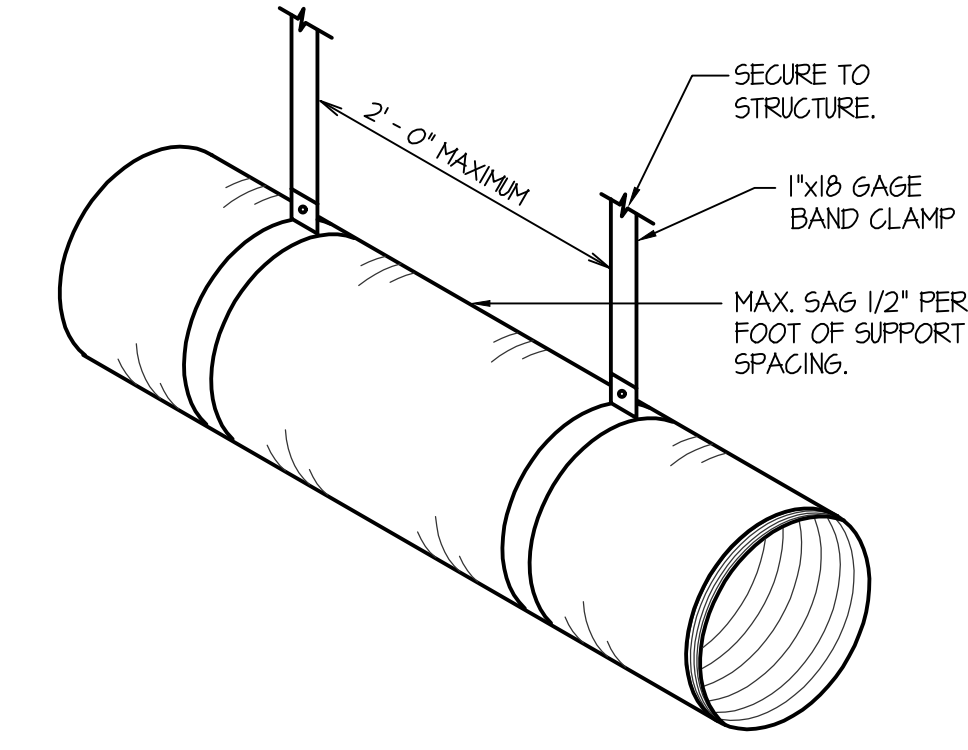
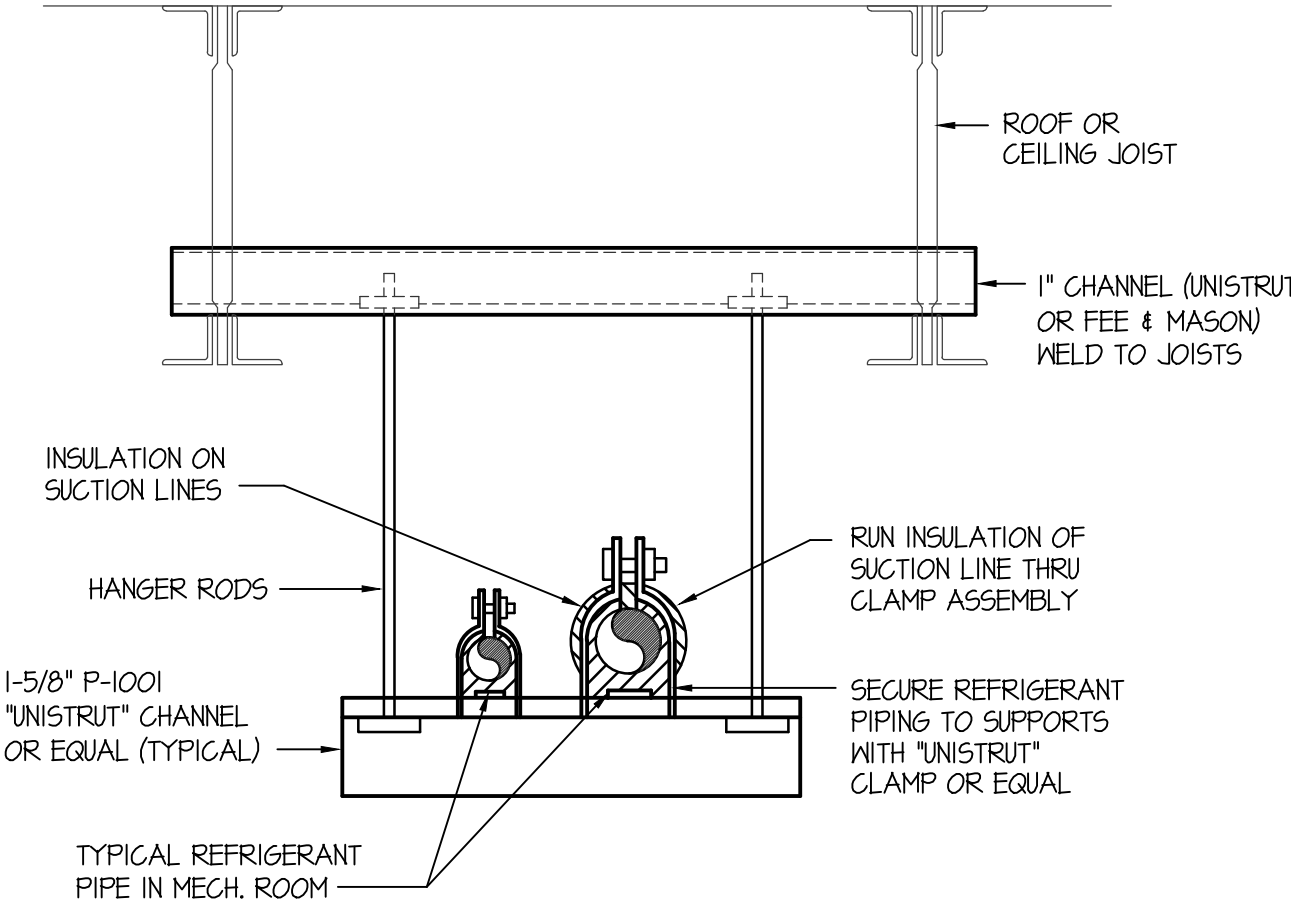


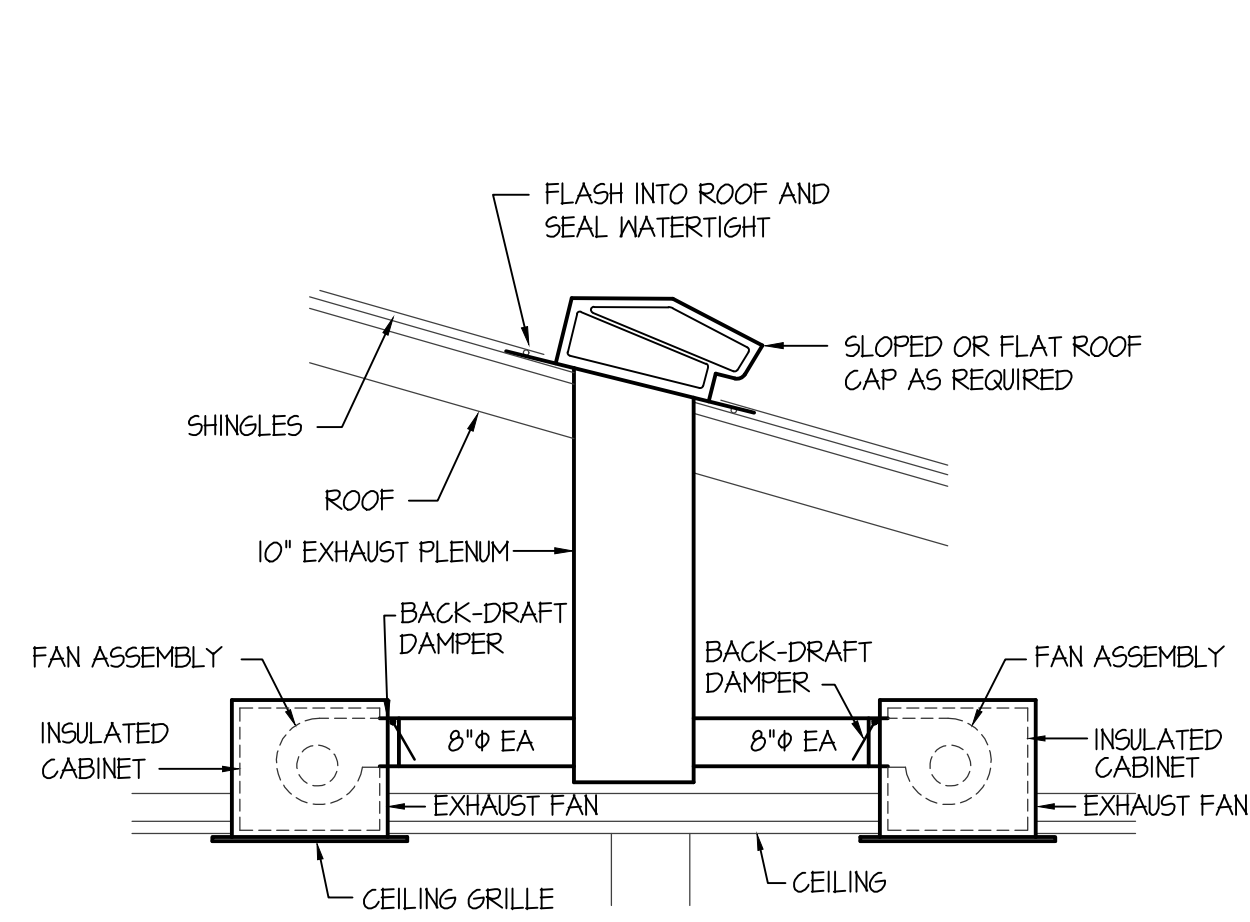
**TYPICAL OUTSIDE AIR DUCT DETAIL**  
NO SCALE



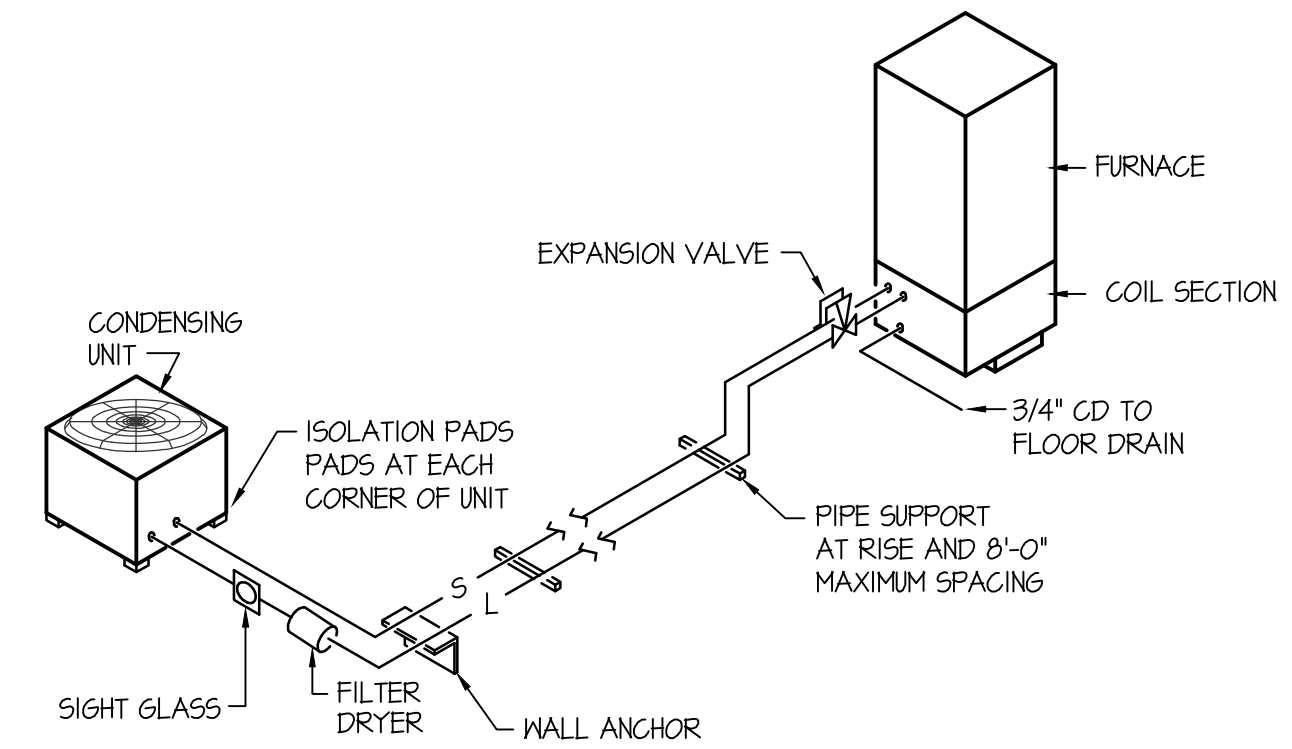
**FLEXIBLE DUCT SUPPORT DETAIL**  
NO SCALE



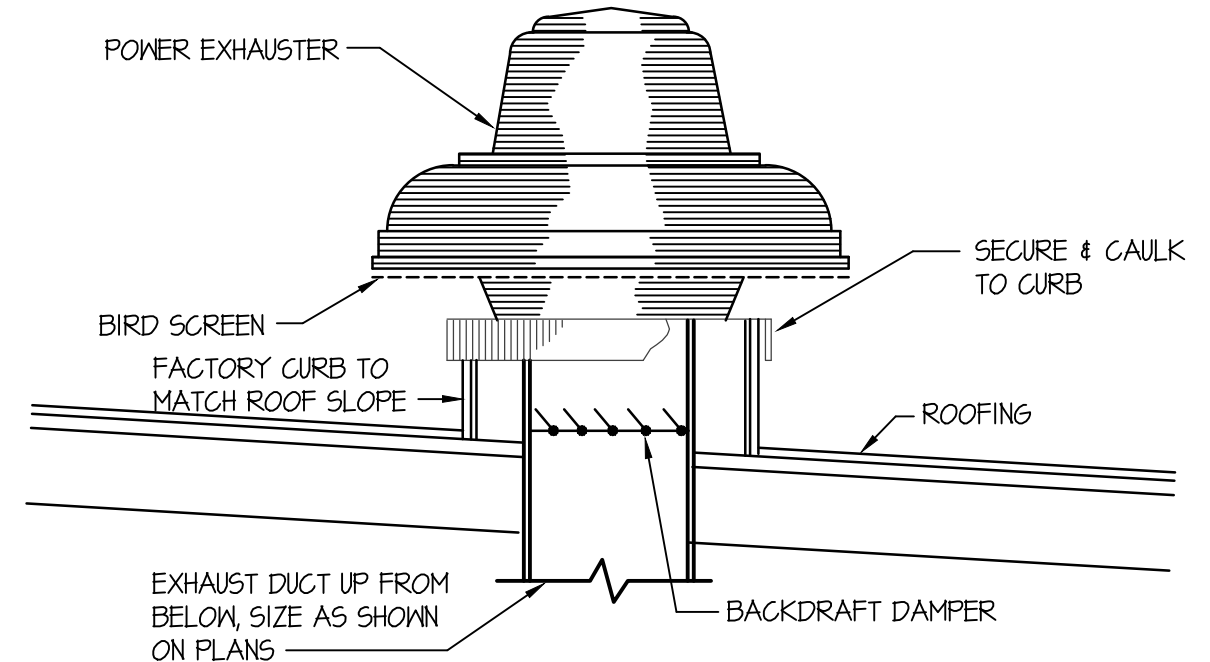
**REFRIGERANT PIPE SUPPORT DETAIL**  
NO SCALE



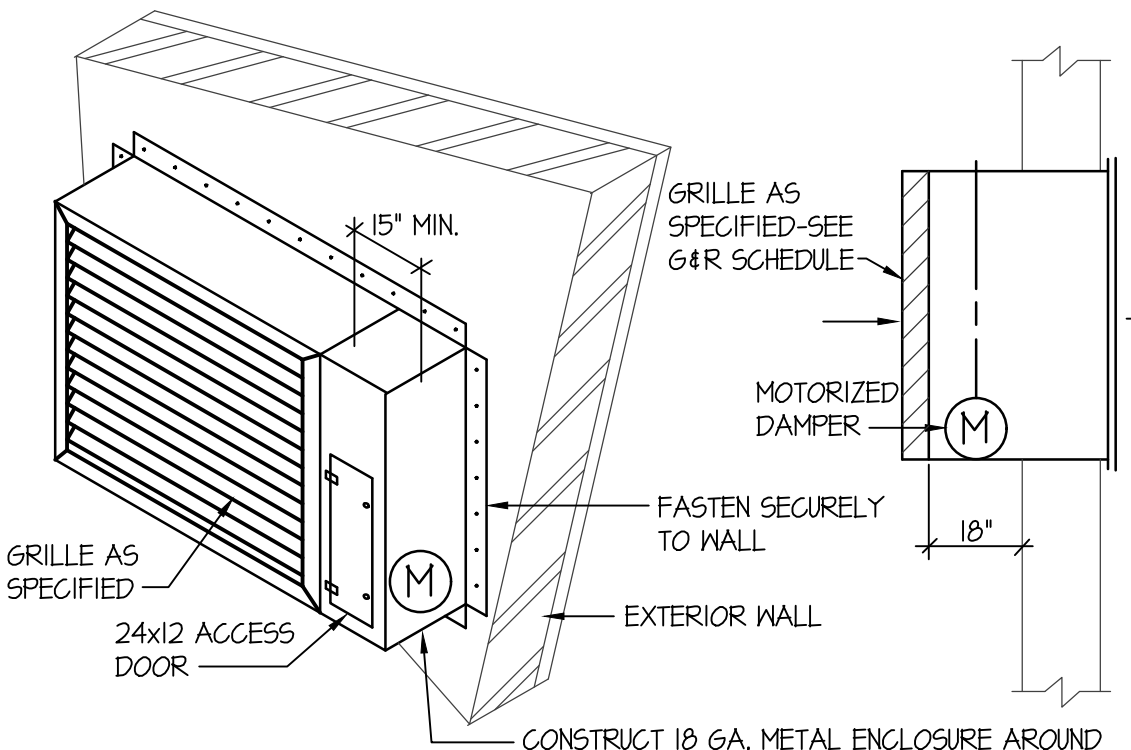
**CEILING MOUNTED EXHAUST FAN DETAIL**  
NO SCALE



**REFRIGERANT PIPING DIAGRAM**  
NO SCALE

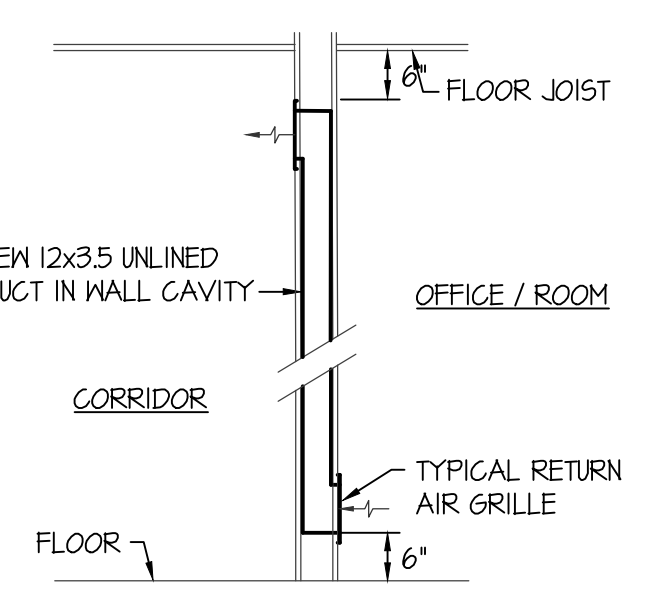


**ROOF TOP EXHAUST FAN DETAIL**  
NO SCALE

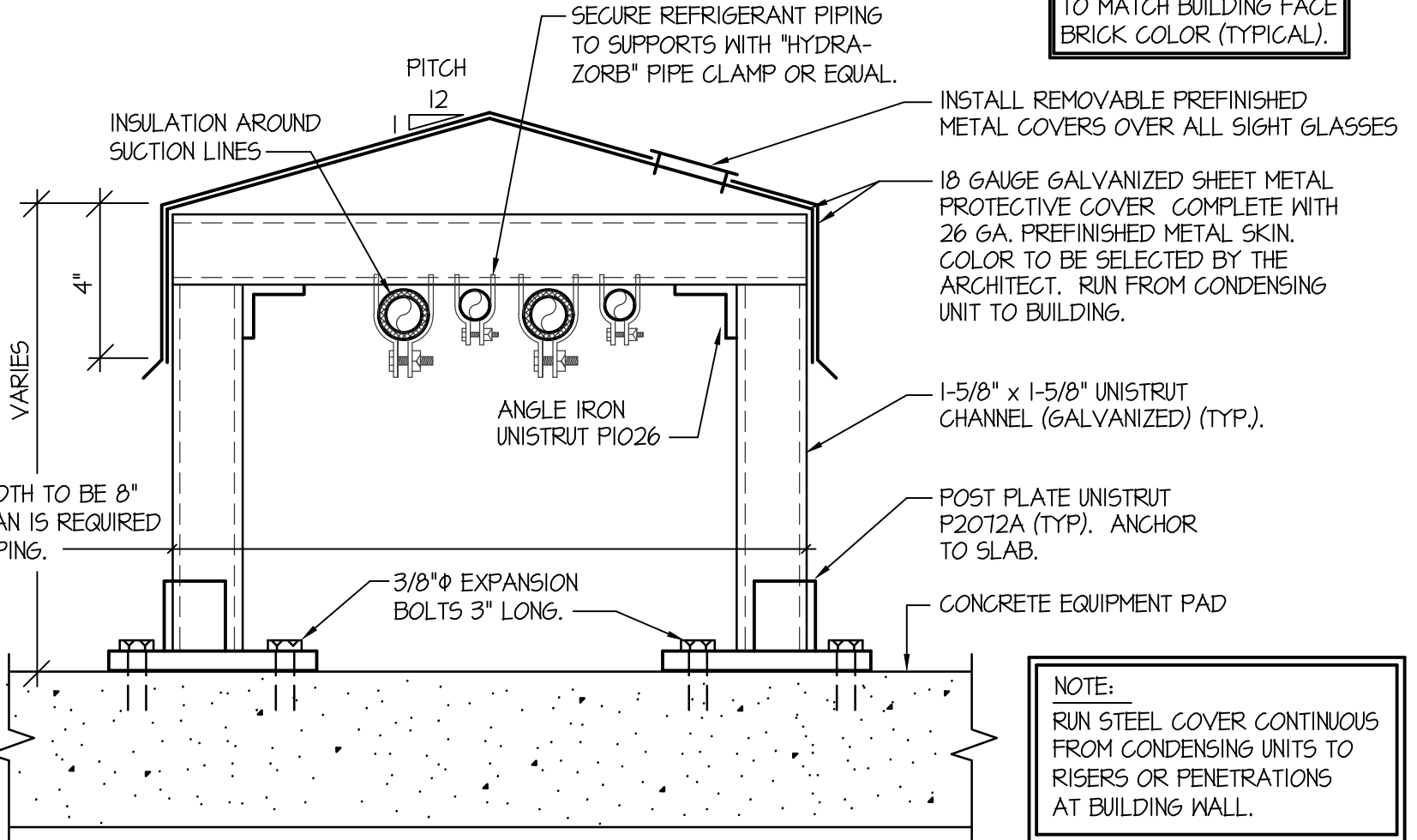


**RELIEF AIR LOUVER DETAIL**  
NO SCALE

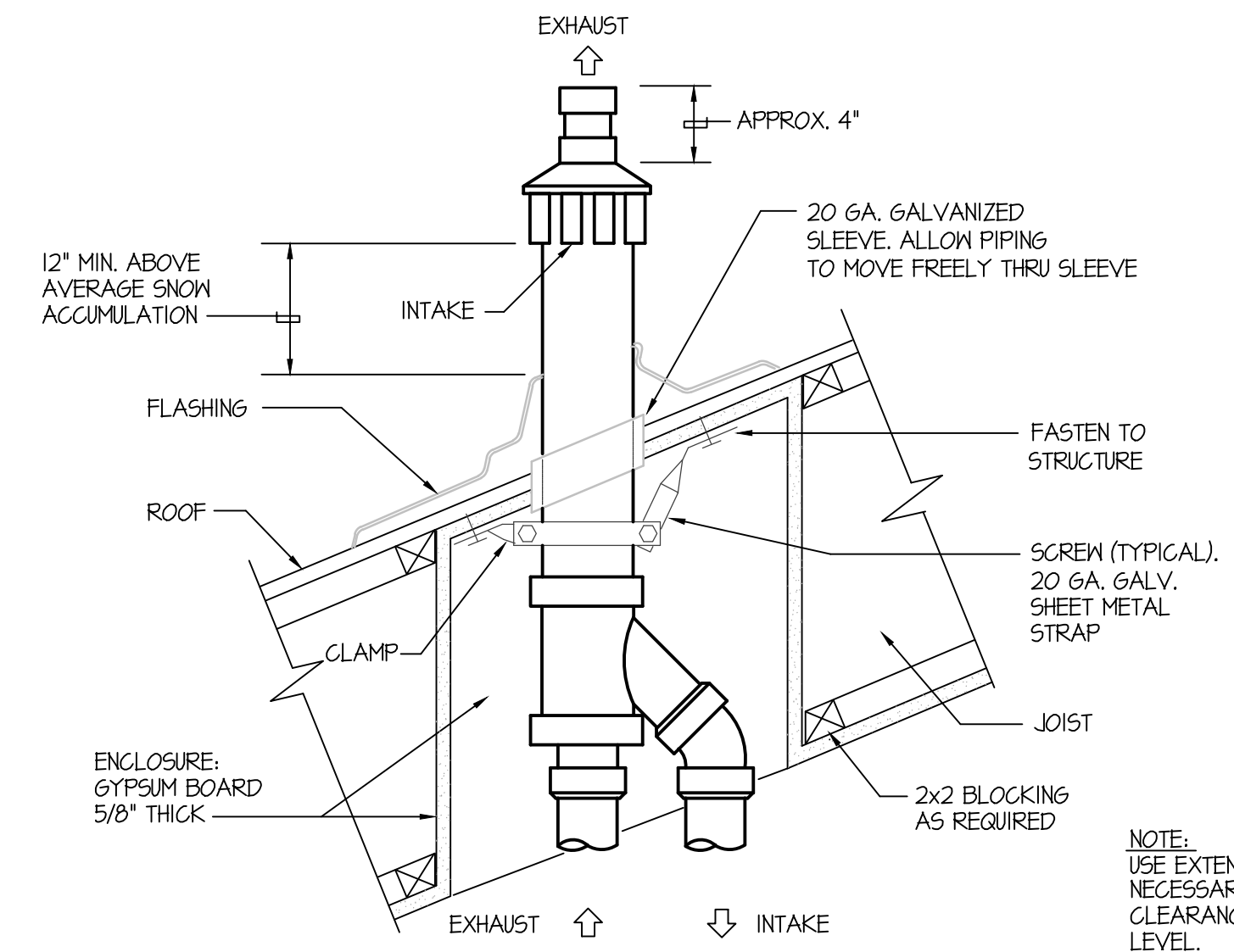
**NOTE:**  
ALL PIPING SUPPORTS ARE TO BE INSTALLED PRIOR TO FIREPROOFING OF JOISTS. NO PIPING SUPPORTS ARE TO BE ATTACHED AFTER FIREPROOFING HAS BEEN DONE.



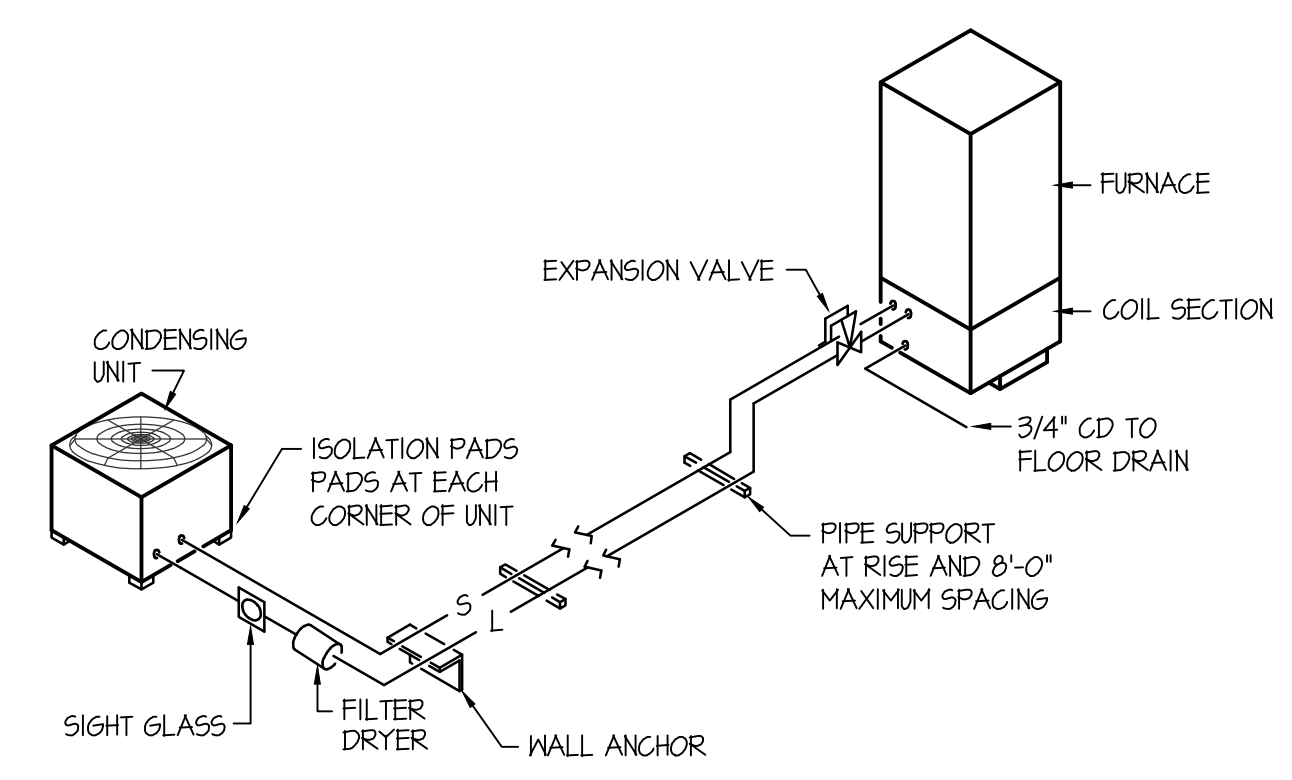
**TRANSFER AIR GRILLE DETAIL**  
NO SCALE



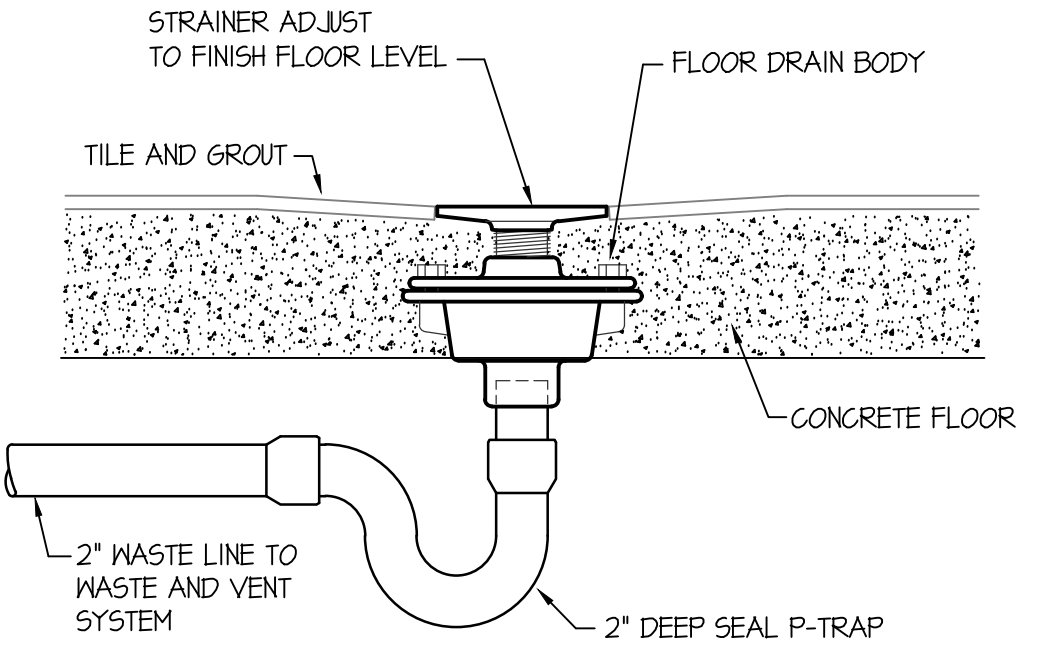
**REFRIGERANT PIPE SUPPORT DETAIL**  
NO SCALE



**CONCENTRIC VENT TERMINATION DETAIL**  
NO SCALE



**REFRIGERANT PIPING DIAGRAM**  
NO SCALE



**FLOOR DRAIN IN CONCRETE FLOOR**  
NO SCALE

FURNACE SCHEDULE														
SYM.	TYPE	DESIGN CFM	O.A. CFM	SP <sub>E</sub>	H.P.	CHAR.	T.A.G.A.		EAT	LAT	SUP	VENT	GAS TYPE	REMARKS
							INPUT	OUTPUT						
FE 1	UP-FLOW	1600	160	5"	3/4"	120/60/1	110,000	106,000	65°F	110°F	1/2"	(2) 3"	NAT.	LENNOX MODEL EL14B13560D WITH MATCHING DX COOLING COIL. BASE BID
FE 2	UP-FLOW	1910	200	5"	1"	120/60/1	132,000	126,000	65°F	110°F	1/2"	(2) 3"	NAT.	LENNOX MODEL EL14B13560D WITH MATCHING DX COOLING COIL. ALTERNATE BID

ELECTRIC HEATER SCHEDULE						
SYM.	TYPE	BTU	KVA	CHAR.	CONTROL	REMARKS
EH 1	WALL MOUNTED	6824	2	208/60/1	INTEGRAL T-STAT	QMARK TYPE CRA3024-T2 COMPLETE WITH GRASS SURFACE MOUNTING FRAME.
EH 2	WALL MOUNTED	518	1.5	120/60/1	INTEGRAL T-STAT	QMARK TYPE CRA1512-T2 COMPLETE WITH GRASS SURFACE MOUNTING FRAME.

EXHAUST FAN SCHEDULE									
SYM.	TYPE	CFM	S.P.E.	WATTS	CHAR.	R.P.M.	CONTROL	REMARKS	
EF 1	CEILING MOUNTED	200	.25	127	120/60/1	760	SEE ELEC.	THIN CITY MODEL T200 WITH BACKDRAFT DAMPER. 8" EXHAUST DUCT TO SLOPED ROOF CAP.	
EF 2	CEILING MOUNTED	120	.25	100	120/60/1	750	SEE ELEC.	THIN CITY T120 WITH BACKDRAFT DAMPER. 8" EXHAUST DUCT TO ROOF CAP.	
EF 3	ROOF MOUNTED	1309	.25	25 H.P.	120/60/1	1160	WALL	THIN CITY DGRU-120BE CENTRIFUGAL ALUMINUM WITH SLOPED ROOF CURB. BASE BID.	
EF 4	ROOF MOUNTED	3248	.25	48 H.P.	120/60/1	1750	WALL	THIN CITY DGRU-140BE CENTRIFUGAL ALUMINUM WITH SLOPED ROOF CURB. ALTERNATE BID.	

FAN SCHEDULE						
SYM.	TYPE	SIZE	AMPS	CHAR.	CONTROL	REMARKS
FE 3	CEILING MOUNTED	54"	2.5	120/60/1	WALL	CASABLANCA MODEL 55068 'PANAMA'

RADIANT HEATER SCHEDULE											
SYM.	TYPE	BTU (NOMINAL) @ ELEVATION	BURNER TUBES		SEC. LENGTH	GAS SIZE	FUEL	TUBE SIZE	FLUE SIZE	REMARKS	
			#	AMPS							
RH 1	STRAIGHT	40,000 39,000	1	9	120/60/1	20'-0"	3/4"	NAT	4"	4"	OMEGA II MODEL O422.20N6.5 - ALUMINIZED STEEL RADIANT SYSTEM WITH TUBES & REFLECTORS. KIT COMPLETE WITH AIR INLET ASSEMBLY, T/STAT, ROOF/WALL VENT CAP. 50 PCS "S" HOOKS, & 100' HANGING CHAIN. BASE BID.
RH 2	STRAIGHT	120,000 100,000	1	9	120/60/1	40'-0"	3/4"	NAT	4"	4"	OMEGA II MODEL O410.40N.5 - ALUMINIZED STEEL RADIANT SYSTEM WITH TUBES & REFLECTORS. KIT COMPLETE WITH AIR INLET ASSEMBLY, T/STAT, ROOF/WALL VENT CAP. 50 PCS "S" HOOKS, & 100' HANGING CHAIN. ALTERNATE BID.

GRILLE AND REGISTER SCHEDULE									
SYM.	TYPE	SIZE	CFM RANGE	THROW PATTERN	CONSTR.	FINISH	BALANCING DAMPER	FIRE DAMPER	REMARKS
GR-1	CEILING	12"	400	◆	STEEL	WHITE	NA	NA	AGUTHERM THERMA-FUSER MODEL 24x24 TF-HC
GR-2	CEILING	8"	200	◆	STEEL	WHITE	NA	NA	AGUTHERM THERMA-FUSER MODEL 24x24 TF-HC
GR-3	CEILING	9x9	50-175	◆	STEEL	WHITE	YES	NA	FRIGE MODEL SMD WITH BEVEL FRAME
GR-4	CEILING	4x4	175-190	◆	STEEL	WHITE	YES	NA	FRIGE MODEL SMD IN 24x24 LAY-IN
RG-1	RETURN GRILLE	14x14	600	NA	STEEL	WHITE	NA	NA	FRIGE MODEL 535
RG-2	RETURN GRILLE	10x10	150-350	NA	STEEL	WHITE	NA	NA	FRIGE MODEL 535 IN 24x24 LAY-IN
RG-3	RETURN GRILLE	32x20	1550	NA	STEEL	WHITE	NA	NA	FRIGE MODEL 535
RG-4	RETURN GRILLE	24x24	1500	NA	STEEL	WHITE	NA	NA	FRIGE MODEL 535 BASE BID
RG-5	RETURN GRILLE	24x48	3300	NA	STEEL	WHITE	NA	NA	FRIGE MODEL 535 ALTERNATE BID
RC-1	ROOF CAP	6"φ-8"φ	100-200	NA	ALUM	ALUM	NA	NA	TWIN SLOPPED MODEL 644 WITH INSECT SCREEN AND BACKDRAFT DAMPER
RC-2	ROOF CAP	10"φ	240-400	NA	ALUM	ALUM	NA	NA	TWIN SLOPPED MODEL 431 WITH INSECT SCREEN AND BACKDRAFT DAMPER
RC-3	ROOF CAP	8"φ	160-200	NA	ALUM	ALUM	NA	NA	TWIN SLOPPED MODEL 644 WITH INSECT SCREEN
RC-4	ROOF CAP	3"φ	NA	NA	ALUM	ALUM	NA	NA	TWIN SLOPPED MODEL 636P WITH INSECT SCREEN
SG-1	SIDEWALL GRILLE	12x8	300	NA	STEEL	WHITE	NA	NA	FRIGE MODEL 520D AT 0 DEGREE DEFLECTION
QL-1	SIDEWALL	24x24"	1500	NA	ALUM	COLOR BY ARCHITECT	YES	NA	AMERICAN WARMING LE-31 MOTORIZED DAMPER AND INTERLOCK WITH EP-4 BASE BID.
QL-2	SIDEWALL	24x48"	3300	NA	ALUM	COLOR BY ARCHITECT	YES	NA	AMERICAN WARMING LE-31 MOTORIZED DAMPER AND INTERLOCK WITH EP-3 ALTERNATE BID.
TL-1	LOW SIDEWALL	14x8	175-225	NA	STEEL	WHITE	13x5.5	NA	FRIGE MODEL 535
TL-2	HIGH SIDEWALL	14x8	175-225	NA	STEEL	WHITE	13x5.5	NA	FRIGE MODEL 535

CONDENSING UNIT SCHEDULE										
SYM.	BTU	EAT	CHAR.	MCA	MFS	SEER	REFR.	PIPE SIZING LIQUID	SUCTION	REMARKS
CU 1	48,000	84°F	208/60/1	28.9	50.0	13.0	R-410A	5/8"	3/8"	LENNOX MODEL 13ACX-048 WITH 0°F LOW AMBIENT HARD START KIT. ALTERNATE BID.
CU 2	60,000	85°F	208/60/1	34.6	50.0	13.0	R-410A	5/8"	3/8"	LENNOX MODEL 13ACX-060 WITH 0°F LOW AMBIENT HARD START KIT. BASE BID.

HEAT PUMP UNIT SCHEDULE									
SYM.	CFM	CHAR.	MCA	COP	HEATING		COOLING		REMARKS
					BTU	KVA	BTU	EER	
HP 1	270/225	208-1φ	13.6	3.6	8/100	2.4	1300	133	L6 MODEL LP1076HDC WITH 2.4 KW ELECTRIC COIL.

(A) UNIT TO BE COMPLETE WITH WALL SLEEVE, CONDENSATE DRAIN KIT PIPED THRU WALL AND REMOVE 2 SPEED WALL MOUNTED THERMOSTAT. ARCHITECTURAL EXTERIOR WALL LOUVER TO BE SUPPLIED WITH UNIT.

**Professional Engineer**  
David D. Schreiber  
STATE OF IDAHO  
No. 10000  
May 02, 2014

**Engineered Systems Associates**  
1355 EAST CENTER  
POCATELLO, IDAHO 83201  
PHONE: (208) 233-0501  
FAX: (208) 233-0529  
EMAIL: esa@engineersystems.com  
ESA JOB NUMBER: 18094

**SOUTH BECK & BAIRD**  
2002 South Vista Avenue • Boise, Idaho 83715  
Phone: 208-342-4811 • www.sbbco.com

STAMP

VERIFY SCALES  
1" = 1'-0" (1/8" = 1'-0")  
1" = 1'-0" (1/8" = 1'-0")

Idaho Division of **VETERANS SERVICES**  
Caring for America's Heroes

DPW No. 17-603 | VA No. FAI ID-13-03  
Southeast Idaho Veterans Cemetery

Blackfoot, Idaho

Construction Documents

**MECHANICAL DETAILS & SCHEDULES**

REVISIONS

NO.	REMARKS

PROJECT INFORMATION

CHECKED	DCS
DRAWN	TD
DATE	May 3, 2019
SBAS JOB NO.	18-144
DPW JOB NO.	17-603
VA JOB NO.	FAI ID-13-03
SHEET NUMBER:	

**MP2.10**  
PACKAGE NUMBER 2 - BUILDING OBS