

HOOD INFORMATION - JOB#4741193

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	WIDTH	HEIGHT	DIAMETER	VELOCITY	SP	CONSTRUCTION	HOOD END TO END	ROW
1	HD 1	S412	CAPTIVEAIRE	11' 0"	600 DEG	600 DEG	HEAVY	206	2266	4"	14"	2266	2120	-0.660'	0	430 SS	ALONE
2	PSP1	166	CAPTIVEAIRE	11' 0"	300 DEG	300 DEG	N/A	0	0						430 SS	ALONE	

HOOD NO	TAG	TYPE	QTY	HEIGHT	LENGTH	EFFICIENCY	QTY	TYPE	WIRE GUARD	LOCATION	SIZE	TYPE	SIZE	MODEL #	QUANTITY	SWITCHES	FRONT PANEL WEIGHT
1	HD 1	SS BAFFLE WITH HANDLES	8	16"	16"	30%	5	L55 SERIES E36	NO								430 LBS
2	PSP1		0				0										124 LBS

HOOD NO	TAG	FIELD	WASHER	17/0"	HIGH	LEFT	RIGHT
1	HD 1	WASHER CHANNEL - FRONT	27"	TOP WIDTH	27"	TOP WIDTH	27"
1	HD 1	RIGHT QUARTER END PANEL	27"	TOP WIDTH	0"	BOTTOM WIDTH	27"
1	HD 1	LEFT QUARTER END PANEL	27"	TOP WIDTH	0"	BOTTOM WIDTH	27"
2	PSP1	FIELD WASHER	11/0"	HIGH	FRONT	LEFT	RIGHT

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2	PSP1	FIELD WASHER	11/0"	HIGH	FRONT	LEFT	RIGHT

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SDWS
1	KEF 1	1	DU80HF4	CAPTIVEAIRE	2266	1350	1160	DDP-PREMIUM	11500	10590	3	208	6.6	523 FPM	187	14.4

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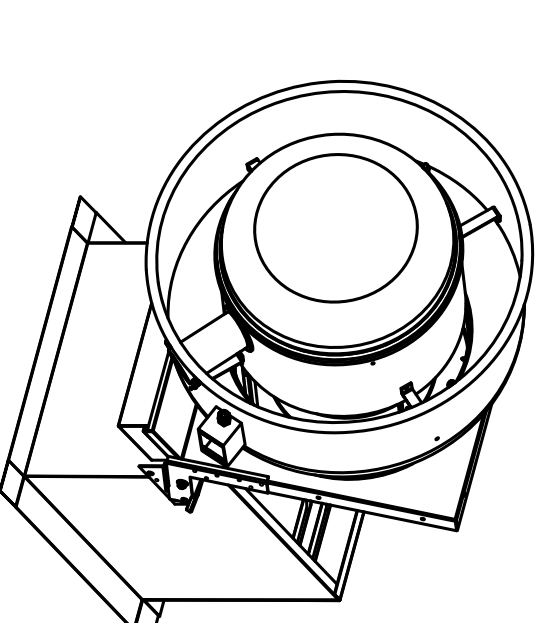
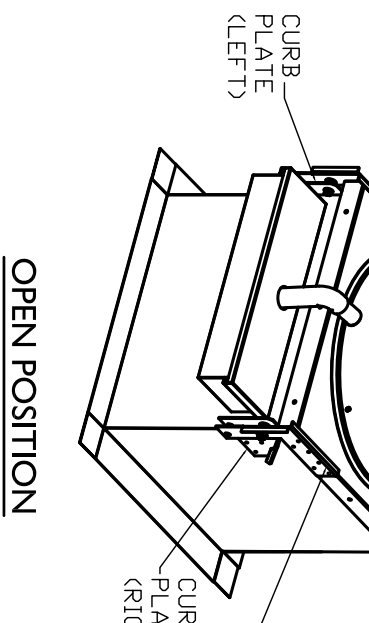
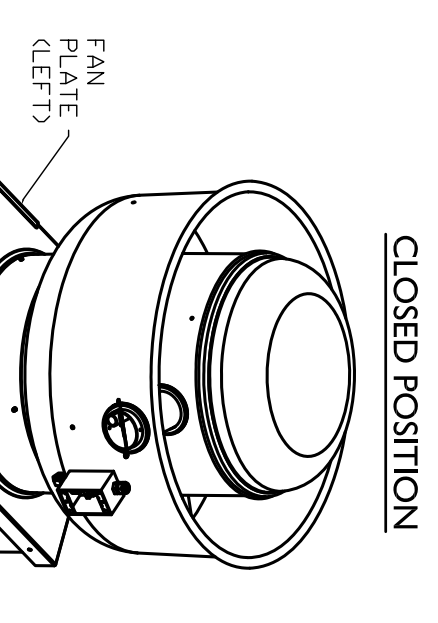
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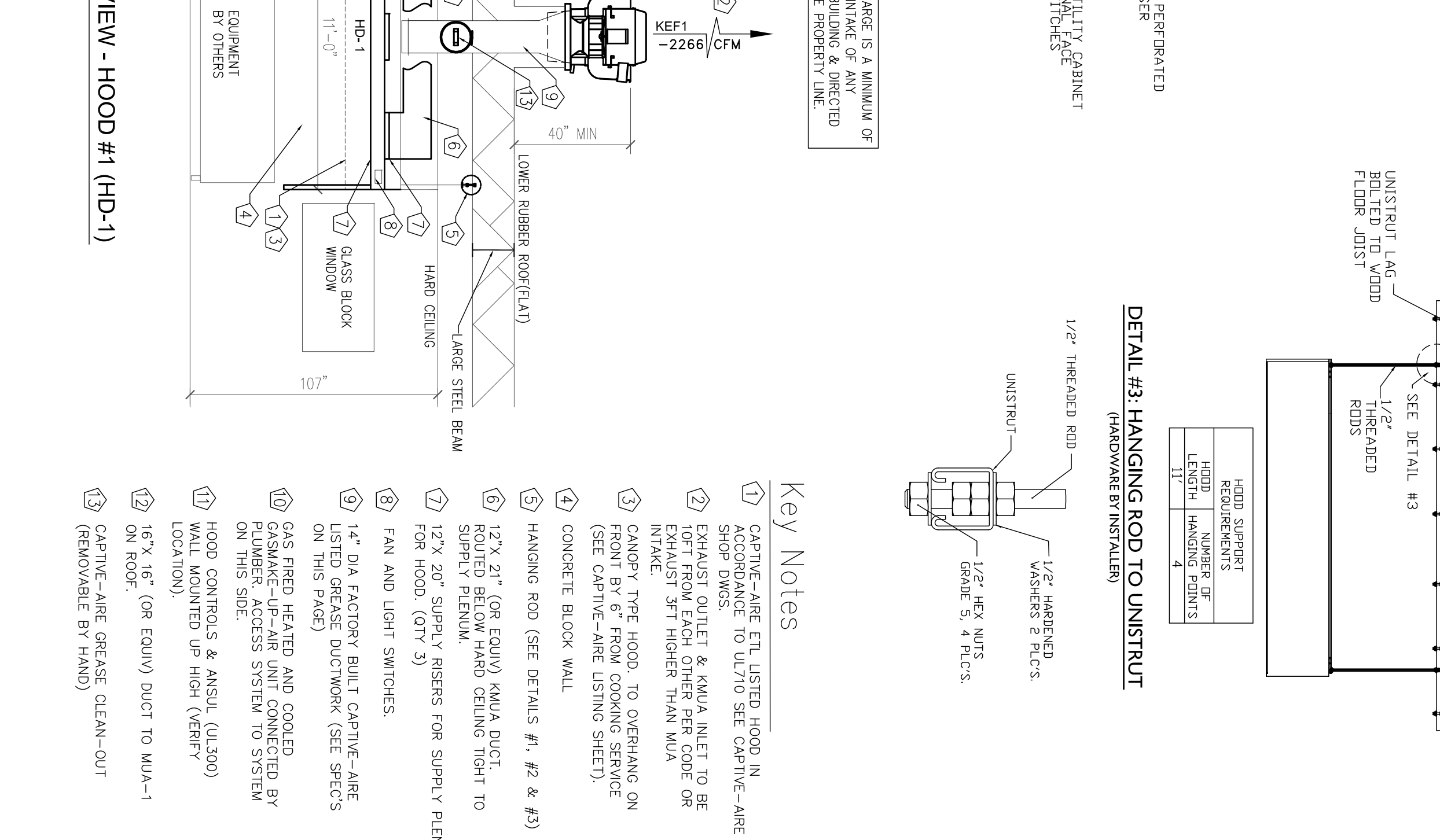
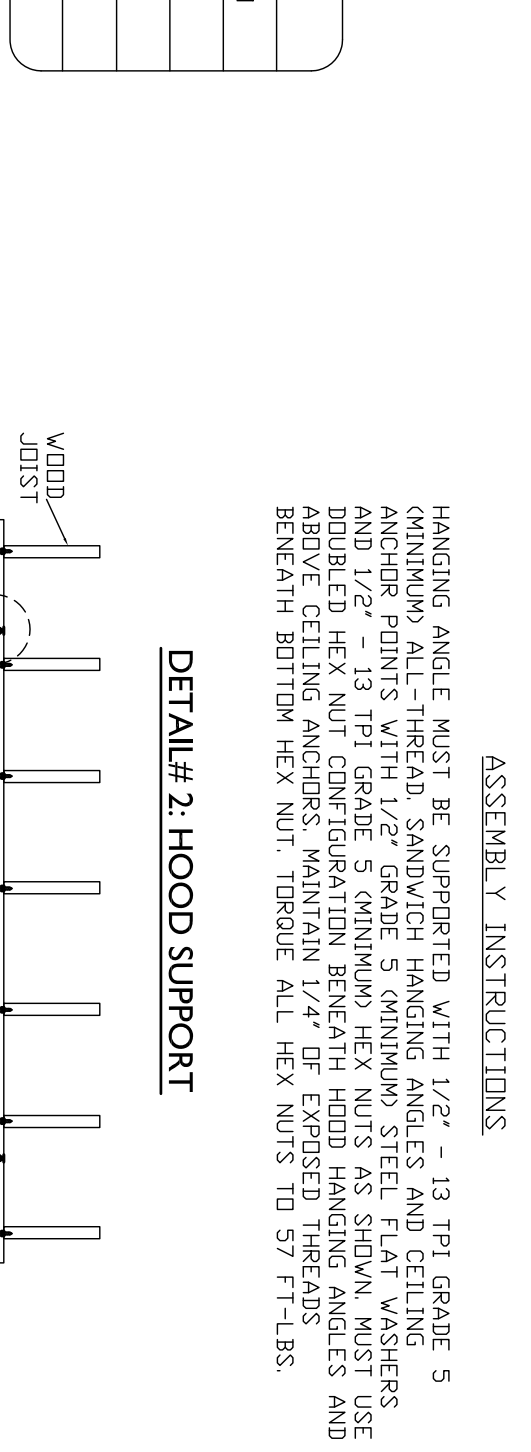
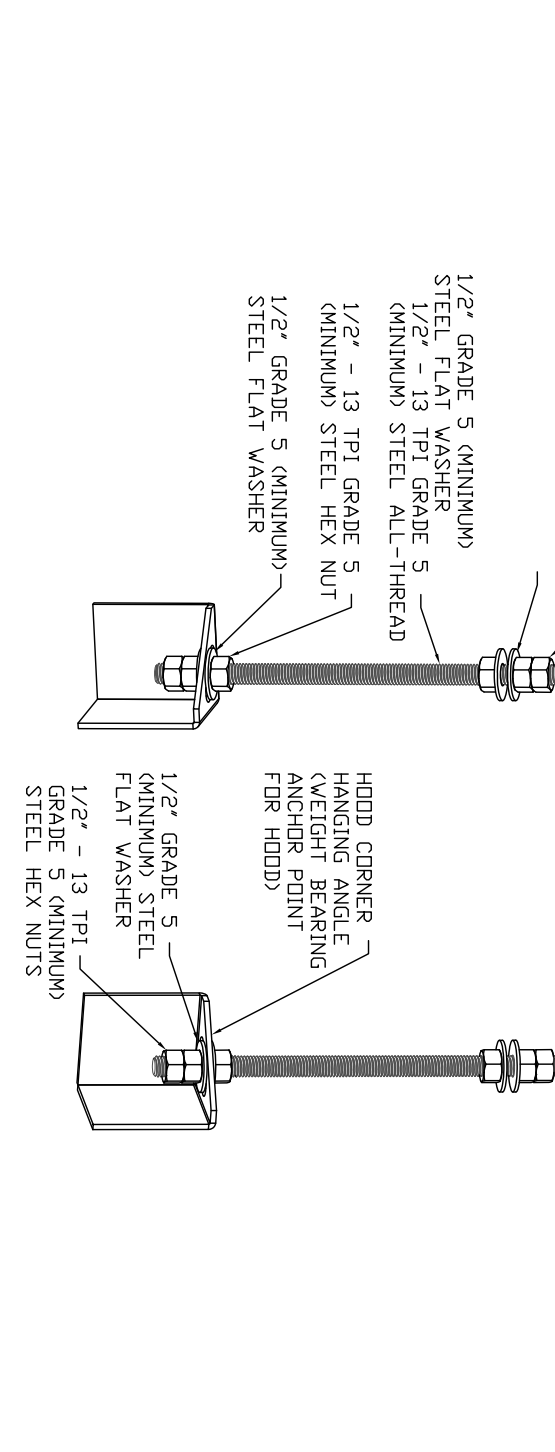
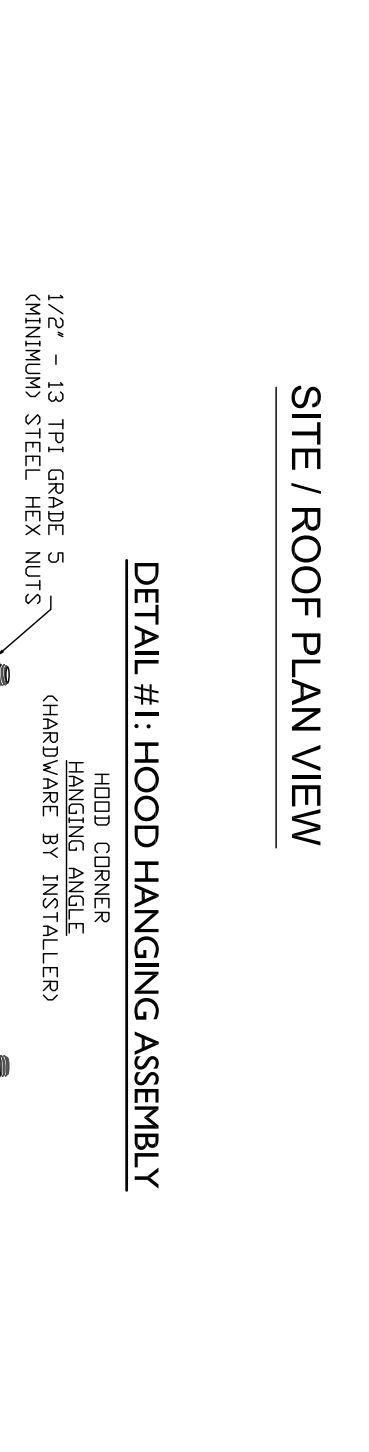
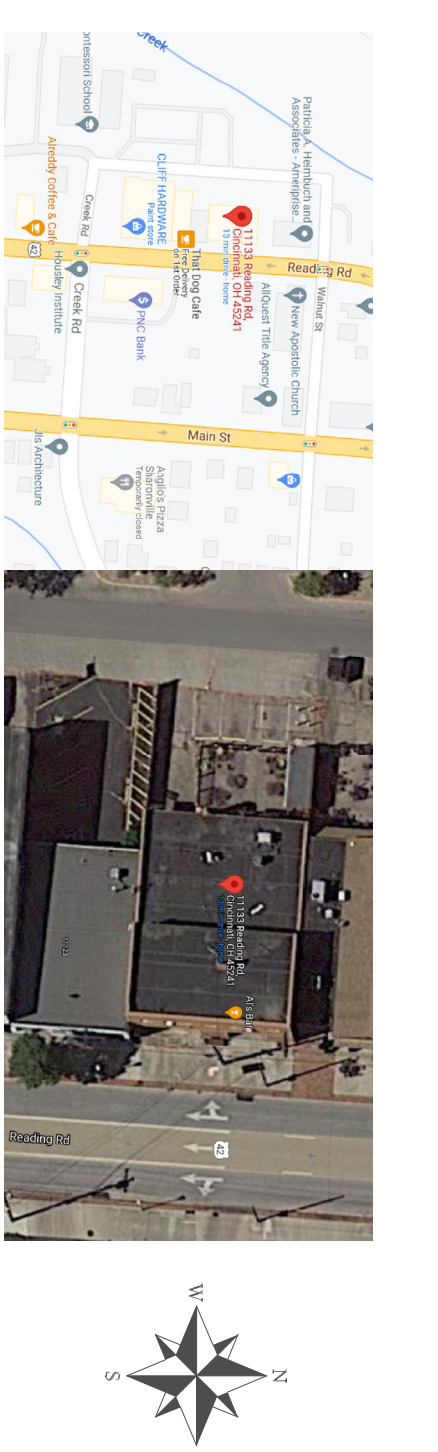
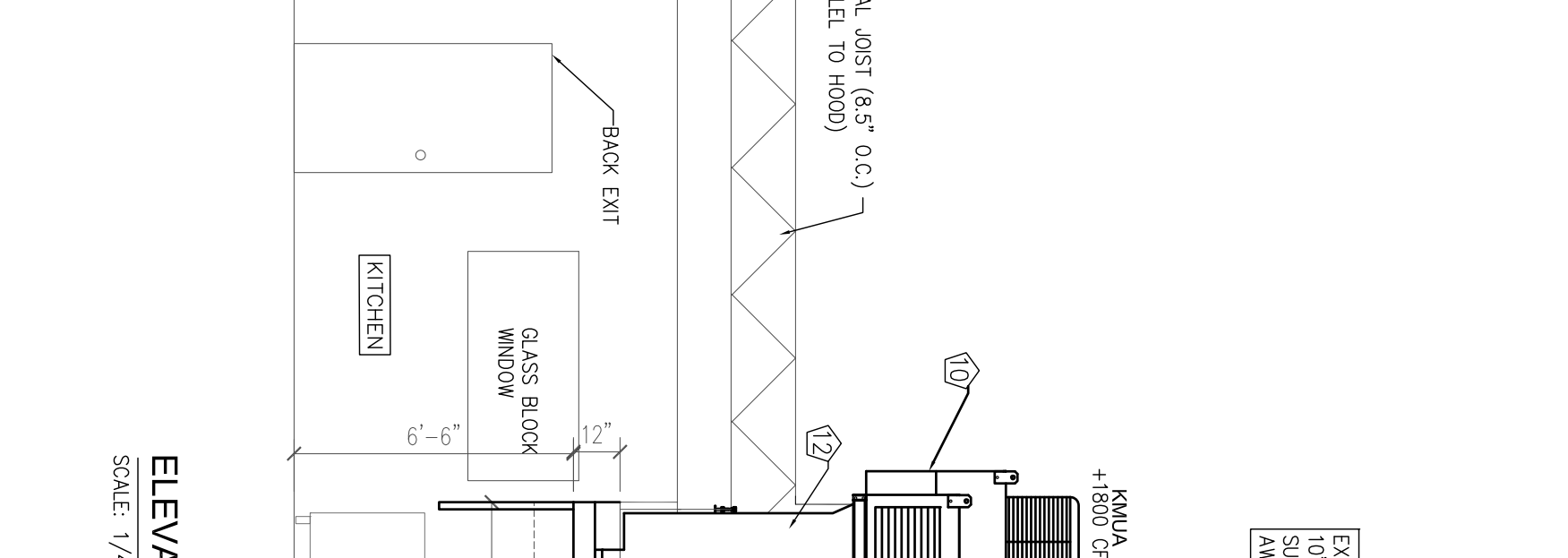
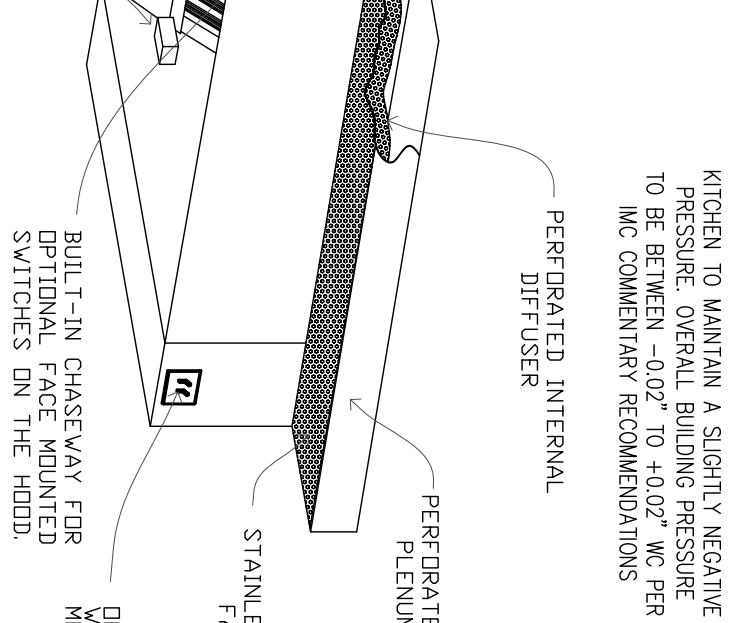
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TAG	ROOMS SERVED	O.A. CFM	EXHAUST QTY
EF-1	KITCHEN	-	2266
MUA	KITCHEN	+ 1800	-
HWC	BUILDING	+ 468 (MIN)	-
NET		0 CFM	



DATE:	12/27/21
DRAWN BY:	JAH
SCALE:	NONE
REVISION:	DATE

REVISION:	DATE

REVISION:	DATE

REVISION:	DATE

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

AL'S BAR
 11133 READING ROAD
 CINCINNATI, OH 45241
 NEW COMMERCIAL HOOD IN KITCHEN

FISCHER ENGINEERING SERVICES, LLC
 MECHANICAL DESIGN & CONSULTING SERVICES
 3872 Nottingham Ct.
 Cleveland, Ohio 45002
 Ph: 513-675-1559

STATE OF OHIO
 REGISTERED PROFESSIONAL ENGINEER
 RAYMOND S. FISCHER
 No. 10887

PLAN VIEW - HOOD #1
 SCALE: 1/4" = 1'-0"

ELEVATION VIEW - HOOD #1 (HD-1)
 SCALE: 1/4" = 1'-0"

Key Notes

- 1) CAPTIVE-AIRE ETL LISTED HOOD IN ACCORDANCE TO UL710 SEE CAPTIVE-AIRE SHOP DWGS.
- 2) EXHAUST DUCT & MUA INLET TO BE INSTALLED IN ACCORDANCE WITH CAPTIVE-AIRE EXHAUST 3" HIGHER THAN MUA INTAKE.
- 3) CANOPY TYPE HOOD, TO OVERHANG ON FRONT BY 6" FROM COOKING SERVICE (SEE CAPTIVE-AIRE LISTING SHEET).
- 4) CONCRETE BLOCK WALL.
- 5) HANGING ROD (SEE DETAILS #1, #2 & #3).
- 6) 12"x 9" (OR EQUIV) MUA DUCT TO BE INSTALLED BELOW HOOD CEILING TIGHT TO SUPPLY PLENUM.
- 7) 12"x 20" SUPPLY RISERS FOR SUPPLY PLENUM FOR HOOD. (QTY 3).
- 8) FAN AND LIGHT SWITCHES.
- 9) 1 1/2" DIA. FACTORY BUILT CAPTIVE-AIRE LISTED GREASE DUCTWORK (SEE SPECS ON THIS PAGE).
- 10) GAS FIRED HEATED AND COOLED GASMAKE-UP-AIR UNIT CONNECTED BY PLUMBER-ACCESS SYSTEM TO SYSTEM ON THIS SIDE.
- 11) HOOD CONTROLLED UP HIGH (KEYF) WALL MOUNTED UP HIGH (KEYF) ON ROOF.
- 12) 15"x 16" (OR EQUIV) DUCT TO MUA-1 ON ROOF.
- 13) CAPTIVE-AIRE GREASE CLEAN-OUT (REMOVABLE BY HAND).

GREASE DUCT SPECIFICATIONS:

- 1) GREASE DUCT WORK SHALL BE FABRICATED OF GALVANNEED STEEL AND INSTALLED IN ACCORDANCE WITH SAKCANA AND THE BUILDING AND MECHANICAL CODES.
- 2) INSTALL DAMPERS AT ALL BRANCH DUCTS AS REQUIRED TO PROPERLY BALANCE THE SYSTEM.

ETL LISTED FILES: 3054804-001

ETL SANITATION LISTED

CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH UL 710 AND NFPA 96 AND ARE RECOGNIZED BY DME OR MORE OF THE FOLLOWING:

ETL SANITATION LISTED

RESPONSIBILITY MATRIX

- 1) REQUIREMENTS FOR HOOD INSTALLER.
- 2) HOOD, FANS, & ALL ASSOCIATED EXHAUST & SUPPLY DUCTWORK IS PROVIDED & INSTALLED BY CONTRACTOR.
- 3) HOOD TO BE STARTED UP BY CONTRACTOR.
- 4) SMOKE TEST ON THE HOODS IN FRONT OF THE OWNER TO ENSURE SATISFACTION WITH COOKING EQUIPMENT ON.
- 5) STRIP STAINLESS FOR UNDER & AROUND HOODS SHALL BE INSTALLED ALSO, IF SHIPPED.
- 6) ASSIST IN PROVIDING & SUBMITTING IN HOOD & MUA PERMIT DRAWINGS.
- 7) INSTALLER TO ENSURE ALL HOOD AND FAN ACCESSORIES ARE INSTALLED SUCH AS WITH THE PRODUCT.
- 8) INSTALL ALL LISTED GREASE DUCT FROM CAPTIVE-AIRE SPECIFICATIONS.
- 9) NOTES (REQUIREMENTS) FOR ELECTRICAL:
- 10) FIELD WIRE FROM BUILDING PANEL TO CAPTIVE AIR CONTROLS CABINET (HOOD MOUNTED PANEL). 3 PHASE (208V) POWER FOR EXHAUST & SUPPLY FANS AND FAN CONTROLS (SEE DRAWINGS FOR EXHAUST & SUPPLY FANS AND FAN CONTROLS).
- 11) 120V, 1 PHASE FROM SE/INT OF HD PANEL TO MUA UNIT. ALSO WIRE A 18-3 GA WIRE FROM HOOD PANEL TO CAPTIVE AIR CONTROLS CABINET (HOOD MOUNTED).
- 12) 120V, 20 AMP CIRCUIT TO BE USED FOR LIGHTS & CONTROLS.
- 13) VERIFY THAT THE WIRE RED/BROWN WIRES ON ANSUL CABINET TO CAPTIVE-AIRES CONTROL PANEL C1 & A1 TERMINALS.
- 14) FIELD WIRE THE DUCT SENSORS LOCATED IN EXHAUST COILERS TO CAPTIVE AIR CONTROLS CABINET (SEE DRAWINGS FOR EXHAUST COILERS).
- 15) FIELD WIRE THE SMOKE SENSORS SUPPLIED BY MUA TO SMOKE SENSOR CABINET (SEE DRAWINGS FOR SMOKE SENSORS).
- 16) FIELD WIRE FROM HOOD UP HIGH. STAT WIRE PROVIDED BY CAPTIVE AIR.
- 17) SWIRL LOCATED AT THE RIGHT END OF THE HOOD. IF NO BUILDING ALARM, INSTALL THE CAPTIVE AIR SUPPLIED 120V HORN/LIGHT STRIKE & WIRE TO ANSUL PANEL.
- 18) ELECTRICAL MUST CHECK FAN ROTATION BY LOOKING AT YELLOW ARROWS MARKED ON FANS. IF ROTATION IS WRONG, REVERSE ANY 2 OF THE 3 PHASE LEADS ON THE LOAD SIDE.
- 19) VERIFY THAT THE UNSEER HOOD BREAKER MUST BE OF SHUNT TRIP TYPE & ELECTRICAL TO WIRE FROM ST & IN TERMINALS OF HOOD PANEL TO SHUNT TRIP DEVICE BY OTHERS.
- 20) INSTALL 3 PHASE 208V CIRCUIT FROM BUILDING PANEL TO COOLING UNIT LOCATED ON ROOF.
- 21) FIELD NOTES (OTHER TRADES):
- 22) EACH SYSTEM PLUMBER TO FIELD INSTALL GAS VALVE INLINE WITH THE GAS PIPING GOING TO THE COOKING EQUIPMENT OF THE SYSTEM PLUMBER & ENSURE ALL WITH THE F.E.C. FOR ALL HOOK UP OF GAS COOKING EQUIPMENT & ENSURE ALL GAS PRESSURE ONCE HOOKED UP. USE GAS REGULATORS TO MAINTAIN 7-14" OF GAS PRESSURE.
- 23) PLUMBER TO SUPPLY & INSTALL GAS LINE TO MUA ON ROOF.
- 24) GENERAL CONTRACTOR (GC) RESPONSIBILITIES:
- 25) GC 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.
- 26) REQUIREMENTS TO INCLUDE BUT NOT LIMITED TO: HOOD WALL READY TO ACCEPT ROUNING. ANY STRUCTURAL SUPPORTS REQUIRED TO SHORE UP BUILDING OR STRUCTURE TO BE INSTALLED PRIOR TO HOOD INSTALLATION. ALL HOODS TO BE INSTALLED & PATCHING WORK COMPLETE DEMO & PATCH WORK BACK UP.
- 27) PROVIDE A WORKING CONSTRUCTION SCHEDULE TO ALL TRADES.

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 KITCHEN COOKING OPERATIONS AS DESCRIBED IN NFPA-96. 304 STAINLESS STEEL AND BE AVAILABLE IN DIAMETERS OF THROUGH 24". ALL SUPPORTS, FAN ADAPTERS, HOOD CONNECTIONS, FITTINGS AND EXPANSION JOINTS REQUIRED TO INSTALL GREASE DUCT SHALL BE INCLUDED. "CLEARANCE TO COMBUSTIBLES" GUIDE FOR DETAILS. "CLEARANCE TO COMBUSTIBLES" GUIDE FOR DETAILS. THE GREASE DUCT WILL BE FULLY WELDED TO THE FAN ADAPTER PLATE AND THE FAN ADAPTER PLATE 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 FORKED WET CLAMPS. CLAMPS SHALL BE OF THE HEAT-HEAD TYPE WITH FLANGED STOPS AND TAPERED LEAD IN" THEREAFTER FOR EASY STARTING. NUTS SHALL BE RETAINED BY MEANS OF A 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. OPERATION AND MAINTENANCE MANUAL. ETL LISTING GREASE DUCT INSTALLED OUTSIDE OF THE BUILDING SHALL BE PROTECTED AGAINST ACCIDENTAL DAMAGE OR VANDALISM. 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 ROD AND SHIELDS MAY ALSO BE USED FOR THE SUPPORT OF HORIZONTAL GREASE DUCT. FANS SHALL BE SUPPORTED INDEPENDENTLY FROM THE GREASE DUCT SECTION OR GREASE DUCT FROM TWISTING OR MOVEMENT CAUSED BY FAN TORQUE OR VIBRATION.

SUPPLY DUCT (SPECIFICATIONS):

- 1) SEFT VETAL DUCTWORK SHALL BE FABRICATED OF GALVANNEED STEEL AND INSTALLED IN ACCORDANCE WITH SAKCANA AND THE BUILDING AND MECHANICAL CODES.
- 2) INSTALL DAMPERS AT ALL BRANCH DUCTS AS REQUIRED TO PROPERLY BALANCE THE SYSTEM.

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