HOOD INFORMATION

HOOD NO	TAG	FILTER(S) TYPE	QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	LIGHT(S) QTY	TYPE	WIRE GUARD	LOCATION	SIZE	FIRE SYSTEM TYPE	FIRE SYSTEM SIZE	ELECTRICAL MODEL #	SWITCHES QUANTITY	FIRE SYSTEM PIPING	HOOD HANGING WEIGHT
1	HD1	CAPTRATE SOLO FILTER	4	16"	16"	85% SEE FILTER SPEC	3	L55 SERIES E26	NO							YES	346 LBS
2	HD2-PIZZA	CONDENSATE BAFFLE	6	16"	16"	N/A	4	L55 SERIES E26	NO	RIGHT	12"x78"x24"	TANK FS	4.0	DCV-2022	2 LIGHT 2 FAN	NO	798 LBS

(LOCATION, SIZE, FIRE SYSTEM, ELECTRICAL and SWITCHES are sub-columns of UTILITY CABINET(S).)

HOOD INFORMATION – JOB#5118237

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM WIDTH	LENG	HEIGHT	RISER(S) DIA	CFM	VEL	SP	HOOD CONSTRUCTION	HOOD CONFIG END TO END	ROW
1	HD1	5424 ND-2	CAPTIVEAIRE	6' 0"	600 DEG	I	HEAVY	160	960			4"	12"	960	1222	-0.430"	430 SS WHERE EXPOSED	ALONE	ALONE
2	HD2-PIZZA	7824 ND-2	CAPTIVEAIRE	9' 0"	450 DEG	II	N/A	175	1575			4"	14"	1575	1473	-0.272"	430 SS WHERE EXPOSED	ALONE	ALONE

CURB ASSEMBLIES

NO	ON FAN	TAG	WEIGHT	ITEM	SIZE
2	# 2	EF1-FRY	38 LBS	RAIL	4.000"W X 36.000"L X 14.000"H ALONG WIDTH, RIGHT COMES AS A SET OF 2.

EXHAUST FAN INFORMATION – JOB#5118237

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	EF2-PIZZA	1	SIF18DD	CAPTIVEAIRE	1575	1.400	1374	TEFC,PREMIUM	1.500	0.7420	3	208	4.5		259	12.8
2	EF1-FRY	1	USBI13DD-RM	CAPTIVEAIRE	960	1.650	1613	ODP,PREMIUM	1.000	0.5030	3	208	3.1	840 FPM	247	14.2

FAN OPTIONS

FAN UNIT NO	TAG	QTY	DESCRIPTION
1	EF2-PIZZA	1	SIF18 – INLET – STANDARD 20" DUCT CONNECTION
		1	SIF – HORIZONTAL OVERHEAD MOUNT – PRE-INSTALLED MOUNTS (11-36)
		1	HANGING SPRING VIBRATION ISOLATORS (SET OF 4), FOR INDOOR OR OUTDOOR USE WITH SQUARE INLINE FANS (HSA125)
		1	SIF18 – STRAIGHT DISCHARGE FOR SIF 18. SQUARE DUCT CONNECTION
		1	2 YEAR PARTS WARRANTY
2	EF1-FRY	1	BI13 – INLET SERVICE DUCT CONNECTION. USED TO CONNECT TO STANDARD 14" GREASE DUCT OR FIELD WELDED DUCT. INCLUDES (2) 7" RISERS BOLTED TO STANDARD INLET RISER
		1	UTILITY SET GREASE CUP
		1	BI13 – 24" DISCHARGE EXTENSION
		1	BI – DISCHARGE ORIENTATION VERTICAL UPPER LEFT – CW INLET SIDE
		1	BI13 – INLET CONNECTION STANDARD 14" FLANGED GREASE DUCT
		1	UTILITY SET – SPRING VIBRATION ISOLATORS – BI11 THRU BI15 / EQUIVALENT SIZED UTILITY SET – INDOOR/OUTDOOR USE
		1	2 YEAR PARTS WARRANTY

HOOD OPTIONS

HOOD NO	TAG	OPTION
1	HD1	FIELD WRAPPER 17.00" HIGH FRONT, LEFT, RIGHT.
		RIGHT QUARTER END PANEL 23" TOP WIDTH, 0" BOTTOM WIDTH, 23" HIGH 430 SS.
		LEFT QUARTER END PANEL 23" TOP WIDTH, 0" BOTTOM WIDTH, 23" HIGH 430 SS.
		STRUCTURAL FRONT PANEL.
		SENSOR-CV.
2	HD2-PIZZA	FIELD WRAPPER 17.00" HIGH FRONT, LEFT, RIGHT.
		RIGHT QUARTER END PANEL 23" TOP WIDTH, 0" BOTTOM WIDTH, 23" HIGH 430 SS.
		LEFT WIDE VERTICAL END PANEL 42" TOP WIDTH, 36" BOTTOM WIDTH, 80" HIGH INSULATED 430 SS.

FAN ACCESSORIES

FAN UNIT NO	TAG	EXHAUST GREASE CUP	EXHAUST GRAVITY DAMPER	EXHAUST WALL MOUNT	EXHAUST SIDE DISCHARGE	SUPPLY GRAVITY DAMPER	SUPPLY MOTORIZED DAMPER	SUPPLY WALL MOUNT
1	EF2-PIZZA							
2	EF1-FRY	YES						

AIR BALANCE SCHEDULE

TAG	ROOMS SERVED	O.A. CFM	EXHAUST CFM
EF-1 (Pizza)	KITCHEN	–	– 1575
EF-2 (Fry)	KITCHEN	–	– 960
HVAC	BUILDING	+2535 (MIN)	–
	NET	0 CFM	

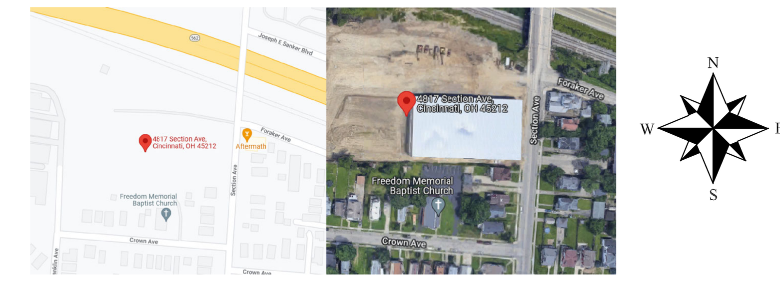
KITCHEN TO MAINTAIN A SLIGHTLY NEGATIVE PRESSURE. OVERALL BUILDING PRESSURE TO BE BETWEEN –0.02" TO +0.02" WC PER IMC COMMENTARY RECOMMENDATIONS

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

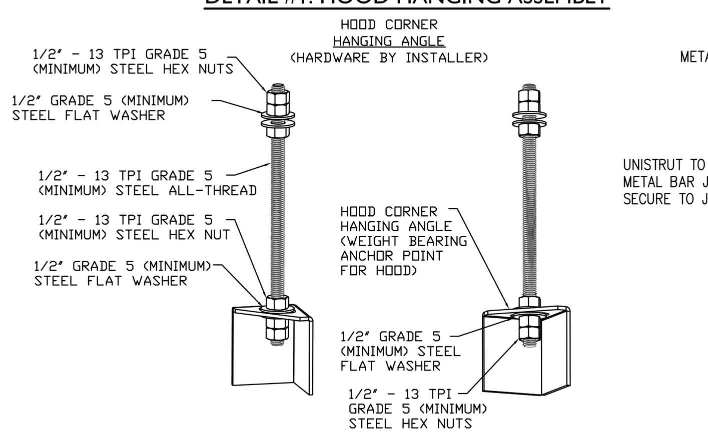
ETL LISTED FILE# 3054804-001

HOOD SYSTEM IS FABRICATED & DESIGNED PER UL-710 STANDARDS



SITE / ROOF PLAN VIEW

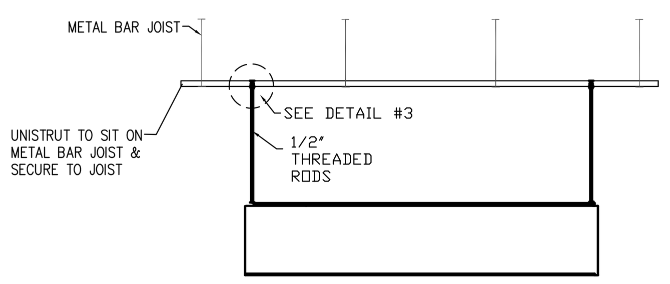
DETAIL #1: HOOD HANGING ASSEMBLY



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.

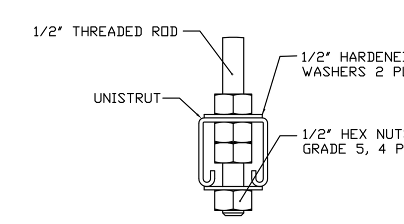
DETAIL# 2: HOOD SUPPORT



HOOD SUPPORT REQUIREMENTS	
HOOD LENGTH	NUMBER OF HANGING POINTS
9'	4
6'	4

DETAIL #3: HANGING ROD TO UNISTRUT

(HARDWARE BY INSTALLER)



RESPONSIBILTY MATRIX

A) REQUIREMENTS FOR FOOD SERVICE CONTRACTOR (F.E.C.)
1) HOOD, FANS, & ALL ASSOCIATED EXHAUST & SUPPLY DUCTWORK IS PROVIDED & INSTALLED BY FOOD SERVICE CONTRACTOR
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) ASSIST IN PROVIDING & SUBMITTING IN HOOD & ANSUL PERMIT DRAWINGS.
5) MOUNT 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 ALL LISTED GREASE DUCT FROM CAPTIVE-AIRE SPECIFICATIONS .

B) NOTES (REQUIREMENTS) FOR ELECTRICIAN:
1) FIELD WIRE FROM BUILDING PANEL TO CAPTIVE AIRE CONTROLS CABINET (HOOD MOUNTED PANEL) 3 PHASE (208V) POWER FOR EXHAUST & SUPPLY FANS AND THEN FROM CAPTIVE AIRE PANEL TO THE DISCONNECT ON THE EXHAUST FANS. THE POWER MUST BE IN SEPARATE CONDUITS DUE TO THE VFD'S.
2) FIELD WIRE FROM BUILDING PANEL TO CAPTIVE AIRE CONTROLS CABINET (HOOD MOUNTED) 1 PHASE, 120, 20 AMP CIRCUIT TO BE USED FOR LIGHTS & CONTROLS CIRCUITRY. THE LIGHTS ARE ALREADY CONNECTED TO CONTROL PANEL.
3) VERIFY THAT THE WIRE RED/BROWN WIRES ON ANSUL CABINET TO CAPTIVE-AIRES CONTROL PANEL C1 & AR1 TERMINALS.
4) FIELD WIRE THE DUCT SENSORS LOCATED IN EXHAUST COLLARS TO CAPTIVE AIRE CABINET. CAPTIVE AIRE SUPPLIES THE WHITE STAT WIRE & SHIPPED IN CABINET
5) FIELD WIRE & INSTALL ROOM SENSOR SUPPLIED BY CAPTIVE AIRE. MOUNT SENSOR 6' AWAY FROM HOOD UP HIGH. STAT WIRE PROVIDED BY CAPTIVE AIRE.
6) FIELD WIRE THE BUILDING ALARM SYSTEM (IF APPLICABLE) INTO THE ANSUL MICRO SWITCH LOCATED AT THE RIGHT END OF THE HOOD. IF NO BUILDING ALARM, INSTALL THE CAPTIVE AIRE SUPPLIED 120V HORN/LIGHT STROBE & WIRE TO ANSUL PANEL.
7) ELECTRICIAN 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.
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.

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.

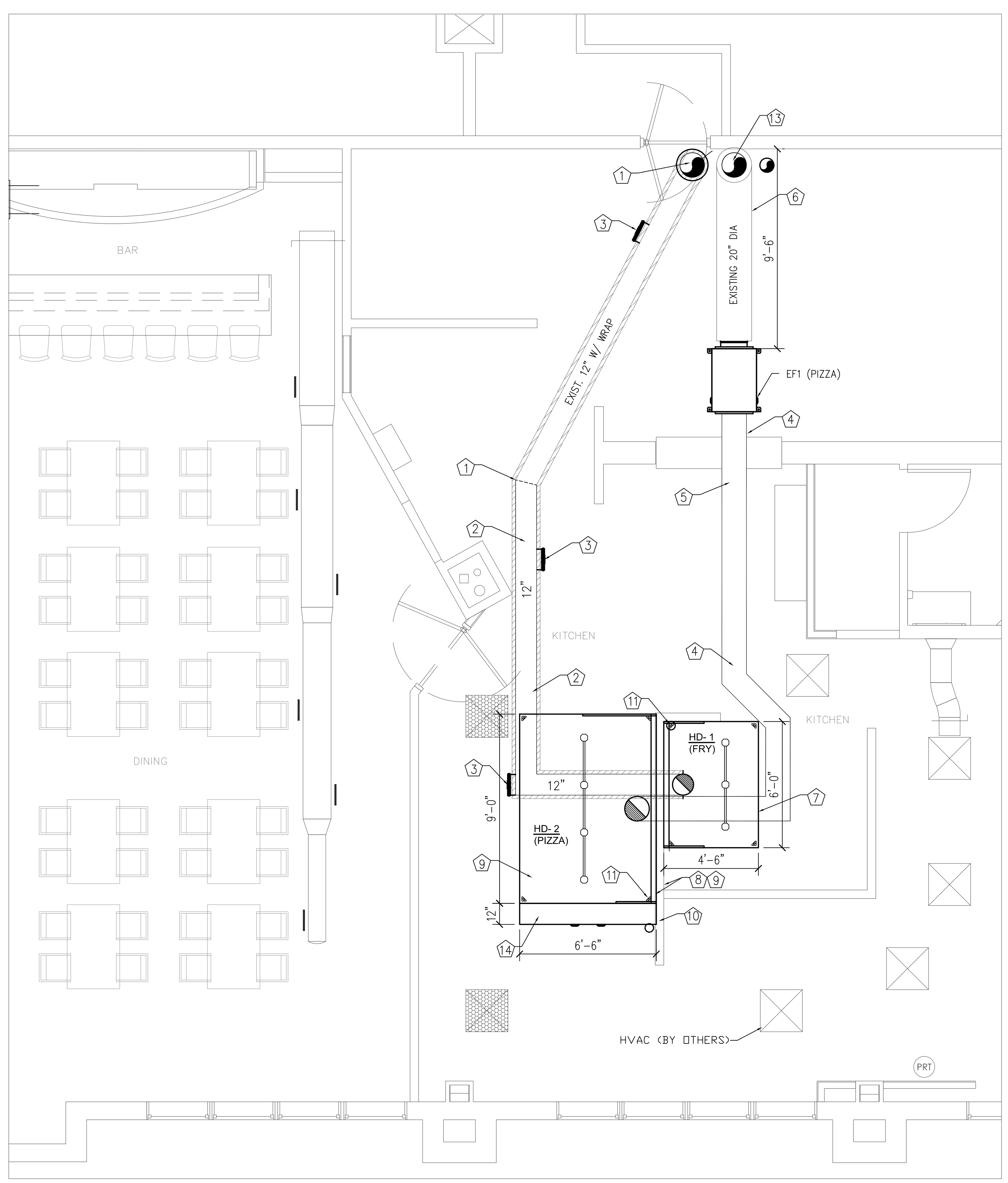
D) GENERAL CONTRACTOR (GC) RESPONSIBILITES:
1) GC IS RESPONSIBLE TO HOLD A COORDINATION MEETING WITH ALL TRADES TO ENSURE UNDERSTANDING OF REQUIREMENTS AND MAKE SURE THERE ARE NO CONFLICTS THROUGHOUT THE PROJECT & ASSIST AS REQUIRED
2) GC IS RESPONSIBLE FOR ANY BUILDING CONSTRUCTION CHANGES OR STRUCTURAL 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.
3) 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 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

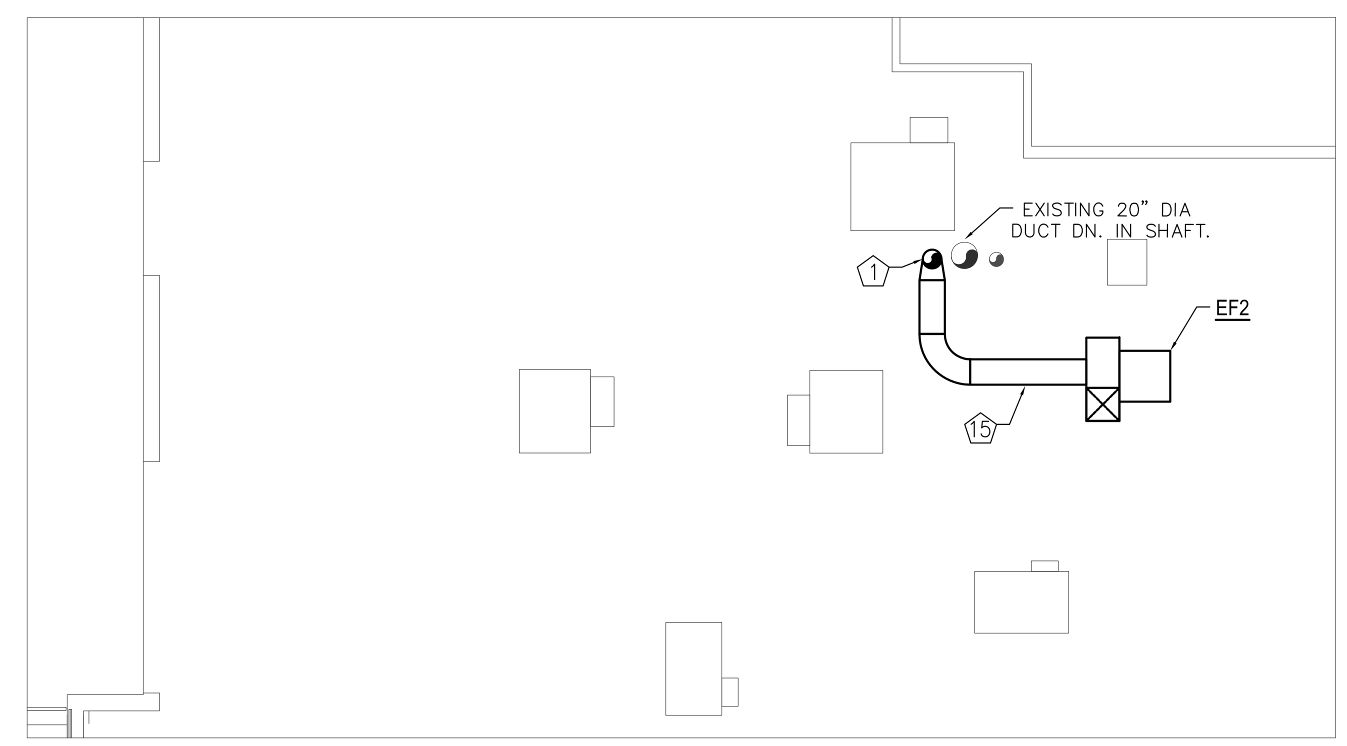


PLAN VIEW - HOOD #1 (PIZZA) & HOOD #2 (FRY)

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

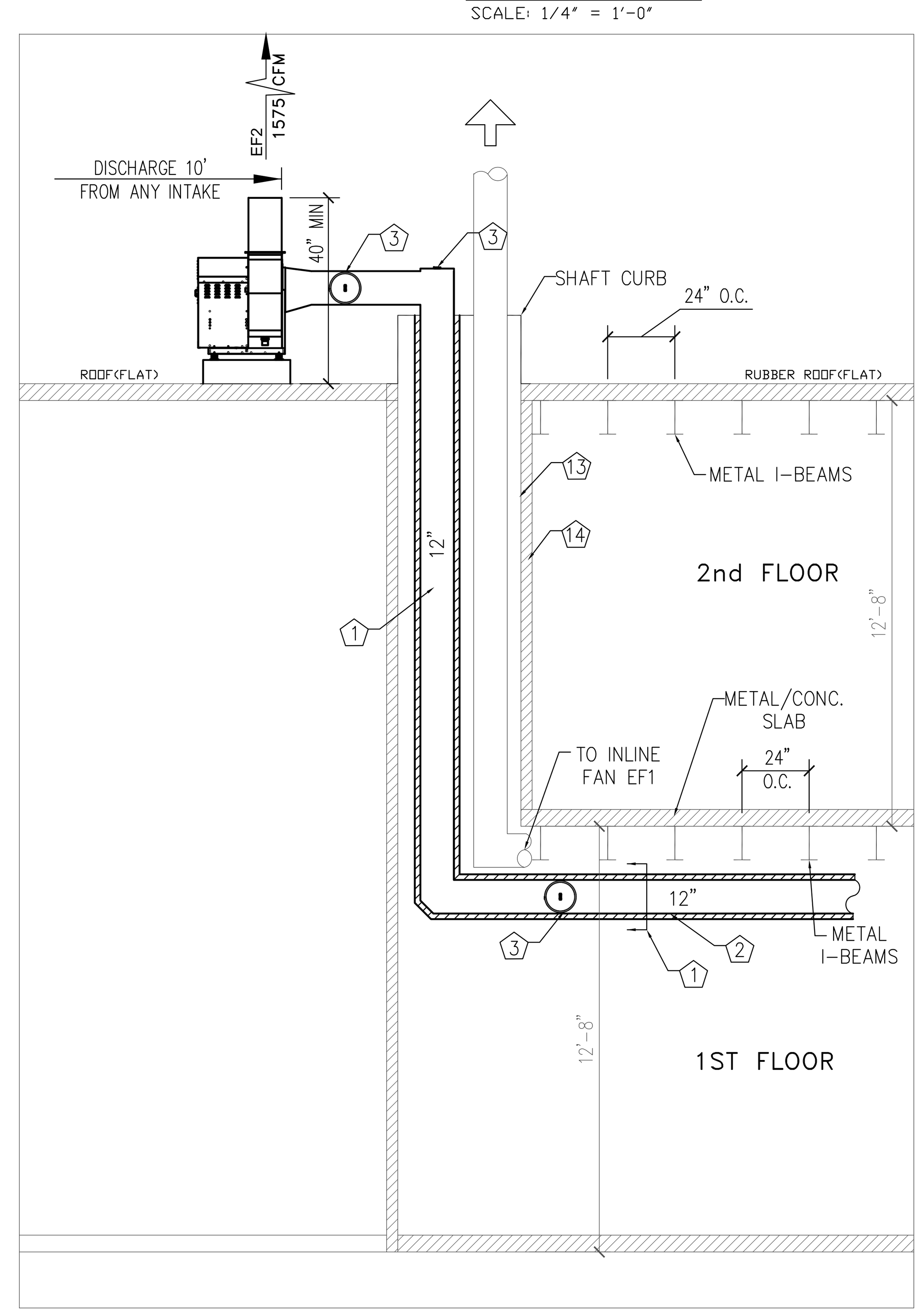
Key Notes

1. EXISTING 12" DIA 16 GA STEEL DUCT TO REMAIN WITH (2) LAYERS OF FIRE WRAP. WELD CAPTIVE-AIRE LISTED 12" DUCT TO EXISTING & FIREWRAP W/ (2) LAYERS OF LISTED WRAP.
2. 12" DIA CAPTIVE-AIRE LISTED STAINLESS STEEL GREASE DUCT WITH (2) LAYERS OF FIREWRAP = 18" DIA (OD).
3. GREASE CLEANOUT DOOR (REMOVABLE BY HAND)
4. 14" DUCT UP INTO THE WEB-METAL JOIST SPAN & ROUTE TO BACK SIDE OF PIZZA HOOD.
5. 14" DUCT TYPE-II (NON-GREASE) GALVANIZED DUCT WITH SEALANT FROM HOOD TO HOOD TO FAN (HEAT ODOR REMOVAL ONLY).
6. 20" DUCT TYPE-II (NON-GREASE) GALVANIZED DUCT WITH SEALANT FROM HOOD TO HOOD TO FAN (HEAT ODOR REMOVAL ONLY). FAN TO EXISTING 20" DIA DUCT UP SHAFT.
7. CAPTIVE-AIRE ETL LISTED HOOD IN ACCORDANCES TO UL710 SEE CAPTIVE-AIRE SHOP DWGS.
8. STAINLESS STL. WALL PANEL BELOW & RIGHT & LEFT OF HOOD FROM FLOOR TO CEILING. ALSO 18" PASS THE HOOD TO LEFT & RIGHT (MINIMUM).
9. CANOPY TYPE HOOD. TO OVERHANG ON FRONT BY 6" FROM COOKING SERVICE (SEE CAPTIVE-AIRE LISTING SHEET).
10. METAL STUD WALL & SHEET ROCK
11. HANGING ROD (SEE DETAILS #1, #2 & #3)
12. EXISTING TYPE-2 (NON-GREASE) DUCT THROUGH EXISTING SHAFT AND THEN DISCHARGE OUT ROOF WITH CAP.
13. EXISTING RATED SHAFT.
14. 12" LISTED CABINET WITH FIRE SYSTEM WITH CONTROL PANEL. FIRE SYSTEM FOR HOOD #2. HOOD #1 IS TYPE-2 (NON-GREASE)
15. CAPTIVE-AIRE LISTED DUCT TO FAN ON ROOF.



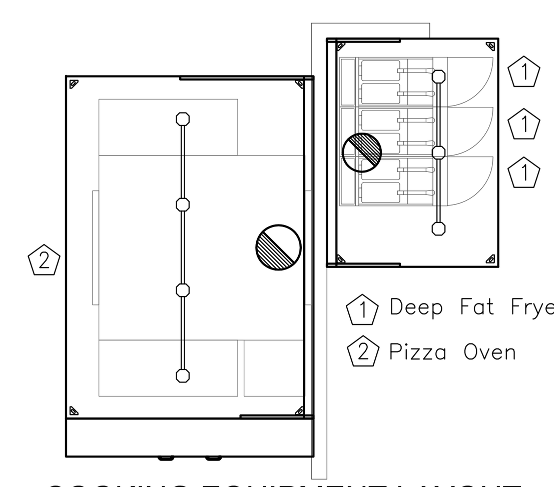
ROOF PLAN VIEW

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

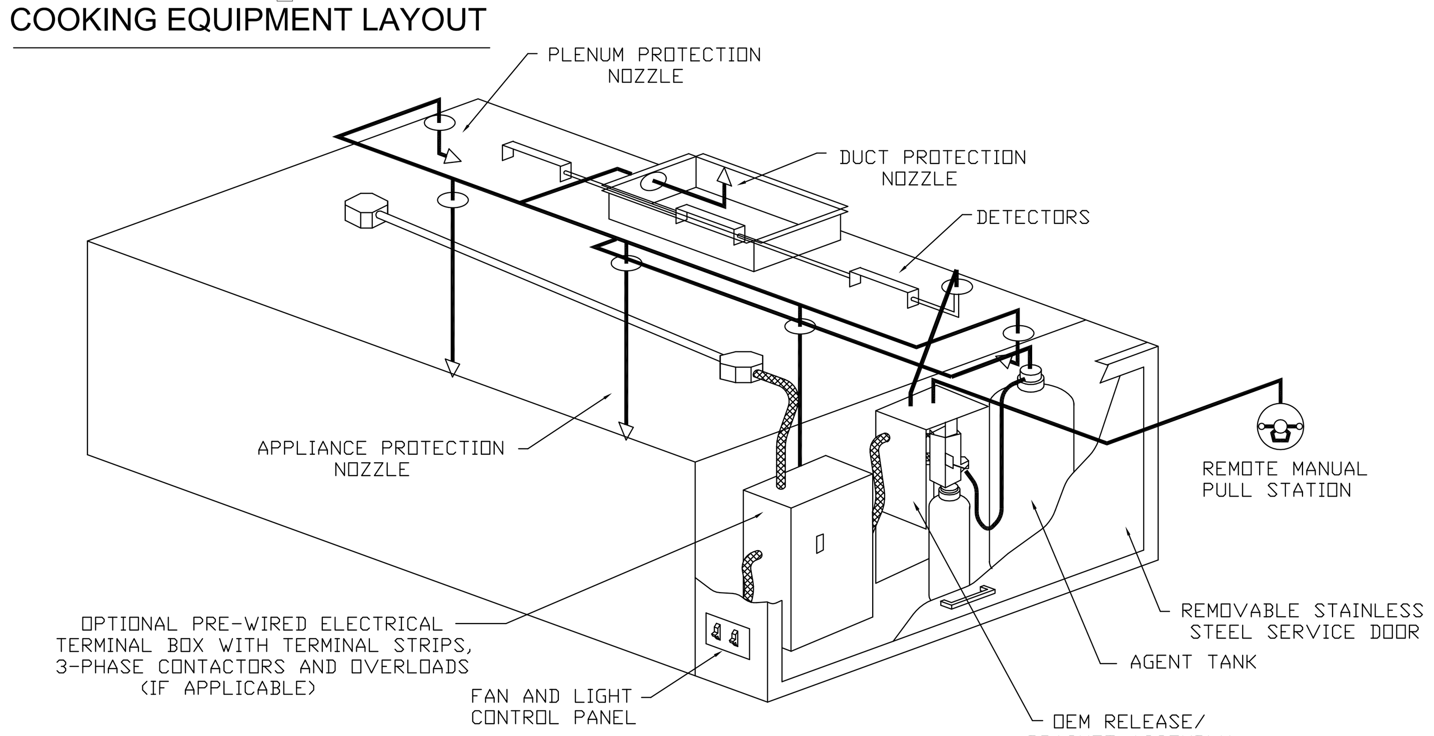


ELEVATION VIEW - HOOD #1 (PIZZA) & HOOD #2 (FRY)

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



COOKING EQUIPMENT LAYOUT



TYPICAL ANSUL R-102 SYSTEM LAYOUT

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

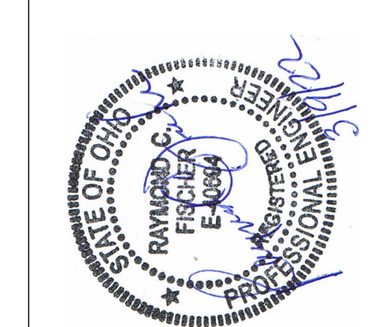
DATE:	3/7/22
DRAWN BY:	JAH
SCALE	NONE
REVISION	DATE

TAGLIO'S

4817 Section Road
Cincinnati, OH 45212

NEW COMMERCIAL HOOD IN KITCHEN

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



SHEET NO: H-1