*HOOD INFORMATION – JOB#5073021*

| HOOD NO | TAG | MODEL | MANUFACTURER | LENGTH | MAX COOKING TEMP | TYPE | APPLIANCE DUTY | DESIGN CFM/FT | TOTAL EXH CFM | EXHAUST PLENUM WIDTH | EXHAUST PLENUM LENG | EXHAUST PLENUM HEIGHT | RISER(S) DIA | RISER(S) CFM | RISER(S) VEL | RISER(S) SP | TOTAL SUPPLY CFM | HOOD CONSTRUCTION | HOOD CONFIG END TO END | HOOD CONFIG ROW |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | HOOD 1 | 5412 ESX-2 | ECON-AIR | 11' 0" | 600 DEG | I | HEAVY | 206 | 2266 | | | 4" | 14" | 2266 | 2120 | -0.660" | 0 | 430 SS WHERE EXPOSED | ALONE | ALONE |
| 2 | PSP | 166 MISC-PSP | ECON-AIR | 11' 0" | 300 DEG | I | N/A | 0 | 0 | | | | | | | | 1926 | 430 SS WHERE EXPOSED | ALONE | ALONE |

*HOOD INFORMATION*

| HOOD NO | TAG | FILTER(S) TYPE | FILTER(S) QTY | FILTER(S) HEIGHT | FILTER(S) LENGTH | FILTER(S) EFFICIENCY @ 7 MICRONS | LIGHT(S) QTY | LIGHT(S) TYPE | LIGHT(S) WIRE GUARD | LIGHT(S) LOCATION | LIGHT(S) SIZE | UTILITY CABINET(S) FIRE SYSTEM TYPE | UTILITY CABINET(S) FIRE SYSTEM SIZE | ELECTRICAL MODEL # | SWITCHES QUANTITY | FIRE SYSTEM PIPING | HOOD HANGING WEIGHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | HOOD 1 | SS BAFFLE WITH HANDLES | 8 | 16" | 16" | 30% | 5 | L55 SERIES E26 | NO | WALL MNT | 12"x48"x24" | TANK FS | 4.0/4.0 | SC-211110MA | 1 LIGHT 1 FAN | YES | 464 LBS |
| 2 | PSP | | | | | | 0 | | | | | | | | | NO | 106 LBS |

*HOOD OPTIONS*

| HOOD NO | TAG | OPTION |
|---|---|---|
| 1 | HOOD 1 | FIELD WRAPPER 5.00" HIGH FRONT, RIGHT.<br>LEFT QUARTER END PANEL 27" TOP WIDTH, 0" BOTTOM WIDTH, 27" HIGH 430 SS.<br>RIGHT VERTICAL END PANEL 27" TOP WIDTH, 21" BOTTOM WIDTH, 66" HIGH INSULATED 430 SS.<br>SENSOR-CV. |

*PERFORATED SUPPLY PLENUM(S)*

| HOOD NO | TAG | POS | LENGTH | WIDTH | HEIGHT | RISER(S) TYPE | RISER(S) WIDTH | RISER(S) LENG | RISER(S) DIA | RISER(S) CFM | RISER(S) SP |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | PSP | Front | 132" | 16" | 6" | MUA | 10" | 24" | | 642 | 0.221" |
| | | | | | | MUA | 10" | 24" | | 642 | 0.221" |
| | | | | | | MUA | 10" | 24" | | 642 | 0.221" |

*WALL-MOUNT UTILITY CABINET*

| HOOD NO | LOCATION | SIZE | UTILITY CABINET(S) FIRE SYSTEM TYPE | FIRE SYSTEM SIZE | ELECTRICAL MODEL # | SWITCHES QUANTITY | WEIGHT |
|---|---|---|---|---|---|---|---|
| 1 | WALL MNT | 12"x48"x24" | TANK FS | 4.0/4.0 | SC-211110MA | 1 LIGHT 1 FAN | 340.00 LBS |

*EXHAUST FAN INFORMATION – JOB#5073021*

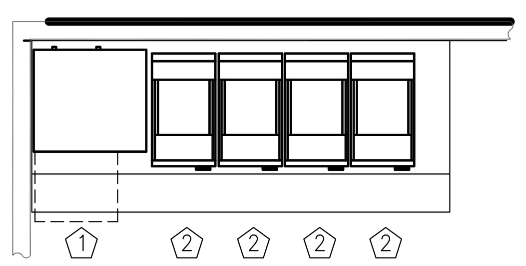
| FAN UNIT NO | TAG | QTY | FAN UNIT MODEL # | MANUFACTURER | CFM | ESP | RPM | MOTOR ENCL | HP | BHP | PHASE | VOLT | FLA | DISCHARGE VELOCITY | WEIGHT (LBS) | SONES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | KEF 1 | 1 | EADU85H | ECON-AIR | 2266 | 0.850 | 1480 | TEAO-ECM | 1.000 | 0.5720 | 1 | 230 | 6.5 | 717 FPM | 93 | 16.5 |

*MUA FAN INFORMATION – JOB#5073021*

| FAN UNIT NO | TAG | QTY | FAN UNIT MODEL # | BLOWER | HOUSING | MIN CFM | DESIGN CFM | ESP | RPM | MOTOR ENCL | HP | BHP | PHASE | VOLT | FLA | MCA | MOCP | WEIGHT (LBS) | SONES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | MUA | 1 | EA1-D.500-15D | 15MF-1-MOD | A1-D.500 | 1000 | 1800 | 0.050 | 1679 | TEAO-ECM | 1.000 | 0.7660 | 1 | 230 | 6.5 | 8.2A | 15A | 455 | 15.6 |

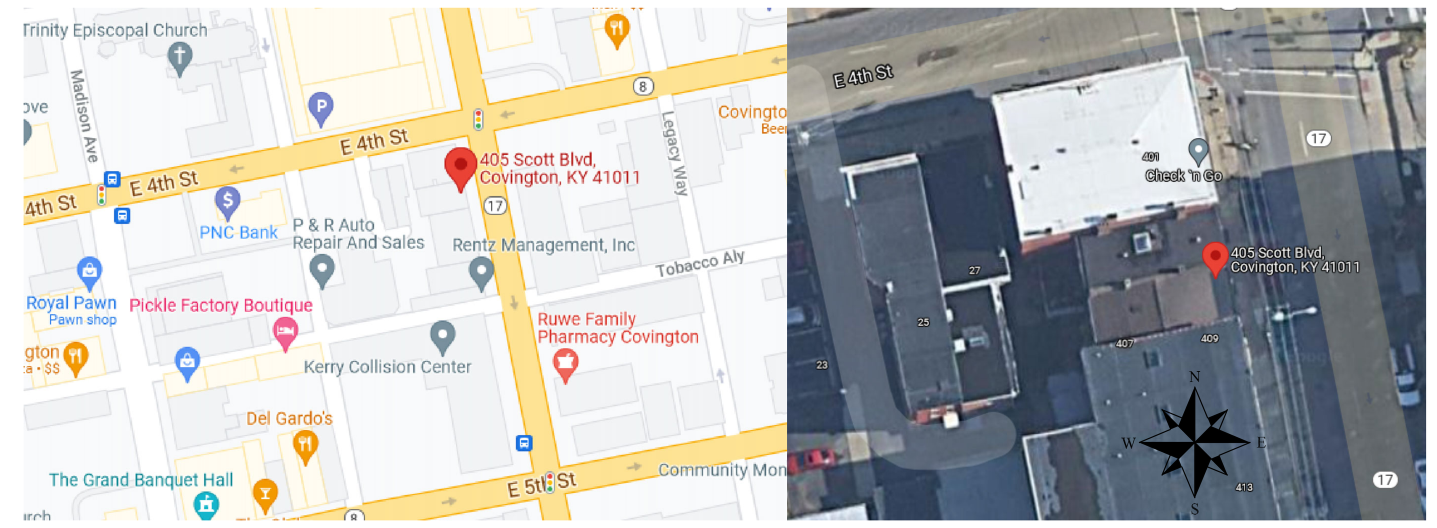
*GAS FIRED MAKE-UP AIR UNIT(S)*

| FAN UNIT NO | TAG | INPUT BTUs | OUTPUT BTUs | TEMP RISE | REQUIRED INPUT GAS PRESSURE | GAS TYPE | BURNER EFFICIENCY(%) |
|---|---|---|---|---|---|---|---|
| 2 | MUA | 132328 | 121742 | 65°F | 7 IN. W.C. - 14 IN. W.C. | NATURAL | 92 |



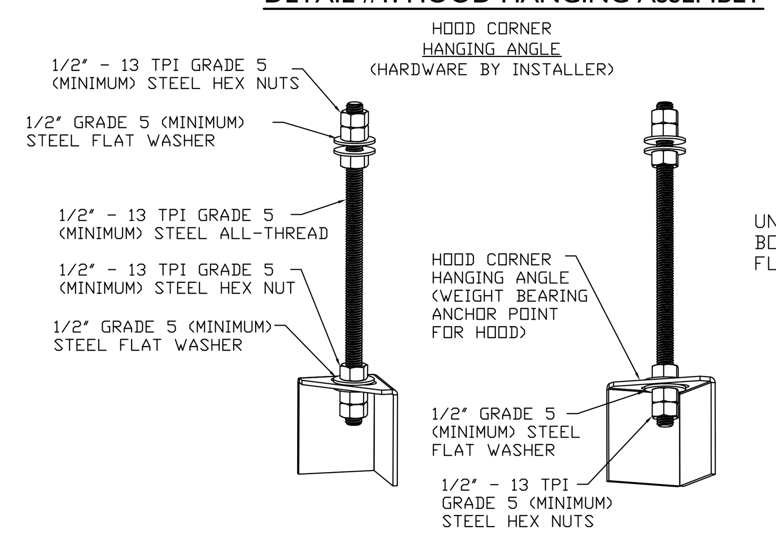

## COOKING EQUIPMENT LAYOUT

1. HOTPLATE, COUNTERTOP, GAS
2. FRYER, GAS




## SITE / ROOF PLAN VIEW

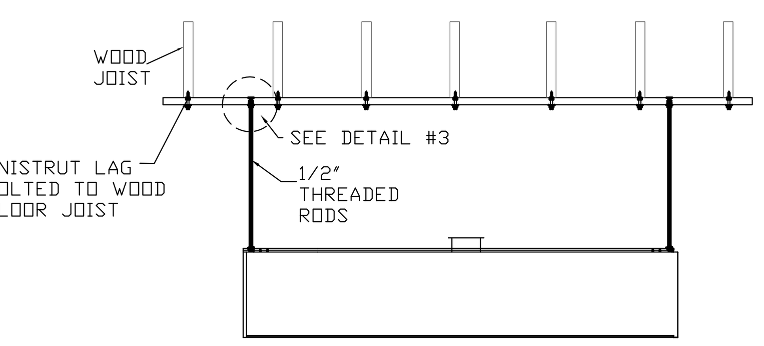
## DETAIL #1: HOOD HANGING ASSEMBLY




ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION BENEATH HOOD HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

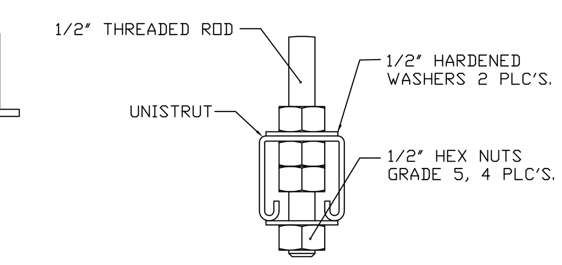
## DETAIL# 2: HOOD SUPPORT




| HOOD SUPPORT REQUIREMENTS | |
|---|---|
| HOOD LENGTH | NUMBER OF HANGING POINTS |
| 11' | 4 |

## DETAIL #3: HANGING ROD TO UNISTRUT

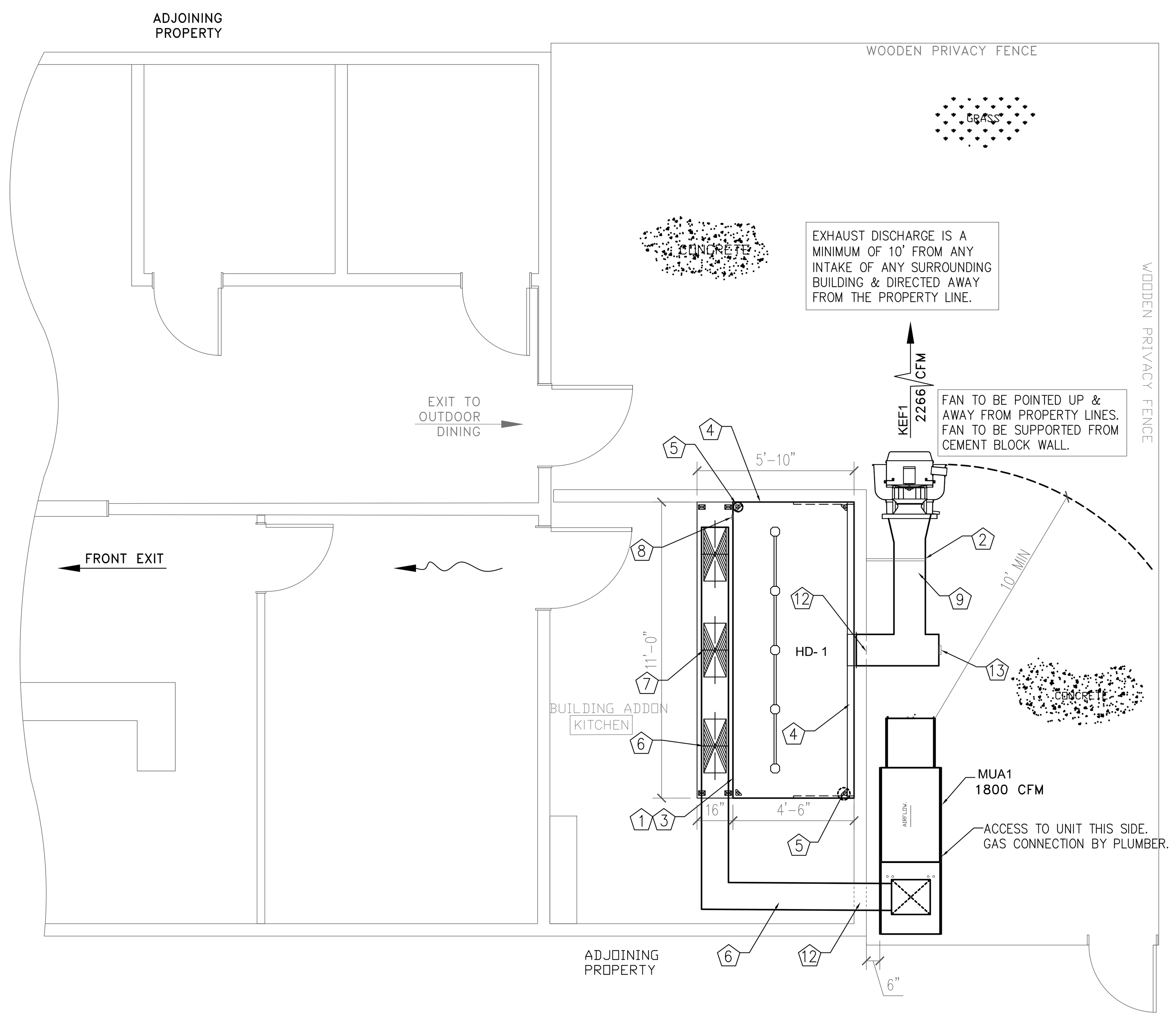
(HARDWARE BY INSTALLER)




**AIR BALANCE SCHEDULE**

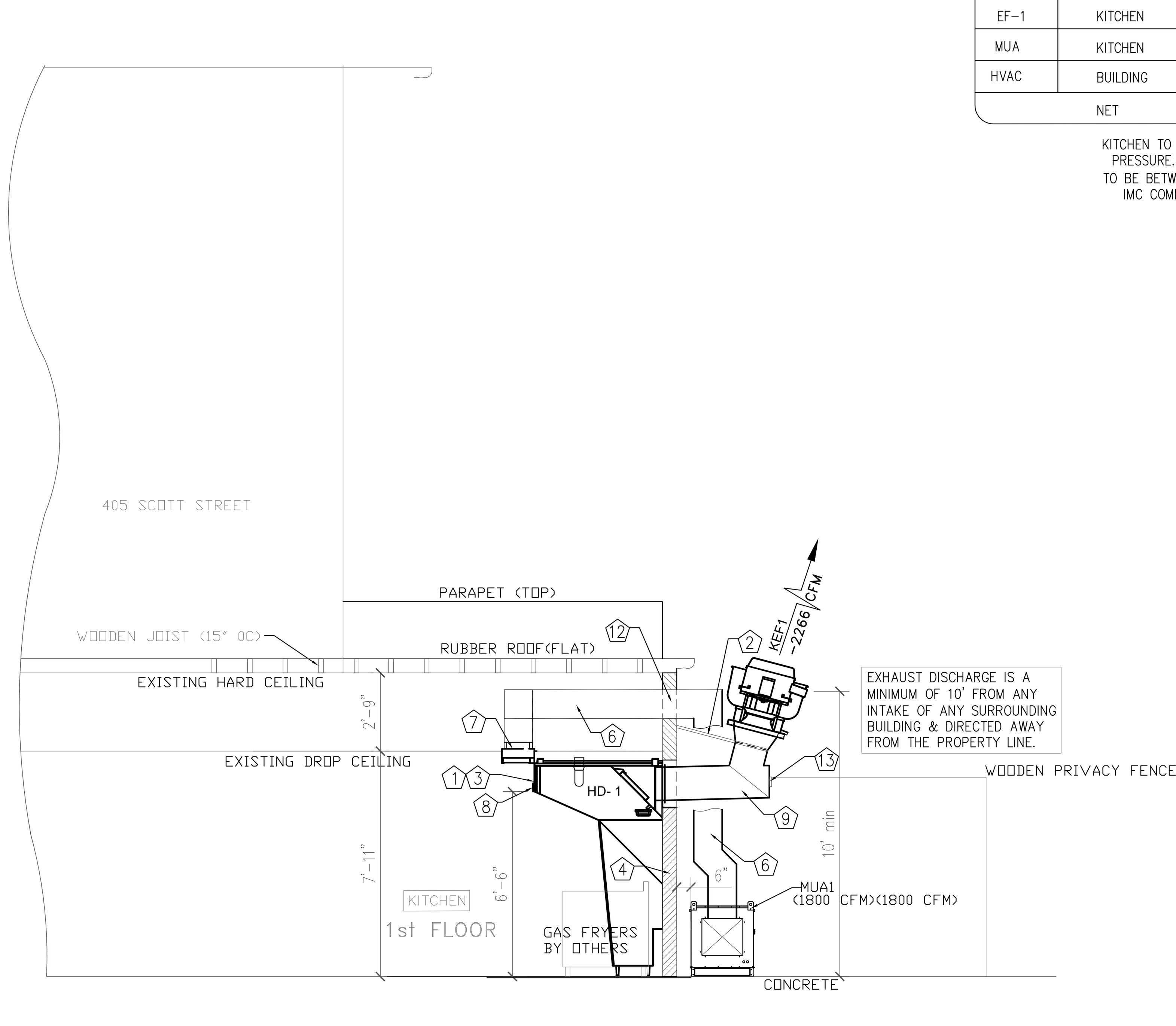
| TAG | ROOMS SERVED | O.A. CFM | EXHAUST CFM |
|---|---|---|---|
| EF-1 | KITCHEN | – | – 2266 |
| MUA | KITCHEN | + 1800 | – |
| HVAC | BUILDING | + 466 (MIN) | – |
| | NET | 0 CFM | |

KITCHEN TO MAINTAIN A SLIGHTLY NEGATIVE PRESSURE. OVERALL BUILDING PRESSURE TO BE BETWEEN -0.02" TO +0.02" WC PER IMC COMMENTARY RECOMMENDATIONS




## PLAN VIEW - HOOD #1

SCALE: 1/4" = 1'-0"




## ELEVATION VIEW - HOOD #1 (HD-1)

SCALE: 1/4" = 1'-0"

## Key Notes

1. ECON-AIRE ETL LISTED HOOD IN ACCORDANCE TO UL710 SEE CAPTIVE-AIRE SHOP DWGS.
2. LISTED DUCT SUPPORT ASSEMBLY PART OF COMPLETE SYSTEM.
3. CANOPY TYPE HOOD. TO OVERHANG ON FRONT BY 6" FROM COOKING SERVICE (SEE ECON-AIRE LISTING SHEET).
4. CONCRETE CEMENT BLOCK WALLS (BACK & RIGHT IF HOOD)
5. HANGING ROD (SEE DETAILS #1, #2 & #3)
6. 12"X 18" (OR EQUIV) DUCT TO MUA1 ON CONCRETE SLAB.
7. 10"X 24" SUPPLY RISERS FOR SUPPLY PLENUM FOR HOOD. (QTY 3)
8. FAN AND LIGHT SWITCHES.
9. 14" DIA FACTORY BUILT CAPTIVE-AIRE LISTED GREASE DUCTWORK (SEE SPEC'S ON THIS PAGE)
10. GAS FIRED HEATED MAKE-UP-AIR UNIT, GAS CONNECTED BY PLUMBER. ACCESS SYSTEM TO SYSTEM ON THIS SIDE.
11. HOOD CONTROLS & ANSUL (UL300) WALL MOUNTED UP HIGH (VERIFY LOCATION).
12. G.C. /OWNER TO PROVIDE HOLES IN THE EXTERIOR WALL FOR EXHAUST & SUPPLY DUCT & THEN CLOSE UP AROUND DUCT SYSTEM.
13. CAPTIVE-AIRE GREASE CLEAN-OUT (REMOVABLE BY HAND)

*RESPONSIBILTY MATRIX*

A) REQUIREMENTS FOR FOOD SERVICE CONTRACTOR (F.E.C./OWNER)
1) HOOD & ALL ASSOCIATED EXHAUST IS PROVIDED & INSTALLED BY OWNER REPRESENTATIVE.
2) HOOD SYSTEM TO BE STARTED UP BY CONTRACTOR
   A) SMOKE TEST ON THE HOODS IN FRONT OF THE OWNER TO ENSURE SATISFACTION WITH COOKING EQUIPMENT ON.
3) ALL WALL STAINLESS FOR UNDER & AROUND HOODS SHALL BE INSTALLED ALSO.
4) HOOD & ANSUL PERMIT DRAWINGS TO BE PROVIDED BY THE OWNER REPRESENTATIVE AND SUBMITTED UNLESS REQUESTED DIFFERENTLY BY ARCHITECT OR OWNER.
5) SET CURB & FANS AS SHOWN ON DRAWINGS
6) INSTALLER TO ENSURE ALL HOOD AND FAN ACCESSORIES ARE INSTALLED SUCH AS GREASE CUPS, HINGE KITS, FILTER INTAKES, AND ANY OTHER MISC. ITEMS SHIPPED WITH THE PRODUCT.
7) INSTALL CAPTIVE-AIRE LISTED STAINLESS STEEL GREASE DUCT FROM HOOD TO FAN.

B) NOTES (REQUIREMENTS) FOR ELECTRICIAN:
1) FIELD WIRE FROM BUILDING PANEL 1 PHASE (230V) POWER FOR EXHAUST FAN TO THE DISCONNECT ON THE EXHAUST. ALSO 1 PHASE, 230V TO MAKE-UP-AIR UNIT.
2) THEN WIRE THE C,A,S, SUPPLIED BRAIDED WIRE FROM EXHAUST FAN TO PIA & PIB OF THE HOOD CONTROL PANEL AT HOOD & RED WIRE FROM MUA TO P2A & P2B OF HOOD CONTROL PANEL.
3) FIELD WIRE FROM BUILDING PANEL TO CAPTIVE AIRE CONTROLS CABINET (HOOD MOUNTED) 1 PHASE, 115V. CIRCUIT TO BE USED FOR LIGHTS & CONTROLS CIRCUITRY.
4) WIRE RED/BROWN WIRES ON ANSUL CABINET TO CAPTIVE-AIRES CONTROL PANEL C1 & AR1 TERMINAL IF NOT ALREADY DONE AT FACTORY.
5) FIELD WIRE THE DUCT SENSORS LOCATED IN EXHAUST COLLARS TO CAPTIVE AIRE CABINET. CAPTIVE AIRE SUPPLIES THE WHITE STAT WIRE & SHIPPED IN CABINET
6) FIELD WIRE & INSTALL ROOM SENSOR SUPPLIED BY CAPTIVE AIRE. MOUNT SENSOR 6' AWAY FROM HOOD UP HIGH. STAT WIRE PROVIDED BY CAPTIVE AIRE.
7) FIELD WIRE THE BUILDING ALARM SYSTEM (IF APPLICABLE) INTO THE ANSUL MICRO SWITCH LOCATED AT THE RIGHT END OF THE HOOD.
8) IF ANY ELECTRIC UNDER HOOD, BREAKER MUST BE OF SHUNT TRIP TYPE & ELECTRICIAN TO WIRE FROM ST & N1 TERMINALS OF HOOD PANEL TO SHUNT TRIP DEVICE BY OTHERS.
9) WIRE CONTROL WIRE FROM MUA UNIT 24V & NI TO HOOD CONTROL PANEL.

C) FIELD NOTES (OTHER TRADES)
1) SITE PLUMBER TO INSTALL THE CAPTIVE-AIRE PROVIDED ANSUL GAS VALVE FOR EACH SYSTEM. PLUMBER TO FIELD INSTALL GAS VALVE INLINE WITH THE GAS PIPING GOING TO THE COOKING EQUIPMENT OF THE SYSTEM. PLUMBER TO COORDINATE WITH THE F.E.C. FOR ALL HOOK UP OF GAS COOKING EQUIPMENT & ENSURE ALL GAS IS VENTED ONCE HOOKED UP. USE GAS REGULATORS TO MAINTAIN 7-14" OF GAS PRESSURE.
2) PLUMBER TO CONNECT GAS LINE TO MUA UNIT.

D) GENERAL CONTRACTOR (GS/OWNER) RESPONSIBILITIES:
1) GC/OWNER IS RESPONSIBLE TO HOLD A COORDINATION MEETING WITH ALL TRADES TO ENSURE UNDERSTANDING OF REQUIREMENTS AND MAKE SURE THERE ARE NO CONFLICTS THROUGHOUT THE PROJECT & ASSIST AS REQUIRED
2) GC/OWNER IS RESPONSIBLE FOR ANY BUILDING CONSTRUCTION CHANGES OR STRUCTURAL REQUIREMENTS TO INCLUDE BUT NOT LIMITED TO: HOOD WALL READY TO ACCEPT WALL STAINLESS & HOOD, ANY REQUIREMENTS TO HEAD OFF JOIST FOR DUCT ROUTING, ANY STRUCTURAL SUPPORTS REQUIRED TO SHORE UP BUILDING OR STRUCTURE, AND ANY FINISHED CEILING WORK, CEILING WORK, DEMO, OR COSMETIC & PATCHING WORK. (ANY REQUIRED HOLES IN BUILDING)
3) PROVIDE A WORKING CONSTRUCTION SCHEDULE TO ALL TRADES. ALSO TO ENSURE AREA IS COMPLETELY CLEARED OUT TO ALLOW WORK TO BE PREFORMED.

*GREASE DUCT SPECIFICATION – SINGLE WALL*

FURNISH SINGLE-WALL, FACTORY BUILT, GREASE DUCT FOR USE WITH TYPE I KITCHEN HOODS, WHICH CONFORMS TO THE REQUIREMENTS OF NFPA-96.
PRODUCTS SHALL BE ETL LISTED TO UL-1978
FOR VENTING AIR AND GREASE VAPORS FROM COMMERCIAL COOKING OPERATIONS AS DESCRIBED IN NFPA-96.
THE DUCT WALL SHALL BE CONSTRUCTED OF .036 THICK TYPE 430 STAINLESS STEEL AND BE AVAILABLE IN DIAMETERS 8" THROUGH 24".
ALL SUPPORTS, FAN ADAPTERS, HOOD CONNECTIONS, FITTINGS AND EXPANSION JOINTS REQUIRED TO INSTALL GREASE DUCT SHALL BE INCLUDED.
ROOF PENETRATIONS SHALL COMPLY WITH LISTED CLEARANCE TO COMBUSTIBLES, SEE "CLEARANCE TO COMBUSTIBLES" GUIDE FOR DETAILS.
THE GREASE DUCT WILL TERMINATE AT THE FAN ADAPTER PLATE, WILL BE FULLY WELDED TO THE FAN ADAPTER PLATE AND THE FAN ADAPTER PLATE WILL BE FASTENED TO THE CURB USING A SUITABLY SIZED FASTENER PROVIDED BY OTHERS; SEE PAGE 12 OF THE "INSTALLATION, OPERATION AND MAINTENANCE MANUAL" FOR DETAILS.
GREASE DUCT JOINTS SHALL BE HELD TOGETHER BY MEANS OF FORMED VEE CLAMPS AND SEALED WITH 3M FIRE BARRIER 2000+. SCREWS USED TO SECURE THE VEE CLAMPS SHALL BE OF THE HEX-HEAD TYPE WITH FLANGED STOPS AND TAPERED "LEAD IN" THREADS FOR EASY STARTING. NUTS SHALL BE RETAINED BY MEANS OF A FREE-FLOATING CAGE TO ALLOW EASY ALIGNMENT.
SINGLE-WALL GREASE DUCT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S "INSTALLATION, OPERATION AND MAINTENANCE MANUAL", ETL LISTING AND STATE AND LOCAL CODES.
GREASE DUCT INSTALLED OUTSIDE OF THE BUILDING SHALL BE PROTECTED AGAINST ACCIDENTAL DAMAGE OR VANDALISM.
SUPPORT VERTICALLY INSTALLED GREASE DUCT FROM THE BUILDING STRUCTURE USING RIGID STRUCTURAL SUPPORTS. ANCHOR SUPPORTS TO THE STRUCTURE BY WELDING OR BOLTING STEEL EXPANSION
ANCHORS OR CONCRETE INSERTS. SUPPORT HORIZONTALLY INSTALLED GREASE DUCT FROM THE BUILDING STRUCTURE USING ABOVE METHOD OR USE DUCT MATE, WIRE ROPE & CLUTCHERS, PART NUMBERS WR20 & CL20. 1/2" THREADED ROD AND SADDLES MAY ALSO BE USED FOR THE SUPPORT OF HORIZONTAL GREASE DUCT.
FANS SHALL BE SUPPORTED INDEPENDENTLY FROM THE GREASE DUCT SECTIONS.
PROTECT GREASE DUCT FROM TWISTING OR MOVEMENT CAUSED BY FAN TORQUE OR VIBRATION.

*SUPPLY DUCT (SPECIFICATIONS):*

1) SHEET METAL DUCTWORK SHALL BE FABRICATED OF GALVANIZED STEEL AND INSTALLED IN ACCORDANCE WITH SMACNA AND THE BUILDING AND MECHANICAL CODES
2) INSTALL DAMPERS AT ALL BRANCH DUCTS AS REQUIRED TO PROPERLY BALANCE THE SYSTEM

CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH
UL 710 AND NFPA 96
AND ARE RECOGNIZED BY ONE OR MORE OF THE FOLLOWING:
ETL SANITATION LISTED
ETL LISTED FILE# 3054804-001

HOOD SYSTEM IS FABRICATED & DESIGNED PER UL-710 STANDARDS

| | |
|---|---|
| DATE: | 1/18/22 |
| DRAWN BY: | JAH |
| SCALE | NONE |
| REVISION | DATE |

# RIVERSIDE CHICKEN

405 SCOTT STREET
COVINGTON, KY 41011
NEW COMMERCIAL HOOD IN KITCHEN

MANAGED BY:
AIR SOLUTIONS, INC.
1329 E. KEMPER RD
CINCINNATI, OH 45246
PH: (513) 860-5555

STATE OF KENTUCKY RAYMOND C. FISCHER 9821 LICENSED PROFESSIONAL ENGINEER 1/19/22

SHEET NO:
H-1