



Engineered Systems Associates
Mechanical Engineers

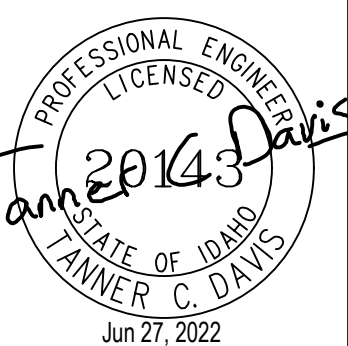
Dwayne Sudweeks P.E., Dave Hansen P.E., Tanner Davis P.E.
 1355 East Center - Pocatello, Idaho 83201
 Phone: (208) 233-0501 email: esa@engsystems.com

PROPERTY # 503-9002

HYAC REPLACEMENT FOR:
LDS SHOSHONE 1st WARD
 SHOSHONE, IDAHO

MECHANICAL DETAILS AND SCHEDULES

PROJECT:



DRWN. BY: TCD
 CKD. BY: DCS
 JOB NO. 22096
 DATE: 06/27/22

SHEET:
ME-4
 OF: 6

FURNACE AND DX COOLING COIL SCHEDULE

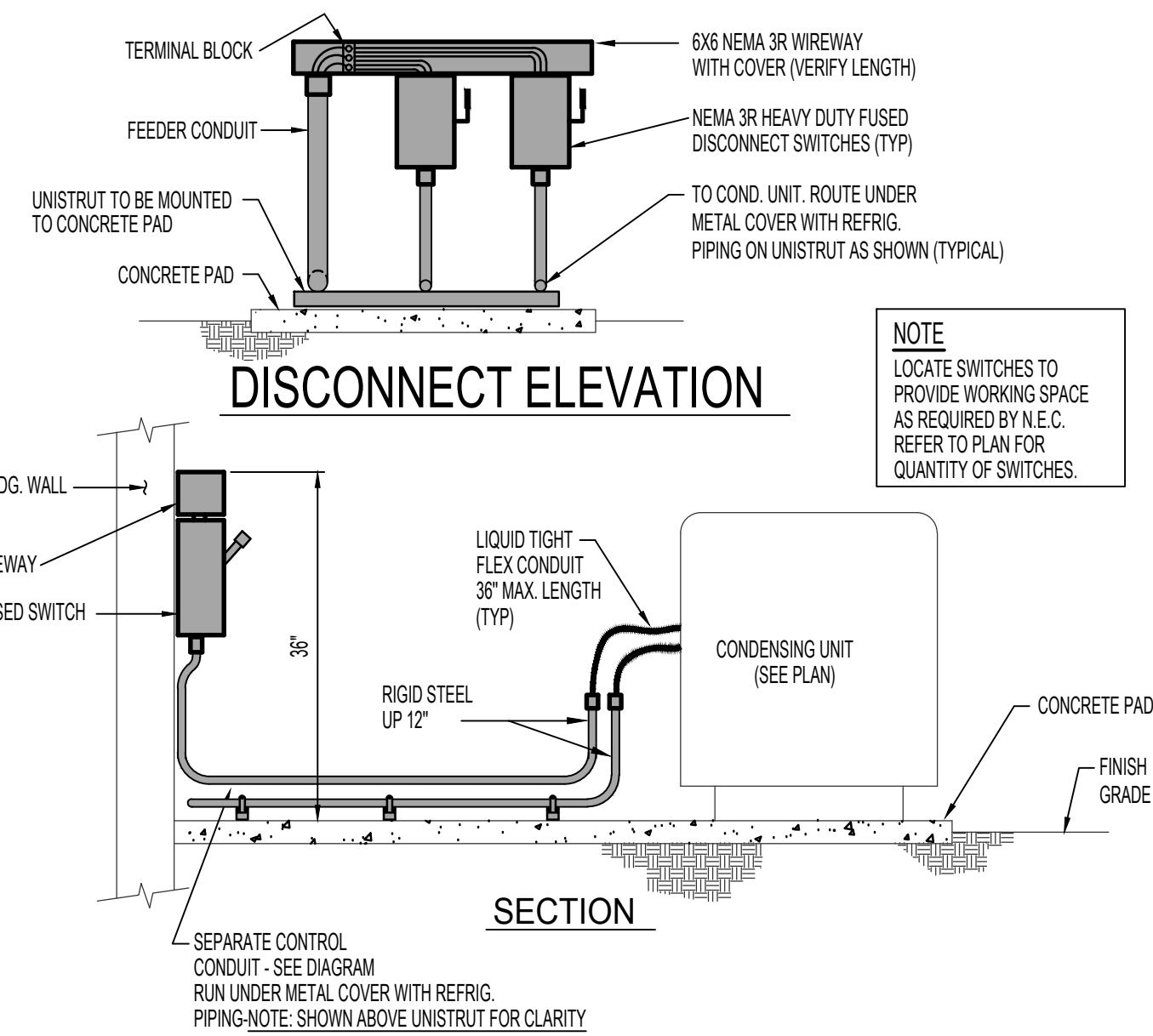
SYM.	TYPE	C.F.M.	SP _e	SPEED	H.P.	CHAR.	A.G.A.			E.A.T.	L.A.T.	GAS TYPE	PIPING SIZES						REMARKS				
							INPUT	OUTPUT	@ ELEV.				B.T.U.	E.A.T.	L.A.T.	MAX. P.D.	LIQUID	SUCTION		C.D.	GAS	INTAKE	EXHAUST
F1	UP-FLOW	2000	5	MED	1	120/601	110,000	106,000	77,250	65°F	107°F	NAT.	60,000	75°F	55°F	25"	12"	7/8"	3/4"	3/4"	2" PVC	2" PVC	LENNOX EL298UH110XV60C WITH FULLY CASER R-410A DX COIL TO MATCH UP-FLOW FURNACE AND HORIZONTAL VENT TERMINAL ASSEMBLY.
F2	UP-FLOW	2000	5	MED	1	120/601	110,000	106,000	77,250	65°F	107°F	NAT.	60,000	75°F	55°F	25"	12"	7/8"	3/4"	3/4"	2" PVC	2" PVC	LENNOX EL298UH110XV60C WITH FULLY CASER R-410A DX COIL TO MATCH UP-FLOW FURNACE AND HORIZONTAL VENT TERMINAL ASSEMBLY.
F3	UP-FLOW	2000	5	MED	1	120/601	110,000	106,000	77,250	65°F	107°F	NAT.	60,000	75°F	55°F	25"	12"	7/8"	3/4"	3/4"	2" PVC	2" PVC	LENNOX EL298UH110XV60C WITH FULLY CASER R-410A DX COIL TO MATCH UP-FLOW FURNACE AND HORIZONTAL VENT TERMINAL ASSEMBLY.
F4	UP-FLOW	2000	5	MED	1	120/601	110,000	106,000	77,250	65°F	107°F	NAT.	60,000	75°F	55°F	25"	12"	7/8"	3/4"	3/4"	2" PVC	2" PVC	LENNOX EL298UH110XV60C WITH FULLY CASER R-410A DX COIL TO MATCH UP-FLOW FURNACE AND HORIZONTAL VENT TERMINAL ASSEMBLY.
F5	UP-FLOW	2000	5	MED	1	120/601	110,000	106,000	77,250	65°F	107°F	NAT.	60,000	75°F	55°F	25"	12"	7/8"	3/4"	3/4"	2" PVC	2" PVC	LENNOX EL298UH110XV60C WITH FULLY CASER R-410A DX COIL TO MATCH UP-FLOW FURNACE AND HORIZONTAL VENT TERMINAL ASSEMBLY.
F6	UP-FLOW	2000	5	MED	1	120/601	110,000	106,000	77,250	65°F	107°F	NAT.	60,000	75°F	55°F	25"	12"	7/8"	3/4"	3/4"	2" PVC	2" PVC	LENNOX EL298UH110XV60C WITH FULLY CASER R-410A DX COIL TO MATCH UP-FLOW FURNACE AND HORIZONTAL VENT TERMINAL ASSEMBLY.

- ① SEE SPECIFICATIONS FOR OTHER APPROVED MANUFACTURERS.
- ② SPEED AS LOW AS POSSIBLE TO ACHIEVE PROPER AIRFLOW.
- ③ FURNACE TO COME WITH BACK-DRAFT DAMPER AND TWINNING KITS FROM MANUFACTURE.

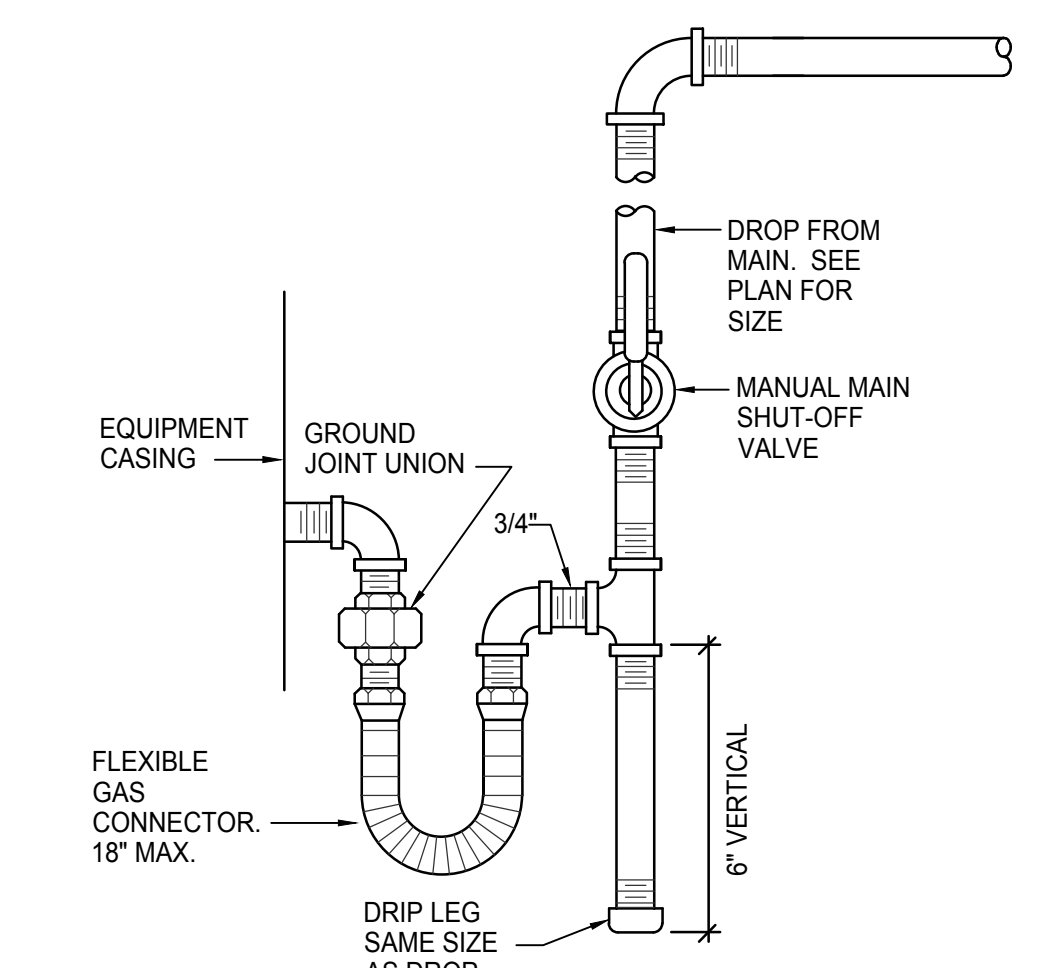
AIR COOLED CONDENSING UNIT SCHEDULE

MARK	MIN. NOMINAL SIZE (TONS)	COMPRESSOR RATED LOAD AMPS	POWER	MOCP	MIN. CIRCUIT AMPS	SEER	REMARKS
CU 1	5.0	15.6	208/60/3	35	21.3	15.5	LENNOX CONDENSING UNIT MODEL TSA060S4-2 WITH PURON REFRIGERANT
CU 2	5.0	15.6	208/60/3	35	21.3	15.5	LENNOX CONDENSING UNIT MODEL TSA060S4-2 WITH PURON REFRIGERANT
CU 3	5.0	15.6	208/60/3	35	21.3	15.5	LENNOX CONDENSING UNIT MODEL TSA060S4-2 WITH PURON REFRIGERANT
CU 4	5.0	15.6	208/60/3	35	21.3	15.5	LENNOX CONDENSING UNIT MODEL TSA060S4-2 WITH PURON REFRIGERANT
CU 5	5.0	15.6	208/60/3	35	21.3	15.5	LENNOX CONDENSING UNIT MODEL TSA060S4-2 WITH PURON REFRIGERANT
CU 6	5.0	15.6	208/60/3	35	21.3	15.5	LENNOX CONDENSING UNIT MODEL TSA060S4-2 WITH PURON REFRIGERANT

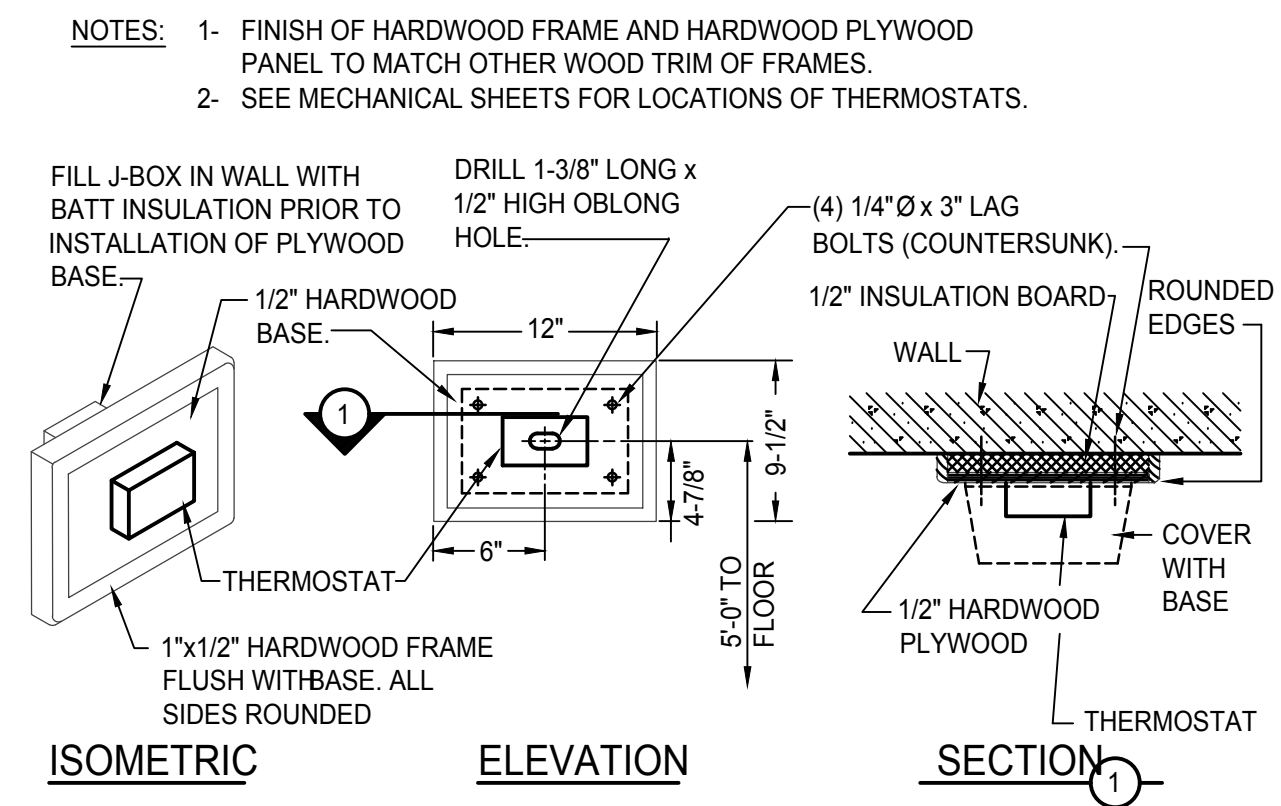
- ① REFRIGERANT R-410A
- ② AT DESIGN CONDITIONS AND 95°F AMBIENT AIR TEMPERATURE TO CONDENSER.
- ③ CONDENSING UNIT MARKS CORRESPOND WITH COOLING COIL AND FURNACE UNIT MARKS.
- ④ SEE SPECIFICATION FOR APPROVED MANUFACTURERS



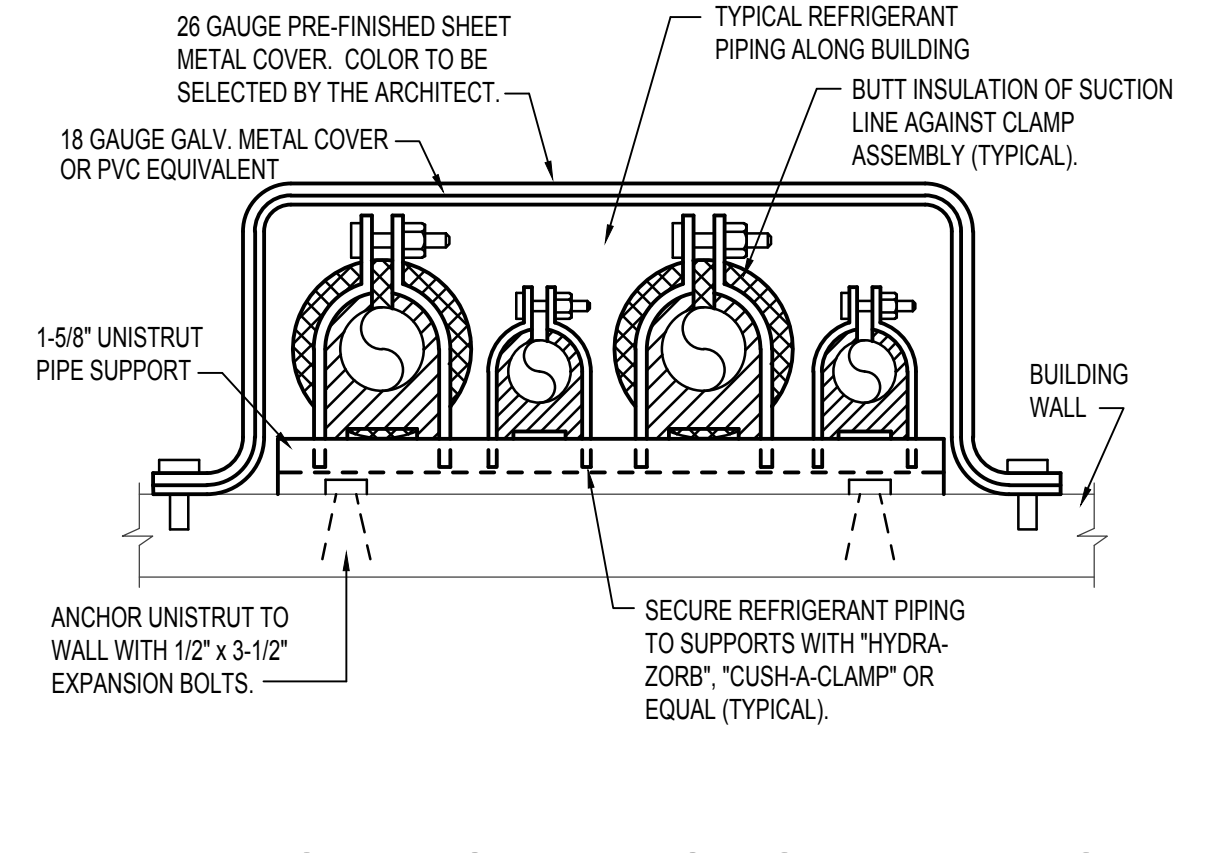
A CONDENSING UNIT - CONDUIT DIAGRAM
 NO SCALE (ABOVE SLAB)



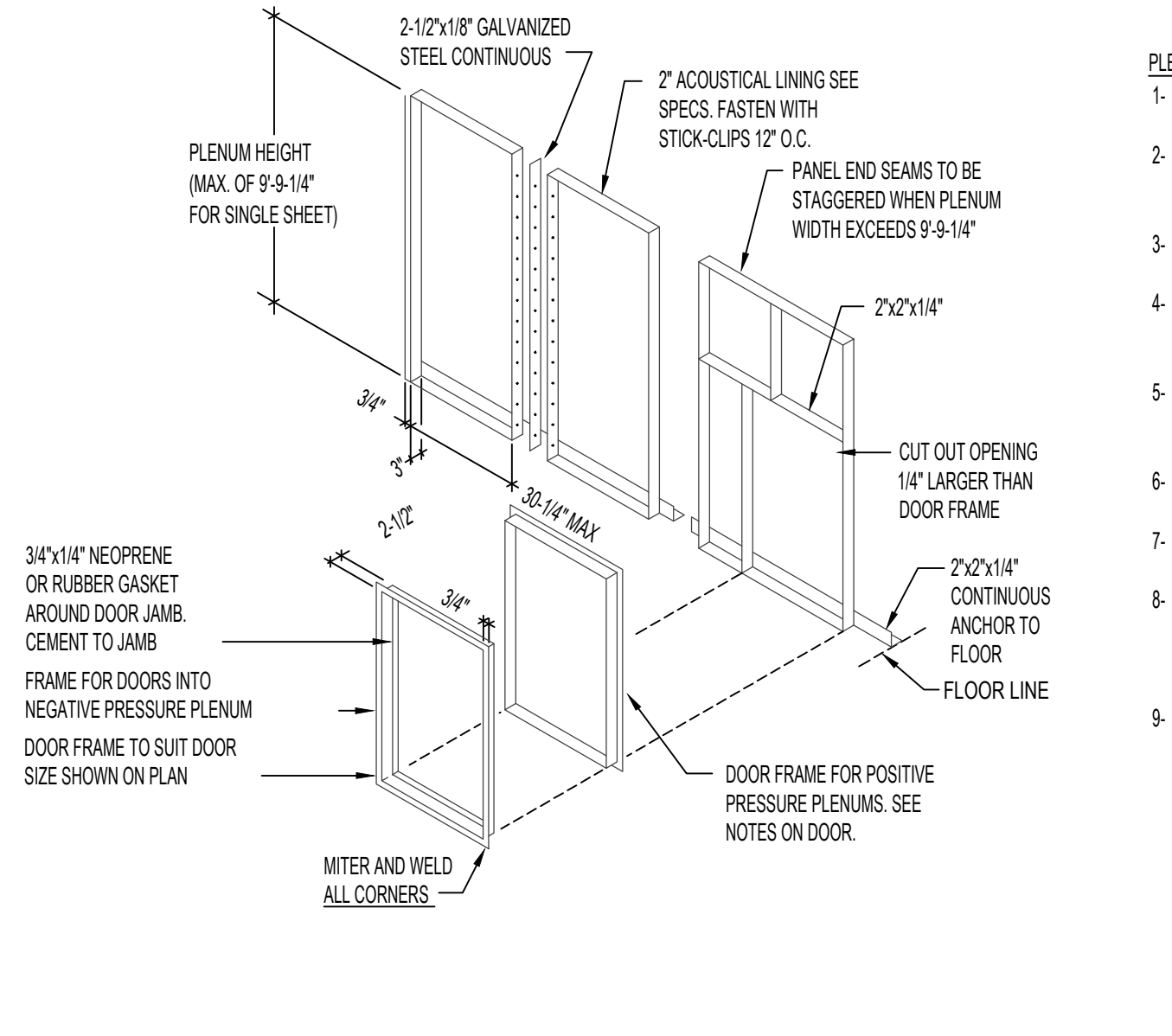
B GAS LINE CONNECTION DETAIL
 NO SCALE



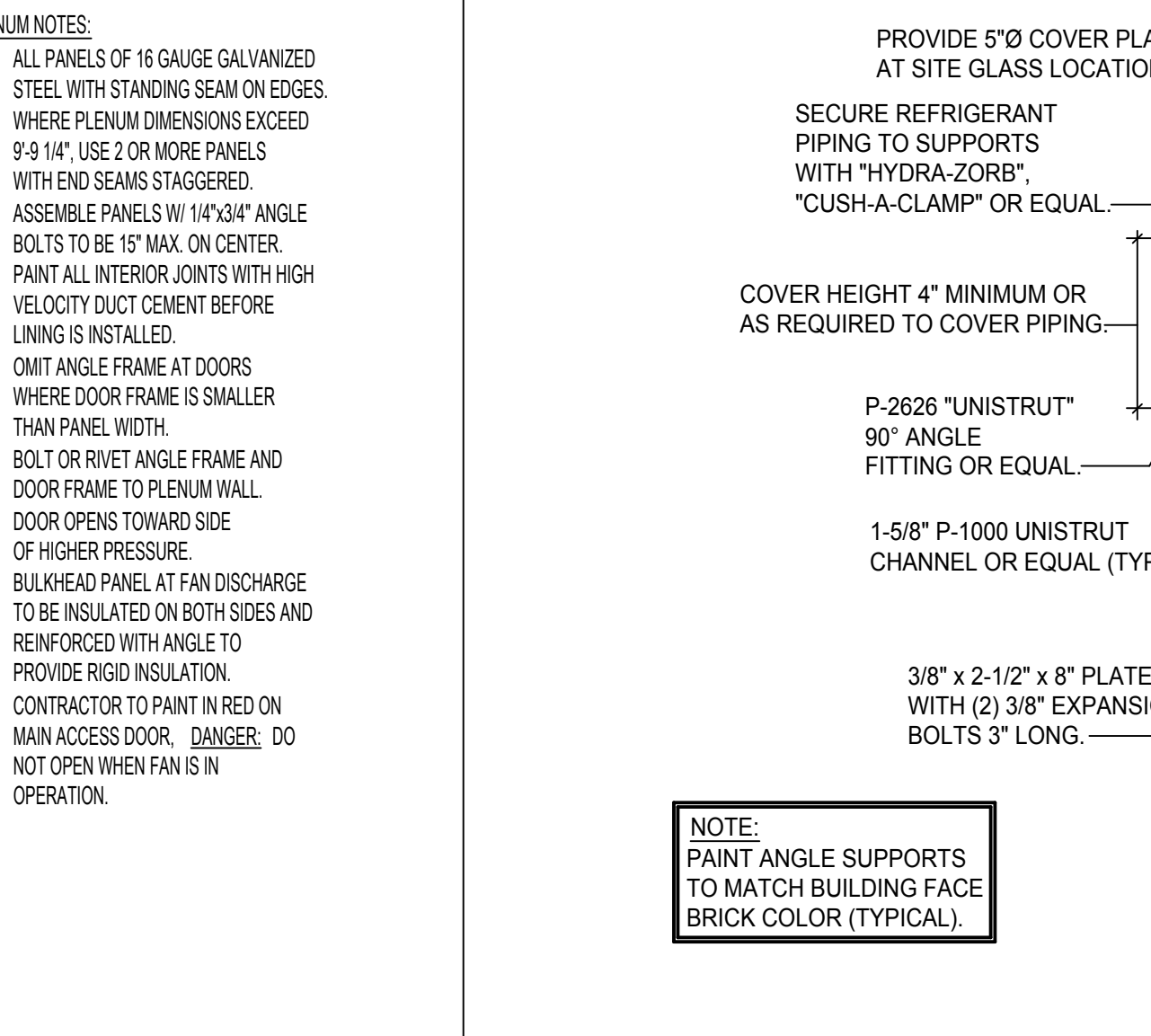
C INSULATED BASE FOR THERMOSTAT
 NO SCALE



D PIPE SUPPORT ALONG BUILDING
 NO SCALE



E PLENUM WALL CONSTRUCTION DETAIL
 NO SCALE



F REFRIGERANT PIPE SUPPORT DETAIL
 NO SCALE

PANEL "C" LOCATION OUTDOOR
 VOLT./PHASE 120/208V 3Ø MAIN 200 AMP
 TYPE "SD D" WOOD NEMA 3R LUGS BREAKER

QUANTITY	SCHEDULE	CIR NO	LOAD WATTS	BREAKER POLE AMP	LOADPOLE A B C	BREAKER POLE AMP	LOAD WATTS	CIR NO	SCHEDULE	QUANTITY
LTS REC	MIS									LTS REC MIS
-	-	1	3240	3 35	6480	-	3240	2	CU-1	-
-	-	3	3240	-	6480	-	3240	4	-	-
-	-	5	3240	-	-	6480	-	6	-	-
-	-	7	3240	3 35	6480	-	3240	8	CU-3	-
-	-	9	3240	-	6480	-	3240	10	-	-
-	-	11	3240	-	-	6480	-	12	-	-
-	-	13	3240	3 35	6480	-	3240	14	CU-5	-
-	-	15	3240	-	6480	-	3240	16	-	-
-	-	17	3240	-	-	6480	-	18	-	-
-	-	19	1	20	300	-	-	20	RECEPTACLE	-
-	-	21	-	-	-	-	-	22	SPARE SPACE	-
-	-	23	-	-	-	-	-	24	-	-
-	-	25	-	-	-	-	-	26	-	-
-	-	27	-	-	-	-	-	28	-	-
-	-	29	-	-	-	-	-	30	-	-

S.C. INT. CAP 22,000 AMPS TOTAL WATTS 19,740 19,440 19,440 FEEDER: BRKR SIZE 150
 NOTES: TOTAL AMPS 95 93 93 CONDUIT 2" C
 CONDUCTORS #20, 1#5 GND

PANEL "F1" LOCATION MECHANICAL MEZZANINE
 VOLT./PHASE 120/208 1Ø MAIN 100 AMP
 TYPE "SD D" WOOD LUGS BREAKER

QUANTITY	SCHEDULE	CIR NO	LOAD WATTS	BREAKER POLE AMP	LOADPOLE A B	BREAKER POLE AMP	LOAD WATTS	CIR NO	SCHEDULE	QUANTITY
LTS REC	MIS									LTS REC MIS
-	-	1	1530	1 20	3060	-	1530	2	F2	-
-	-	3	1530	1 20	-	1830	-	4	RECEPTACLE	-
-	-	5	-	-	-	-	-	6	-	-
-	-	7	-	-	-	-	-	8	-	-

S.C. INT. CAP 10,000 AMPS TOTAL WATTS 3060 1830 FEEDER: BRKR SIZE 40A 2P
 NOTES: TOTAL AMPS 25.5 15.3 CONDUIT 3/4"
 CONDUCTORS 3 #8, 1 #10 GROUND

PANEL "F2" LOCATION MECHANICAL MEZZANINE
 VOLT./PHASE 120/208 1Ø MAIN 100 AMP
 TYPE "SD D" WOOD LUGS BREAKER

QUANTITY	SCHEDULE	CIR NO	LOAD WATTS	BREAKER POLE AMP	LOADPOLE A B	BREAKER POLE AMP	LOAD WATTS	CIR NO	SCHEDULE	QUANTITY
LTS REC	MIS									LTS REC MIS
-	-	1	1530	1 20	3060	-	1530	2	F4	-
-	-	3	1530	1 20	-	1830	-	4	F6	-
-	-	5	-	-	-	-	-	6	-	-
-	-	7	-	-	-	-	-	8	-	-

S.C. INT. CAP 10,000 AMPS TOTAL WATTS 3060 1830 FEEDER: BRKR SIZE 40A 2P
 NOTES: TOTAL AMPS 25.5 15.3 CONDUIT 3/4"
 CONDUCTORS 3 #8, 1 #10 GROUND