



A | B | C | D | E | F | G | H | J | K

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10

**GENERAL NOTES:**

1. THESE DRAWINGS HAVE BEEN PREPARED FOR PERMIT. FINAL DESIGN AND DETAILING IS BY THE CONTRACTOR. FINAL DESIGN WORK INCLUDES (BUT IS NOT LIMITED TO): REVIEW OF ALL CONTRACT DOCUMENTS, VERIFYING FIXTURE LOCATIONS, VERIFYING SPACE AVAILABLE FOR ALL PIPING, COORDINATING WORK WITH OTHER TRADES, DESIGN OF FINAL PLUMBING SYSTEM AND PREPARATION OF CONSTRUCTION SHOP DRAWINGS (BASED ON THESE REVIEWS AND DESIGN/COORDINATION WORK).
2. SEE MECHANICAL GENERAL NOTES SHEET M0.1.
3. PROVIDE FLEX CONNECTOR AT GAS PIPING CONNECTION TO GAS CANDY STOVE.

**HULTZ**  
engineers inc  
1111 Fawcett Ave Suite 100 Tacoma WA 98402  
Phone: (253) 383-3257 Fax: (253) 383-3263  
general@hultzhu.com Job Number: 26-057

PRCTI20260747

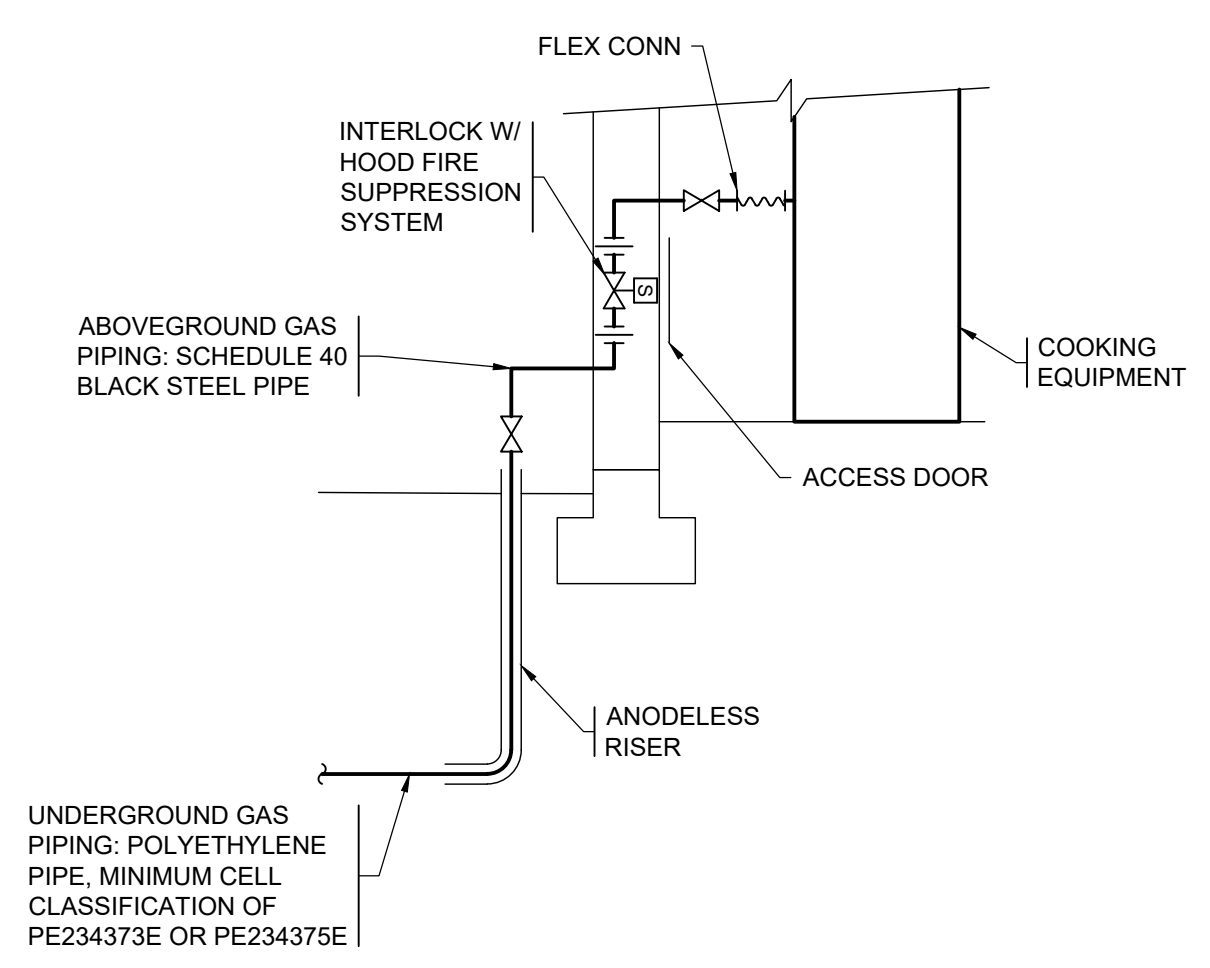
**MARCOE CANDY -  
HOOD / GAS PLANS**  
110 9TH AVE SW, PUYALLUP, WA 98371



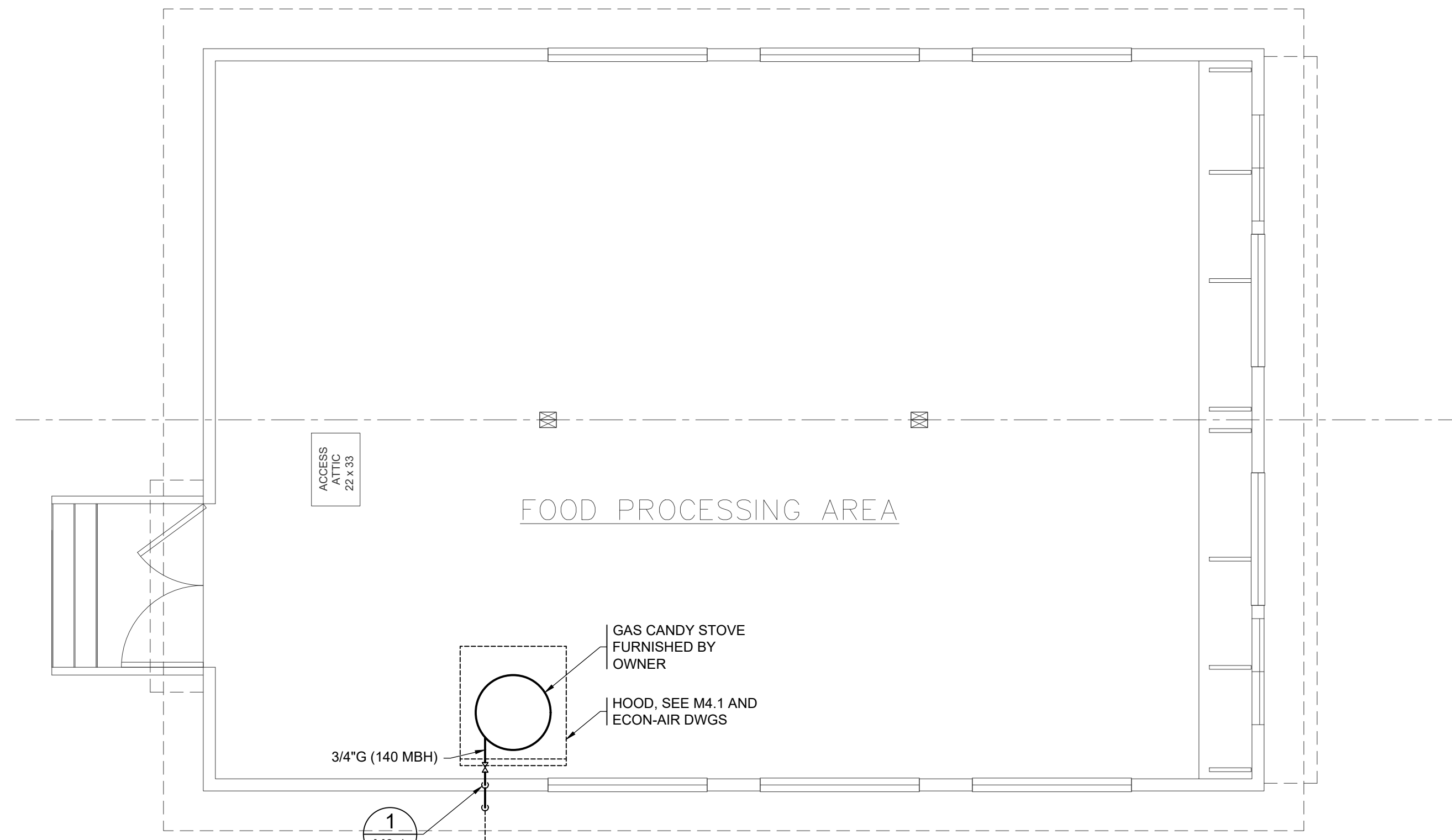
SIGNED  
05-07-2026

SHEET TITLE: FLOOR PLAN - GAS PIPING  
DRAWN: MB CHECKED: CP DATE: 05.07.26  
REVISIONS:

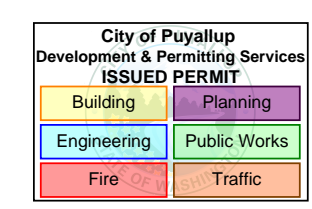
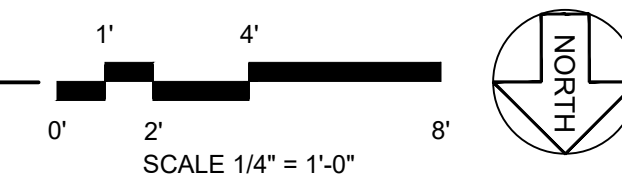
M3.1



**GAS PIPING SCHEMATIC** 1  
NTS M3.1



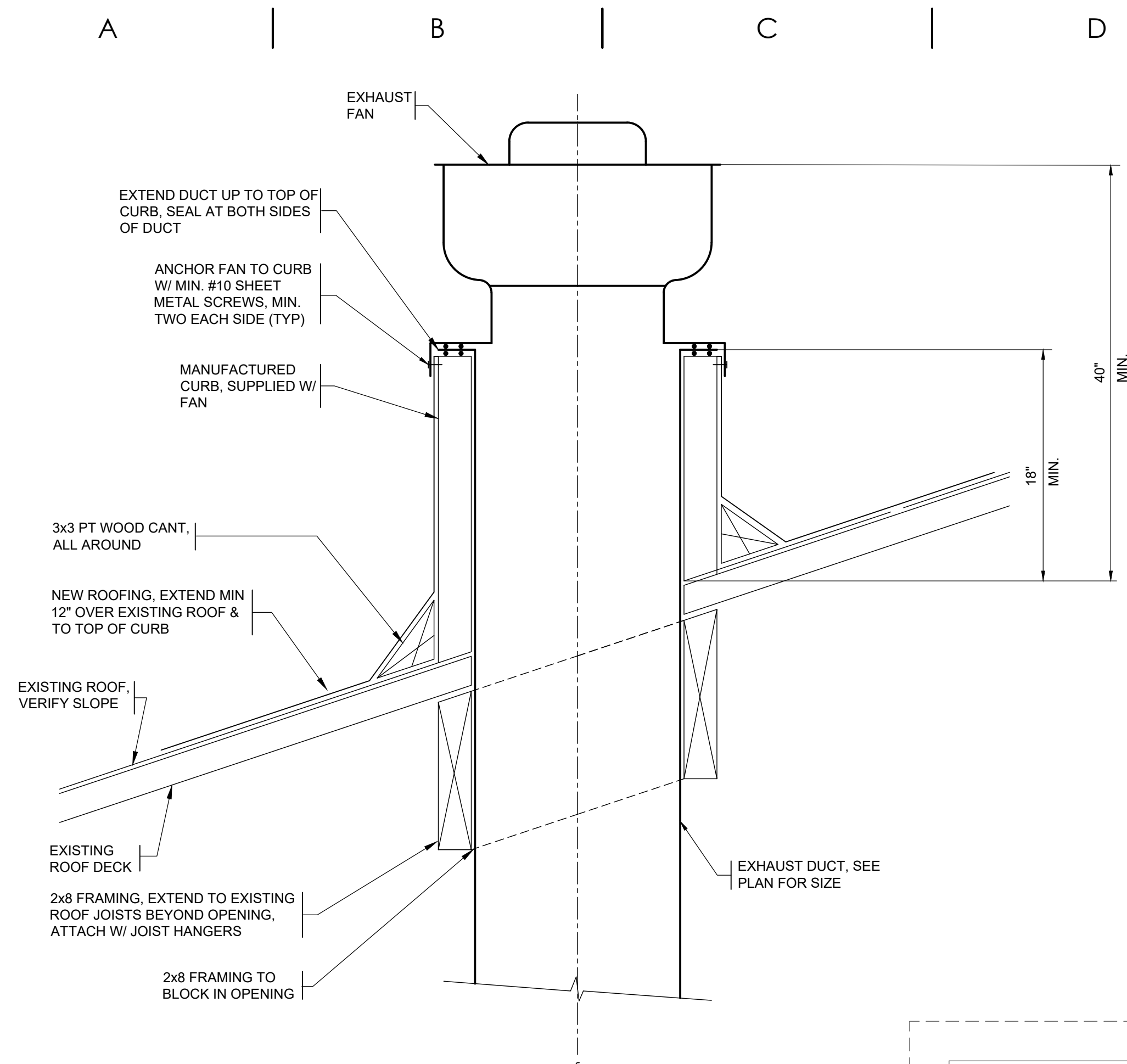
**FLOOR PLAN - GAS PIPING**  
SCALE: 1/4"=1'-0"



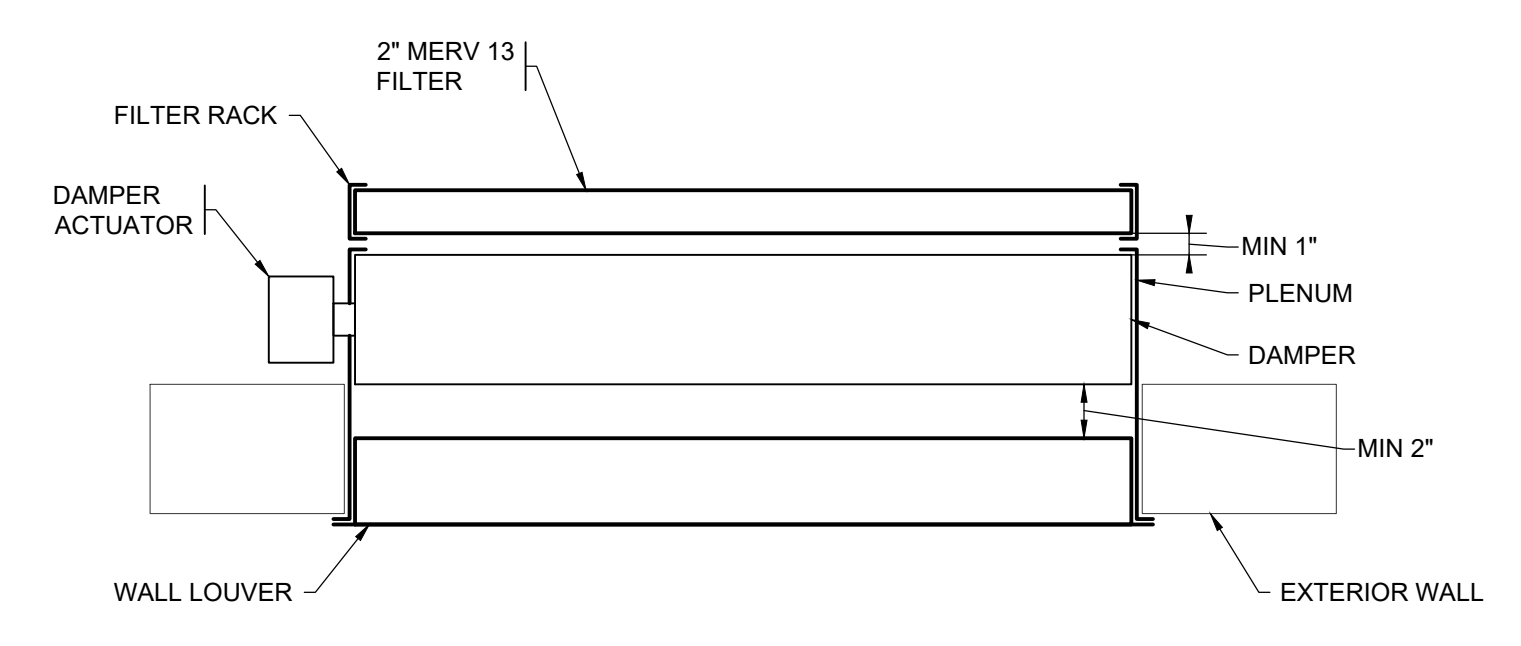
PERMIT SET 05-07-26

A | B | C | D | E | F | G | H | J | K

0' 1' 2'  
SHEET SIZE IS TRUE SCALE WHEN ABOVE LINE MEASURES AS NOTED

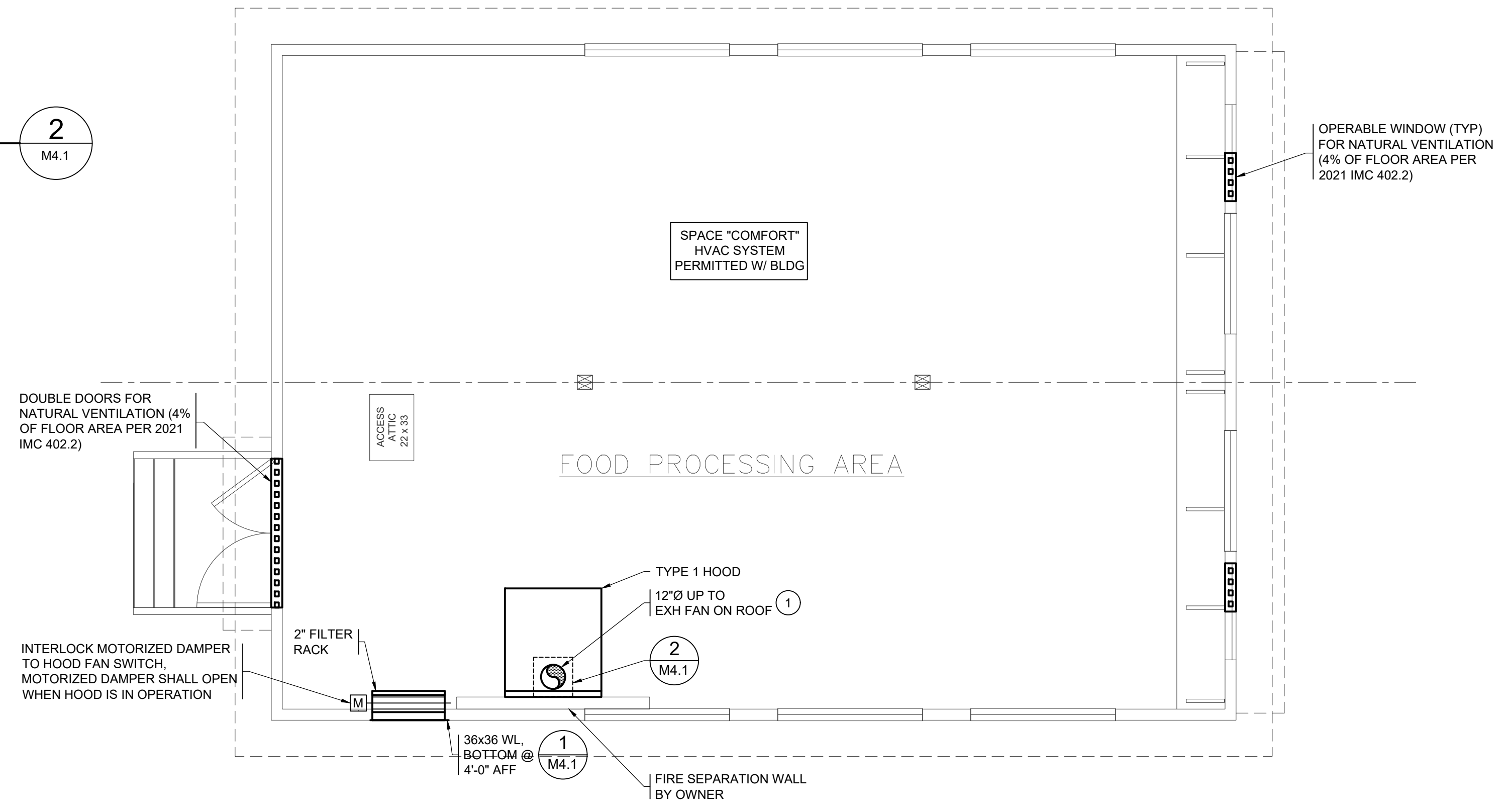


**FAN MOUNTING DETAIL 2**  
NTS M4.1



**WALL LOUVER DETAIL 1**  
NTS M4.1

**NATURAL VENTILATION CALCULATION PER IMC**  
 OPENABLE AREA = (2 WINDOWS X 8 SQFT) + (2 DOORS X 21 SQFT) = 58 SQFT  
 REQUIRED OPENABLE AREA = 4% X 1059 SQFT = 42.36 SQFT  
 PROJECT COMPLIES, OPENABLE AREA TO THE OUTDOORS EXCEEDS THE 4% OF THE FLOOR AREA BEING VENTILATED.



- NOTES:**
- SEE ECON-AIR DRAWINGS FOR HOOD, EXH FAN AND GREASE DUCT DATA.
  - HOOD FIRE SUPPRESSION BY PENINSULA FIRE UNDER SEPARATE PERMIT.

**FLOOR PLAN - HVAC**  
SCALE: 1/4"=1'-0"

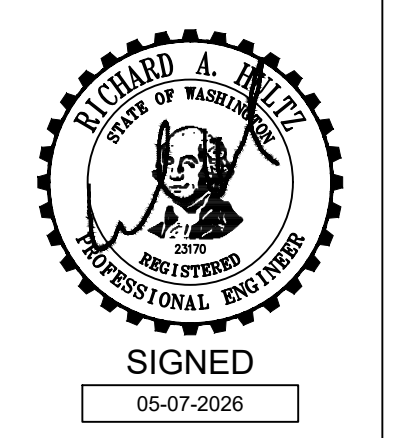
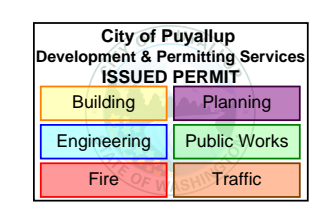
**GENERAL NOTES:**

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- DRAWINGS DO NOT SHOW ITEMS REQUIRED BY THE DEPARTMENT OF HEALTH. OWNER SHALL PROVIDE ITEMS AS REQUIRED.
- SEE MECHANICAL GENERAL NOTES SHEET M0.1.
- LOCATE ALL EQUIPMENT, DAMPERS, AND ITEMS REQUIRING ADJUSTMENT OR MAINTENANCE TO BE ACCESSIBLE.
- HANG HOODS FROM STRUCTURE ABOVE.
- CONTROLS CONTRACTOR SHALL PROVIDE LOW VOLTAGE CONNECTIONS FOR HOOD AND HOOD CONTROL PANEL. SEE REFERENCE DRAWINGS PROVIDED BY ECON-AIR.
- TYPE I HOOD, EXHAUST FAN & GREASE DUCT TESTING AND INSTALLATION SHALL COMPLY WITH CODE.

**KEYED NOTES:**

- CONNECT DUCT TO EXHAUST RISER SUPPLIED W/ HOOD.

**CONTRACTOR NOTE**  
See structural calculations for framing and unistrut details.



SHEET TITLE: FLOOR PLAN - HVAC  
 DRAWN: MB CHECKED: CP DATE: 05.07.26  
 REVISIONS:

FOR QUESTIONS, CALL THE  
Seattle Office  
REGION 85  
PHONE: (425) 212 - 5996  
EMAIL: reg85@econair.com

PATENT NUMBERS  
EXHAUST HOODS ND-2/BD-2/SND-2 (CANADA) - CA PATENT 2520435 C.

**HOOD INFORMATION - JOB#8643529**

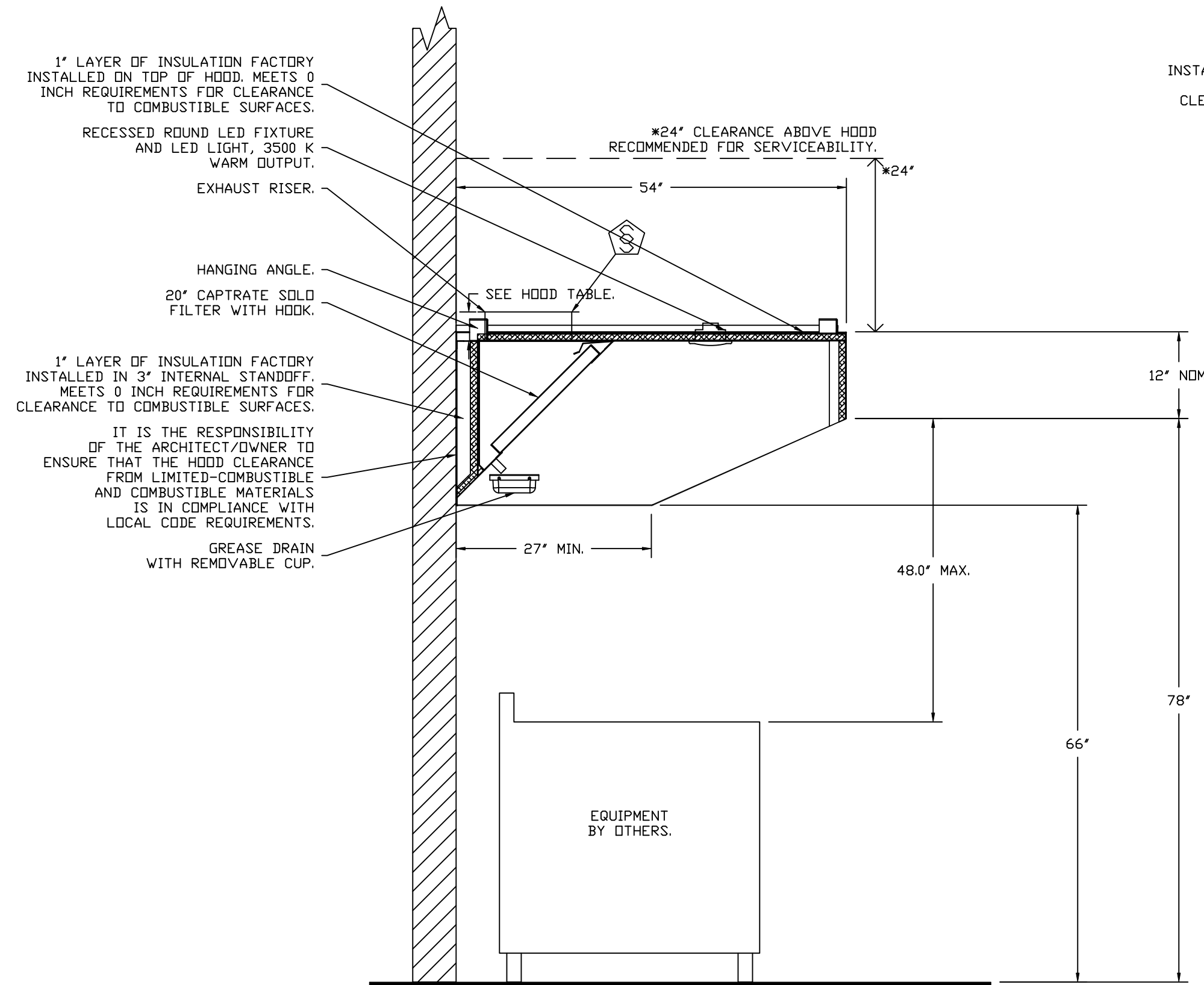
HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM RISER(S)						HOOD CONSTRUCTION	HOOD CONFIG		
										WIDTH	LENG	HEIGHT	DIA	CFM	VEL		SP	END TO END	RDW
1	KH	5412 ESX-2	ECON-AIR	4' 0"	600 DEG	I	HEAVY	300	1200			4'	12'	1200	1528	-0.716'	430 SS WHERE EXPOSED	ALONE	ALONE

**HOOD INFORMATION**

HOOD NO	TAG	FILTER(S)					LIGHT(S)					UTILITY CABINET(S)				FIRE SYSTEM PIPING	HOOD HANGING WEIGHT	
		TYPE	QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY	TYPE	WIRE GUARD	LOCATION	SIZE	FIRE SYSTEM	ELECTRICAL	SWITCHES				
1	KH	CAPRATE SOLID FILTER	2	20"	20"	85% SEE FILTER SPEC	1	RECESSED ROUND	NO								NO	239 LBS

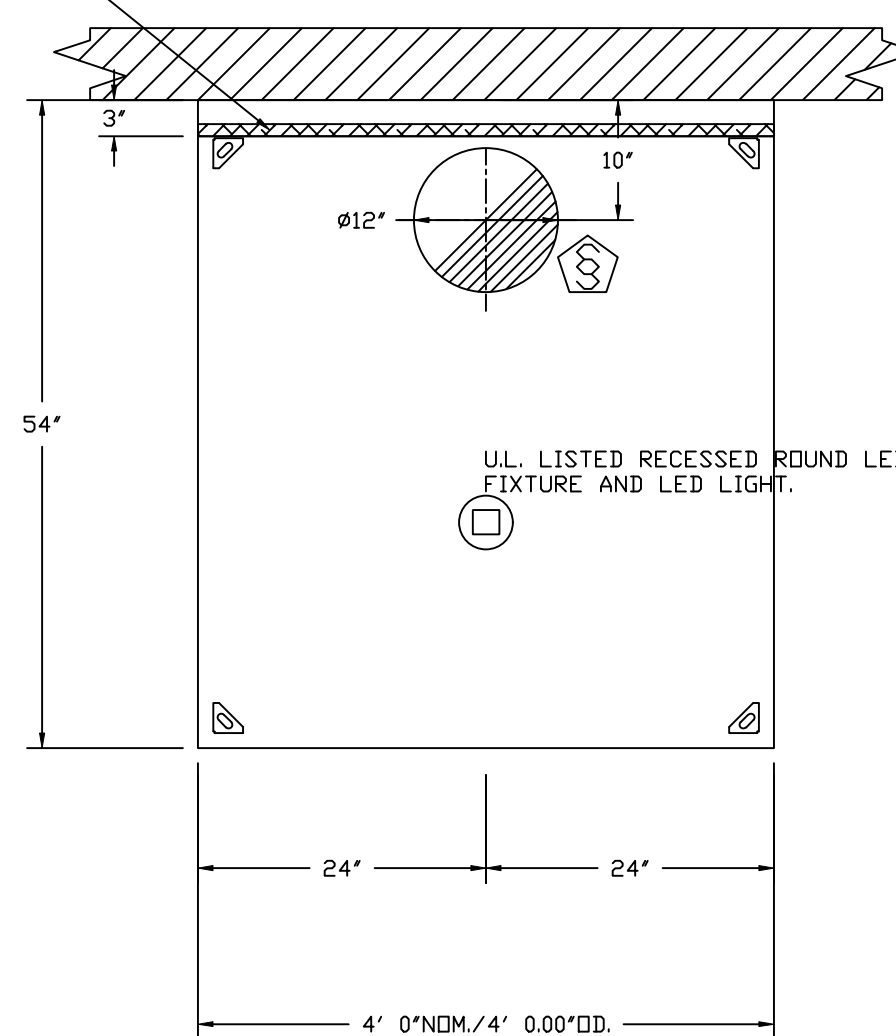
**HOOD OPTIONS**

HOOD NO	TAG	OPTION
1	KH	INSULATION FOR TOP OF HOOD. INSULATION FOR BACK OF HOOD.



**SECTION VIEW - MODEL 5412ESX-2  
HOOD - #1 (KH)**

1" LAYER OF INSULATION FACTORY INSTALLED IN INTERNAL BACK STANDOFF. MEETS 0 INCH REQUIREMENTS FOR CLEARANCE TO COMBUSTIBLE SURFACES.



**PLAN VIEW - HOOD #1 (KH)  
4' 0.00" LONG 5412ESX-2**

**SPECIFICATION: CAPRATE® GREASE-STOP® SOLID FILTER**

THE CAPRATE GREASE-STOP SOLID FILTER IS A SINGLE-STAGE FILTER FEATURING A UNIQUE S-BAFFLE DESIGN IN CONJUNCTION WITH A SLOTTED REAR BAFFLE DESIGN, TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY.

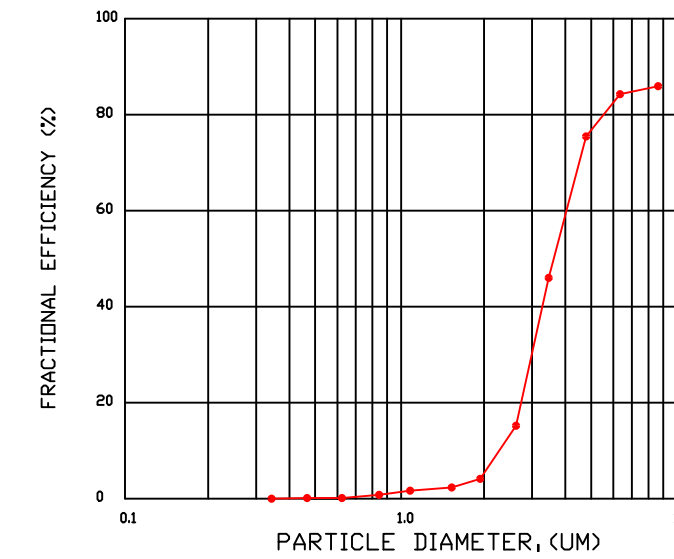
FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

UNITS SHALL INCLUDE STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPONENTS WHEN ASSEMBLED.

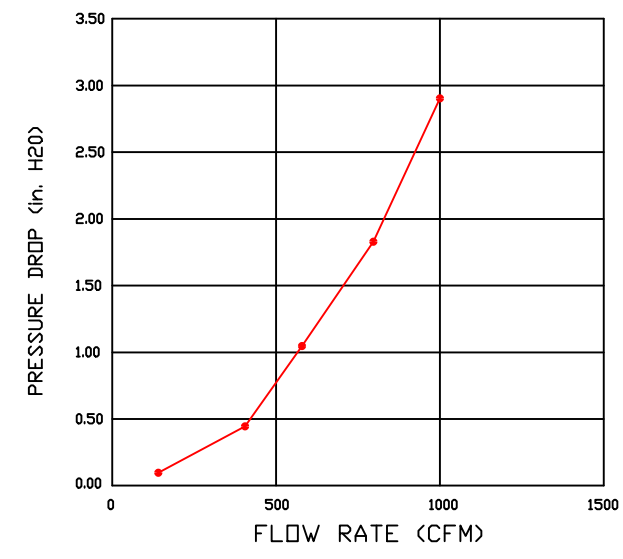
GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 85% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE.

THE CAPRATE GREASE-STOP SOLID WAS TESTED TO ASTM STANDARD ASTM F2519-05. MANUFACTURER APPROVED FOR USE IN SOLID FUEL APPLICATIONS AS A SPARK ARRESTER.

EFFICIENCY VS. PARTICLE DIAMETER



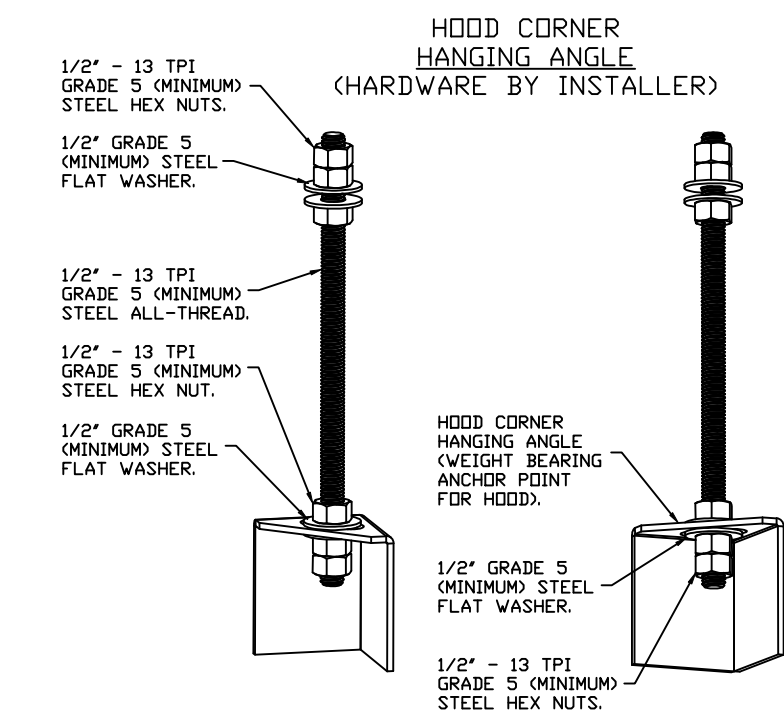
PRESSURE DROP VS. FLOW RATE



CAPRATE FILTERS ARE BUILT IN COMPLIANCE WITH:  
NFPA #96.  
NSF STANDARD #2.  
UL STANDARD #1046.  
INT. MECH. CODE (IMC).  
ULC-S649.



18 WIDE X 18 TALL X 6.00 DEEP.  
SS HINGED ELECTRICAL BOX.



**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) STEEL HEX NUTS. 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.

**REVISIONS**

DESCRIPTION	DATE

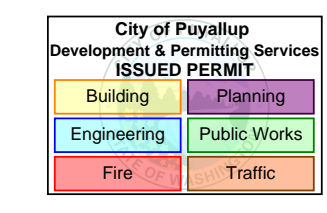
**econ·air**  
Seattle Office  
www.econair.com  
114 NW Canal St. #300, Seattle, WA 98107 PHONE: (425) 212-5996 FAX: 4252125998 EMAIL: reg85@econair.com

PRCTI20260747

Marcoe Candy Company - Puyallup, WA St Fair Rev2  
110 9th Avenue Southwest,  
Puyallup, WA, 98371

DATE: 4/29/2026  
DWG.#: 8643529  
DRAWN BY:  
SCALE: 3/4" = 1'-0"  
MASTER DRAWING

SHEET NO. 1



**EXHAUST FAN INFORMATION -- JOB#8643529**

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SDNES
1	EF	1	EADU85H	ECDN-AIR	1200	0.900	1206	TEAD-ECM	0.750	0.3760	1	208	5.2	380 FPM	90	9.1

**FAN ACCESSORIES**

FAN UNIT NO	TAG	EXHAUST				SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT	
1	EF	YES							

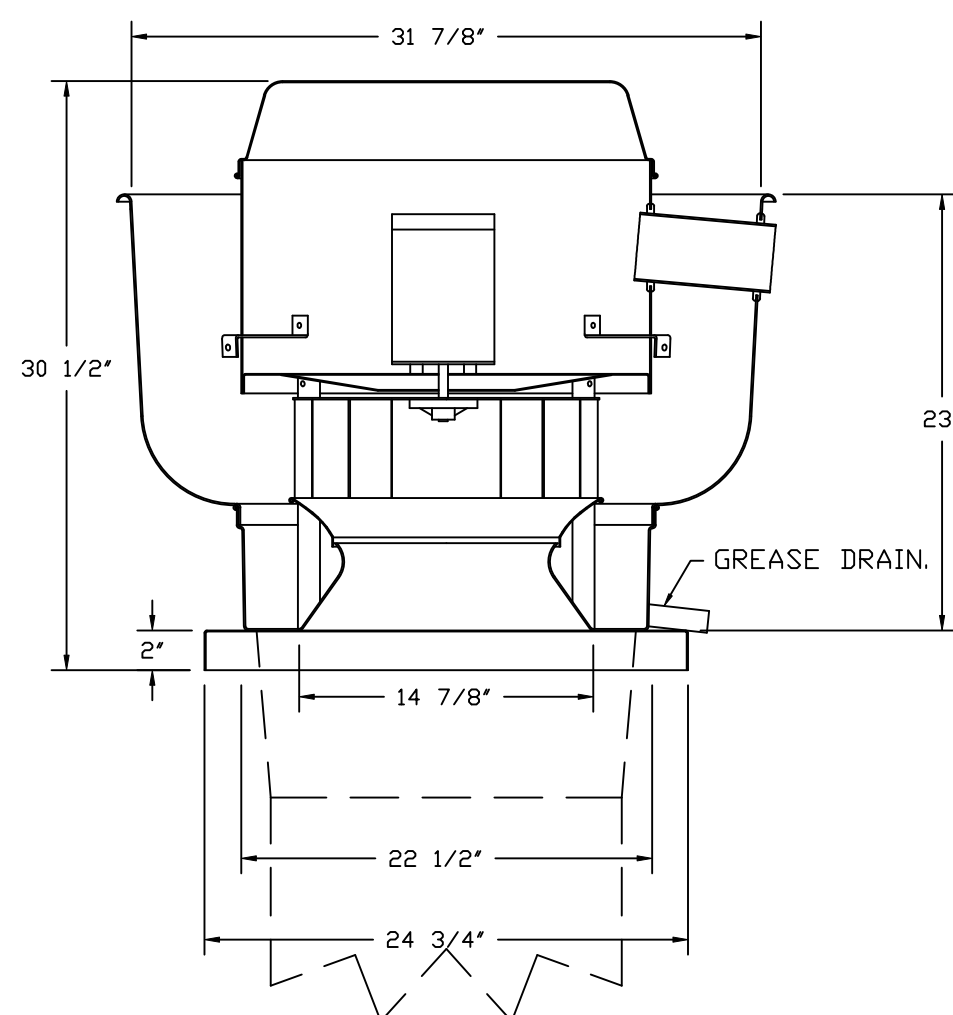
**CURB ASSEMBLIES**

NO	ON FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	EF	32 LBS	CURB	23.000"W X 23.000"L X 20.000"H 2,000:12,000 PITCH ALONG LENGTH, RIGHT VENTED.

**FAN OPTIONS**

FAN UNIT NO	TAG	QTY	DESCRIPTION
1	EF	1	GREASE BOX
		1	FAN BASE CERAMIC SEAL - DU/DR85HFA - INSTALLED AT PLANT - FOR GREASE DUCTS
		1	ECM WIRING PACKAGE - PWM SIGNAL FROM ECPM03 PREWIRE (TELCO MOTOR), CCW ROTATION
		1	2 YEAR PARTS WARRANTY

FAN #1 EADU85H -- EXHAUST FAN (EF)



**FEATURES:**

- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL705 AND UL762 AND ULC-S645
- VARIABLE SPEED CONTROL.
- INTERNAL WIRING.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
- HIGH HEAT OPERATION 300°F (149°C).
- GREASE CLASSIFICATION TESTING.
- NEMA 3R SAFETY DISCONNECT SWITCH.

**NORMAL TEMPERATURE TEST**

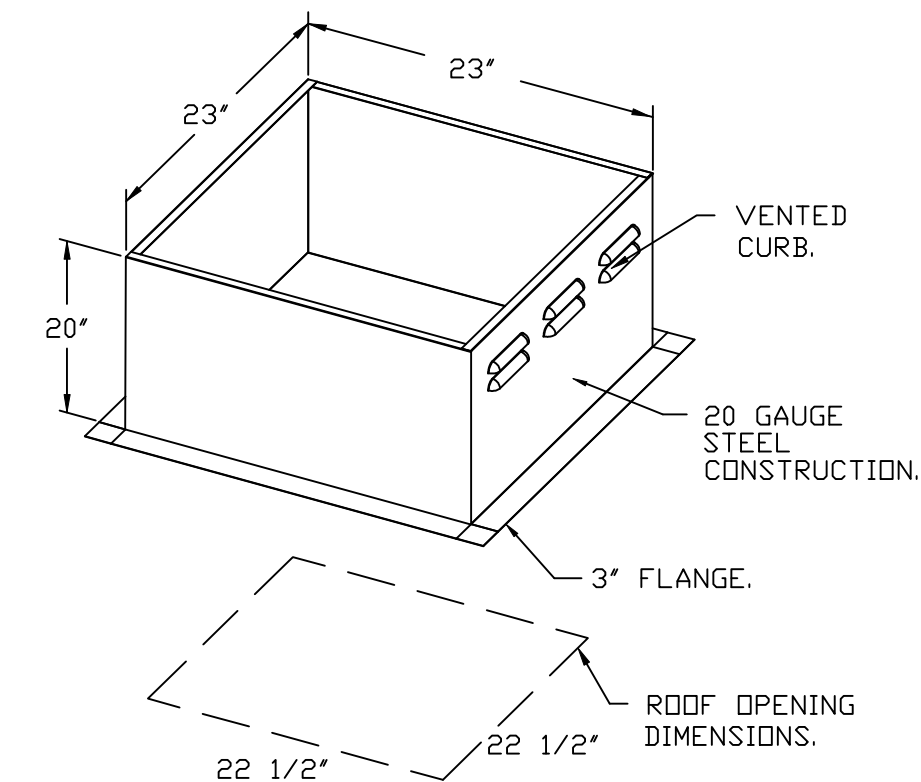
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

**ABNORMAL FLARE-UP TEST**

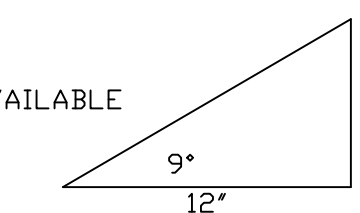
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

**OPTIONS**

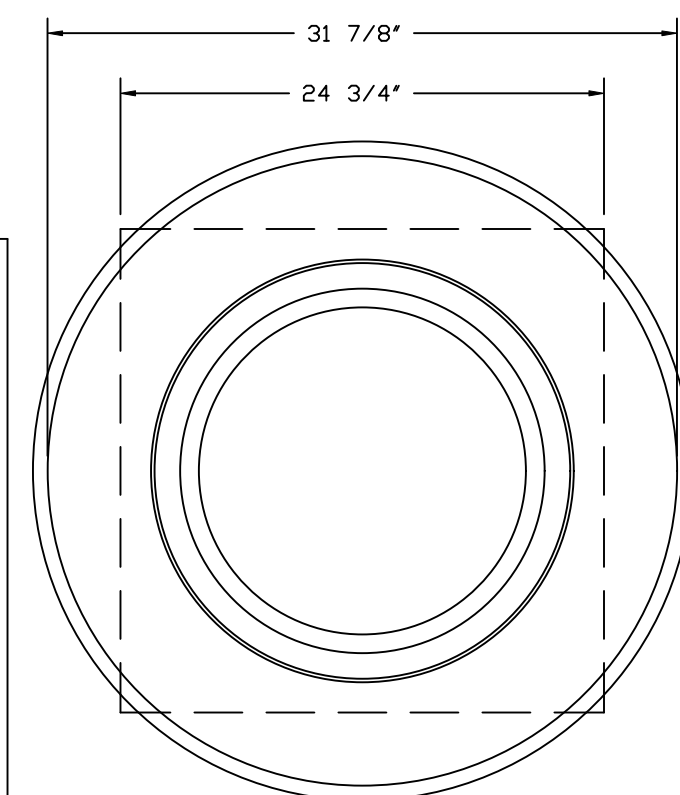
- GREASE BOX.
- FAN BASE CERAMIC SEAL - DU/DR85HFA - INSTALLED AT PLANT - FOR GREASE DUCTS.
- ECM WIRING PACKAGE - PWM SIGNAL FROM ECPM03 PREWIRE (TELCO MOTOR), CCW ROTATION.
- 2 YEAR PARTS WARRANTY.



PITCHED CURBS ARE AVAILABLE FOR PITCHED ROOFS.

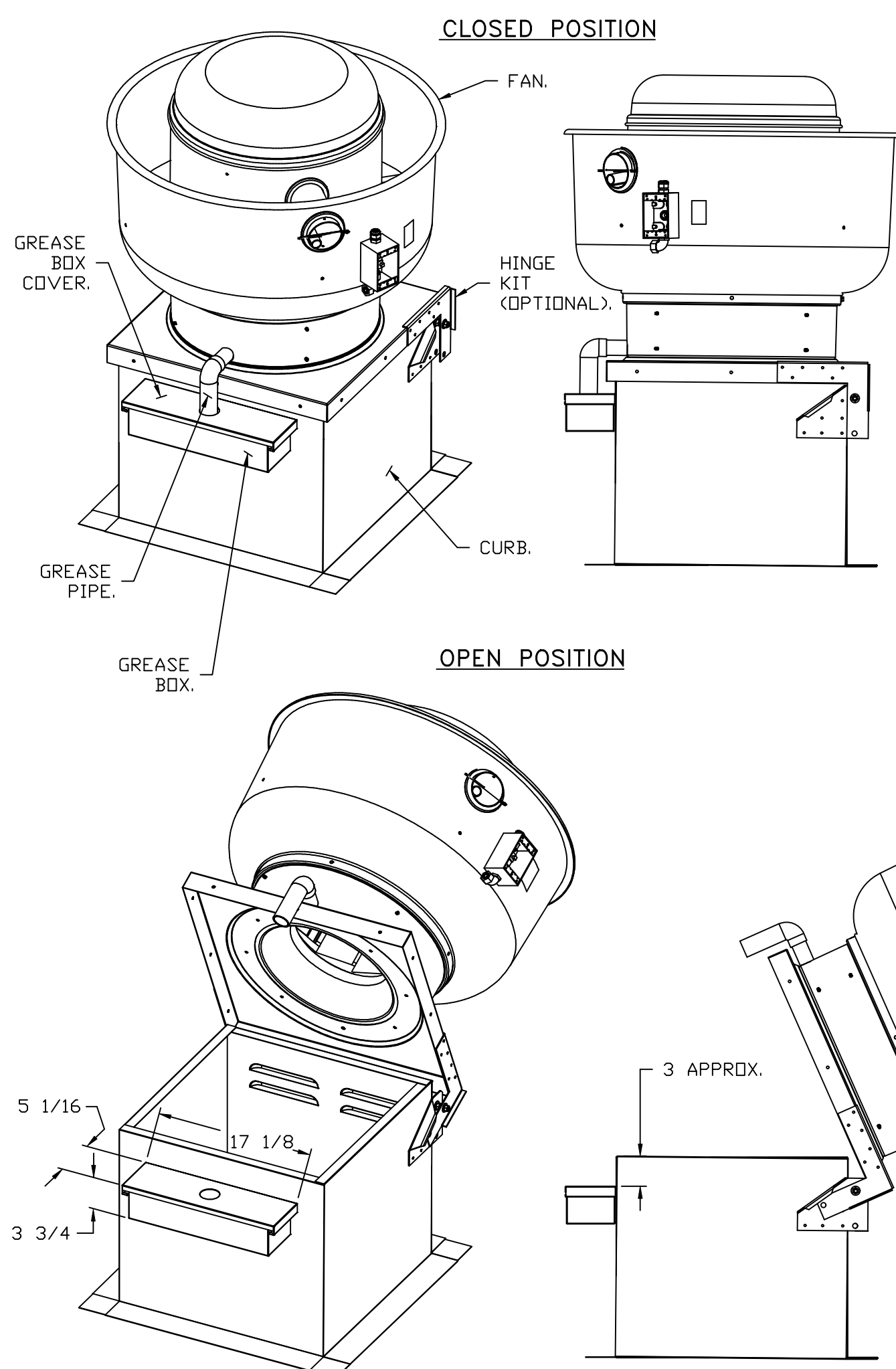


SPECIFY PITCH:  
EXAMPLE: 7/12 PITCH = 30° SLOPE.



TOP VIEW

**GREASE BOX INSTALLATION**



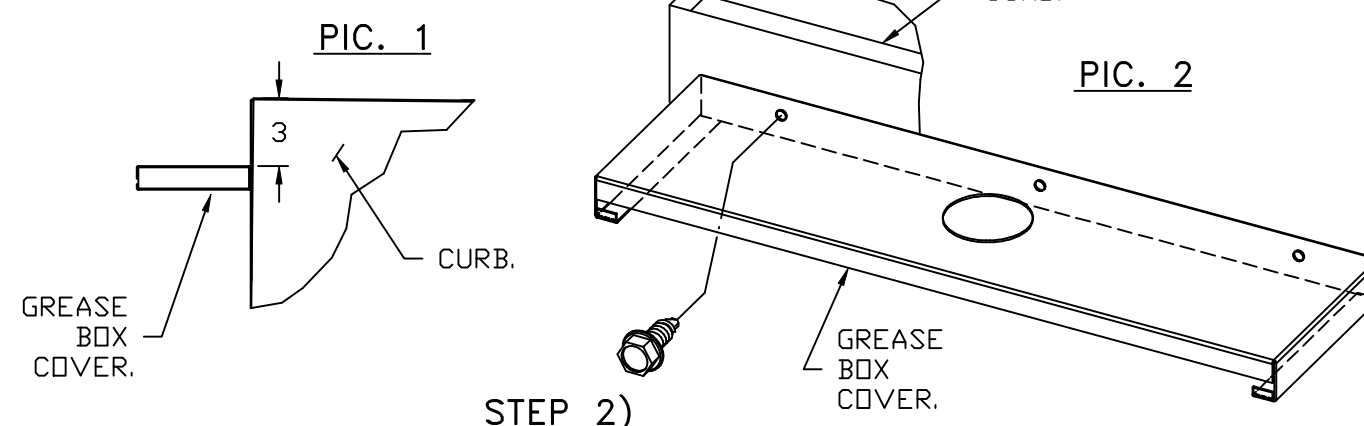
**PARTS INCLUDED**

- GREASE BOX.
- GREASE BOX COVER.
- GREASE PIPE.
- SHEET METAL SCREWS  
3 - LONG (3/4" LG.).

**GREASE BOX FIELD INSTALLATION**

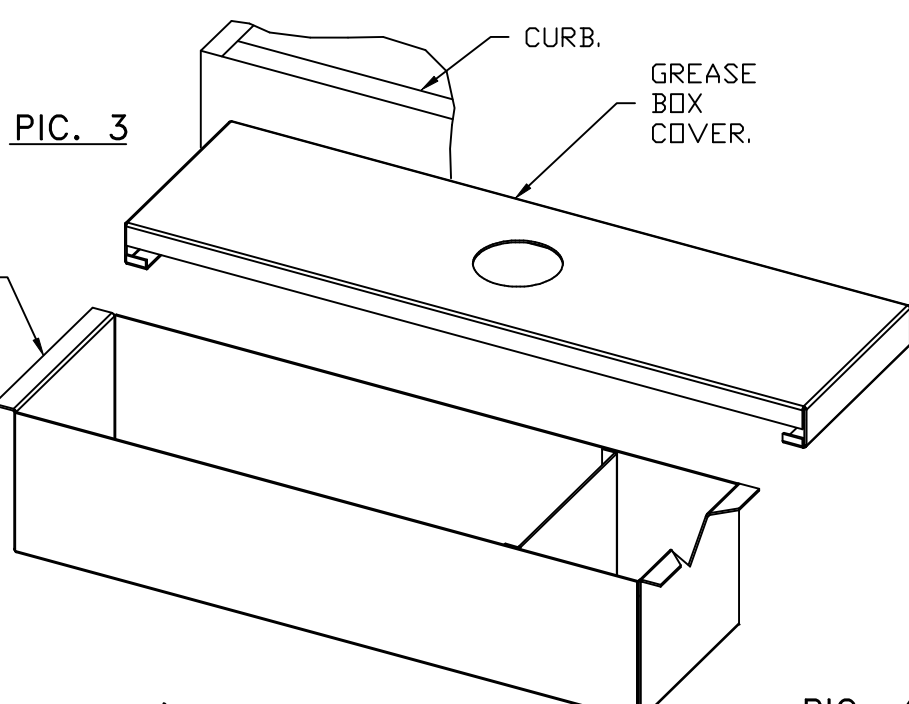
**STEP 1)**

ATTACH GREASE BOX COVER TO THE CURB, HOLD 3" DIMENSION AS SHOWN ON PIC. 1. SCREW GREASE BOX COVER TO CURB USING (3) LONG (3/4" LG.) SCREWS AS SHOWN ON PIC. 2.



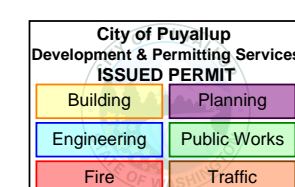
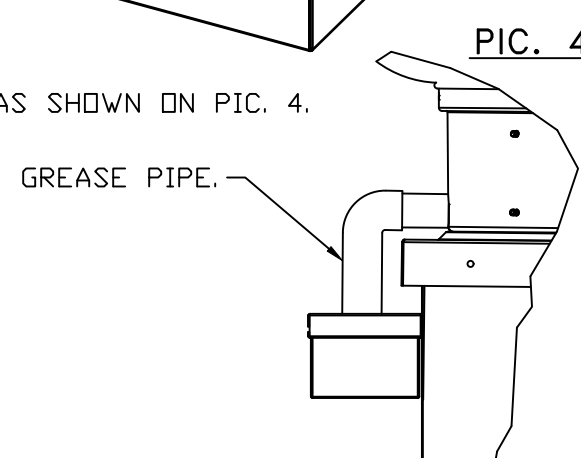
**STEP 2)**

ATTACH GREASE BOX TO GREASE BOX COVER, SLIDE AND DROP AS SHOWN ON PIC. 3.



**STEP 3)**

INSTALL GREASE PIPE AS SHOWN ON PIC. 4.



\*NOTE: UL 705 INSTALL.

**REVISIONS**

NO.	DESCRIPTION	DATE

**Secon·air**  
Seattle Office  
www.seconair.com  
114 NW Canal St. #300, Seattle, WA 98107 PHONE: (425) 212-5996 FAX: 4252125998 EMAIL: reg85@seconair.com

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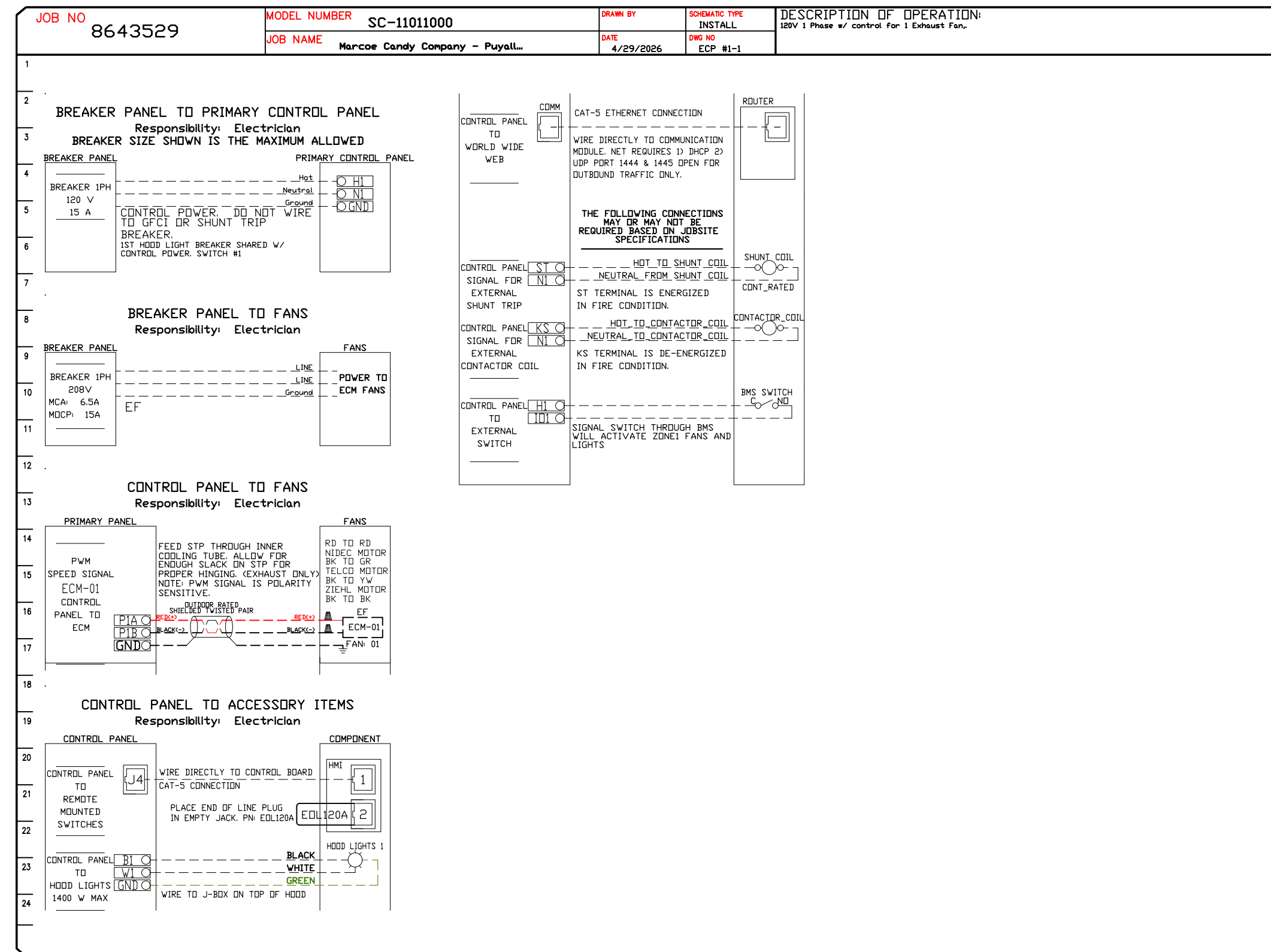
Marcoe Candy Company - Puyallup, WA St Fair Rev2  
110 9th Avenue Southwest,  
Puyallup, WA, 98371

DATE: 4/29/2026  
DWG.#: 8643529  
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SCALE: 3/4" = 1'-0"  
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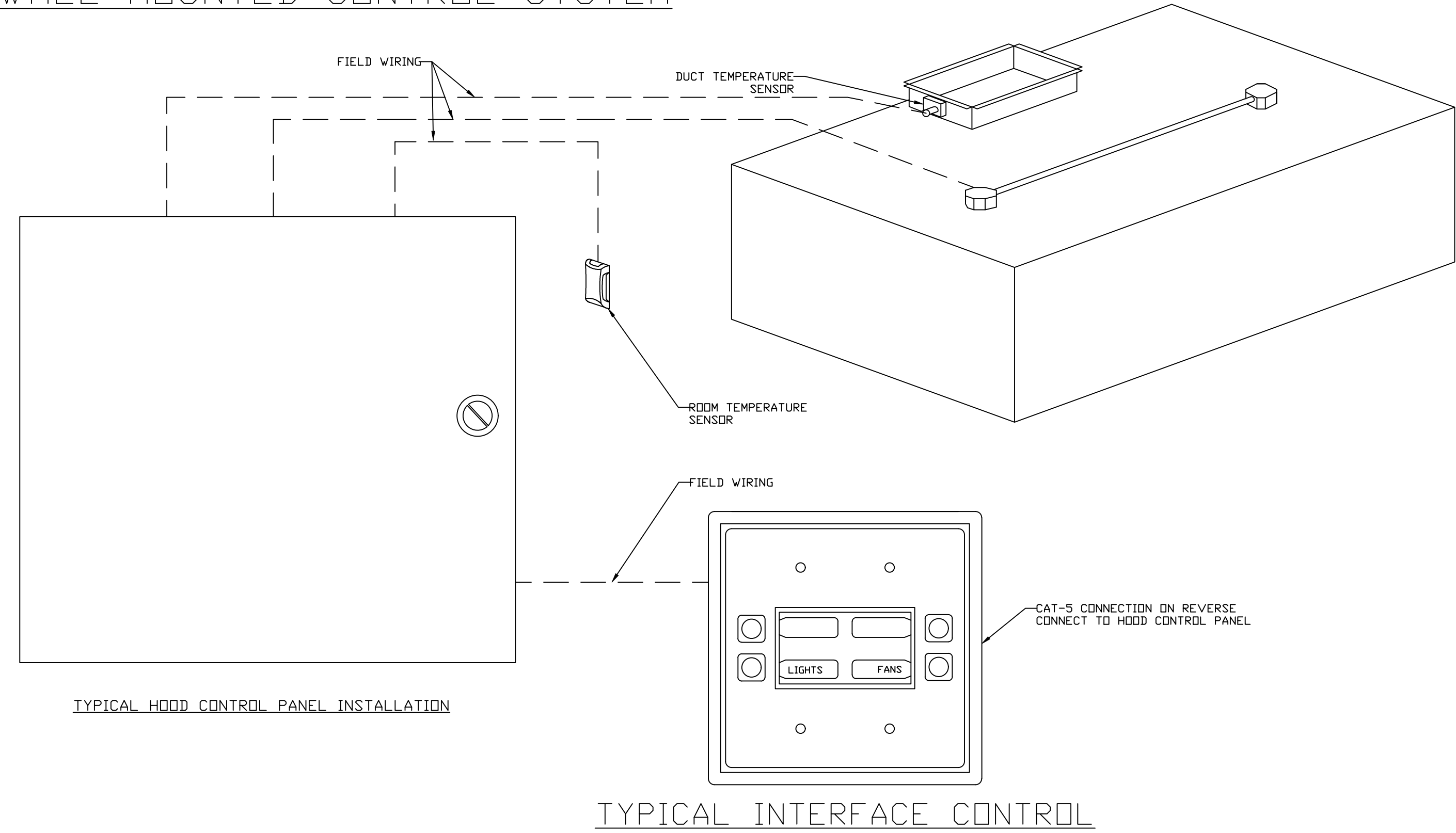
SHEET NO. 2

**ELECTRICAL PACKAGE -- JOB#8643529**

NO	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED					
				LOCATION	QUANTITY		FAN TAG	TYPE	#	HP	VOLT	FLA
1		SC-11011000	WALL MOUNT IN SS BOX	SHIP LOOSE W/ PREWIRE	1 LIGHT 1 FAN	SMART CONTROLS BASIC	EF	EXHAUST	1	0.750	208	5.2

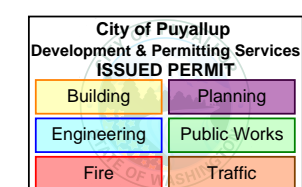


**WALL MOUNTED CONTROL SYSTEM**



TYPICAL HOOD CONTROL PANEL INSTALLATION

TYPICAL INTERFACE CONTROL



**REVISIONS**

NO.	DESCRIPTION	DATE

**Secon·air**  
www.seconair.com

**Seattle Office**  
114 NW Canal St. #300, Seattle, WA 98107 PHONE: (425) 212-5996 FAX: 4252125998 EMAIL: reg85@seconair.com

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Marcoe Candy Company - Puyallup, WA St Fair Rev2  
110 9th Avenue Southwest,  
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DATE: 4/29/2026  
DWG.#: 8643529  
DRAWN BY:  
SCALE: 3/4" = 1'-0"  
MASTER DRAWING

SHEET NO. 3

DUCTWORK #1 PARTS - JOB#8643529 DOUBLE WALL

TAG	PART #	CFM	GPM	ZONE	COVEREDBY	SP	WEIGHT	VELOCITY	QTY	DESCRIPTION
HI-E1	EDW16DWRISER-2R-S	1200				-0.7160	7.31		1	DOUBLE WALL RISER COVER - USED ON 12" INNER RISER, 4' LONG - 2 LAYERS REDUCED CLEARANCE - 16" STAINLESS STEEL OUTER RISER SHELL ASSEMBLY. INCLUDES INSULATION & SINGLE V CLAMPS FOR INNER & OUTER CONNECTIONS.
P1	EDW1211DWLT-2R-S	1200				-0.0045	13.08	1528	1	DOUBLE WALL DUCT - 12" INNER DUCT, 11' LONG - 2 LAYERS REDUCED CLEARANCE - 16" STAINLESS STEEL OUTER SHELL.
P2	EDW1227DWAJD-2R-S	1200				-0.0058	45.95	1528	1	DOUBLE WALL ADJUSTABLE DUCT - 12" INNER DUCT - 2 LAYERS REDUCED CLEARANCE - 16" STAINLESS STEEL OUTER SHELL. MIN LENGTH = 11' / MAX LENGTH = 24.5' / ADJUSTMENT = 13.5' / ADJUSTABLE SECTION MAY NEED TO BE CUT. INCLUDES SINGLE AND DOUBLE WALL "V" CLAMPS.
P3 ASSEMBLED W/P4	EDW1235DWLTP-2R-S	1200				-0.0142	42.19	1528	1	DOUBLE WALL DUCT - 12" INNER DUCT, 35' LONG - 2 LAYERS REDUCED CLEARANCE - 16" STAINLESS STEEL OUTER SHELL - USED WITH TRANSITION PLATE.
P4 ASSEMBLED W/P3 D=B SYSTEM AT P4	EDW1912TPDBEX	1200					7.50	1528	1	DUCT TO CURB TRANSITION 3/4" DOWN TURN, 19-1/2" CURB TO 12" DUCT, 16 GA ALUMINIZED STEEL. FOR USE WITH EXHAUST FANS.
						-0.7405	0.00			
RC1	EDW16DWRISER-2R-S						7.31		1	DOUBLE WALL RISER COVER - USED ON 12" INNER RISER, 4' LONG - 2 LAYERS REDUCED CLEARANCE - 16" STAINLESS STEEL OUTER RISER SHELL ASSEMBLY. INCLUDES INSULATION & SINGLE V CLAMPS FOR INNER & OUTER CONNECTIONS.
	E3M-2000PLUS						0.80		1	DUCT - 3M FIRE BARRIER 2000 PLUS SILICONE - USED AS SEALANT TO SEAL DUCT JOINTS.
TOTAL WEIGHT							124.14			
TOTAL PRESSURE						-0.7405				

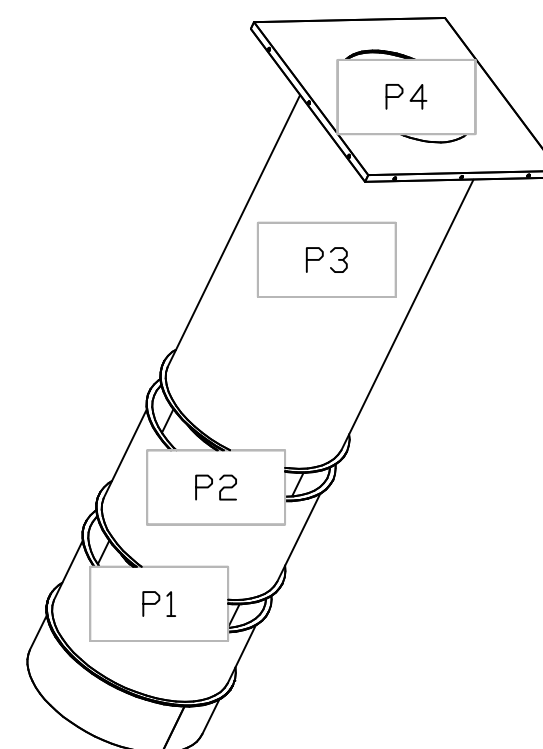
DOUBLE WALL FACTORY BUILT DUCTWORK

- ALL DUCTWORK IS REQUIRED TO BE INSTALLED WITH THE MAXIMUM SUPPORT SPACING LISTED BELOW.
- FOR A COMPLETE LIST OF APPROVED SUPPORT METHODS, SEE THE ENTIRE INSTALLATION AND OPERATION MANUAL.
- DUCTWORK SHALL SLOPE NOT LESS THAN 1/16" PER LINEAR FOOT TOWARDS THE HOOD OR AN APPROVED GREASE COLLECTION RESERVOIR.
- WHERE HORIZONTAL DUCTS EXCEED 75 FEET IN LENGTH, THE SLOPE SHALL NOT BE LESS THAN 3/16" PER LINEAR FOOT.

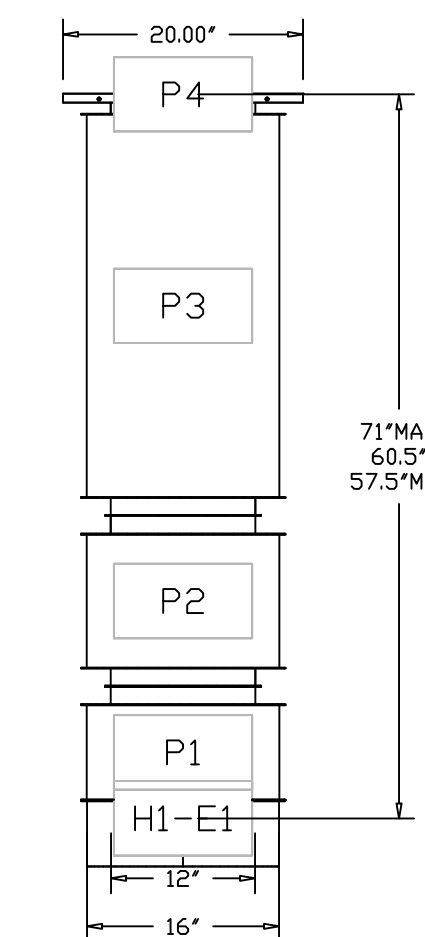
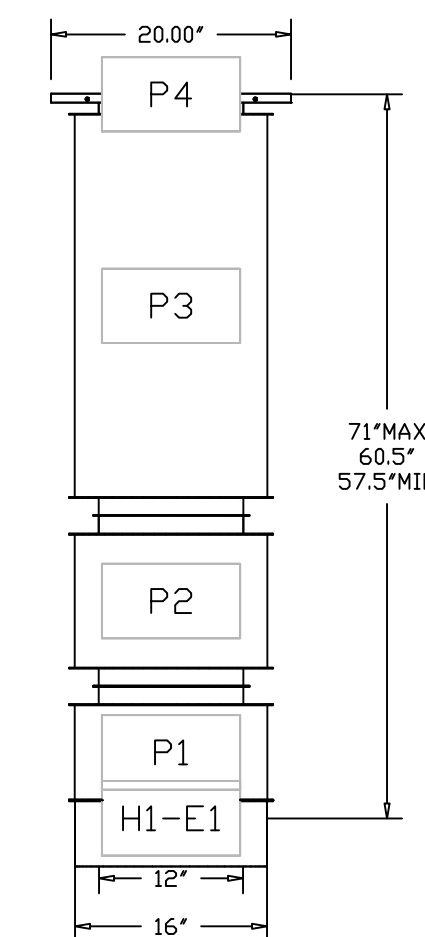
HORIZONTAL	
DUCT DIAMETER	SUPPORT SPACING (FT)
5"	7'
6"	7'
7"	7'
8"	7'
10"	7'
12"	7'
14"	7'
16"	7'
18"	5'
20"	5'
22"	5'
24"	5'
26"	5'
28"	5'
30"	5'
32"	5'
34"	5'
36"	5'

VERTICAL			
TYPE	WALL SUPPORT (FT)	CURB SUPPORT (FT)	FLOOR SUPPORT (FT)
2R & 2R HT (5'-16')	20'	24'	24'
2R (18')	18'	24'	24'
3R & 3Z (5'-24')	10'	24'	24'
3Z (26' -36')	10'	20'	20'

DUCTWORK #1 SE VIEW

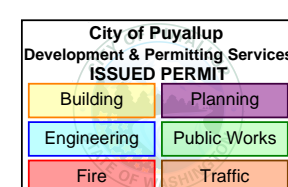
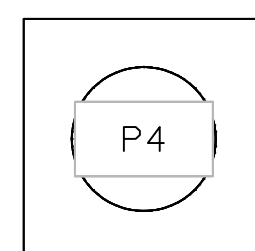


DUCTWORK #1 FRONT VIEW DUCTWORK #1 SIDE VIEW



DO NOT LEAK TEST USING SMOKE BOMBS CONTAINING CHLORINES/CHLORIDES. CONSULT WITH CAPTIVEAIRE FOR PROPER LEAK TESTING METHODS.

DUCTWORK #1 TOP VIEW



**REVISIONS**

DESCRIPTION	DATE

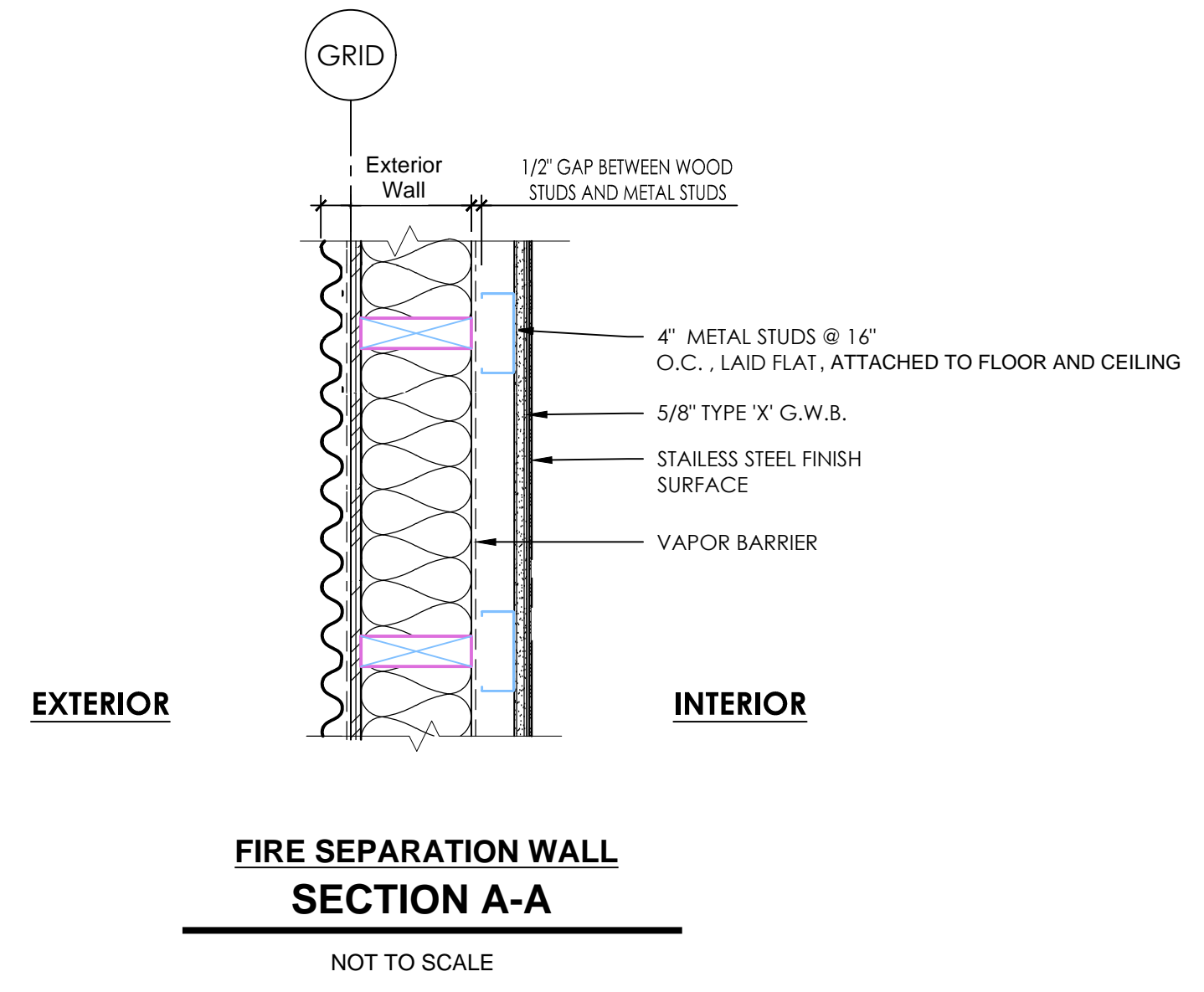
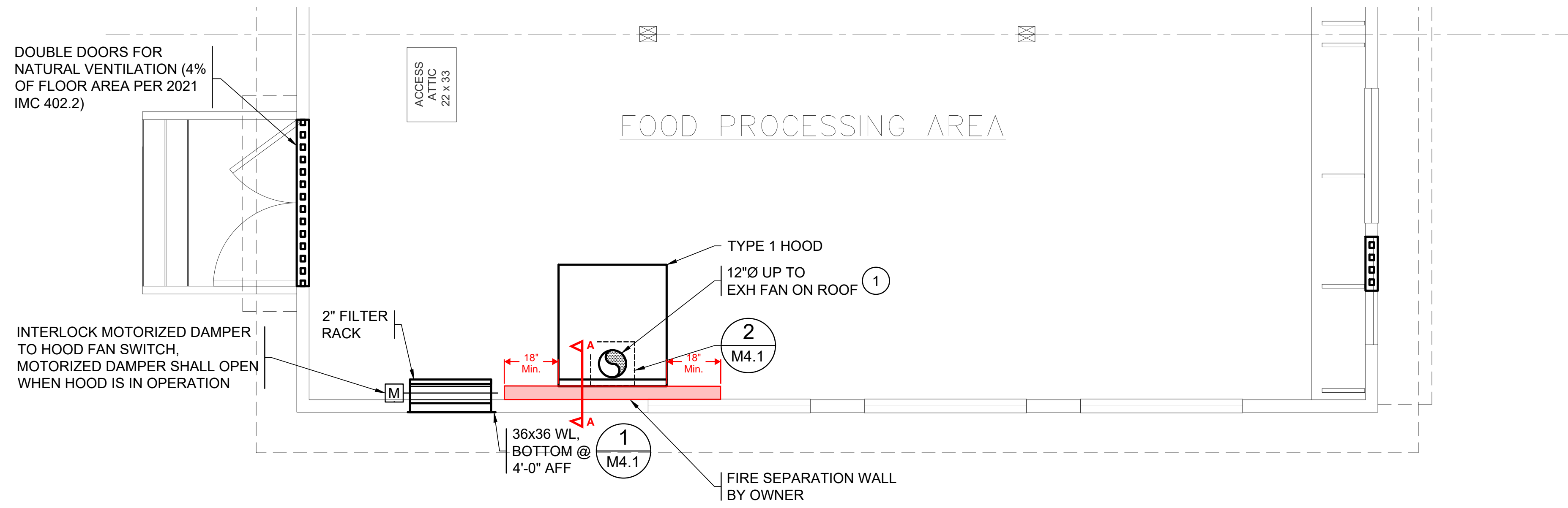
**Secon.air**  
www.seconair.com  
Seattle Office  
114 NW Canal St, #500, Seattle, WA, 98107 PHONE: (425) 212-5998 FAX: 425-212-5998 EMAIL: reg85@seconair.com

PRCTI20260747

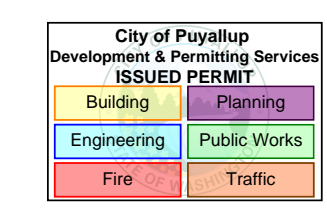
Marcoe Candy Company - Puyallup, WA St Fair Rev2  
110 9th Avenue Southwest,  
Puyallup, WA, 98371

DATE: 4/29/2026  
DWG #: 8643529  
DRAWN BY:  
SCALE: 3/4" = 1'-0"  
MASTER DRAWING

SHEET NO. 4



**FIRE SEPARATION WALL  
SECTION A-A**  
NOT TO SCALE



Owner/Developer:

Engineer:



JMJ Team  
905 Main Street, Suite #200  
Sumner, WA 98390  
(206) 596-2020

Project:

PRCTI20260747

ONE INCH AT FULL SCALE.  
IF NOT, SCALE ACCORDINGLY



05-18-26

REV	DATE	DESCRIPTION

SHEET TITLE:  
**Details**

PROJ. NO.:  
DATE:

DRAWN BY: DESIGN BY:

SHEET NUMBER:  
**C-01**

DWG. \_\_\_\_\_ OF \_\_\_\_\_