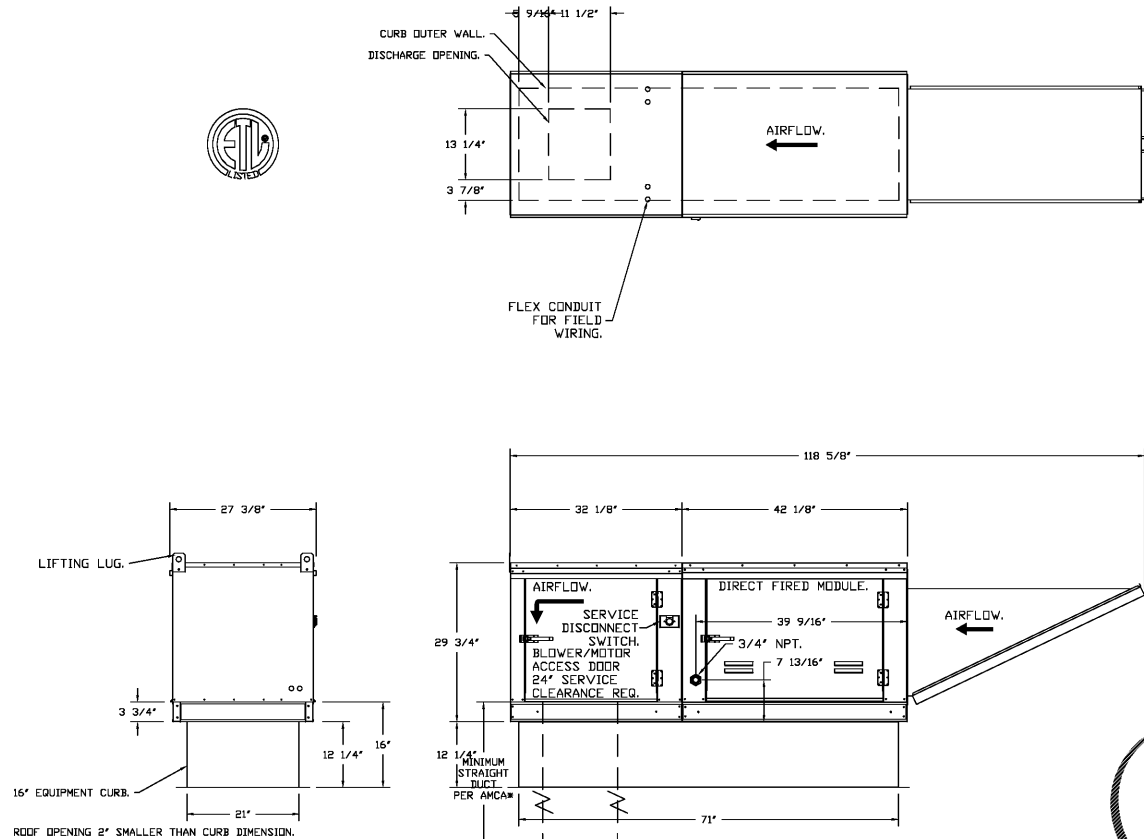
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- FAN #2 AI-D250-15D - HEATER
1. DIRECT GAS FIRED HEATED MAKE UP AIR UNIT WITH 15' DIRECT DRIVE FAN.
 2. INTAKE HEED WITH EZ FILTERS.
 3. DOWN DISCHARGE - AIR FLOW RIGHT -> LEFT.
 4. COOLING INTERLOCK RELAY, 24VAC COIL, 120V CONTACTS. LOCKS OUT BURNER 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, LOW LEAKAGE, TFB20S 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 1/2" DIAMETER, 1/4" THREAD SIZE.
 8. GAS PRESSURE GAUGE, -5 TO +15 INCHES WC, 2.5" DIAMETER, 1/4" THREAD SIZE.
 9. 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.
 10. HINGED DOUBLE WALL INSULATED DOOR ASSEMBLY (BURNER/BLOWER SECTION).

NOTE: SUPPLY DUCT MUST BE INSTALLED TO MEET SMACNA STANDARDS. A MINIMUM STRAIGHT DUCT LENGTH MUST BE MAINTAINED DOWNSTREAM OF UNIT DISCHARGE AS OUTLINED IN AMCA PUBLICATION 201. WHEN USING RECTANGULAR DUCTWORK, ELBOWS MUST BE RADIUS THROAT, RADIUS BACK WITH TURNING VANES. FLEXIBLE DUCTWORK AND SQUARE THROAT/SQUARE BACK ELBOWS SHOULD NOT BE USED. ANY TRANSITION AND/OR TURNS IN THE DUCTWORK WILL CAUSE SYSTEM EFFECT. SYSTEM EFFECT WILL DRASTICALLY INCREASE STATIC PRESSURE AND REDUCE AIRFLOW. DO NOT RELY ON UNIT TO SUPPORT DUCT IN ANY WAY. FAILURE TO PROPERLY SIZE DUCTWORK MAY CAUSE SYSTEM EFFECTS AND REDUCE PERFORMANCE OF THE EQUIPMENT. SUGGESTED STRAIGHT DUCT SIZE IS 14" x 14".

SUPPLY SIDE HEATER INFORMATION

WINTER TEMPERATURE = 29°F. TEMP. RISE = 50°F.
BTUS CALCULATED OFF ACTUAL AIR DENSITY.
OUTPUT BTUS AT ALTITUDE OF 0.0 FT. = 76386.
INPUT BTUS AT ALTITUDE OF 0.0 FT. = 83029.
OUTPUT BTUS AT ALTITUDE OF 938 FT. = 73932.
INPUT BTUS AT ALTITUDE OF 938 FT. = 80253.



DIRECT FIRED (DF) PROFILE PLATE ASSEMBLY

DESCRIPTION
DIRECT FIRED BURNERS SHALL HAVE PATENTED US PATENT NO. 5,649,500. SELF-ADJUSTING PROFILE PLATES SHALL ALLOW BURNERS TO ACHIEVE CLEAN COMBUSTION BY LIMITING BY-PRODUCT LEVELS TO A MAXIMUM OF 50% OF CARBON MONOXIDE (CO) AND 50% OF NITROGEN DIOXIDE (NO2). DIRECT FIRED UNITS SHALL BE CONFIGURED WITH THE BLOWER MOUNTED DOWNSTREAM OF THE BURNER. THIS ARRANGEMENT WILL ENSURE A CONSISTENT AIRFLOW, REGARDLESS OF INLET AIR TEMPERATURE.

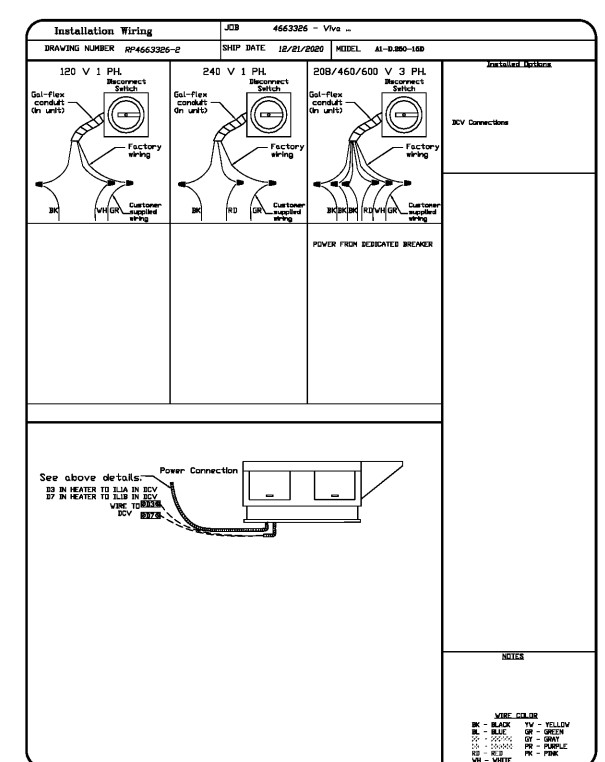
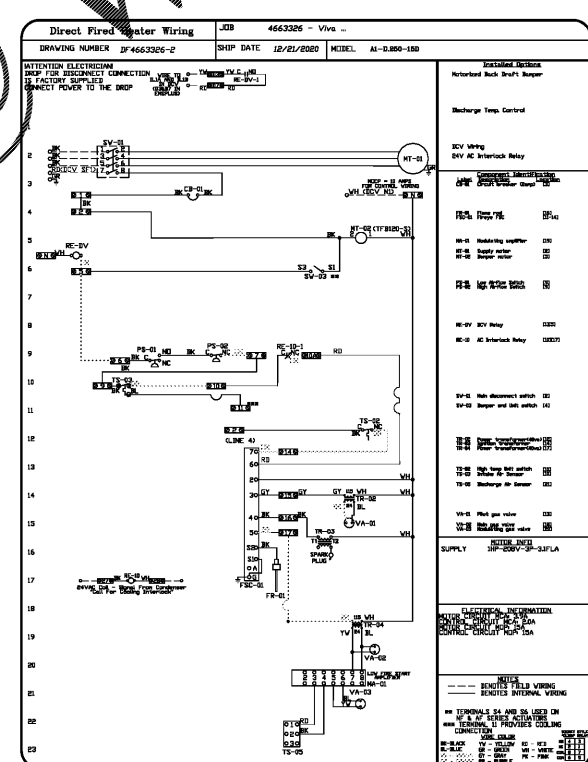
APPLICATION
SPRING-LOADED BURNER PROFILE PLATES ARE ENGINEERED TO AUTOMATICALLY REACT TO THE MOMENTUM OF A FRESH AIR STREAM WITHOUT THE NEED FOR ANY MOTORS OR ACTUATORS TO MECHANICALLY ADJUST THEM. WITH THIS FEATURE, ALL DF UNITS ARE DESIGNED FOR DEMAND CONTROL VENTILATION (DCV) REQUIREMENTS.

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 Z83.8 (CIRCULATING 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.

WWW.LDILine.com

Order Plans @



REVISIONS	
DESCRIPTION	DATE

CAPTIVE

Piedmont Office

6503 Carmel Road, Suite 105, Charlotte, NC, 28226 PHONE: (704) 844-9088 FAX: (919) 227-5952 EMAIL: reg30@captivewire.com

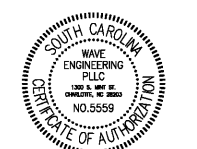
www.captivewire.com

Viva Chicken - Greenville SC
GREENVILLE, SC, 29601

DATE: 12/21/2020
DWG.#: 4663326
DRAWN BY: agrant
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO. 3

d3 studio
PLANNING • ARCHITECTURE • INTERIORS
1318 CENTRAL AVENUE :: SUITE A-10
CHARLOTTE, N.C. 28205
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FOR CONSTRUCTION

Viva Chicken.
PERUVIAN ROTISSERIE JOINT
1139 WOODRUFF RD.
-SUITE B
GREENVILLE, SC
29607

REVISION		
no.	date	comment

DRAWN BY: agrant
CHECKED BY: BRD
SUBMITTAL DATE: 02.08.2021
PROJECT NUMBER: 02-2031

MECHANICAL HOOD DRAWINGS

M3.03