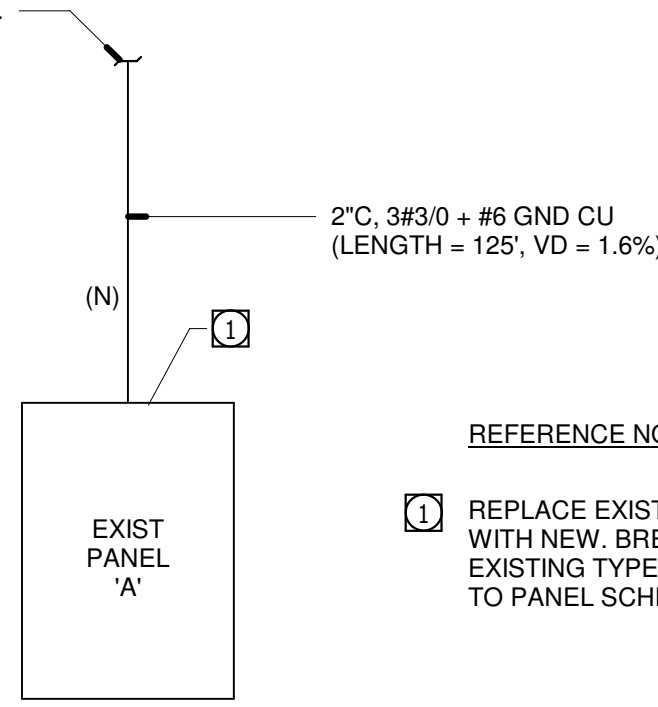


NOTE: EXISTING SPACE ELECTRICAL SUB FEEDER CONNECTED FROM THE EXISTING BUILDING MAIN ELECTRICAL DISTRIBUTION BOARD (MDB), FIELD VERIFY. (NEED TO UPGRADE TO 200A MAIN BREAKER)



REFERENCE NOTES

- 1. REPLACE EXISTING MAIN BREAKER WITH NEW BREAKER TO MATCH EXISTING TYPE AND RATING. REFER TO PANEL SCHEDULE FOR SIZE.

PARTIAL ELECTRICAL SINGLE LINE DIAGRAM N.T.S 1

EXISTING PANEL "A" (NEED TO UPGRADE TO 200A) panel schedule table with columns for LOCATION, TRIP, POLES, and LOAD CLASSIFICATION. Includes a summary table for TOTAL DEMAND and PANEL LOADS.

SINGLE LINE DIAGRAM GENERAL NOTES (AS APPLICABLE)

- 1. FIELD VERIFY MINIMUM AIC RATINGS OF EXISTING ELECTRICAL EQUIPMENTS.
2. ADJUST CIRCUITING ON PANELBOARDS AS REQUIRED TO MAINTAIN MAXIMUM 10% LOAD IMBALANCE.
3. PROVIDE A COMPLETE TYPED DIRECTORY IN EACH PANELBOARD TO INCLUDE EXISTING LOADS TO REMAIN AS WELL AS NEW LOADS.
4. PANELBOARDS IDENTIFICATION LABEL SHALL INCLUDE THE NAME WHERE POWER SUPPLY ORIGINATES PER NEC 408.4.
5. CIRCUIT BREAKERS SERVING FIRE ALARM SYSTEM PANELS AND POWER SUPPLIES SHALL BE IDENTIFIED AS FIRE ALARM, PROVIDED WITH LOCK ON DEVICE, AND HAVE A RED COLORED HANDLE OR PAINTED RED.
6. FIELD VERIFY AVAILABLE FAULT CURRENT AT SERVICE ENTRANCE WITH UTILITY COMPANY PRIOR TO PROCUREMENT OF ELECTRICAL DISTRIBUTION EQUIPMENT AND VERIFY MINIMUM FAULT INTERRUPTING RATINGS OF MAIN SWITCHBOARD AND BRANCH PANELBOARD.
7. ALL OVERCURRENT DEVICES IN AN INDIVIDUAL PIECE OF EQUIPMENT SHALL HAVE AN AIC RATING EQUAL TO THE OVERALL RATING OF THE EQUIPMENT.
8. ALL TERMINATIONS AND ENCLOSURES SHALL BE RATED FOR USE WITH 75 DEGREE CELSIUS CONDUCTORS.
9. ALL SERVICE ENTRANCE EQUIPMENT, SWITCHBOARDS, DISTRIBUTION BOARDS, AND PANELBOARDS RATED AT 400AMPS OR GREATER, SHALL BE PROVIDED WITH A MAIN OVERCURRENT DEVICE AND BUSSING RATED AT 100% CONTINUOUS OPERATION.
10. ALL BRANCH OR FEEDER CIRCUIT OVER CURRENT DEVICES RATED AT 400AMPS OR HIGHER SHALL BE RATED FOR 100%

PANEL WIRE/FEEDER DISTRIBUTION SCHEDULE

Table with columns: FEEDER, AMPS, CONDUIT, CONDUCTOR, GROUND. Lists wire sizes for feeders F202 through F1002.

VOLTAGE DROP WIRE TABLE

Tables showing voltage drop calculations for 110VOLT and 208VOLT single phase systems with columns for length of run and amperage.



DRAWN BY:
PROJECT #:

Table with columns: NUMBER, DESCRIPTION, DATE. Empty table for revision tracking.

PROJECT: SABOR PIRI PIRI TENANT IMPROVEMENT 800 B AVE. SUITE 804 NATIONAL CITY CA 91950

DRAWINGS PREPARED BY:



MECHANICAL ELECTRICAL PLUMBING ENERGY CONSULTANTS
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TITLE: ELECTRICAL SINGLE LINE DIAGRAM AND LOAD CALCULATIONS

SHEET: E4.1

HVAC GENERAL NOTES

- 1. CONTRACTOR SHALL CAREFULLY REVIEW THESE PLANS AND SPECIFICATIONS PRIOR TO BID. CONTRACTOR SHALL ALSO REVIEW PLANS AND SPECIFICATIONS OF OTHER RELATED TRADES (INCLUDING ARCHITECTURAL, CIVIL, STRUCTURAL AND ELECTRICAL) PRIOR TO BID TO ENSURE AN ACCURATE UNDERSTANDING OF EXACT SCOPE OF WORK. ANY ITEMS REQUIRING CLARIFICATION SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IN SUFFICIENT TIME TO BE INCORPORATED INTO THE BID.
2. CONTRACTOR SHALL VERIFY ALL EQUIPMENT MODEL NUMBERS, CAPACITIES, SIZES, VOLTAGES, AND ALL OTHER SCHEDULED INFORMATION WITH ALL OTHER APPLICABLE TRADES AND WITH THE MANUFACTURER PRIOR TO INSTALLATION.
3. CONTRACTOR SHALL VERIFY ALL LOCATIONS, SIZES, P.O.C.'s, AND AVAILABILITY OF ALL EXISTING ITEMS (I.E.: OUTSIDE AIR, EXHAUST ETC.) PRIOR TO INSTALLATION OF ANY MATERIAL OR EQUIPMENT.
4. THESE DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND ARE NOT INTENDED TO INDICATE ALL NECESSARY OFFSETS OF DUCTWORK AND PIPING. THE CONTRACTOR SHALL INSTALL MATERIAL AND EQUIPMENT IN A MANNER AS TO CONFORM TO STRUCTURE, AVOID OBSTRUCTIONS, PRESERVE HEADROOM, AND KEEP OPENINGS AND PASSAGEWAYS CLEAR. ALL INSTALLATIONS SHALL BE CONSISTENT WITH NORMALLY ACCEPTABLE INDUSTRY STANDARDS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES OR CONFLICTS THAT WOULD AFFECT THE SYSTEM PERFORMANCE OR WHICH WOULD INCUR ADDITIONAL COSTS. THIS NOTIFICATION SHALL BE MADE PRIOR TO THE INSTALLATION OF THE ITEMS CONCERNED.
5. NEW AND/OR EXISTING EQUIPMENT INDICATED ON THIS DRAWING IS SHOWN IN APPROXIMATE POSITION(S). CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS INCLUDING EQUIPMENT LOCATIONS, P.O.C.'s AND STRUCTURAL MEMBERS PRIOR TO INSTALLATION. IN ALL CASES, ADEQUATE ACCESS (PER MANUFACTURER'S RECOMMENDATIONS AND CODE COMPLIANCE) FOR MAINTENANCE AND REPLACEMENT OF EQUIPMENT SHALL BE PROVIDED.
6. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE CODES. NOTHING SHOWN IN THE PLANS OR STATED IN THE SPECIFICATIONS IS INTENDED TO INDICATE THAT THE INSTALLATION OF CONNECTIONS OF ANY ITEM OR DEVICE SHOULD BE DONE CONTRARY TO THE MANUFACTURER'S INSTRUCTIONS AND ALL APPLICABLE CODES AND REGULATIONS. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT THE INSTALLATION AND CONNECTIONS OF ALL ITEMS AND DEVICES CONFORM TO MANUFACTURER'S INSTRUCTIONS AND TO ALL APPLICABLE CODES AND REGULATIONS.
7. ALL HVAC EQUIPMENT, MATERIAL, AND ALL CONNECTION THERETO SHALL BE INSTALLED COMPLETE PER MANUFACTURER'S INSTRUCTIONS TO PROVIDE A COMPLETE AND FULLY OPERATIONAL SYSTEM.
8. DUCT SIZES INDICATED ON DRAWINGS ARE INSIDE NET CLEARANCE DIMENSIONS.
9. CONTRACTOR MAY, AT HIS OPTION, WITH PRIOR APPROVAL FROM ENGINEER REVISE DUCTWORK SIZING AND ROUTING TO ALLOW FOR INSTALLATION IN THE AVAILABLE SPACE. DUCTWORK THAT IS RESIZED MUST MAINTAIN THE SAME CROSS-SECTIONAL AREA.
10. ALL NEW SUPPLY, RETURN, AND EXHAUST (AIR DISTRIBUTION) GRILLES, REGISTERS, AND DIFFUSERS SHALL MATCH (IF APPLICABLE) EXISTING, AND BE APPROVED BY ARCHITECT. THE MAXIMUM NOISE NC LEVEL SHALL BE 25.
11. ALL SUPPLY, RETURN, AND EXHAUST REGISTER CONNECTIONS TO DUCTWORK SHALL BE PROVIDED WITH ACCESSIBLE MANUAL VOLUME DAMPERS. ALTERNATIVELY, ACCESSIBLE MANUAL VOLUME DAMPERS MAY BE PROVIDED IN DUCT WORK FEEDER LINES SERVING INDIVIDUAL REGISTERS. PROVIDE ACCESS DOOR AND PANEL AS REQUIRED.
12. SUBSTITUTION OF HVAC EQUIPMENT WITH EFFICIENCIES LOWER THAN THOSE INDICATED ON THE PLANS IS NOT PERMITTED.
13. IF THE CONTRACTOR'S USE OF SUBSTITUTE MATERIALS, EQUIPMENT, OR METHODS OF INSTALLATION REQUIRES ANY CHANGES IN OTHER TRADES' WORK FROM THAT SHOWN ON THE DRAWINGS, THE EXTRA COST OF THE OTHER TRADES WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR INITIATING THE SUBSTITUTION.
14. SUBMITTALS: APPROVAL OF SUBMITTALS DOES NOT RELEASE THE CONTRACTOR FROM OBLIGATIONS TO COMPLY WITH ALL REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS OR APPLICABLE CODE REGULATIONS.
15. WHERE NONMETALLIC PIPING PENETRATES AREA SEPARATION WALLS, THE PIPE SECTION PASSING THROUGH THE WALLS AND THE FIXTURE CONNECTIONS THERETO SHALL BE OF METAL ONLY.
16. NO RANGE HOODS, DRYER VENTS, COMBUSTION VENTS, OR HEATING DUCTS ARE PERMITTED IN AREA SEPARATION WALLS.
A. CONTRACTOR TO VERIFY LOCATION OF FIRE AND FIRE/SMOKE BARRIER WALLS WITH ARCHITECT PRIOR TO FIRE AND/OR SMOKE DAMPER, DETECTOR AND ACTUATOR INSTALLATION.
B. ALL CEILING FIRE DAMPERS TO BE ONE (1) HOUR U.L. AND C.S.F.M. APPROVED.
C. ALL ONE HOUR WALL SHALL BE APPROVED WITH ONE HOUR FIRE DAMPERS BOTH U.L. AND C.S.F.M. APPROVED.
D. ALL TWO HOUR WALLS SHALL BE APPROVED WITH TWO HOUR FIRE DAMPERS BOTH U.L. AND C.S.F.M. APPROVED.
E. ALL SMOKE BARRIER WALLS SHALL BE PROVIDED WITH U.L. AND C.S.F.M. APPROVED SMOKE/FIRE DAMPERS (EQUAL TO WALL RATING), MOTOR, ACTUATOR, AND SMOKE DETECTOR.
F. ALL PENETRATIONS OF ONE (1) HOUR CORRIDOR WALLS AND CEILINGS THAT WOULD REQUIRE THE INSTALLATION OF A FIRE DAMPER SHALL BE APPROVED WITH A U.L. AND C.S.F.M. APPROVED COMBINATION SMOKE/FIRE DAMPER, (EQUAL TO WALL RATING), MOTOR, ACTUATOR, AND SMOKE DETECTOR.
G. PROVIDE ALL FIRE & SMOKE DAMPERS WITH ACCESS DOORS AS NECESSARY.
17. PROVIDE BALANCING DAMPERS ON ALL OUTSIDE AIR, EXHAUST AIR, SUPPLY AIR AND RETURN AIR SYSTEMS THROUGH OUT. DAMPERS ARE NOT INDICATED ON PLANS BUT ARE REQUIRED AT ALL BRANCH TAKE-OFFS.
18. PROVIDE TURNING VANES ON ALL 90 DEGREE SQUARE ELBOWS.
19. PROVIDE FLEXIBLE DUCT CONNECTIONS WITH MINIMUM 1" GAP ON THE SUPPLY AND RETURN DUCT CONNECTIONS ON ALL FANS.
20. ALL SUPPLY AND RETURN DUCTWORK FROM AC UNITS AND FANS SHALL BE LINED WITH 1" ACOUSTIC INSTALLATION TO MINIMUM 15 FEET FROM THE FAN UNLESS NOTED TO BE LONGER. PROVIDE PERFORATED LINING. DUCT SIZE SHALL BE INCREASED TO PROVIDE THE CLEAR INSIDE DIMENSIONS AS NOTED ON PLANS.
21. VERIFY MECHANICAL EQUIPMENT LOCATION & DUCT ROUTING WITH ENGINEERING PRIOR TO CONSTRUCTION.
22. FACTORY-MADE FLEXIBLE AIR DUCTS AND CONNECTORS SHALL BE NOT MORE THAN 5 FEET IN LENGTH AND SHALL NOT BE USED IN LIEU OF RIGID ELBOWS OR FITTINGS. FLEXIBLE AIR DUCTS SHALL BE PERMITTED TO BE USED AS AN ELBOW AT A TERMINAL DEVICE.

CALIFORNIA GREEN BUILDING STANDARDS CODE 2022

- 1. ALL HVAC DUCTS ARE REQUIRED TO BE SEALED WITH MASTIC AND SHALL BE TESTED. CONCEALED DUCT SHALL BE INSULATED WITH MIN R-8 DUCT INSULATION.
2. AT THE TIME OF ROUGH INSTALLATION OR DURING STORAGE ON THE CONSTRUCTION SITE AND UNTIL START-UP OF THE HEATING AND COOLING EQUIPMENT, ALL DUCTS AND OTHER RELATED AIR DISTRIBUTION COMPONENT EQUIPMENT SHALL BE COVERED WITH TAPE, PLASTIC, SHEETMETAL OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY TO REDUCE THE AMOUNT OF DUST OR DEBRIS WHICH MAY COLLECT IN THE SYSTEM. CGBC 5.504.3
3. BASED ON THESE PLANS, THE MECHANICAL/BALANCING CONTRACTOR SHALL PROVIDE A TESTING AND ADJUSTING PLAN AND SHALL FOLLOW IT AS PER CALIFORNIA GREEN BUILDING STANDARDS CODE. SECTION 5.410.4.
4. IN MECHANICAL VENTILATED BUILDINGS, PROVIDE REGULARLY OCCUPIED AREAS OF THE BUILDING WITH AIR FILTRATION MEDIA FOR OUTSIDE AND RETURN AIR PRIOR OCCUPANCY THAT PROVIDES AT LEAST A MERV 8. CGBC 5.504.5.3
5. BUILDINGS SHALL MEET OR EXCEED THE PROVISIONS OF CALIFORNIA BUILDING CODE, CCR, TITLE 24, PART 2, SECTIONS 1203 (VENTILATION) AND CHAPTER 14 (EXTERIOR WALLS). FOR ADDITIONAL MEASURES NOT APPLICABLE TO LOW-RISE RESIDENTIAL OCCUPANCIES, SEE SECTION 5.407.2 OF THIS CODE. CGBC 5.505.1
6. FOR MECHANICALLY OR NATURALLY VENTILATED SPACES IN BUILDINGS, MEET THE MINIMUM REQUIREMENTS OF SECTION 120.1 (REQUIREMENTS FOR VENTILATION) OF THE 2022 CALIFORNIA ENERGY CODE, OR THE APPLICABLE LOCAL CODE, WHICHEVER IS MORE STRINGENT, AND DIVISION 1, CHAPTER 4 OF CCR, TITLE 8. CGBC 5.506.1
7. FOR BUILDINGS OR ADDITIONS EQUIPPED WITH DEMAND CONTROL VENTILATION, CO2 SENSORS AND VENTILATION CONTROLS SHALL BE SPECIFIED AND INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2022 CALIFORNIA ENERGY CODE, SECTION 120(C)(4). CGBC 5.506.2
8. TESTING AND ADJUSTING SYSTEMS SHALL BE REQUIRED FOR BUILDING LESS THAN 10,000 SQFT. CGBC 5.410.4.
9. DEVELOP A WRITTEN PLAN OF PROCEDURES FOR TESTING AND ADJUSTING SYSTEMS. SYSTEMS TO BE INCLUDED FOR TESTING AND ADJUSTING SHALL INCLUDE, AS APPLICABLE TO THE PROJECT, THE SYSTEMS LISTED IN SECTION 5.410.4.2.
10. PERFORM TESTING AND ADJUSTING PROCEDURES IN ACCORDANCE WITH APPLICABLE STANDARDS ON EACH SYSTEM AS DETERMINED BY THE ENFORCING AGENCY. 5.410.4.3. BEFORE A NEW SPACE-CONDITIONING SYSTEM SERVING A BUILDING IS OPERATED FOR NORMAL USE, BALANCE IN ACCORDANCE WITH THE PROCEDURES DEFINED BY NATIONAL STANDARDS LISTED IN SECTION 5.410.4.3.1. OR AS APPROVED BY THE ENFORCING AGENCY.
11. AFTER COMPLETION OF TESTING, ADJUSTING AND BALANCING, PROVIDE A FINAL REPORT OF TESTING SIGNED BY THE INDIVIDUAL RESPONSIBLE FOR OPERATING THESE SERVICES.
12. PROVIDE THE BUILDING OWNER WITH DETAILED OPERATING AND MAINTENANCE INSTRUCTIONS AND COPIES OF WARRANTIES FOR EACH SYSTEM PRIOR TO FINAL INSPECTION. INCLUDE A COPY OF ALL INSPECTION VERIFICATIONS AND REPORTS REQUIRED BY THE ENFORCING AGENCY.
13. IF THE HVAC SYSTEM IS USED DURING CONSTRUCTION, USE RETURN AIR FILTERS WITH A MERV OF 8, BASED ON ASHRAE 52.2-1999, OR AN AVERAGE EFFICIENCY OF 30% BASED ON ASHRAE 52.1-1992. REPLACE ALL FILTERS IMMEDIATELY PRIOR TO OCCUPANCY. APPLIES TO ADDITIONS OR ALTERATIONS.
14. INSTALL HVAC AND REFRIGERATION EQUIPMENT THAT DOES NOT CONTAIN CFCs. CGBC 5.508.1.1.
15. INSTALL FIRE SUPPRESSION EQUIPMENT THAT DOES NOT CONTAIN HALONS. CGBC 5.508.1.2.
16. ADHESIVES, ADHESIVE BONDING PRIMERS, ADHESIVE PRIMERS, SEALANT, SEALANT PRIMERS AND CAULKS SHALL COMPLY WITH LOCAL OR REGIONAL AIR POLLUTION CONTROL OR AIR QUALITY MANAGEMENT DISTRICT RULES WHERE APPLICABLE, OR SCQMD RULE 1168 VOC LIMITS, AS SHOWN IN CALGREEN TABLES 5.504.4.2. SUCH PRODUCTS SHALL COMPLY WITH THE RULE 1168 PROHIBITION ON THE USE OF CERTAIN TOXIC COMPOUNDS (CHLOROFORM, ETHYLENE DICHLORIDE, METHYLENE CHLORIDE, PERCHLOROETHYLENE AND TRICHLOROETHYLENE), EXCEPT FOR AEROSOL PRODUCTS AS SPECIFIED BELOW, AEROSOL ADHESIVES; AND SMALLER UNIT SIZES OF ADHESIVES; AND SEALANT OR CAULKING COMPOUNDS IN UNITS OF PRODUCT, LESS PACKAGING, WHICH DO NOT WEIGH MORE THAN ONE POUND AND DO NOT CONSIST OF MORE THAN 16 FLUID OUNCES) SHALL COMPLY WITH STATEWIDE VOC STANDARDS AND OTHER REQUIREMENTS, INCLUDING PROHIBITIONS ON USE OF CERTAIN TOXIC COMPOUNDS, OF CALIFORNIA CODE OF REGULATIONS, TITLE 17, COMMENCING WITH SECTION 94507.

DUCT TESTING AND INSULATION

- 1. ALL DUCTWORK SHALL BE SEALED AND PRESSURE TESTED FOR LEAKS PER SMACNA REQUIREMENTS IN THE "HVAC AIR DUCT LEAKAGE TEST MANUAL" AND THE CALIFORNIA GREEN BUILDING 2022 STANDARDS.
2. INSULATE ALL DUCTWORK AND PIPES PER THE 2022 CALIFORNIA MECHANICAL CODE AND TITLE 24 REQUIREMENT. ALL DUCTWORK SHALL BE INSULATED WITH WOOL FIBER OR FIBERGLASS INSULATION WITH FSK VAPOR BARRIER. ALL PIPES (INCLUDING CONDENSATE PIPING) SHALL BE INSULATED WITH EARTHWOOL FIBERGLASS PIPE INSULATION WITH ASJ+SSL FACING. REFRIGERANT PIPING SHALL BE INSULATED WITH CLOSED CELL INSULATION. ALL DUCTS AND PIPES EXPOSED TO WEATHER (DUCTWORK IN CRAWL SPACES ARE CLASSIFIED AS DUCTWORK EXPOSED TO WEATHER), INCLUDING REFRIGERANT PIPING, SHALL BE PROVIDED WITH ALUMINUM OR SS JACKET INSTALLED PER MANUFACTURER'S PRINTED INSTALLATION MANUAL.
3. FOR PROJECTS WITH EXISTING DUCTS, PERFORM DUCT CLEANING PER THE "NATIONAL DUCT CLEANERS ASSOCIATION", CLEAN EXISTING DIFFUSERS, GRILLES AND REGISTERS WITHOUT DAMAGING PAINT OR COATING. IF THE DAMAGE IS EXISTING, INFORM ARCHITECT AND TAKE PHOTOS BEFORE PERFORMING CLEANING PROCEDURE.

SPECIAL HANGING REQUIREMENTS

- 1. FOR ALL ITEMS AND EQUIPMENT BEING SUPPORTED FROM ROOF DECK, SUBMIT COORDINATION DRAWINGS CLEARLY SHOWING DETAILS OF FIELD CONNECTIONS, ANCHORAGE, AND THE RELATIONSHIP TO THE WORK OF OTHERS.
2. MECHANICAL CONTRACTOR TO PROVIDE HANGER SUPPORTS AND SEISMIC BRACING AS NEEDED PER LATEST SMACNA SEISMIC RESTRAINT MANUAL. SUBMIT SHOP DRAWING AND HANGER DATA SHEET FOR APPROVAL.

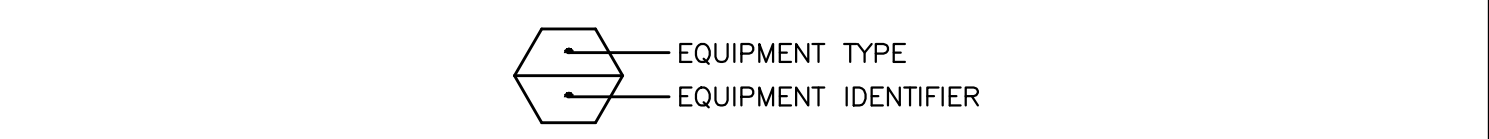
MECHANICAL SPECIFICATIONS

- 1. GENERAL PROVISIONS - THE GENERAL CONDITIONS, SUPPLEMENTS AND AMENDMENTS SHALL GOVERN THIS DIVISION OF THE SPECIFICATIONS.
2. PROJECT REQUIREMENTS - PROVIDE ALL ITEMS, MATERIALS, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THE WORK OR OPERATIONS MENTIONED HEREIN, OR INDICATED ON THE DRAWINGS AND REASONABLY INFERRED THEREIN, AS REQUIRED TO MAKE A COMPLETE AND WORKING SYSTEM.
3. INTENT - WORK SHALL BE DONE IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS AND THEIR INTENT, COMPLETE WITH ALL NECESSARY COMPONENTS, INCLUDING THOSE NOT NORMALLY SHOWN OR CALLED FOR, AND SHALL BE READY FOR OPERATION BEFORE ACCEPTANCE.
ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE CODES. NOTHING SHOWN IN THE PLANS OR STATED IN THE SPECIFICATIONS IS INTENDED TO INDICATE THAT THE INSTALLATION OR CONNECTIONS OF ANY ITEM OR DEVICE SHOULD BE DONE CONTRARY TO MANUFACTURERS INSTRUCTIONS AND ALL APPLICABLE CODES AND REGULATIONS. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT THE INSTALLATION AND CONNECTIONS OF ALL ITEMS AND DEVICES CONFORMS TO MANUFACTURERS INSTRUCTIONS AND TO ALL APPLICABLE CODES AND REGULATIONS.
ANY REFERENCE TO THE DESIGN AUTHORITY SHALL MEAN MR ENGINEERING, INC.
THE WORK "PROVIDE" SHALL MEAN "SUPPLY AND INSTALL" UNLESS OTHERWISE INDICATED.
4. GOVERNING REGULATIONS - THE WORK UNDER MECHANICAL SCOPE OF WORK, SHALL CONFORM, BUT NOT LIMITED TO THE REQUIREMENTS OF THE FOLLOWING CODES, REGULATIONS AND STANDARDS:
- 2022 EDITIONS OF THE CALIFORNIA BUILDING CODE, INCLUDING BUT NOT LIMITED TO THE MECHANICAL, PLUMBING, FIRE AND ENERGY CODES.
- SMACNA PUBLICATIONS, INCLUDING BUT NOT LIMITED TO, HVAC DUCT CONSTRUCTION STANDARDS AND GUIDELINES FOR SEISMIC RESTRAINT OF MECHANICAL SYSTEMS.
- AABC OR NEBB REGULATIONS GOVERNING TESTING AND BALANCING AND COMMISSIONING OF SYSTEMS.
- OSHA REGULATIONS.
5. PERMITS - OBTAIN ALL REQUIRED PERMITS AND PAY ALL FEES THEREFORE AND COMPLY WITH ALL LOCAL AND STATE REGULATIONS, CODES AND BY-LAWS APPLICABLE TO THE WORK.
6. RESPONSIBILITY - VISIT THE SITE BEFORE SUBMITTING A BID AND EXAMINE ALL LOCAL AND EXISTING CONDITIONS ON WHICH THE WORK IS DEPENDENT.
NO CONSIDERATION WILL BE GRANTED FOR ANY MISUNDERSTANDING OF WORK TO BE DONE RESULTING FROM FAILURE TO VISIT THE SITE.
WHEN THE CONTRACT DOCUMENTS DO NOT CONTAIN SUFFICIENT INFORMATION FOR THE PROPER SELECTION OF EQUIPMENT FOR BIDDING, NOTIFY THE DESIGN AUTHORITY DURING THE BIDDING PERIOD. IF CLARIFICATION CANNOT BE OBTAINED, ALLOW FOR THE MOST EXPENSIVE ARRANGEMENT. FAILURE TO DO THIS SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO SUPPLY THE INTENDED EQUIPMENT AND OR INSTALLATION.
CHECK DRAWINGS OF ALL TRADES AND SITE SURVEY TO VERIFY SPACE AVAILABILITY FOR THE INSTALLATION. COORDINATE WORK WITH ALL TRADES AND MAKE CHANGES TO FACILITATE SATISFACTORY INSTALLATION. MAKE NO DEVIATIONS TO THE DESIGN INTENT INVOLVING EXTRA COST TO THE OWNER WITHOUT DESIGN AUTHORITY WRITTEN APPROVAL.
7. WORKMANSHIP - WORKMANSHIP SHALL BE IN ACCORDANCE WITH WELL ESTABLISHED PRACTICE AND STANDARDS ACCEPTED AND RECOGNIZED BY DESIGN AUTHORITY AND THE TRADE.
EMPLOY ONLY TRADESMEN HOLDING VALID TRADE QUALIFICATION CERTIFICATES. TRADESMEN SHALL PERFORM ONLY WORK THAT THEIR CERTIFICATE PERMITS.
8. DRAWING AND MEASUREMENTS - DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ARE INTENDED TO INDICATE THE SCOPE AND GENERAL ARRANGEMENT OF WORK. DO NOT SCALE DRAWINGS.
TAKE FIELD MEASUREMENTS WHERE EQUIPMENT AND MATERIAL DIMENSIONS ARE DEPENDENT UPON BUILDING DIMENSIONS.
9. SUBMITTALS - SUBMIT THREE SETS OF ALL EQUIPMENT AND RELATED MATERIAL FOR APPROVAL PRIOR TO ORDERING. AFTER 10 DAYS FROM CONTRACT AWARD, SUBMIT DUCT SHOP DRAWINGS TO ARCHITECT FOR ENGINEERS REVIEW.
10. RECORD DRAWINGS - MAINTAIN ONE CONTRACT DRAWING, WHITE PRINT, ON SITE, SOLELY FOR THE PURPOSE OF RECORDING, IN RED, ANY CHANGES AND/OR DEVIATION FROM THE CONTRACT DRAWINGS AS IT OCCURS.
AT THE COMPLETION OF THE PROJECT, CERTIFY THE ABOVE-MENTIONED DRAWINGS AS BEING ACCURATE AND COMPLETE BY LABELLING IN THE LOWER RIGHT HAND CORNER IN LETTERS OF AT LEAST 1/2 INCH HIGH AS FOLLOWS: "AS-BUILT DRAWINGS, DATED ---", DELIVER TO DESIGN AUTHORITY.
11. OPERATING AND MAINTENANCE MANUALS - PREPARE INSTRUCTION MANUALS WHICH INCLUDE EQUIPMENT MANUFACTURER'S OPERATING AND MAINTENANCE BULLETINS, AND A REPORT ON THE TESTING AND BALANCING. SUBMIT THREE (3) COPIES TO DESIGN AUTHORITY.
12. SERVICES - PROTECT ALL SERVICES AND MAKE GOOD ANY DAMAGE CAUSED BY THE WORK IN THIS CONTRACT.
THE PLANS SHOW APPROXIMATE LOCATIONS OF DUCTWORK, PIPING AND EQUIPMENT BASED UPON EXISTING RECORD DRAWINGS. BE PREPARED TO ACCOMMODATE CHANGES IN LOCATION AS MAY BE FOUND ON SITE.
13. DUCTWORK CLEANING - ALL NEW DUCTWORK SHALL BE WIPED CLEAN OF ALL OIL AND OTHER SURFACE FILMS WITH SUITABLE SOLVENT PRIOR TO INSTALLATION.
ALL SUPPLY AND RETURN DUCTWORK SHALL BE THOROUGHLY CLEANED BY A PROFESSIONAL DUCT CLEANING AGENCY PRIOR TO REUSE.
14. CLEAN UP - MAKE GOOD AND CLEAN ALL AREAS DISRUPTED BY THIS WORK.
15. BALANCING - AIR SYSTEMS - BALANCING SHALL BE DONE BY AN AABC OR NEBB CERTIFIED FIRM. ADJUST AIR HANDLING EQUIPMENT AND ASSOCIATED BALANCE DAMPERS ON SUPPLY, RETURN AND EXHAUST SYSTEMS TO WITHIN PLUS OR MINUS 10% OF THE SPECIFIED AIR QUANTITIES. MAINTAIN THE DESIGN PRESSURE RELATIONSHIPS.
ADJUST DIFFUSERS, REGISTERS AND GRILLES TO OBTAIN OPTIMUM AIR DISTRIBUTION PATTERN.
MEASURE OUTSIDE AIR QUANTITIES AND CONFIRM THAT THE SPECIFIED OUTSIDE AIR QUANTITIES PER TITLE-24 CALCULATIONS HAVE BEEN PROVIDED THROUGHOUT.
PERMANENTLY MARK THE FINAL BALANCE POSITION ON ALL BALANCE DAMPERS AND ADJUSTABLE TURNING DEVICES.
SUBMIT A REPORT TO THE DESIGN AUTHORITY INDICATING FINAL AIR QUANTITIES OBTAINED.
16. EQUIPMENT START UP AND COMMISSIONING
CHECK AND ADJUST REFRIGERANT CHARGE AS REQUIRED FOR PROPER OPERATION.
BALANCE AC UNITS TO PROVIDE SPECIFIED AIR FLOWS.
PROVIDE ALL AC UNITS WITH NEW MERV 13 FILTERS. FILTER.
TEST ALL EQUIPMENT.
TO ASSURE THAT ALL FUNCTIONS AND PERFORMANCE ARE AS INDICATED ON THE MANUFACTURER'S RATING. ALL EQUIPMENT SHALL BE BALANCED AND TESTED TO PROVIDE THE OWNER WITH FUNCTIONING SYSTEMS. THE HVAC SYSTEMS SHALL HAVE A MINIMUM OF ONE YEAR WARRANTY ON ALL PARTS AND LABOR OR LONGER AS AGREED BETWEEN OWNER AND CONTRACTOR.
17. KITCHEN HOOD EXHAUST DUCT
SEE DRAWING M0.8 FOR GREASE EXHAUST DUCT REQUIREMENTS.

MECHANICAL LEGEND

Table with 5 columns: SYMBOL, ABBREV, DESCRIPTION, ABBREV, DESCRIPTION. Lists various mechanical symbols and their corresponding abbreviations and descriptions, such as POC (POINT OF CONNECTION), EQPT. (EQUIPMENT), KW (KILOWATT), LBS (POUNDS), MAX (MAXIMUM), MECH (MECHANICAL), MFR (MANUFACTURER), MIN (MINIMUM), MTD (MOUNTED), (N) (NEW), NOS (NUMBERS), OBD (OPPOSED BLADE DAMPER), OSA (OUTSIDE AIR), HP (HORSEPOWER), HR (HOUR), QTY (QUANTITY), RA (RETURN AIR), RG (RETURN AIR GRILLE), RAD (RETURN AIR DUCT), RR (RETURN AIR REGISTER), SA (SUPPLY AIR), SAD (SUPPLY AIR DUCT), SR (SUPPLY AIR REGISTER), SF (SQUARE FEET), FSD (SMOKE/FIRE DAMPER), SS (STAINLESS STEEL), TEMP (TEMPERATURE), TYP (TYPICAL), TA (TRANSFER AIR), T/A (TO ABOVE), T/B (TO BELOW), TR (TRANSFER REGISTER), V/PH/HZ (VOLTS/PHASE/HERTZ), VCD (VARIABLE VOLUME CONTROL), VOL (VOLUME), VTR (VENT THRU ROOF), WITH (WITH), WC (WATER COLUMN), WPD (WATER PRESSURE DROP), WT (WEIGHT), MUA (MAKE UP AIR), REFRIGERANT LINE.

EQUIPMENT IDENTIFICATION SYMBOL



SCOPE OF WORK

- 1. PROVIDE NEW FAN COIL UNIT WITH HEAT PUMP.
2. PROVIDE NEW TYPE I KITCHEN EXHAUST HOOD.
3. PROVIDE NEW SUPPLY FAN FOR VENTILATION.

DRAWING INDEX

Table with 2 columns: Item Number, Description. Lists drawing items from M0.1 to M4.8, including Mechanical Specifications, Schedules, Forms, Plans, Details, and Hood Details.

Table with 3 columns: REV, DESCRIPTION, DATE. Revision table for the drawing.

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TITLE:
MECHANICAL SPECIFICATIONS LEGEND AND GENERAL NOTES

JOB NO: B2306-AA123
DRAWN: CL
CHECKED: CZ
SCALE: NONE
DATE: 06.28.2023

M0.1

FAN COIL UNIT SCHEDULE

MARK	MANUFACTURER & MODEL	SERVICE	SUPPLY AIR (CFM)	E.S.P. (IN. WG.)	TOTAL COOLING CAPACITY (MBH)	TOTAL HEATING CAPACITY (MBH)	ELECTRICAL DATA					UNIT DIMENSIONS WIDTH X HEIGHT X DEPTH	UNIT WEIGHT (LBS.)	SOUND LEVEL dB(A)	QTY.	REMARKS
							MCA	MOCP	VOLT	PH	HZ					
FCU 1	LG LMN249HVT	AS SHOWN	600	-	24.0	25.6	0.4	15	208-230	1	60	39-9/32" x 6-1/16" x 13-19/32"	25.6	46	2	1, 2, 3, 4

1. NEW FAN COIL UNIT.
2. PROVIDE WITH MERV 13 FILTER MOUNTED AT RETURN GRILLE, SECONDARY DRAIN PAN, CONDENSATE PUMP, AND DISCONNECT SWITCH.
3. PROVIDE WITH PROGRAMMABLE T24 APPROVED TSATS. COORDINATE FINAL LOCATION W/ OWNER REPRESENTATIVE.
4. INSTALL PER MANUFACTURER'S RECOMMENDATION.

DUCT MATERIAL SCHEDULE

(FOR LOW PRESSURE DUCTWORKS W/S.P. LESS THAN 2" W.G., LESS THAN 2000 FPM)

RECTANGULAR			
DIMENSION:	4"-18"	19"-30"	31"-54"
GAUGE:	26 ga.	24 ga.	22 ga.
ROUND			
DIMENSION:	3"-14"	15"-23"	24"-37"
GAUGE:	26 ga.	24 ga.	20 ga.

DUCT CONSTRUCTION SHALL COMPLY WITH CMC 2019, SMACNA METAL AND FLEXIBLE DUCT CONSTRUCTION STANDARD AND UL 181, WHICHEVER IS THE MOST STRINGENT SHALL PREVAIL.

HEATING AND COOLING DUCT SYSTEM

AIRFLOW CFM	SUPPLY OR RETURN MAIN DUCT SIZE		TABLE A
	RD	OR	
200	8" RD	OR 6" X 8"	
300	9" RD	OR 8" X 8"	
400	10" RD	OR 10" X 8"	
500	11" RD	OR 14" X 8" 10" X 10"	
600	12" RD	OR 16" X 8" 12" X 10"	
700	13" RD	OR 18" X 8" 14" X 10" 12" X 12"	
800	14" RD	OR 22" X 8" 16" X 10" 14" X 12"	
1000	16" RD	OR 28" X 8" 20" X 10" 16" X 12"	
1200	17" RD	OR 32" X 8" 24" X 10" 20" X 12"	
1400	18" RD	OR 28" X 10" 24" X 12"	
1600	20" RD	OR 32" X 10" 28" X 12"	
1800	21" RD	OR 30" X 12"	
2000	22" RD	OR 34" X 12"	

AIRFLOW CFM	SUPPLY BRANCH DUCT SIZE		TABLE B
	RD	OR	
80	5" RD		
120	6" RD	OR 3-1/2" X 10"	
160	7" RD		

OUTDOOR UNIT SCHEDULE

MARK	MANUFACTURER & MODEL	SERVICE	ELECTRICAL DATA			SEER	HSPF	TOTAL COOLING CAPACITY (MBH)	TOTAL HEATING CAPACITY (MBH)	UNIT DIMENSIONS WIDTH X HEIGHT X DEPTH	TOTAL STD UNIT WT. (LBS.)	SOUND LEVEL dB(A)	REMARKS
			V. / PH. / HZ.	MOCP	MCA								
HP 1	LG LMU481HV	FCU 1 FCU 2	208-230/1/60	40	32.7	20.8	9.5	48.0	54.0	37-13/32" X 54-11/32" X 13"	192	55	1, 2, 3, 4

1. PROVIDE WITH REFRIGERANT PIPE HEADER KIT AND REFRIGERANT R410A.
2. COOLING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 80°F/67°F, OUTDOOR AIR OF 95°F.
3. HEATING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 70°F, OUTDOOR AIR OF 47°F.
4. INSTALL PER MANUFACTURER'S RECOMMENDATION.

EXHAUST HOOD SCHEDULE

MARK	MANUF. & MODEL	SERVICE	EXHAUST (CFM)	MAKE-UP AIR (CFM)	EXHAUST DUCT SIZE	EXHAUST S.P.	DIMENSIONS			OPER. WT. (LBS.)	REMARKS
							WIDTH	DEPTH	HEIGHT		
H 1	CAPTIVEAIRE 5424 ND-2-PSP-F	KITCHEN	1725	-	14"ø	-0.711"	104"	54"	30"	801	1

1. INSTALL PER MANUFACTURER'S INSTRUCTION.

AIR DISTRIBUTION SCHEDULE

MARK	MANUFACTURER & MODEL OR EQUAL	SERVICE	TYPE	FINISH	MODULE SIZE	NECK SIZE	REMARKS
CD-1	TITUS 350R OR APPROVED EQUAL	SUPPLY	CEILING	WHITE	24"x24"	24"x24"	1
FAG-1	RUSKIN ELF6375DXH OR APPROVED EQUAL	FRESH AIR	WALL	WHITE	36"x24"	-	1

1. INSTALL PER MANUFACTURER'S INSTRUCTIONS.

KITCHEN EXHAUST FAN SCHEDULE

MARK	MANUF. & MODEL	LOCATION	SERVICE	CFM	ESP (IN.)	FAN (RPM)	SONES	ELECTRICAL		OPER. WT. (LBS.)	REMARKS
								V. / PH. / HZ.	HP		
REF 1	CAPTIVEAIRE DU180HFA	ROOF	KITCHEN HOOD	1725	1.0	966	9.5	208/3/60	1.0	153	1, 2, 3, 4

1. INSTALL AS PER MANUFACTURER'S INSTRUCTION.
2. FAN TO OPERATE ON A WALL MOUNT SWITCH.
3. PROVIDE WITH DISCONNECT SWITCH AND PREMIUM EFFICIENCY MOTOR.
4. FAN SHALL MEET NFPA 96 STANDARDS FOR GREASE DUCT. PROVIDE VENTILATED ROOF CURB AND GREASE CUP.

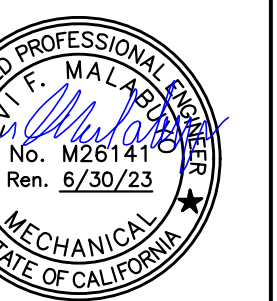
SUPPLY FAN SCHEDULE

MARK	MANUF. & MODEL	LOCATION	SERVICE	CFM	ESP (IN.)	SONES	ELECTRICAL		OPER. WT. (LBS.)	QTY.	REMARKS
							V. / PH. / HZ.	POWER			
SF 1	GREENHECK CSP-A3300-VG OR APPROVED EQUAL	CEILING	AS SHOWN	1725	0.8	4.3	115/1/60	422 WATTS	122	1	1, 2, 3, 4

1. PROVIDE WITH CEILING GRILLE VIBRATION ISOLATOR KIT, FAN TERMINATION CAP WITH BIRD SCREEN AND BACK DRAFT DAMPER.
2. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
3. BATHROOM EXHAUST FAN SHALL BE "ENERGY STAR" COMPLIANT AND DUCTED TO TERMINATE OUTSIDE OF THE BUILDING(CGBSC 4.506.1.1)
4. INTERLOCK TO OPERATE WHEN HOOD (H-1) IS IN OPERATION.

REV	DESCRIPTION	DATE

**SABOR PIRI PIRI
TENANT IMPROVEMENT**
800 B AVENUE SUITE 804
NATIONAL CITY CA 91950



TITLE:

MECHANICAL SCHEDULES

JOB NO: B2306-AA123
DRAWN: CL
CHECKED: CZ
SCALE: NONE
DATE: 06.28.2023

M0.2

STATE OF CALIFORNIA CALIFORNIA ENERGY COMMISSION
Mechanical Systems NRCC-MCH-E
Project Name: SABOR PIRI PIRI TENANT IMPROVEMENT Report Page: (Page 1 of 9)
Project Address: 800B Avenue Suite 80, National City CA 91950 Date Prepared: 2023-06-27T05:25:20-04:00
A. GENERAL INFORMATION
B. PROJECT SCOPE
C. COMPLIANCE RESULTS
D. EXCEPTIONAL CONDITIONS
E. ADDITIONAL REMARKS
F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

STATE OF CALIFORNIA CALIFORNIA ENERGY COMMISSION
Mechanical Systems NRCC-MCH-E
Project Name: SABOR PIRI PIRI TENANT IMPROVEMENT Report Page: (Page 2 of 9)
Project Address: 800B Avenue Suite 80, National City CA 91950 Date Prepared: 2023-06-27T05:25:20-04:00
C. COMPLIANCE RESULTS
D. EXCEPTIONAL CONDITIONS
E. ADDITIONAL REMARKS
F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

STATE OF CALIFORNIA CALIFORNIA ENERGY COMMISSION
Mechanical Systems NRCC-MCH-E
Project Name: SABOR PIRI PIRI TENANT IMPROVEMENT Report Page: (Page 3 of 9)
Project Address: 800B Avenue Suite 80, National City CA 91950 Date Prepared: 2023-06-27T05:25:20-04:00
F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)
G. PUMPS

STATE OF CALIFORNIA CALIFORNIA ENERGY COMMISSION
Mechanical Systems NRCC-MCH-E
Project Name: SABOR PIRI PIRI TENANT IMPROVEMENT Report Page: (Page 4 of 9)
Project Address: 800B Avenue Suite 80, National City CA 91950 Date Prepared: 2023-06-27T05:25:20-04:00
H. FAN SYSTEMS & AIR ECONOMIZERS
I. SYSTEM CONTROLS
J. VENTILATION AND INDOOR AIR QUALITY

STATE OF CALIFORNIA CALIFORNIA ENERGY COMMISSION
Mechanical Systems NRCC-MCH-E
Project Name: SABOR PIRI PIRI TENANT IMPROVEMENT Report Page: (Page 5 of 9)
Project Address: 800B Avenue Suite 80, National City CA 91950 Date Prepared: 2023-06-27T05:25:20-04:00
J. VENTILATION AND INDOOR AIR QUALITY
K. TERMINAL BOX CONTROLS

STATE OF CALIFORNIA CALIFORNIA ENERGY COMMISSION
Mechanical Systems NRCC-MCH-E
Project Name: SABOR PIRI PIRI TENANT IMPROVEMENT Report Page: (Page 6 of 9)
Project Address: 800B Avenue Suite 80, National City CA 91950 Date Prepared: 2023-06-27T05:25:20-04:00
L. DISTRIBUTION (DUCTWORK AND PIPING)

STATE OF CALIFORNIA CALIFORNIA ENERGY COMMISSION
Mechanical Systems NRCC-MCH-E
Project Name: SABOR PIRI PIRI TENANT IMPROVEMENT Report Page: (Page 7 of 9)
Project Address: 800B Avenue Suite 80, National City CA 91950 Date Prepared: 2023-06-27T05:25:20-04:00
M. COOLING TOWERS
N. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE
P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

STATE OF CALIFORNIA CALIFORNIA ENERGY COMMISSION
Mechanical Systems NRCC-MCH-E
Project Name: SABOR PIRI PIRI TENANT IMPROVEMENT Report Page: (Page 8 of 9)
Project Address: 800B Avenue Suite 80, National City CA 91950 Date Prepared: 2023-06-27T05:25:20-04:00
Q. MANDATORY MEASURES DOCUMENTATION LOCATION

STATE OF CALIFORNIA CALIFORNIA ENERGY COMMISSION
Mechanical Systems NRCC-MCH-E
Project Name: SABOR PIRI PIRI TENANT IMPROVEMENT Report Page: (Page 9 of 9)
Project Address: 800B Avenue Suite 80, National City CA 91950 Date Prepared: 2023-06-27T05:25:20-04:00
DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
RESPONSIBLE PERSON'S DECLARATION STATEMENT

Table with 3 columns: REV, DESCRIPTION, DATE

800 B AVENUE SUITE 804 NATIONAL CITY CA 91950

SABOR PIRI PIRI TENANT IMPROVEMENT



TITLE:

MECHANICAL T24 FORMS

JOB NO:B2306-AA123 DRAWN: CL CHECKED: CZ SCALE: NONE DATE: 06.28.2023

M0.3

STATE OF CALIFORNIA
Process Systems CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-PRC-E
 This form is used to document any process systems that are within the scope of the permit application and are demonstrating compliance with mandatory requirements in 120.6/ 160.7 or prescriptive requirements in 140.9. This compliance document is used for newly constructed, addition and alteration projects.
 Project Name: SABOR PIRI PIRI TENANT IMPROVEMENT Report Page: (Page 1 of 6)
 Project Address: 800B Avenue Suite 80, National City CA 91950 Date Prepared: 2023-06-27T05:19:43-04:00

A. GENERAL INFORMATION

01	Project Location (city)	NATIONAL CITY	04	Total Conditioned Floor Area	450
02	Climate Zone	7	05	Total Unconditioned Floor Area	0
03	Occupancy Types Within Project:		06	# of Stories (Habitable Above Grade)	1

• Restaurant

B. PROJECT SCOPE
 This table includes process systems that are within the scope of the permit application and are demonstrating compliance with mandatory requirements in 120.6 / 160.7 or prescriptive requirements in 140.9.
 My project consists of: (check all that apply):

01	02
<input type="checkbox"/> Refrigerated Spaces <3,000 ft ³ Total (no Title 24, Pt6 requirements)	<input type="checkbox"/> Escalator & Moving Walkway Speed Controls (mandatory 120.6(g))
<input type="checkbox"/> Refrigerated Spaces >=3,000 ft ³ Total (mandatory 120.6(a))	<input type="checkbox"/> Computer Rooms (mandatory 120.6(j)) and prescriptive 140.9(a)) ¹
<input type="checkbox"/> Food /Beverage Stores >=8,000 ft ³ cfa (mandatory 120.6(b))	<input checked="" type="checkbox"/> Commercial Kitchen Ventilation/Exhaust (prescriptive 140.9(b)) ¹
<input type="checkbox"/> Enclosed Parking Garage Exhaust >=10,000 cfm (mandatory 120.6(c))	<input type="checkbox"/> Laboratory Exhaust/Factory Exhaust & Fume Hood (prescriptive 140.9(c)) ¹
<input type="checkbox"/> Newly Installed Process Boilers (mandatory 120.6(d))	<input type="checkbox"/> Pool/Spa (mandatory 110.4 / 160.7)
<input type="checkbox"/> Compressed Air Systems Combined HP >= 25 (mandatory 120.6(e))	<input type="checkbox"/> Controlled Environment Horticulture (mandatory 120.6(h))
<input type="checkbox"/> Elevator Lighting & Ventilation Controls (mandatory 120.6(f) / 160.7)	<input type="checkbox"/> New Steam Traps (mandatory 120.6(i))

¹ FOOTNOTES: These building features can comply using the performance method. If using the performance method for these features, compliance should be demonstrated on the NRCC-PRC-E.

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 CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: 117190-0623-0002 Schema Version: rev 20220101 Report Generated: 2023-06-27 02:19:47

STATE OF CALIFORNIA
Process Systems CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-PRC-E
 Project Name: SABOR PIRI PIRI TENANT IMPROVEMENT Report Page: (Page 2 of 6)
 Date Prepared: 2023-06-27T05:19:43-04:00

C. COMPLIANCE RESULTS
 Results in this table are automatically calculated from data input and calculations in Tables F through R. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see applicable Table referenced below.

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Refrigerated Warehouse / Space 120.6(a) (See Table F)	Commercial Refrigeration 120.6(b) (See Table G)	Parking Garage Exhaust 120.6(c) (See Table H)	Process Boilers 120.6(d) (See Table I)	Compressed Air Systems 120.6(e) (See Table J)	Elevators 120.6(f) / 160.7 (See Table K)	Escalators & Moving Walkways 120.6(g) (See Table L)	Computer Rooms 140.9(a) (See Table M)	Commercial Kitchens 140.9(b) (See Table N)	Laboratory/ Factory Exhaust 140.9(c) (See Table O)	Controlled Environment Horticulture 120.6(h) (See Table P)	Steam Traps 120.6(i) (See Table Q)	Multifamily Pool/Spa 160.7 (See Table R)	Compliance Results
								Yes					COMPLIES

D. EXCEPTIONAL CONDITIONS
 This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS
 This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. REFRIGERATED WAREHOUSES/SPACES
 This section does not apply to this project.

G. COMMERCIAL REFRIGERATION
 This section does not apply to this project.

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STATE OF CALIFORNIA
Process Systems CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-PRC-E
 Project Name: SABOR PIRI PIRI TENANT IMPROVEMENT Report Page: (Page 3 of 6)
 Date Prepared: 2023-06-27T05:19:43-04:00

H. ENCLOSED PARKING GARAGE EXHAUST
 This section does not apply to this project.

I. PROCESS BOILER
 This section does not apply to this project.

J. COMPRESSED AIR SYSTEMS
 This section does not apply to this project.

K. ELEVATOR LIGHTING AND VENTILATION
 This section does not apply to this project.

L. ESCALATORS AND MOVING WALKWAYS SPEED CONTROLS
 This section does not apply to this project.

M. COMPUTER ROOM SYSTEM SUMMARY
 This section does not apply to this project.

N. COMMERCIAL KITCHEN EXHAUST AND VENTILATION
 This table contains all new and replacement hoods being installed within the scope of the permit application. Table N is used to demonstrate compliance with prescriptive requirements found in 140.9(b).
Kitchen Ventilation 140.9(b)2

01	<input type="checkbox"/>	Existing kitchen hoods not being replaced as part of an addition or alteration (do not need to meet requirements)
----	--------------------------	---

Requirements

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STATE OF CALIFORNIA
Process Systems CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-PRC-E
 Project Name: SABOR PIRI PIRI TENANT IMPROVEMENT Report Page: (Page 4 of 6)
 Date Prepared: 2023-06-27T05:19:43-04:00

N. COMMERCIAL KITCHEN EXHAUST AND VENTILATION

02	Replacement Air to Hood Compliance Method 140.9(b)1A
03	Providing replacement air directly to the hood(s) that does not exceed 10% of the hood(s) exhaust rate
04	Mechanically cooled or heated makeup air delivered to any space with a kitchen hood is designed per 140.9(b)2A to not exceed the greater of: The supply flow required to meet the space heating and cooling load
05	Location that is supplying transfer air: The kitchen/ dining facility has a total Type I and Type II kitchen hood exhaust airflow > 5000 cfm and is designed to have one of the following per 140.9(b)2B: NA: Not a kitchen/ dining facility having a total Type I and Type II kitchen hood exhaust airflow rate > 5,000 cfm

Kitchen Exhaust: Airflow Rate 140.9(b)1B

01	Kitchen Name or Item Tag	SABOR PIRI PIRI	Compliance Method per 140.9(b)1B	Type I hood design exhaust rates do not exceed the maximum allowed per §140.9(b)1, as documented below		
02	03	04	05	06	07	08
Name or Item Tag	Hood Type ¹	Hood Style	Hood Length (ft)	Equipment Duty	Design Hood Exhaust Rate CFM	Max Hood Exhaust Rate Allowed CFM
H-1	Type I	Wall-mounted Canopy	8.75	Heavy Duty	1725	2450

¹ FOOTNOTES: Type II hoods do not have a max hood exhaust air rate per 140.9(b)1B

O. LABORATORY AND FACTORY EXHAUST AND FUME HOODS
 This section does not apply to this project.

P. CONTROLLED ENVIRONMENT HORTICULTURE
 This section does not apply to this project.

Q. STEAM TRAPS IN INDUSTRIAL FACILITIES
 This section does not apply to this project.

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STATE OF CALIFORNIA
Process Systems CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-PRC-E
 Project Name: SABOR PIRI PIRI TENANT IMPROVEMENT Report Page: (Page 5 of 6)
 Date Prepared: 2023-06-27T05:19:43-04:00

R. Pool & SPAs
 This section does not apply to this project.

S. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
 Selections have been made based on information provided in this document. If any selections have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCC/

Form/Title
 NRCC-PRC-01-E - Covered Process

T. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE
 Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: <http://www.energy.ca.gov/title24/attcp/providers.html>

Form/Title
 NRCA-PRC-02-F Kitchen Exhaust Systems/Spaces To Be Field Verified
 SABOR PIRI PIRI

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STATE OF CALIFORNIA
Process Systems CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-PRC-E
 Project Name: SABOR PIRI PIRI TENANT IMPROVEMENT Report Page: (Page 6 of 6)
 Project Address: 800B Avenue Suite 80, National City CA 91950 Date Prepared: 2023-06-27T05:19:43-04:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
 I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: RANIL BATHIANCLA
 Signature Date: 2023-06-27
 Company: MR ENGINEERING CONSULTANTS, INC.
 Address: 39210 STATE ST. STE 106
 City/State/Zip: FREMONT, CA 94538
 CEAH/HERS Certification Identification (if applicable):
 Phone: 510-509-2362

RESPONSIBLE PERSON'S DECLARATION STATEMENT
 I certify the following under penalty of perjury, under the laws of the State of California:
 1. The information provided on this Certificate of Compliance is true and correct.
 2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
 3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1, and Part 6 of the California Code of Regulations.
 4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
 5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the building provides to the building owner at occupancy.

Responsible Designer Name: LEVI MALABUYO
 Signature Date: 2023-06-27
 Company: MR ENGINEERING CONSULTANTS, INC.
 Address: 39210 STATE ST. STE 106
 City/State/Zip: FREMONT, CA 94538
 License: M26141
 Phone: 510-509-2362

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 CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: 117190-0623-0002 Schema Version: rev 20220101 Report Generated: 2023-06-27 02:19:47

REV	DESCRIPTION	DATE

SABOR PIRI PIRI
 TENANT IMPROVEMENT
 800 B AVENUE SUITE 804
 NATIONAL CITY CA 91950

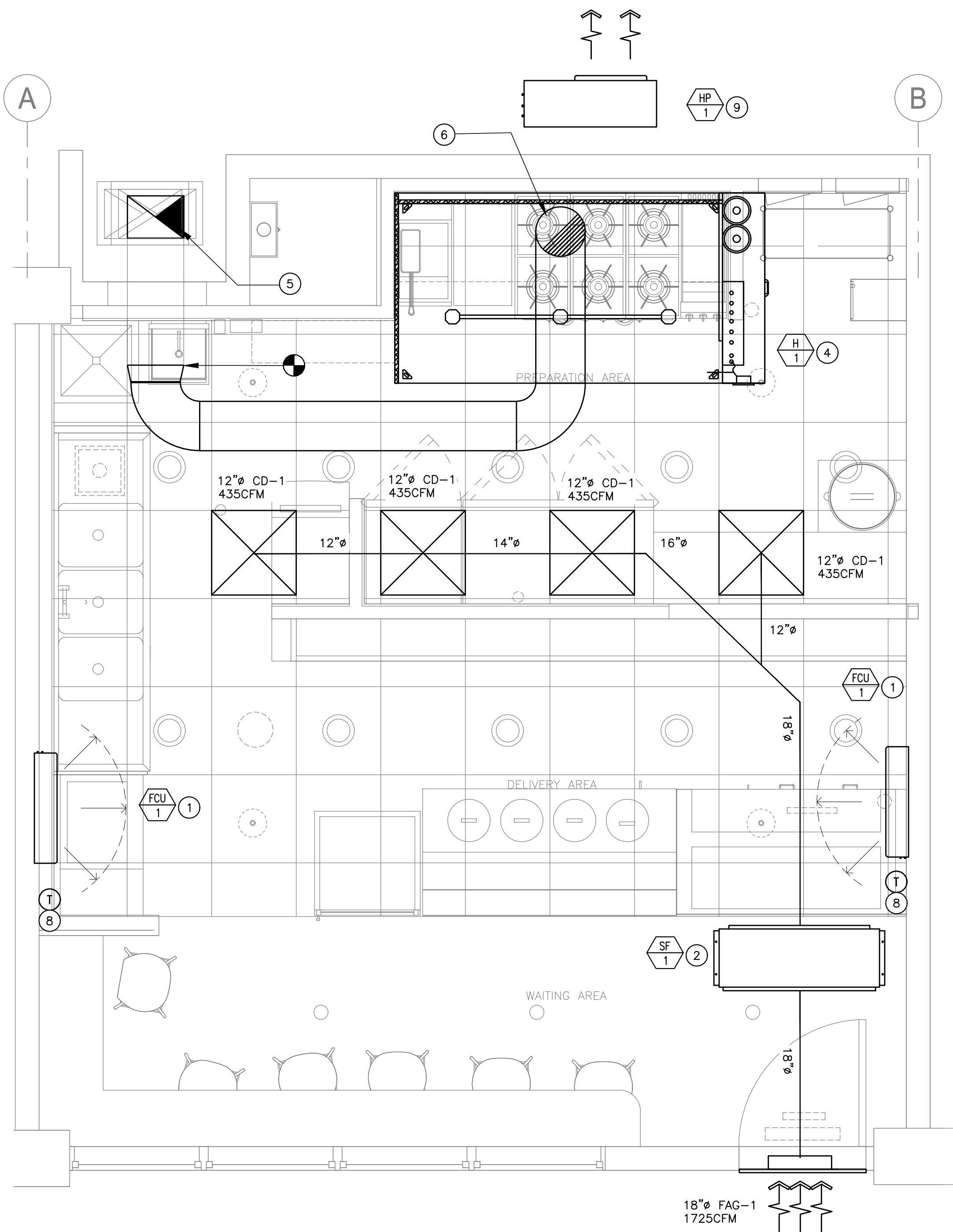
MR ENGINEERING CONSULTANTS, INC.
 1171 4th Ave, Ste 1011
 San Diego, CA 92111
 phone: (619) 730-4468
 fax: (619) 596-3382
 www.mrengineer.com



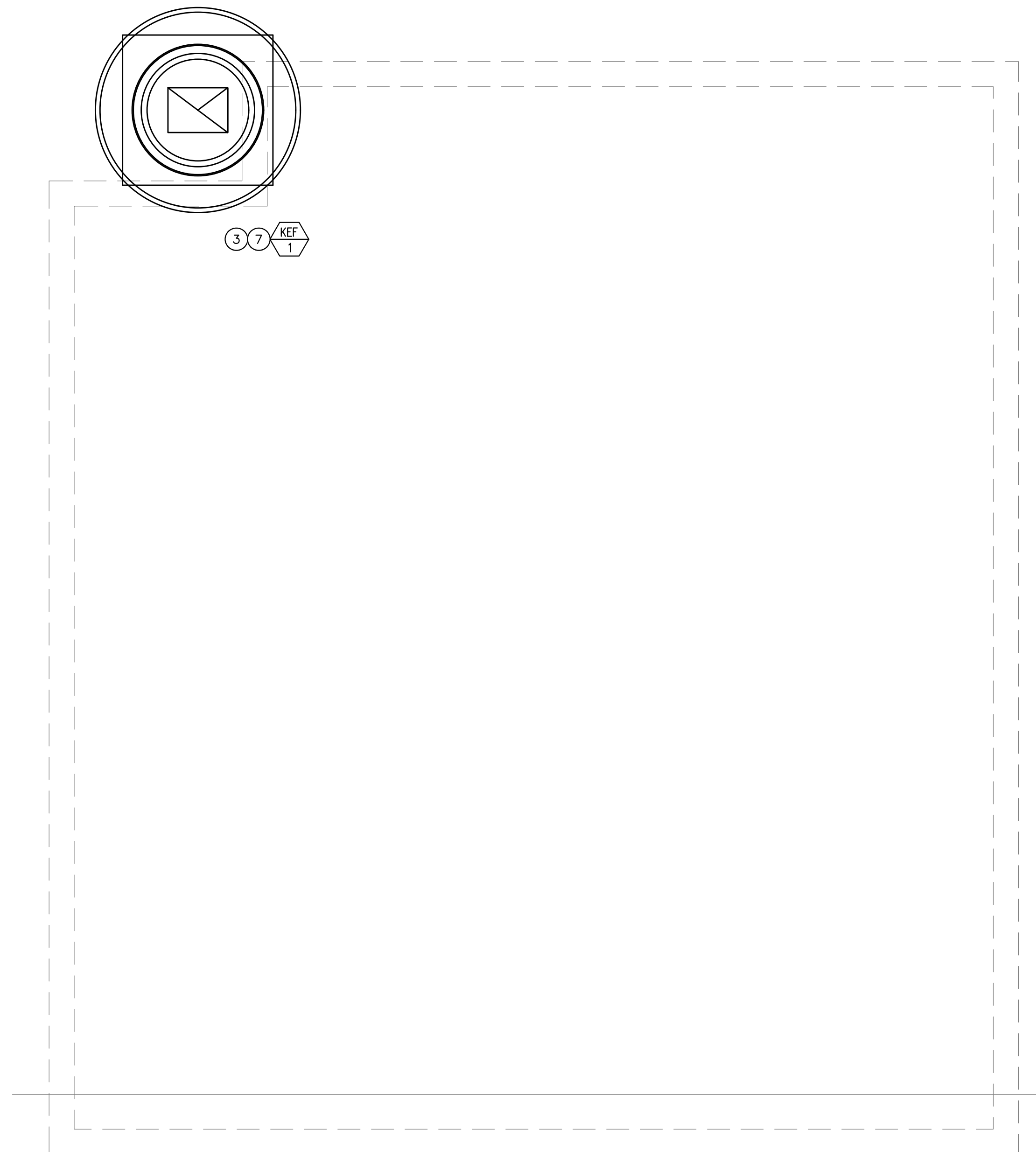
TITLE:
 MECHANICAL
 T24 FORMS

JOB NO: B2306-AA123
 DRAWN: CL
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 SCALE: NONE
 DATE: 06.28.2023

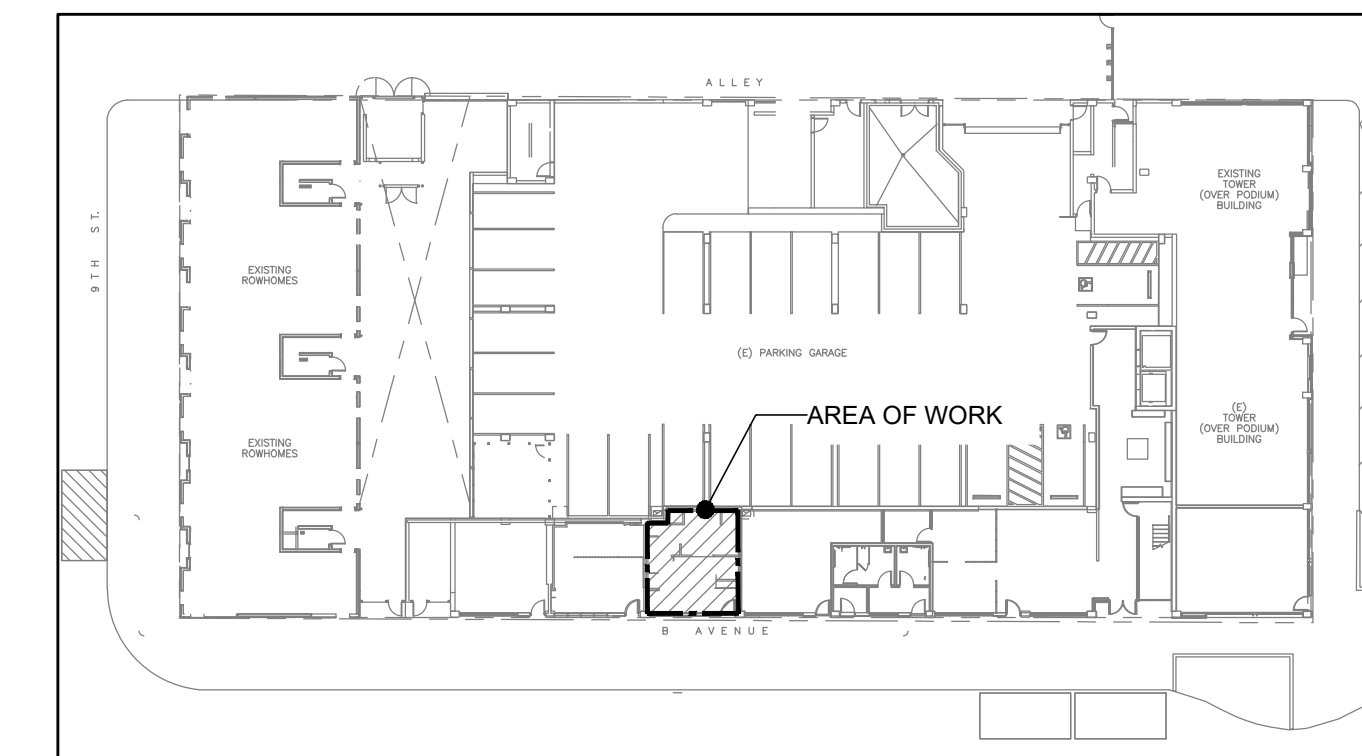
M0.4



1 MECHANICAL FLOOR PLAN
 M2.1 SCALE: 1/2" = 1'-0"



2 MECHANICAL ROOF PLAN
 M2.1 SCALE: 1/2" = 1'-0"



3 KEY PLAN
 M2.1 SCALE: NTS

GENERAL NOTES

- CONTRACTOR SHALL VERIFY IN THE FIELD FOR EXACT LOCATION OF ALL DUCTING/PIPING AND UTILITIES PRIOR TO START OF WORK. IN THE EVENT OF ANY DISCREPANCIES OR POTENTIAL CONFLICTS, NOTIFY THE ARCHITECT AND ENGINEER IN WRITING PRIOR TO START OF WORK.
- ALL DUCTING/PIPING LOCATIONS ARE DIAGRAMMATIC. CONTRACTOR SHALL COORDINATE WITH ALL TRADES AND OWNER'S REPRESENTATIVE AND VERIFY EXACT ROUTING PRIOR TO START OF WORK.
- FINAL THERMOSTAT/REMOTE SENSOR SHALL BE COORDINATED WITH THE ARCHITECT AND GENERAL CONTRACTOR FOR APPROVAL PRIOR TO INSTALLATION.
- CONTRACTOR SHALL PERFORM AIR BALANCING AS PART OF TESTING AND COMMISSIONING ACTIVITIES OF ALL HVAC SYSTEM AND EQUIPMENT. DURING THE SAID ACTIVITY, ALL SUPPLY AND EXHAUST AIRFLOW RATES SHALL BE VERIFIED IN ACCORDANCE WITH 2022 CMC SECTION 508.10.1.2 THROUGH SECTION 508.10.1.5.
- MECHANICAL HOOD SHOULD COMPLY WITH CMC TABLE 508.10.1.3 AND FOR MEDIUM DUTY COOKING ONLY.
- PROVIDE YOUNG REGULATOR BALANCING DAMPER AS NEEDED FOR THE DIFFUSER THAT IS NOT ACCESSIBLE FOR BALANCING.
- CONTRACTOR TO PROVIDE ACCESS PANEL TO ALL MECHANICAL EQUIPMENTS FOR MAINTENANCE IF NOT READILY ACCESSIBLE. COORDINATE WITH ARCHITECT.

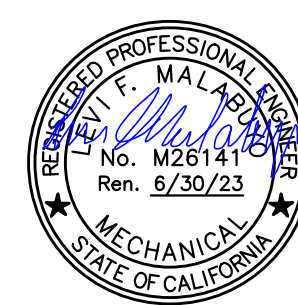
KEY NOTES

- NEW WALL MOUNTED FAN COIL UNIT. SEE SHEET M0.2 FOR UNIT SPECIFICATION.
- NEW INLINE SUPPLY FAN. SEE SHEET M0.2 FOR UNIT SPECIFICATION.
- NEW KITCHEN EXHAUST FAN. SEE SHEET M0.2 FOR UNIT SPECIFICATION.
- NEW TYPE I HOOD. REFER TO SHEETS M0.2 AND M4.1 TO M4.8 FOR THE EQUIPMENT DETAILS AND SPECIFICATIONS. HOOD SHALL BE SECURED IN PLACE TO RESIST THE LATERAL LOADS.
- 16"x12" KITCHEN HOOD EXHAUST DUCT RISER T/A, CONNECT TO KEF-1.
- 14" EXHAUST DUCT CONNECTION TO NEW TYPE I HOOD.
- FAN DISCHARGE SHALL BE FORTY(40) INCHES ABOVE THE ROOF SURFACES AND SHALL HAVE A MINIMUM OF TEN (10) FOOT CLEARANCE FROM ANY OUTSIDE AIR INTAKE. IF AN EXHAUST FAN SHALL BE EXTENDED BY MEANS OF SHROUD ON ROUND FANS TO MEETS THE THREE (3) FEET VERTICAL CLEARANCE REQUIREMENT.
- FCU THERMOSTAT. COORDINATE WITH ARCHITECT. REFER TO DETAIL #5/M3.1 FOR MOUNTING.
- NEW HEAT PUMP UNIT. SEE SHEET M0.2 FOR UNIT SPECIFICATION.

REV	DESCRIPTION	DATE

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TENANT IMPROVEMENT
 800 B AVENUE SUITE 804
 NATIONAL CITY CA 91950

1111 Ave. Ave. #111
 San Diego, CA 92101
 phone: (619) 730-4488
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 eng@emrinc.com
 www.emrinc.com

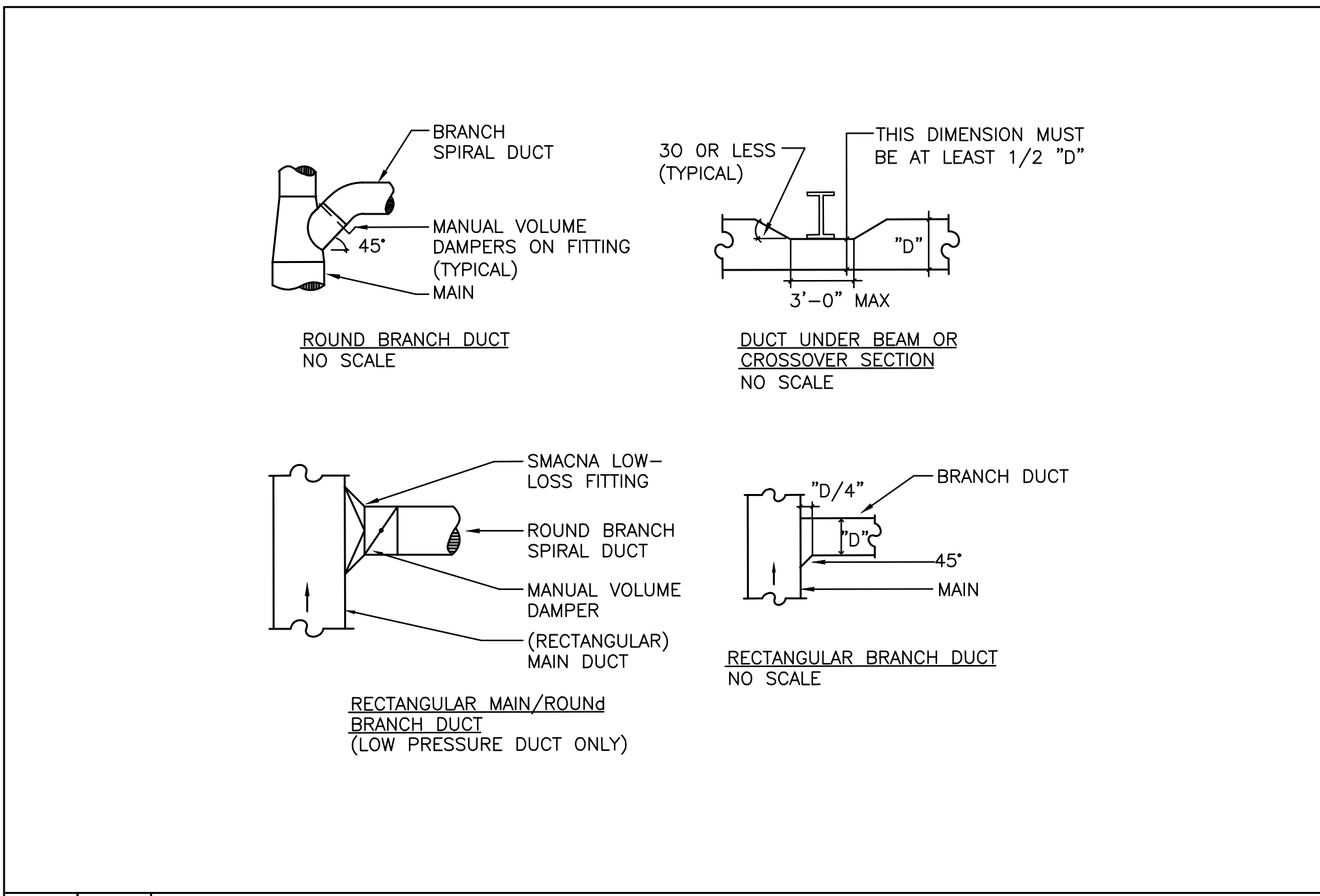


TITLE:
MECHANICAL FLOOR & ROOF PLAN

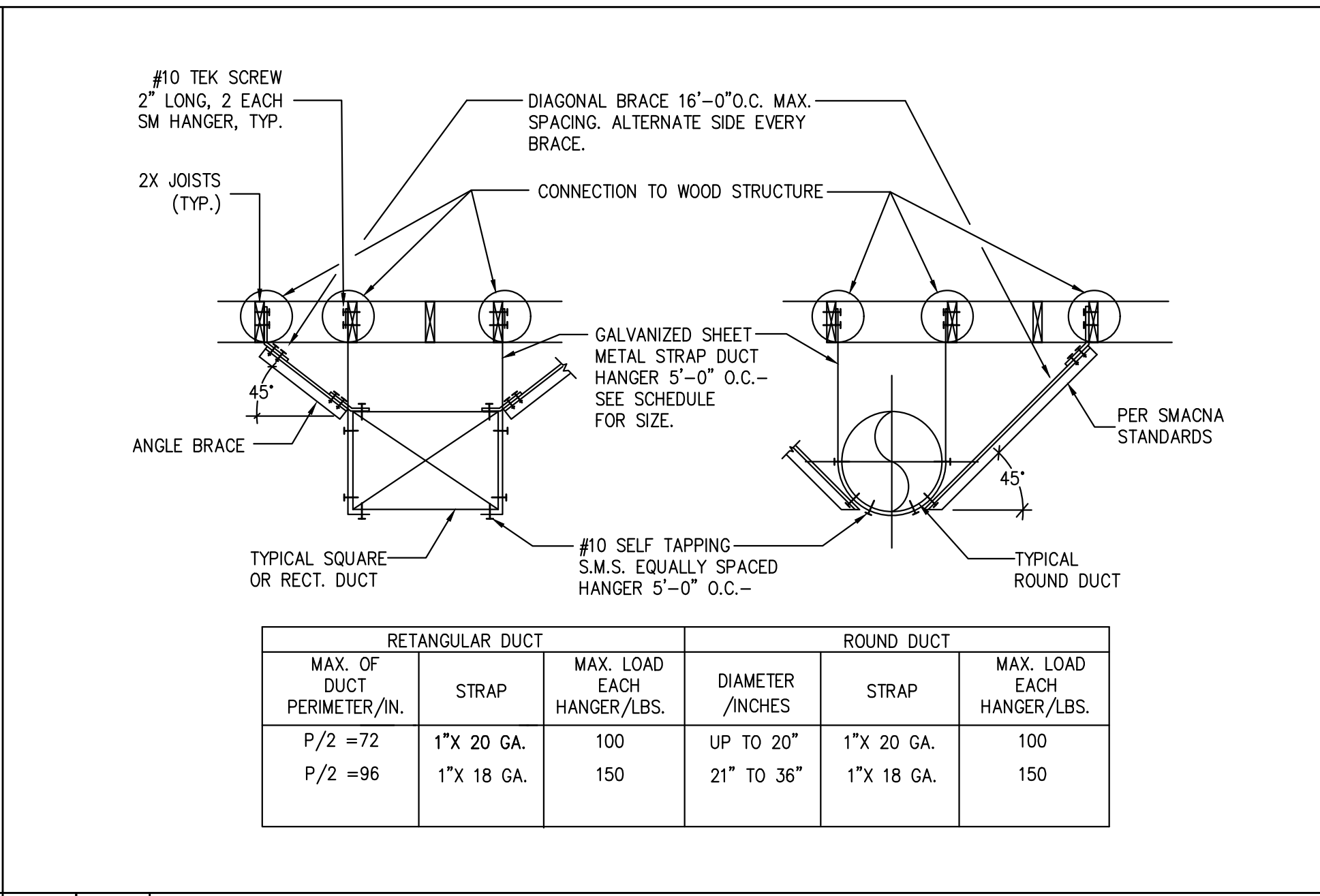
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 DRAWN: CL
 CHECKED: CZ
 SCALE: AS SHOWN
 DATE: 06.28.2023

M2.1

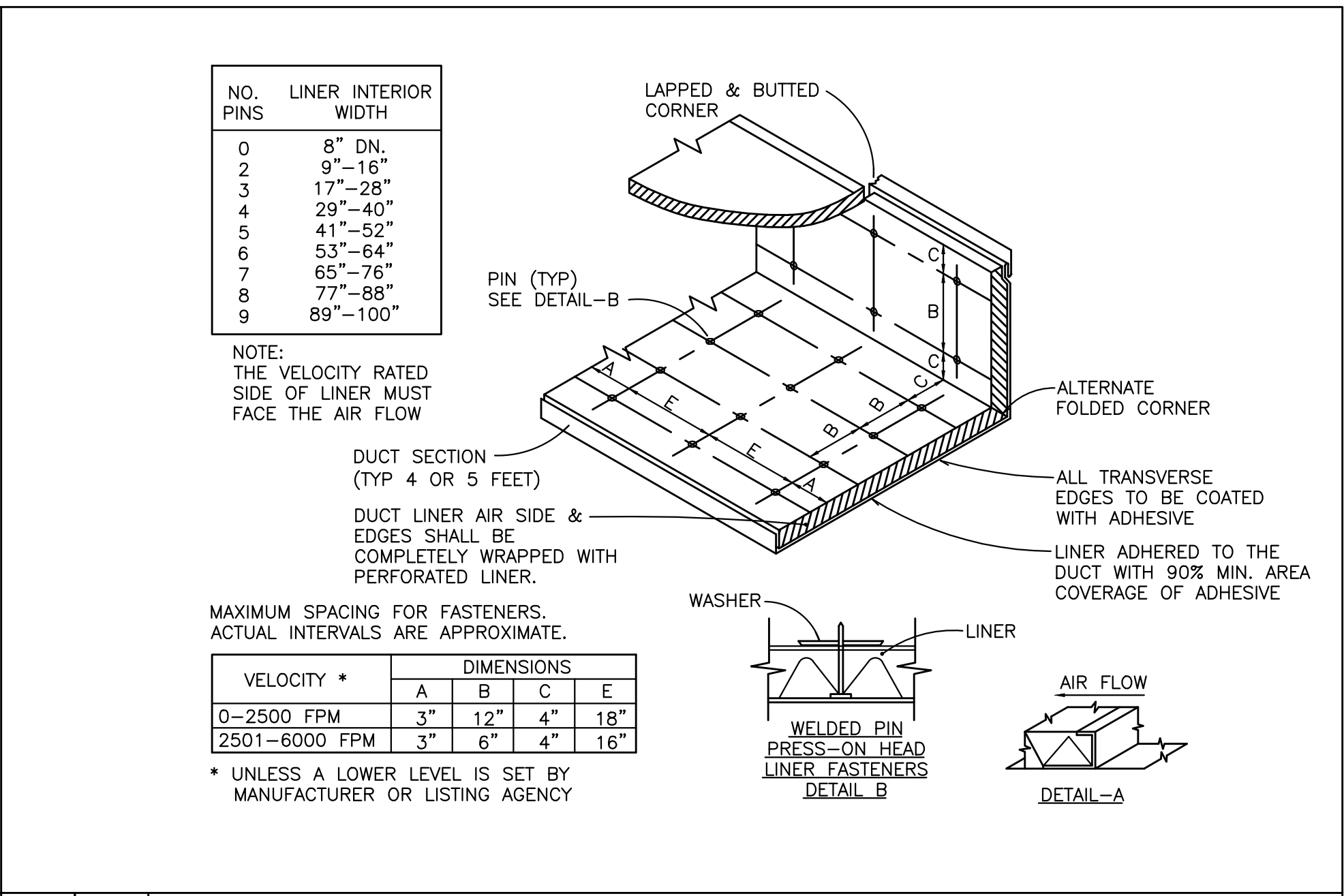
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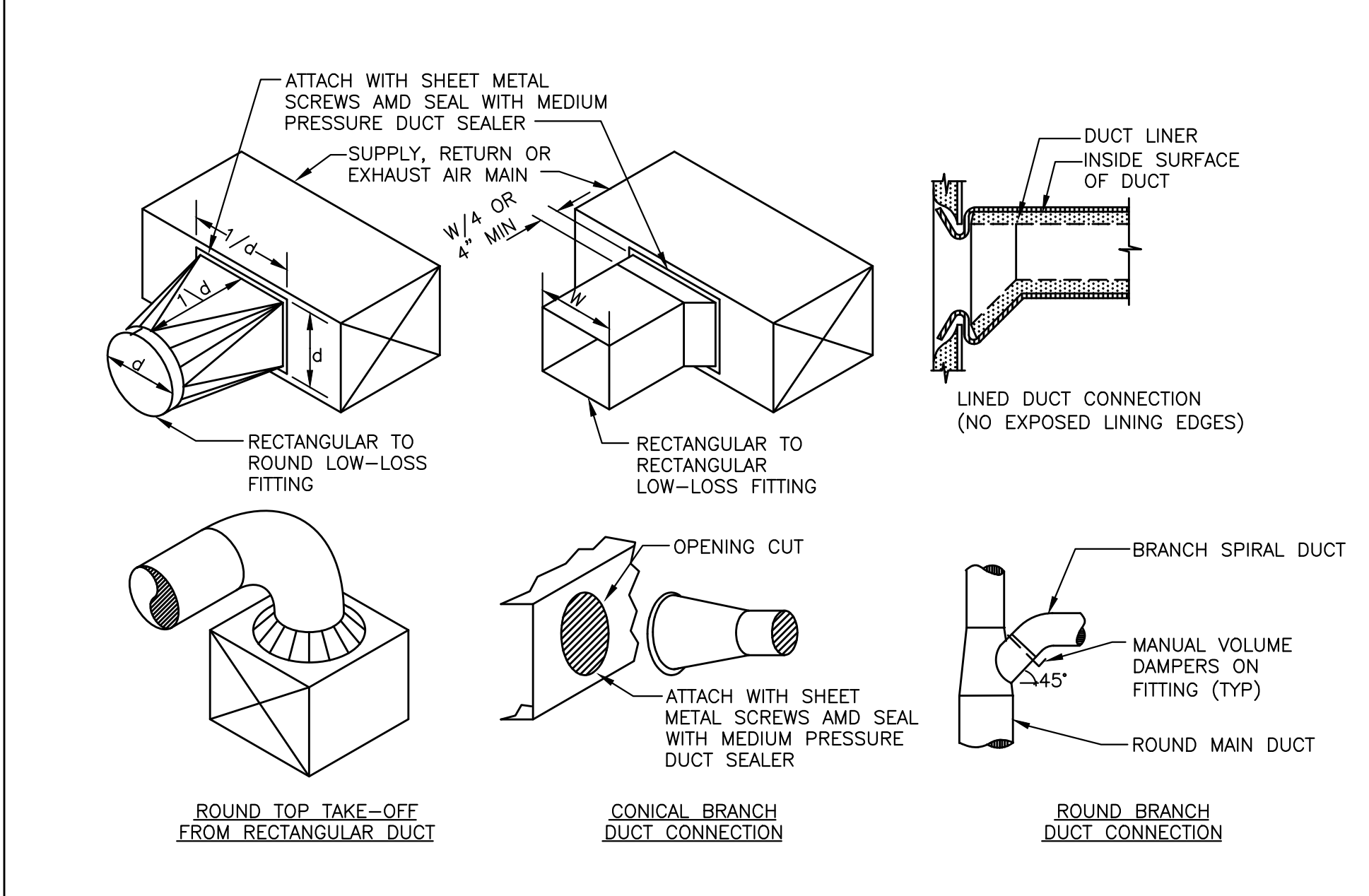
1 SCALE NONE DUCT INSTALLATION DETAIL



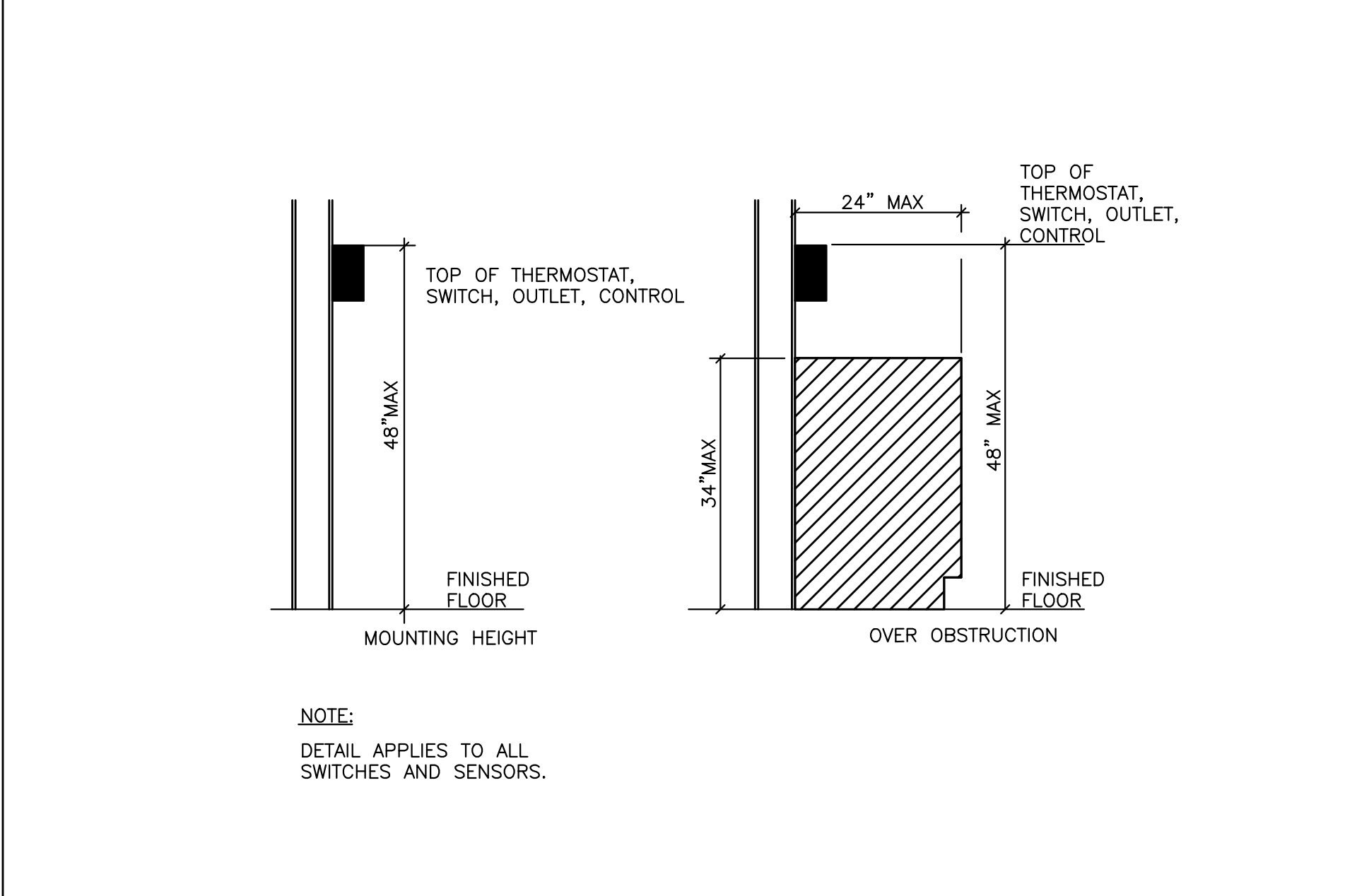
2 SCALE NONE DUCT SUPPORT DETAIL



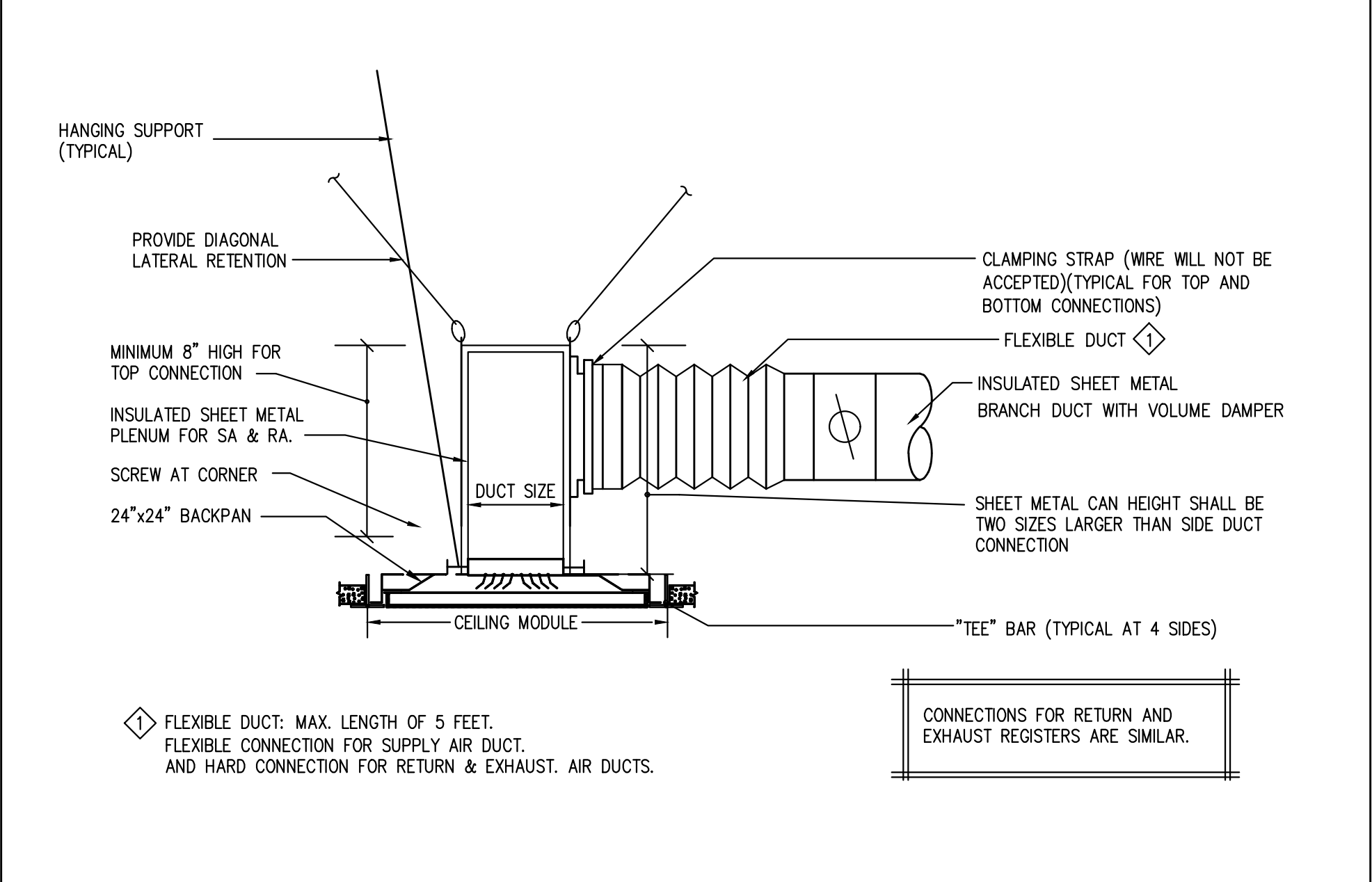
3 SCALE NONE DUCT LINING DETAIL



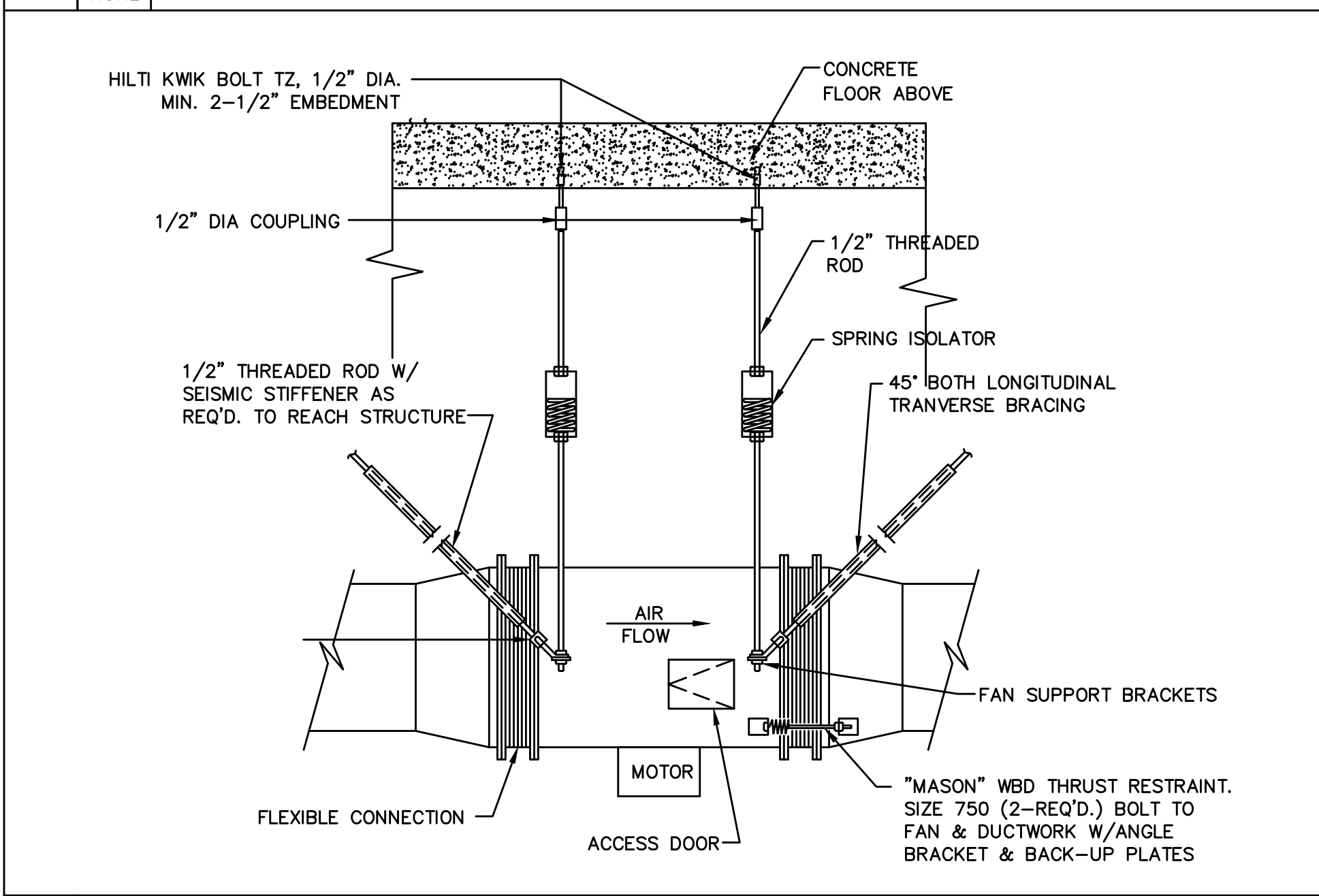
4 SCALE NONE BRANCH DUCTWORK CONNECTIONS



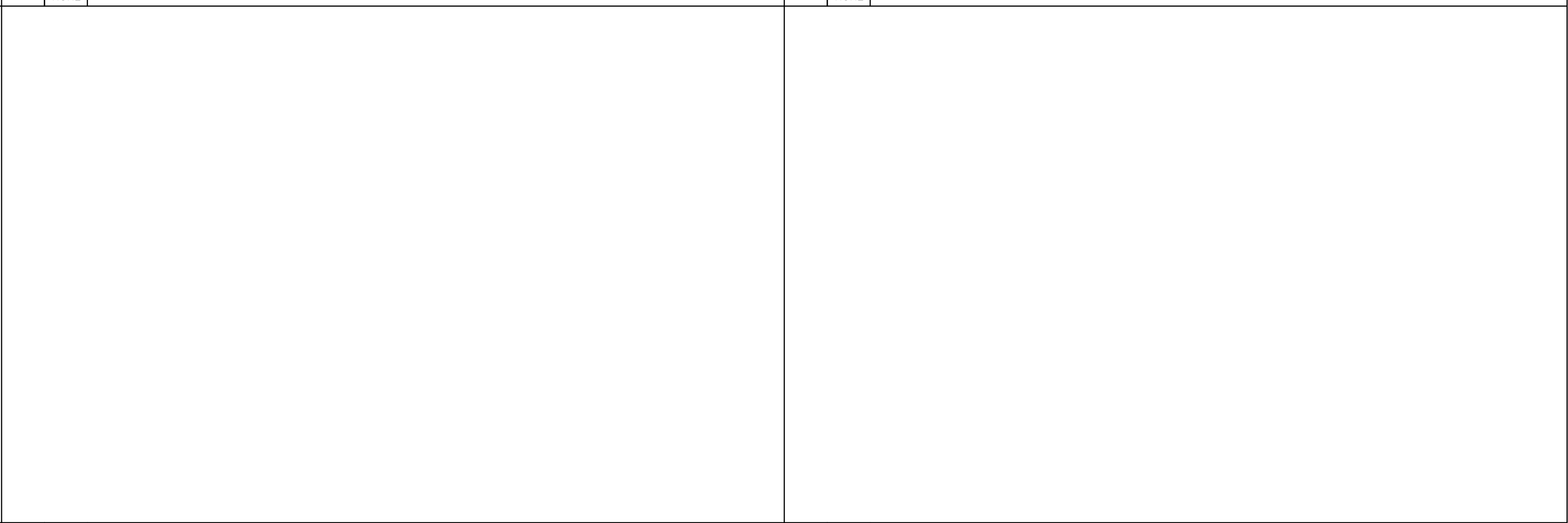
5 SCALE NONE THERMOSTAT MOUNTING DETAIL



6 SCALE NONE CEILING DIFFUSER DETAIL



7 SCALE NONE INLINE FAN MOUNTING DETAIL



SCALE NONE

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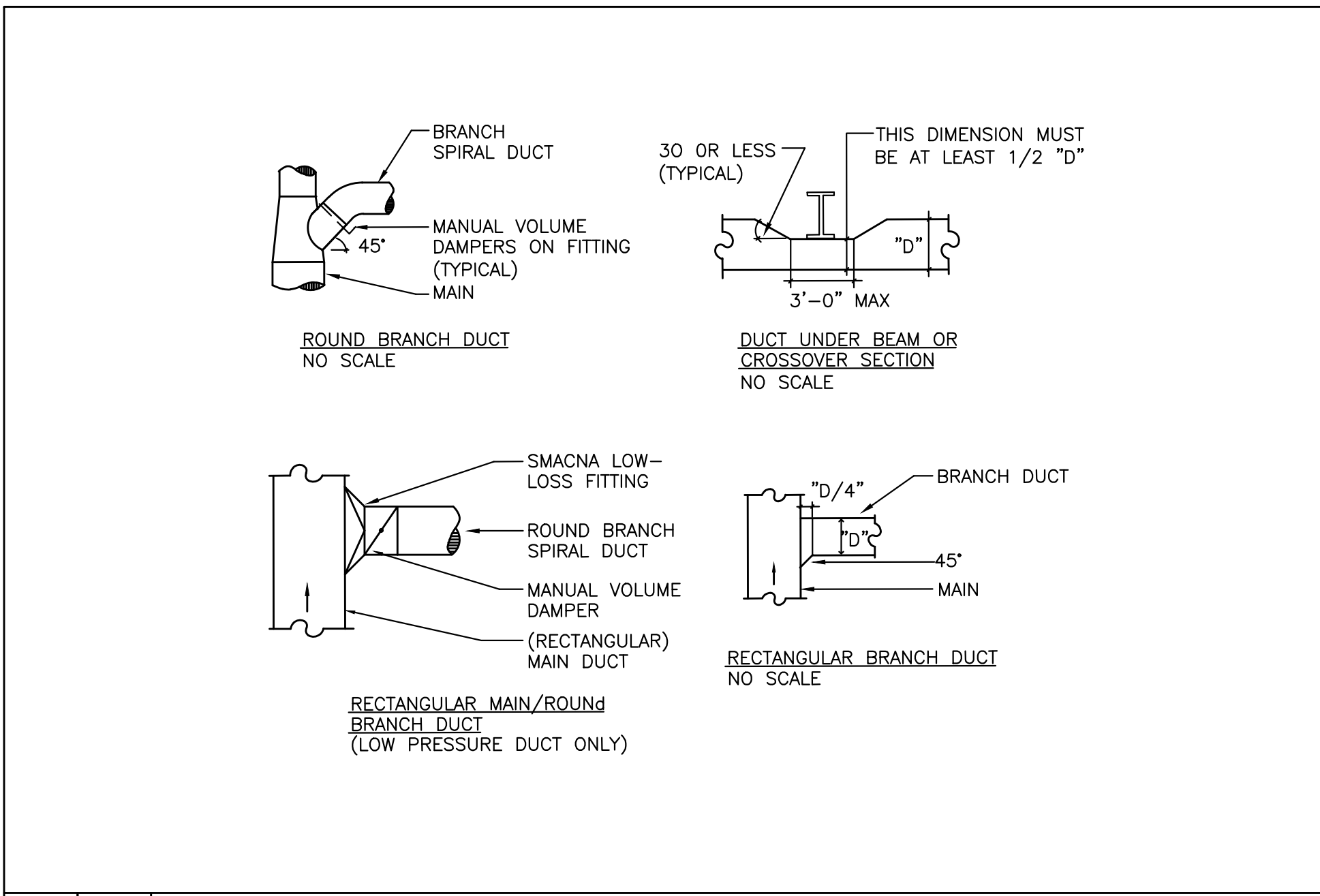
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MECHANICAL
DETAILS

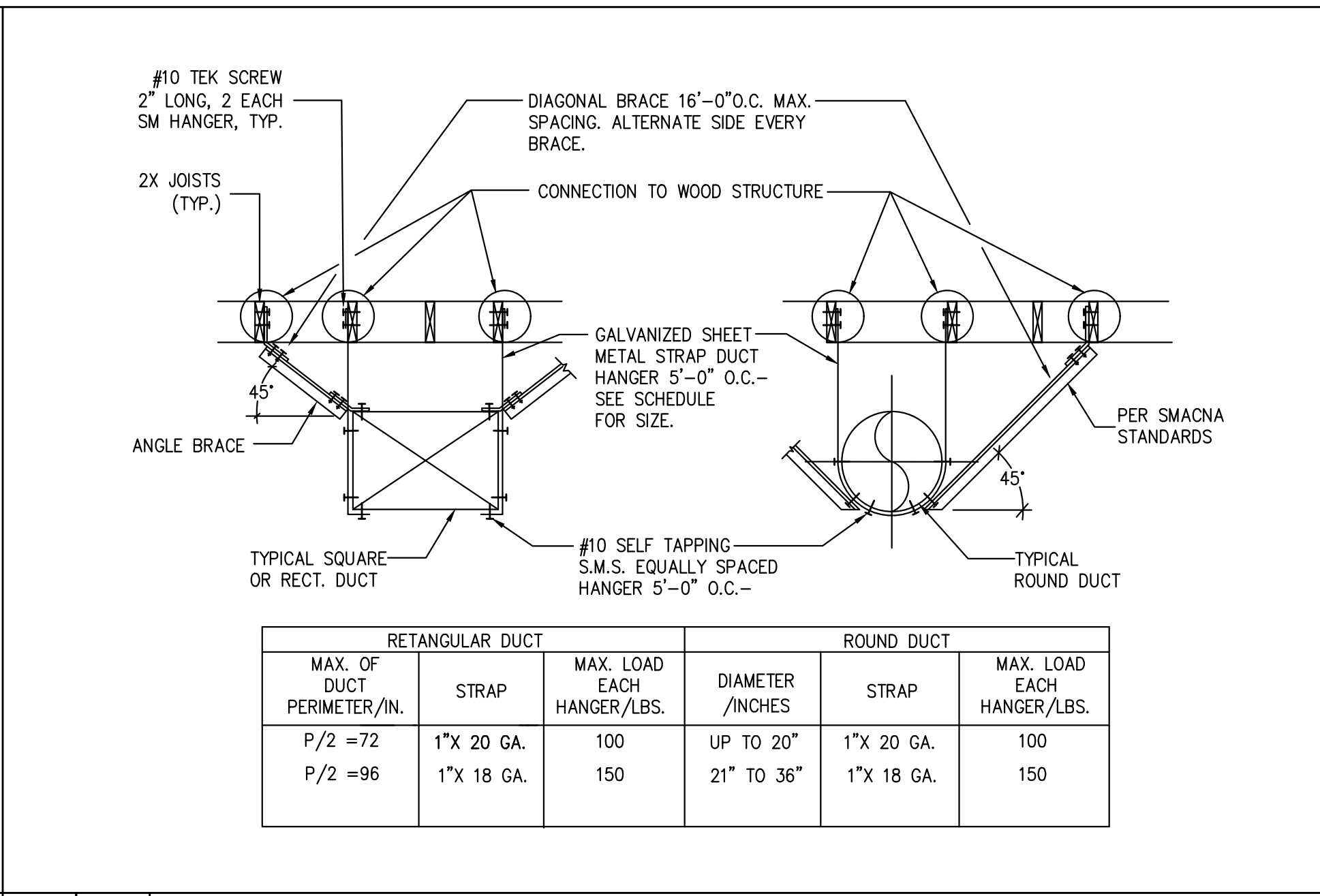
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DATE: 06.28.2023

M3.1

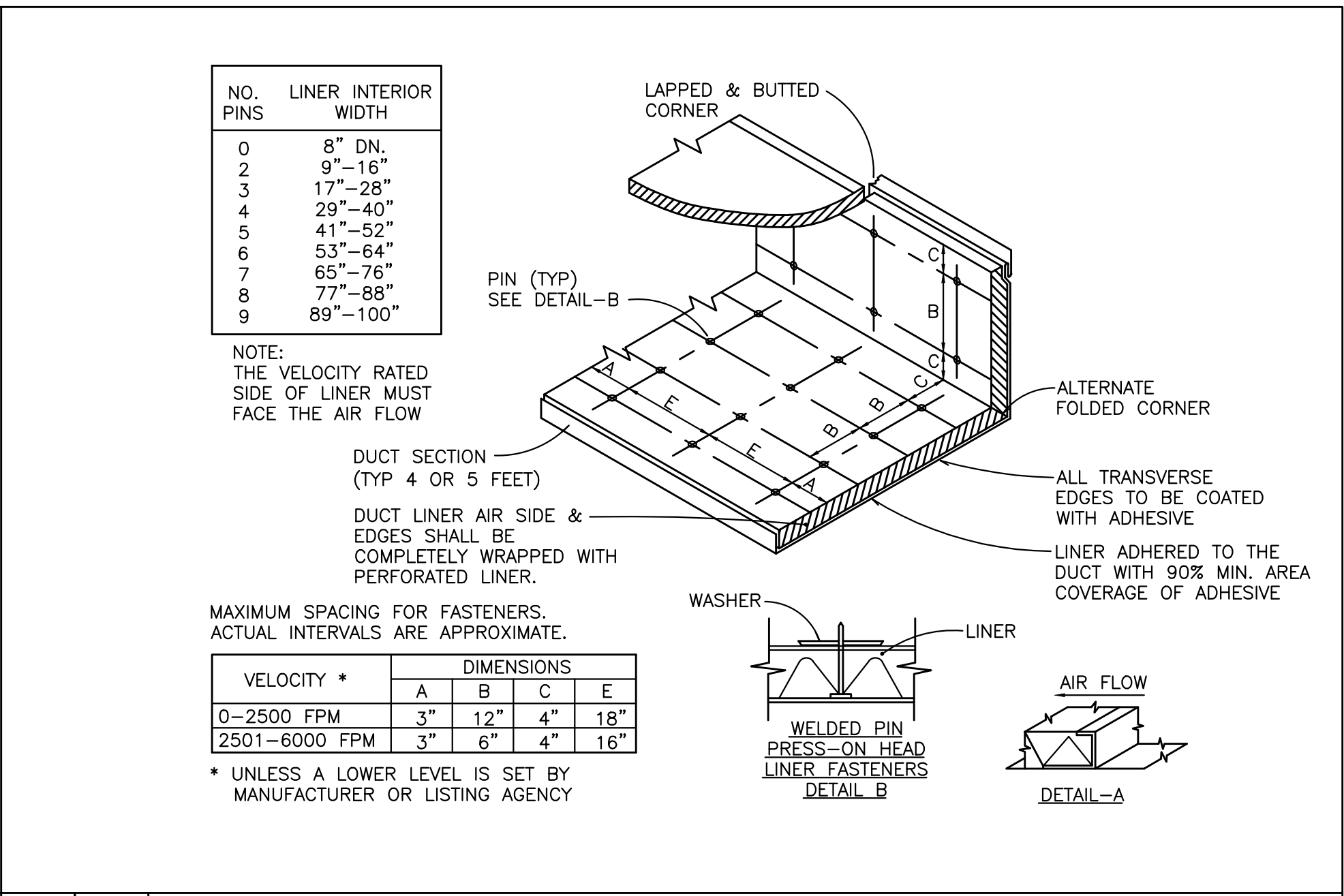
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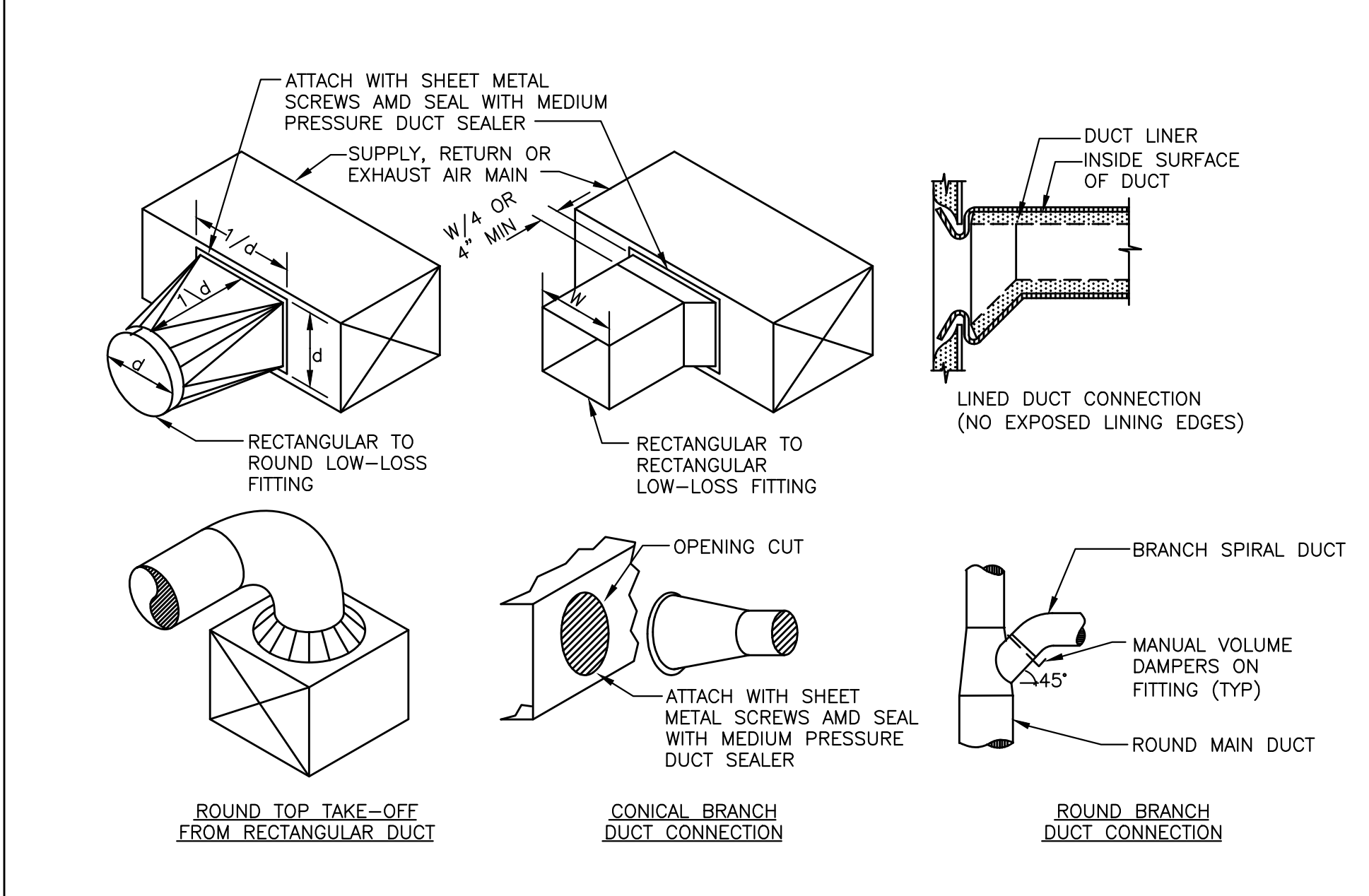
1 SCALE NONE DUCT INSTALLATION DETAIL



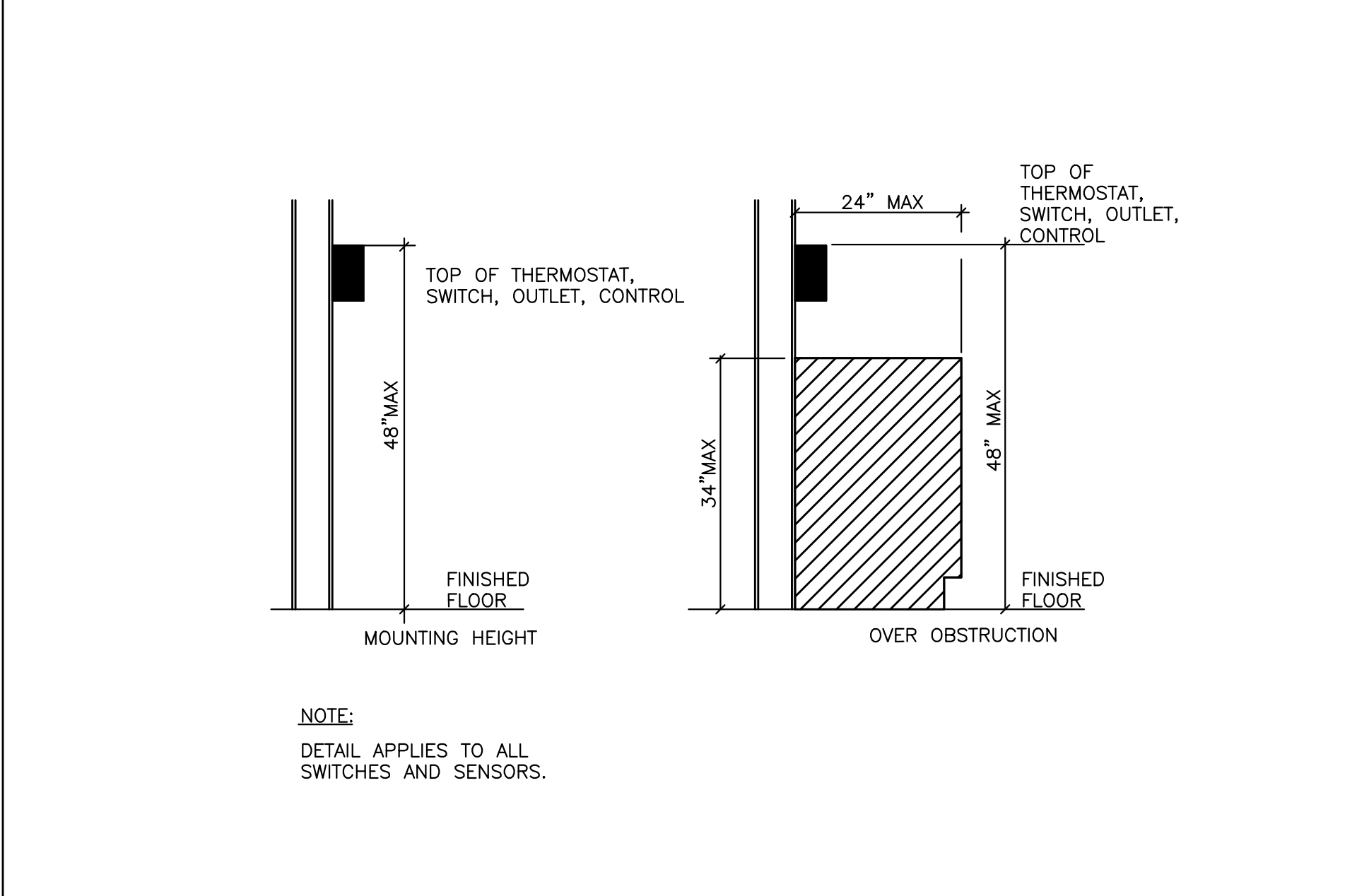
2 SCALE NONE DUCT SUPPORT DETAIL



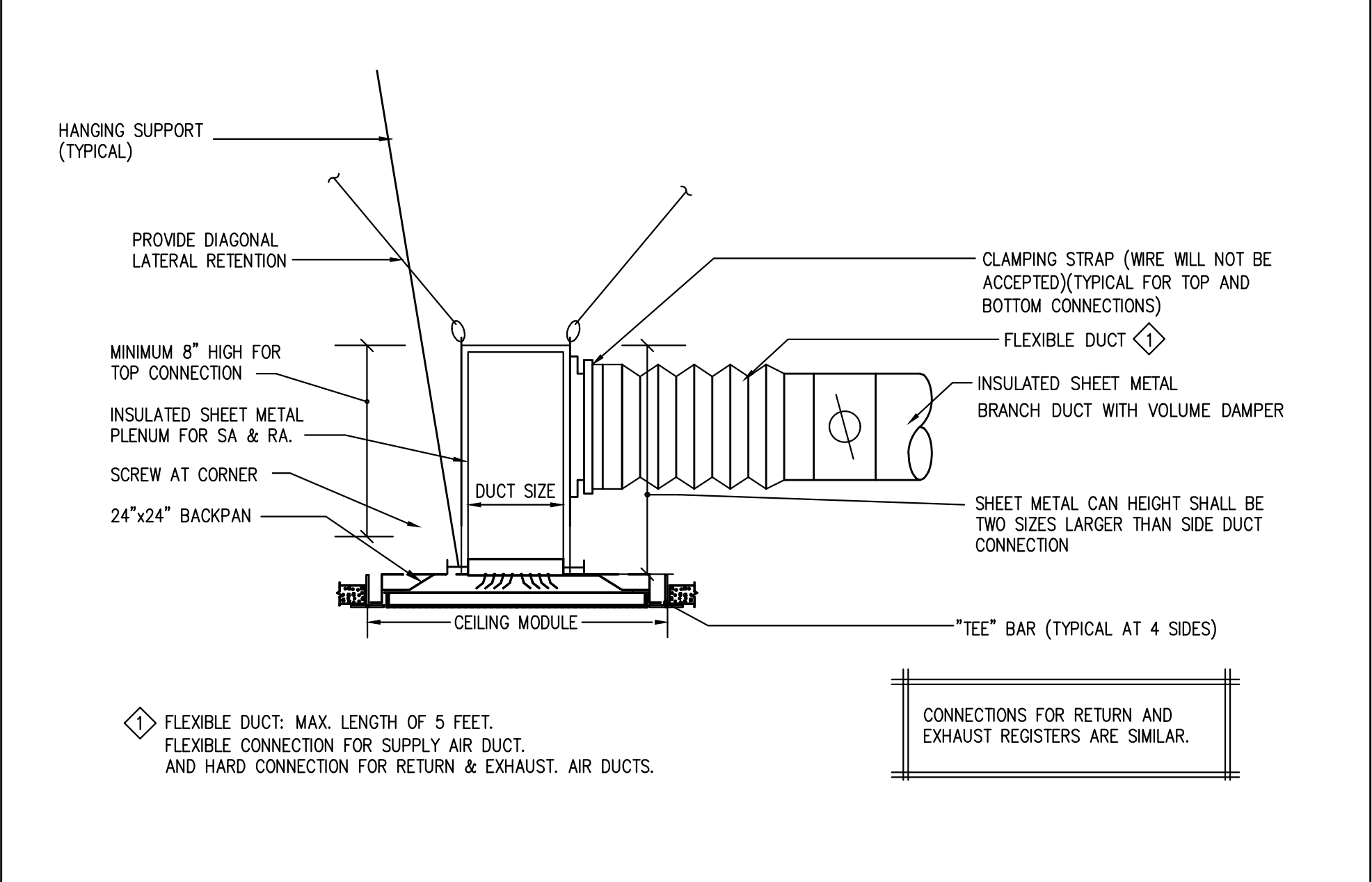
3 SCALE NONE DUCT LINING DETAIL



4 SCALE NONE BRANCH DUCTWORK CONNECTIONS



5 SCALE NONE THERMOSTAT MOUNTING DETAIL



6 SCALE NONE CEILING DIFFUSER DETAIL



SCALE	SCALE	SCALE
NONE	NONE	NONE

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MECHANICAL DETAILS
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M3.1

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FOR QUESTIONS, CALL THE
Inland Empire
REGION 102
PHONE: (951) 231-5102
EMAIL: reg102@captivaire.com

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

HOOD INFORMATION - JOB#6067442

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	ROW
1		5424 ND-2	CAPTIVEAIRE	7' 8"	600 DEG	I	HEAVY	225	1725			4"	14"	1725	1614	-0.711"	430 SS WHERE EXPOSED	ALONE	ALONE

HOOD INFORMATION

HOOD NO	TAG	TYPE	FILTER(S)			EFFICIENCY @ 7 MICRONS	QTY	LIGHT(S)			UTILITY CABINET(S)			FIRE SYSTEM	HOOD HANGING WEIGHT		
			QTY	HEIGHT	LENGTH			TYPE	WIRE GUARD	LOCATION	SIZE	FIRE SYSTEM	SIZE			ELECTRICAL	SWITCHES
1		CAPTRATE SOLO FILTER	5	20"	16"	85% SEE FILTER SPEC	3	L55 SERIES E26	NO	RIGHT	12"x54"x24"	TANK FS	4.0/4.0	SC-310110MA	1 LIGHT 1 FAN	YES	801 LBS

HOOD OPTIONS

HOOD NO	TAG	OPTION
1		LEFT END STANDOFF (FINISHED) 1" WIDE 54" LONG INSULATED.
		INSULATION FOR TOP OF HOOD.
		INSULATION FOR BACK OF HOOD.
		RIGHT WIDE VERTICAL END PANEL 42" TOP WIDTH, 36" BOTTOM WIDTH, 80" HIGH INSULATED 430 SS.

SPECIFICATION: CAPTRATE GREASE-STOP SOLO FILTER

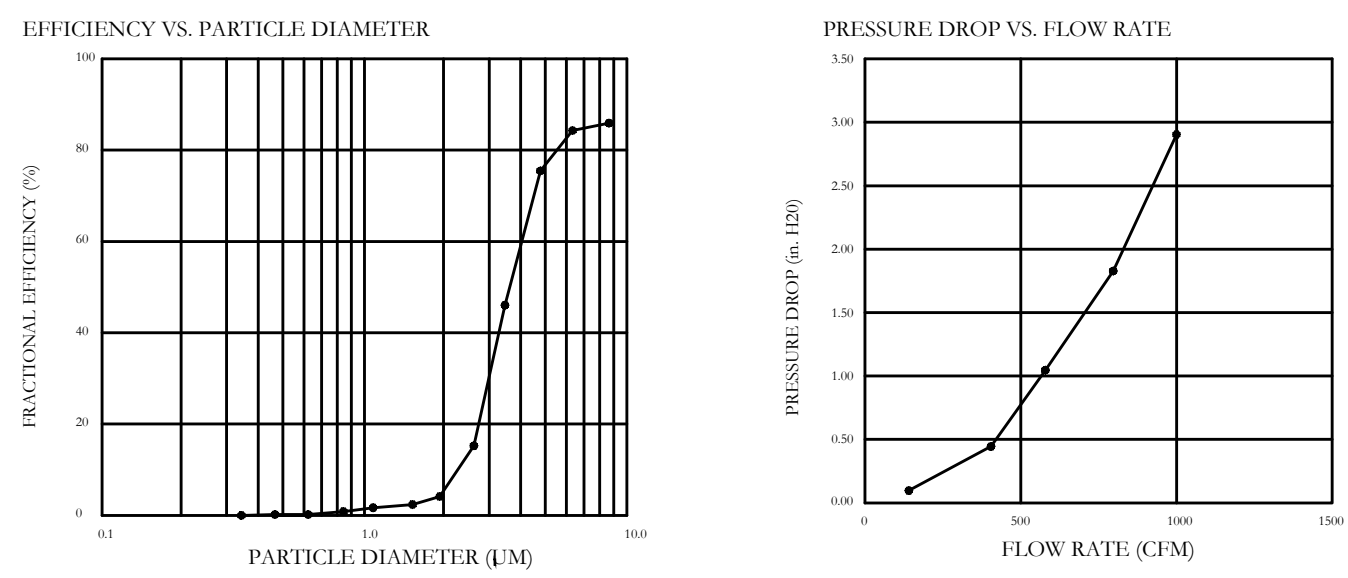
THE CAPTRATE GREASE-STOP SOLO FILTER IS A SINGLE-STAGE FILTER FEATURING A UNIQUE S-Baffle DESIGN IN CONJUNCTION WITH A SLOTTED REAR Baffle DESIGN, TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY.

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



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

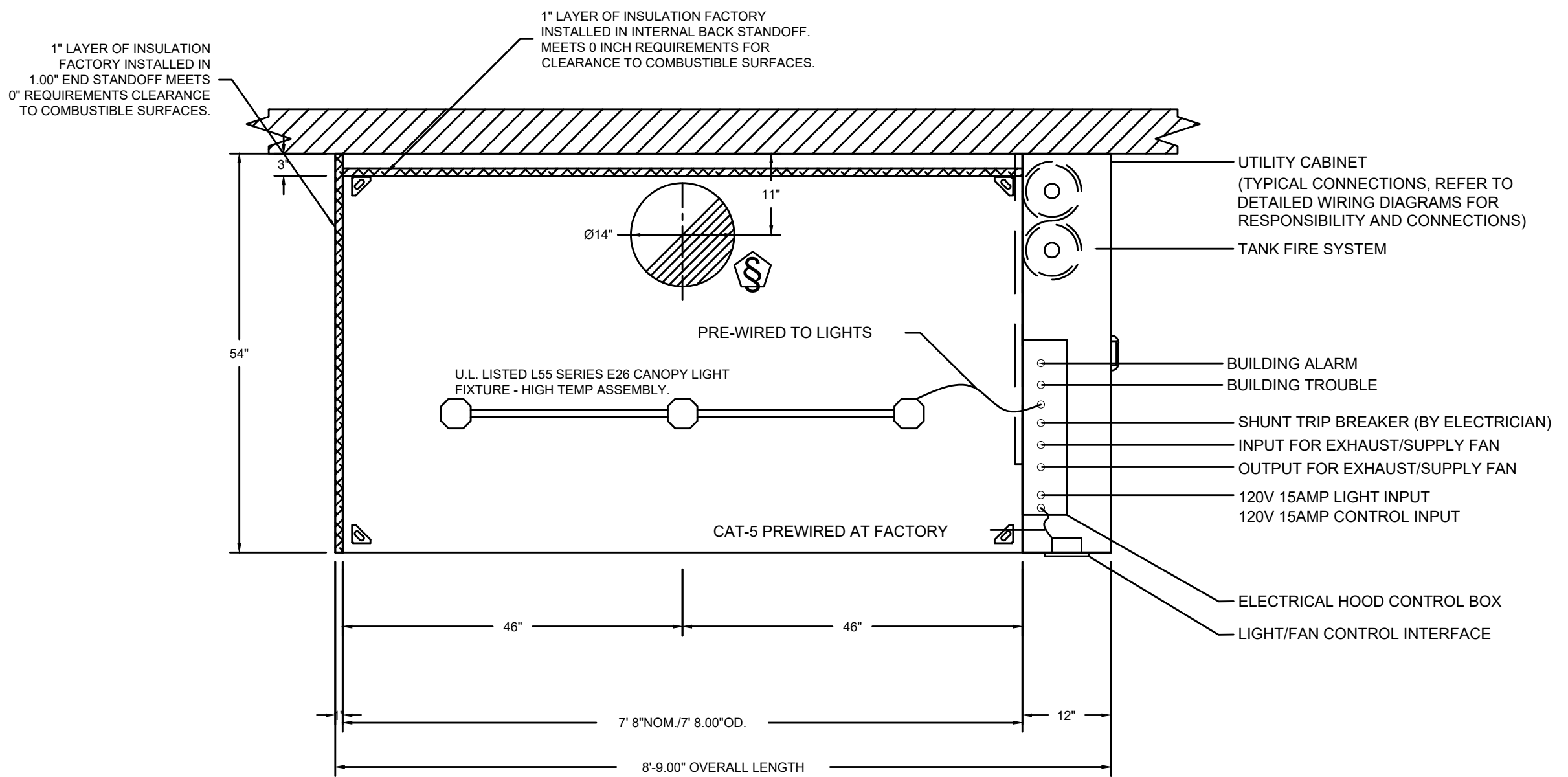


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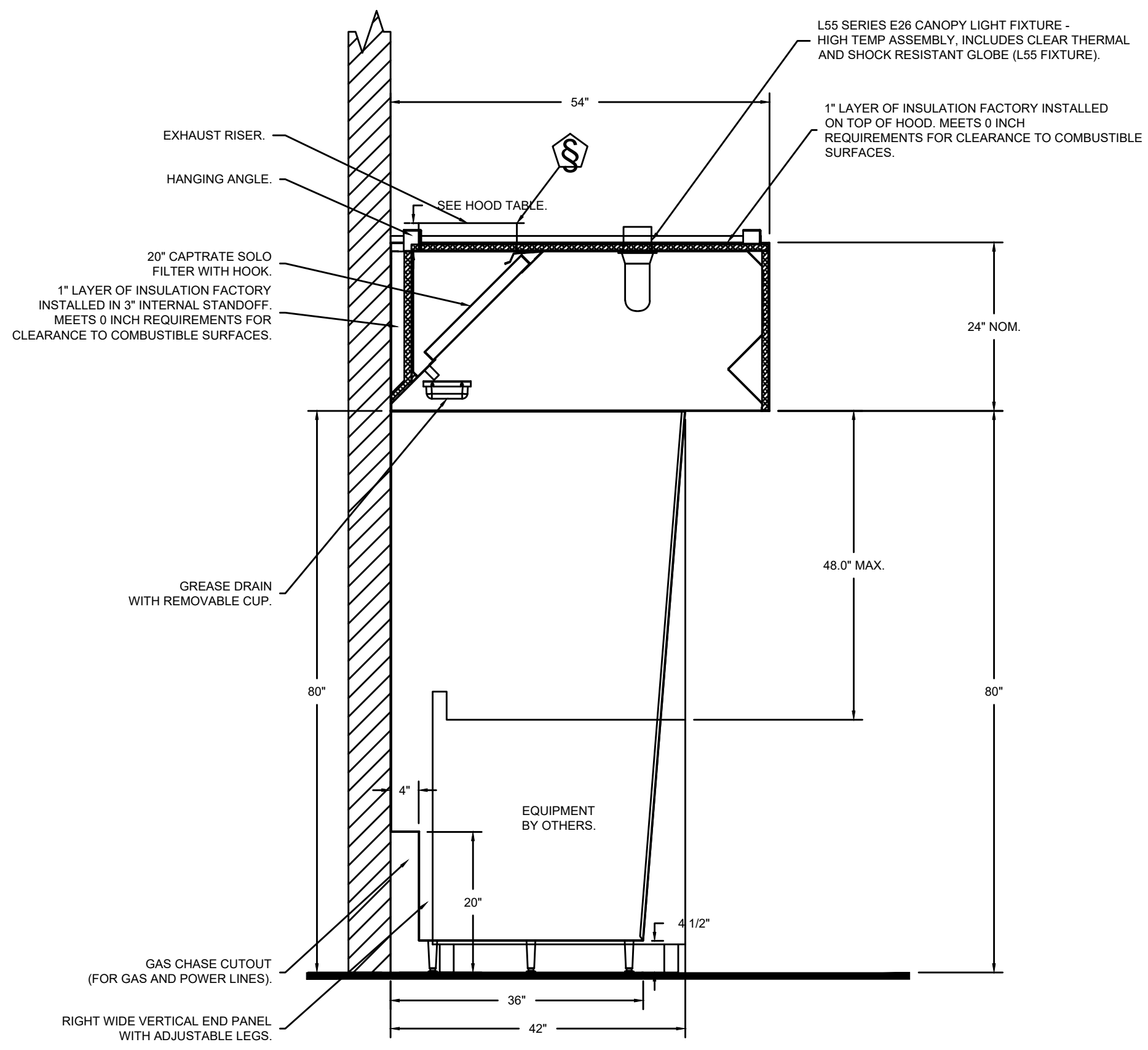
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PLAN VIEW - HOOD #1
7' 8.00" LONG 5424ND-2



SECTION VIEW - MODEL 5424ND-2
HOOD - #1

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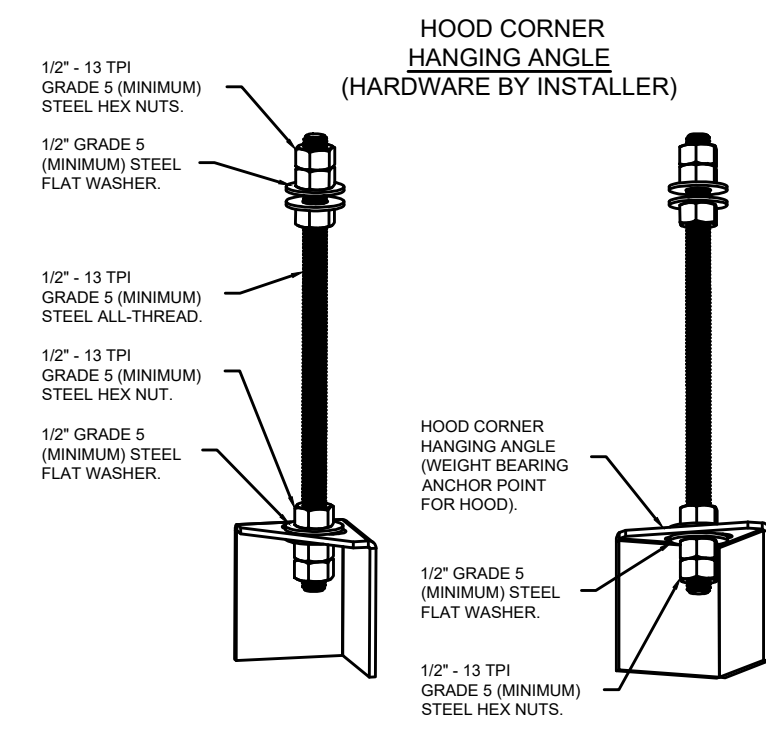
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 DWG.#: 6067442
 DRAWN BY: MR-102
 SCALE: 3/4" = 1'-0"
 MASTER DRAWING
 SHEET NO. 1

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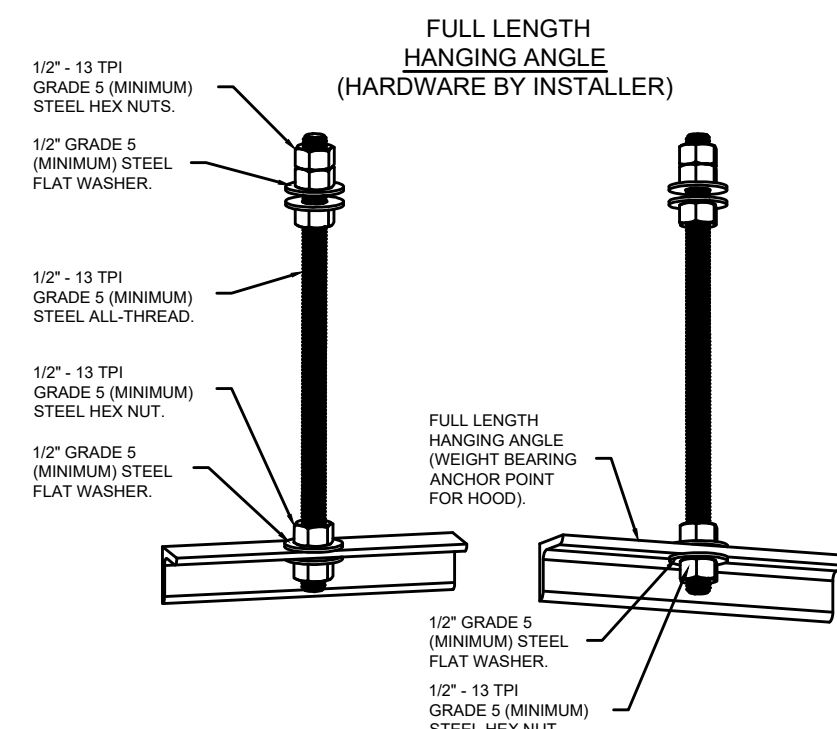
TITLE:
MECHANICAL HOOD DETAILS
 JOB NO: B2306-AA123
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 CHECKED: CZ
 SCALE: NONE
 DATE: 06.28.2023

M4.1



ASSEMBLY INSTRUCTIONS

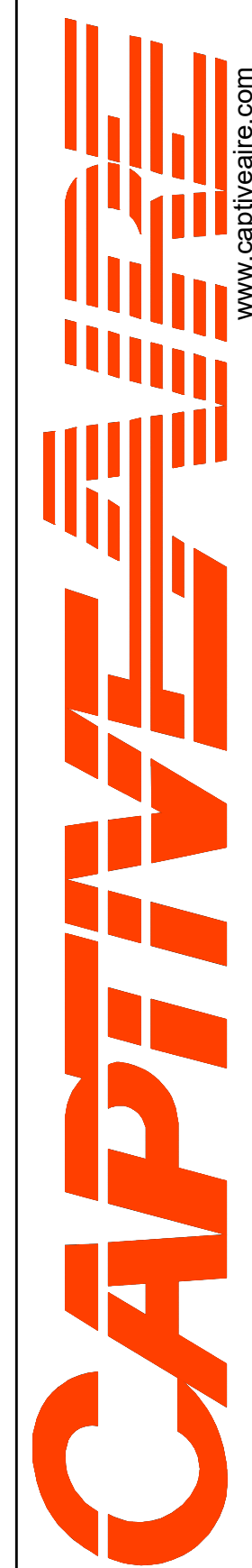
HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION BENEATH HOOD HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.



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 ABOVE CEILING ANCHORS. SINGLE HEX NUT BENEATH HANGING ANGLE IS ACCEPTABLE FOR FULL LENGTH HANGING ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

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DATE: 6/20/2023

DWG.#: 6067442

DRAWN BY: MR-102

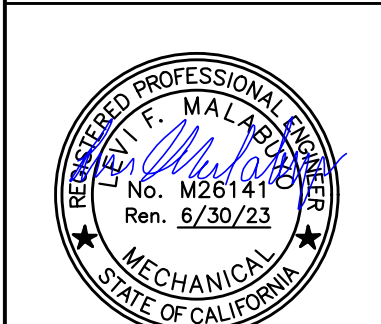
SCALE: 3/4" = 1'-0"

MASTER DRAWING

SHEET NO.
2

REV	DESCRIPTION	DATE

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TITLE:
**MECHANICAL
HOOD
DETAILS**

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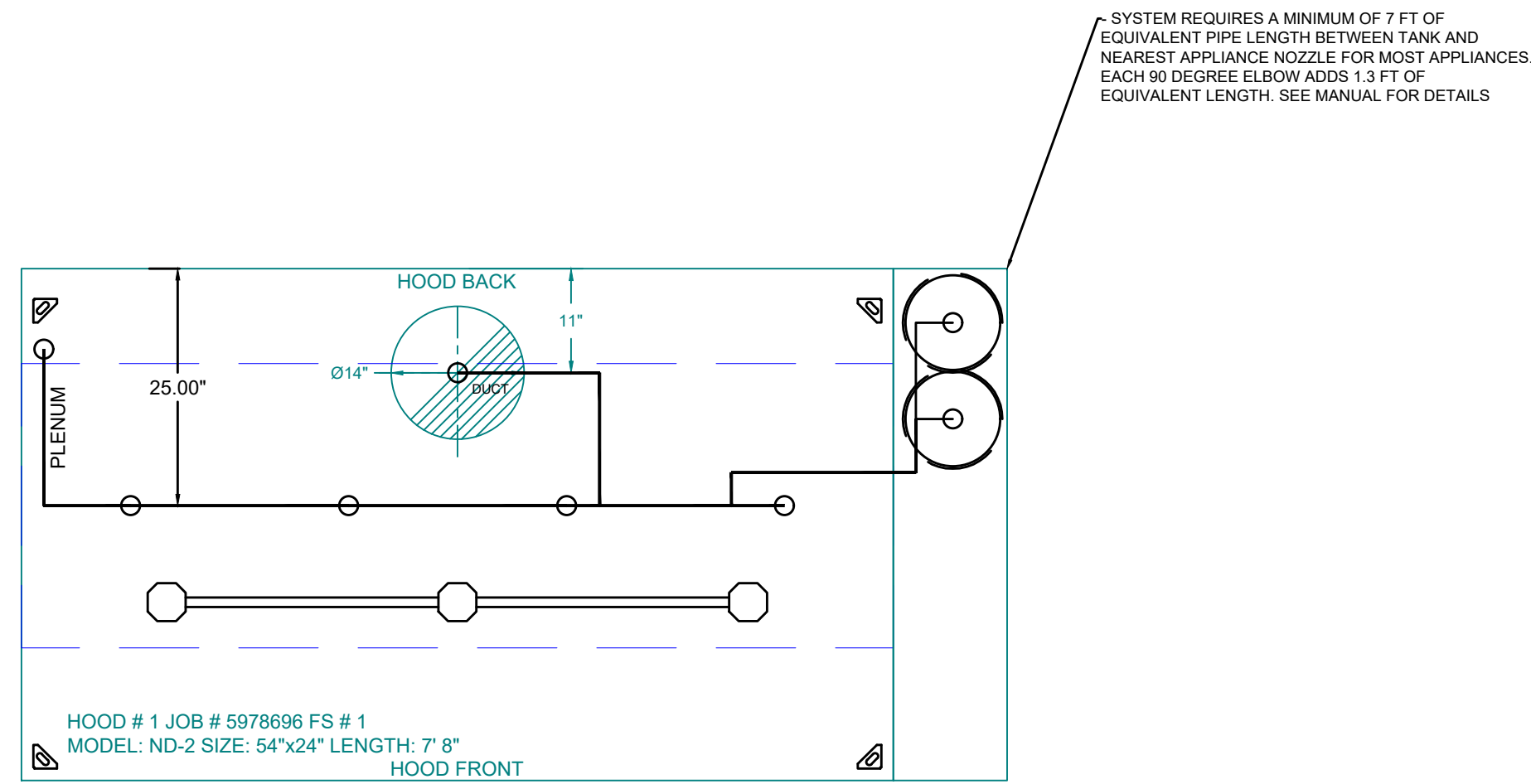
M4.2

FIRE SYSTEM INFORMATION – JOB#6067442

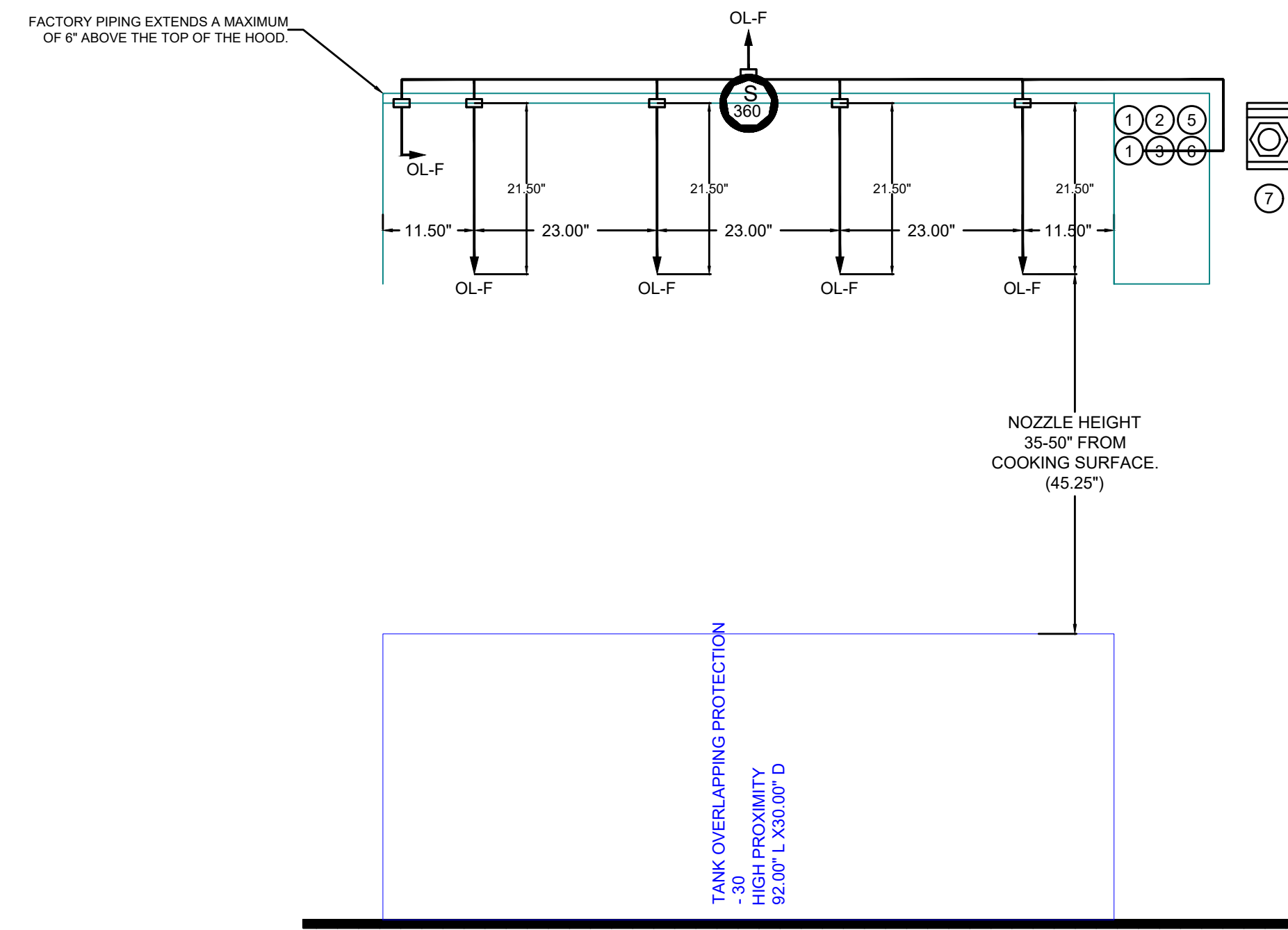
FIRE SYSTEM NO	TAG	TYPE	SIZE	FLOW POINTS	INSTALLATION	
					SYSTEM	LOCATION ON HOOD
1		TANK FS	4.0/4.0	28	FIRE CABINET RIGHT	RIGHT, HOOD 1

CAS VALVE(S)

FIRE SYSTEM NO	TAG	TYPE	SIZE	SUPPLIED BY
1		SC ELECTRICAL		CAPTIVEAIRE SYSTEMS



SYSTEM REQUIRES A MINIMUM OF 7 FT OF EQUIVALENT PIPE LENGTH BETWEEN TANK AND NEAREST APPLIANCE NOZZLE FOR MOST APPLIANCES. EACH 90 DEGREE ELBOW ADDS 1.3 FT OF EQUIVALENT LENGTH. SEE MANUAL FOR DETAILS



NOTES

- FIELD PIPE DROPS AS SHOWN
- PIPING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS.
- FIELD INSTALLED DROP: FACTORY WILL PROVIDE QTY 2 60IN LONG PIECES OF CHROME PLATED PIPING SHIPPED LOOSE TO BE FIELD-INSTALLED.
- SHIP LOOSE DROP: FACTORY WILL PROVIDE THE EXACT CHROME PIPE LENGTH NEEDED SHIPPED LOOSE TO BE FIELD-INSTALLED.
- RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVEING, SALAMANDERS, ETC.
- OVERLAPPING COVERAGE SHALL NOT BE USED ON ANY APPLIANCE WITH AN OBSTRUCTION.
- IF APPLICABLE, EXTENDED PRE-PIPED DROPS ARE SHIPPED LOOSE.
- FACTORY PIPING EXTENDS A MAXIMUM OF 6\" ABOVE THE TOP OF THE HOOD.

- APPLIANCE DIMENSIONS LISTED REPRESENT THE COOKING SURFACE SIZE, NOT THE OVERALL APPLIANCE SIZE.

- THIS FIRE SYSTEM COMPLIES WITH U.L. 300 REQUIREMENTS.

- OL-F NOZZLE PART NUMBER REPLACES 3070-3/8H-10-SS
 JOB # : 5978696.
 JOB NAME : SABOR PIRI PIRI - NATIONAL CITY REV.1.

SYSTEM SIZE: TANK-SP-2 TOTAL FP REQUIRED: 28.
 HOOD # 1 7' 8.00" LONG x 54" WIDE x 24" HIGH.
 RISER # 1 SIZE: 14" DIA.
 HOOD # 1 METAL BLOW-OFF CAPS INCLUDED.

- HEAVY-DUTY APPLIANCES (RATED 600°F) WILL REQUIRE AN ADDITIONAL DOWNSTREAM FIRESTAT IN THE EVENT THAT THE DUCTWORK CONTAINS ANY HORIZONTAL RUNS OVER 25 FT IN LENGTH.
- MEDIUM TO LIGHT-DUTY APPLIANCES (RATED 450°F) WILL NOT REQUIRE ANY ADDITIONAL DOWNSTREAM DETECTION.

LEGEND – FIRE CABINET TANK SYSTEM

- 4 GALLON TANK.
- PRIMARY ACTUATOR RELEASE.
- SECONDARY ACTUATOR RELEASE.
- PRESSURE SUPERVISION SWITCH.
- PRIMARY HOSE ASSEMBLY.
- SECONDARY HOSE ASSEMBLY.
- REMOTE MANUAL ACTUATION DEVICE.

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 Inland Empire
 3002 Dow Avenue, Suite 202, Tustin, CA, 92780 PHONE: (951) 231-5102 EMAIL: reg.102@captiveaire.com

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JOB NO:	B2306-AA123
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SCALE:	NONE
DATE:	06.28.2023

M4.3

EXHAUST FAN INFORMATION – JOB#6067442

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		1	DU180HFA	CAPTIVEAIRE	1725	1.000	966	TEFC,PREMIUM	1.000	0.6060	3	208	3.9	398 FPM	153	9.5

FAN OPTIONS

FAN UNIT NO	TAG	QTY	DESCRIPTION
1		1	GREASE BOX
1		1	EXHAUST FAN HEAT BAFFLE
1		1	2 YEAR PARTS WARRANTY

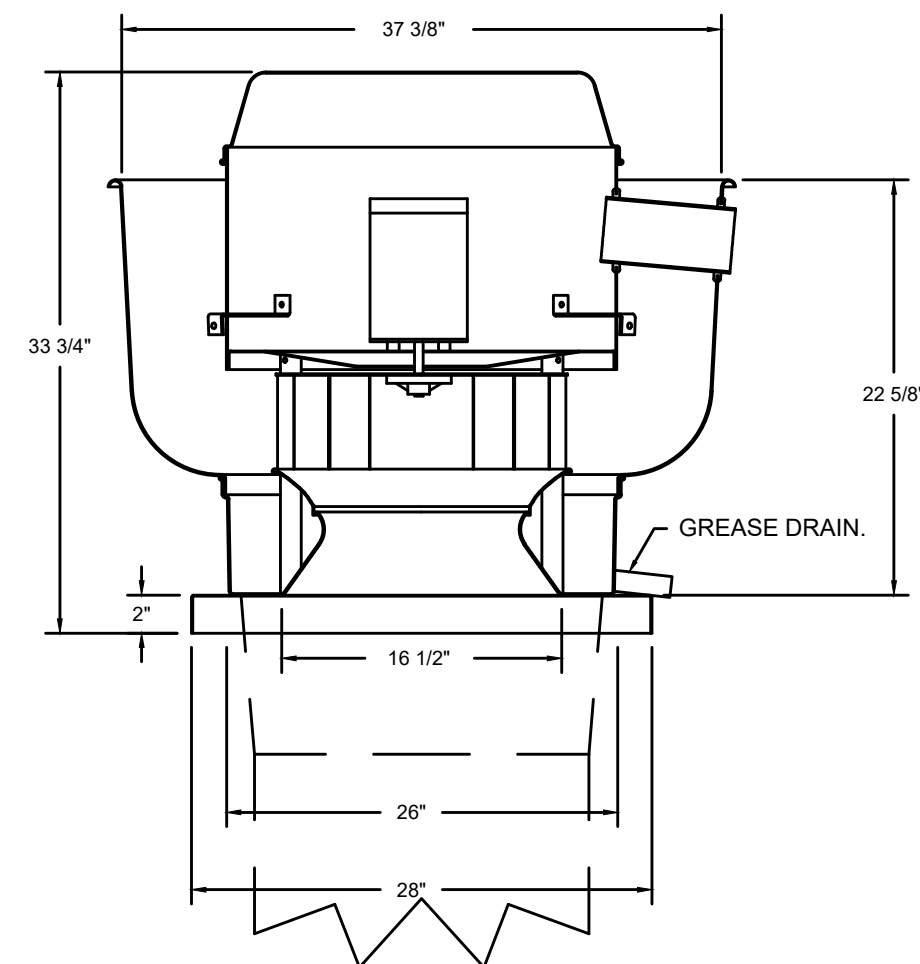
FAN ACCESSORIES

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

CURB ASSEMBLIES

NO	ON FAN	WEIGHT	ITEM	SIZE
1	#1	41 LBS	CURB	26.500"W X 26.500"L X 20.000"H VENTED HINGED.

FAN #1 DU180HFA - EXHAUST FAN



TOP VIEW

FEATURES:

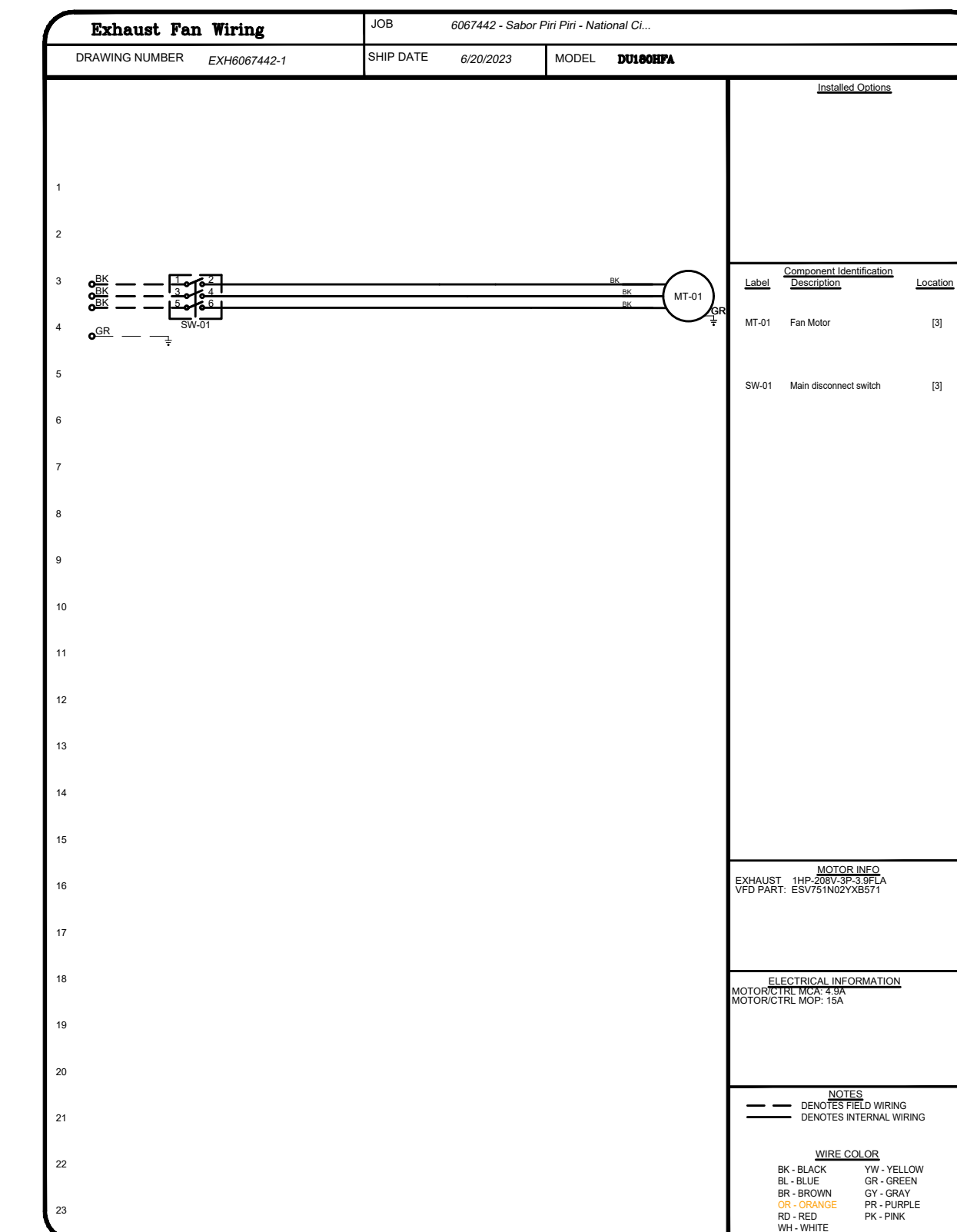
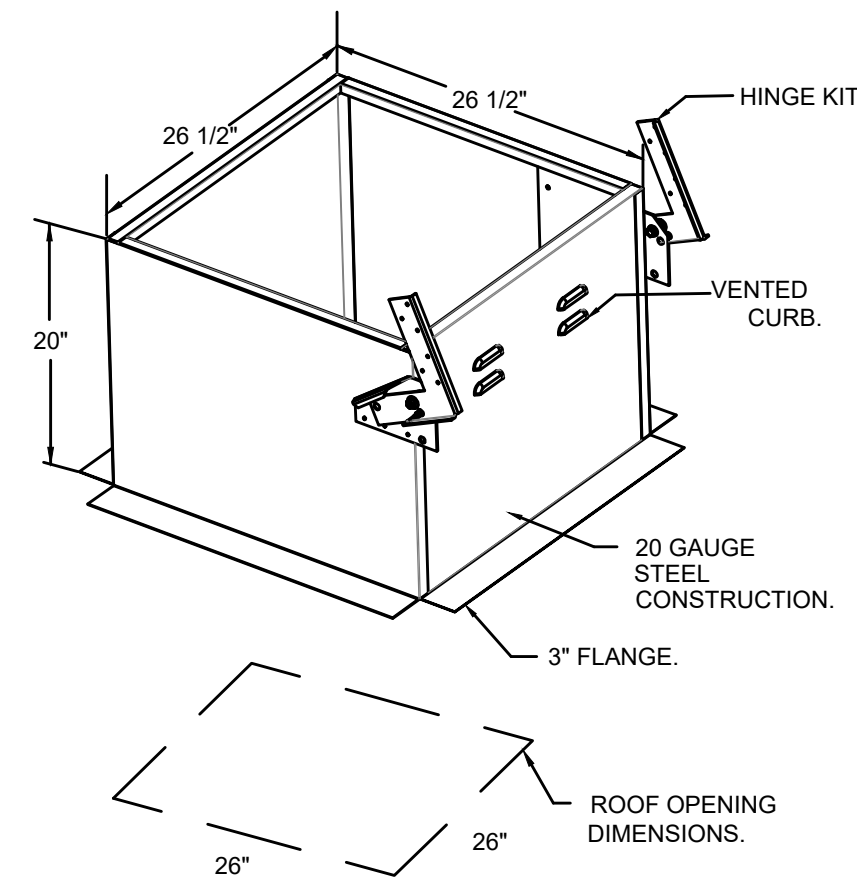
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL705 AND UL762 AND IULC-8645
- VARIABLE SPEED CONTROL.
- INTERNAL WIRING.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
- HIGH HEAT OPERATION 300°F (149°C).
- GREASE CLASSIFICATION TESTING.
- NEMA 3R SAFETY DISCONNECT 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.
- EXHAUST FAN HEAT BAFFLE.
- 2 YEAR PARTS WARRANTY.



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 NATIONAL CITY, CA, 91950

DATE: 6/20/2023
 DWG.#: 6067442
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 SCALE: 3/4" = 1'-0"
 MASTER DRAWING
 SHEET NO. 5

REV	DESCRIPTION	DATE

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TITLE:
MECHANICAL HOOD DETAILS

JOB NO: B2306-AA123
 DRAWN: CL
 CHECKED: CZ
 SCALE: NONE
 DATE: 06.28.2023

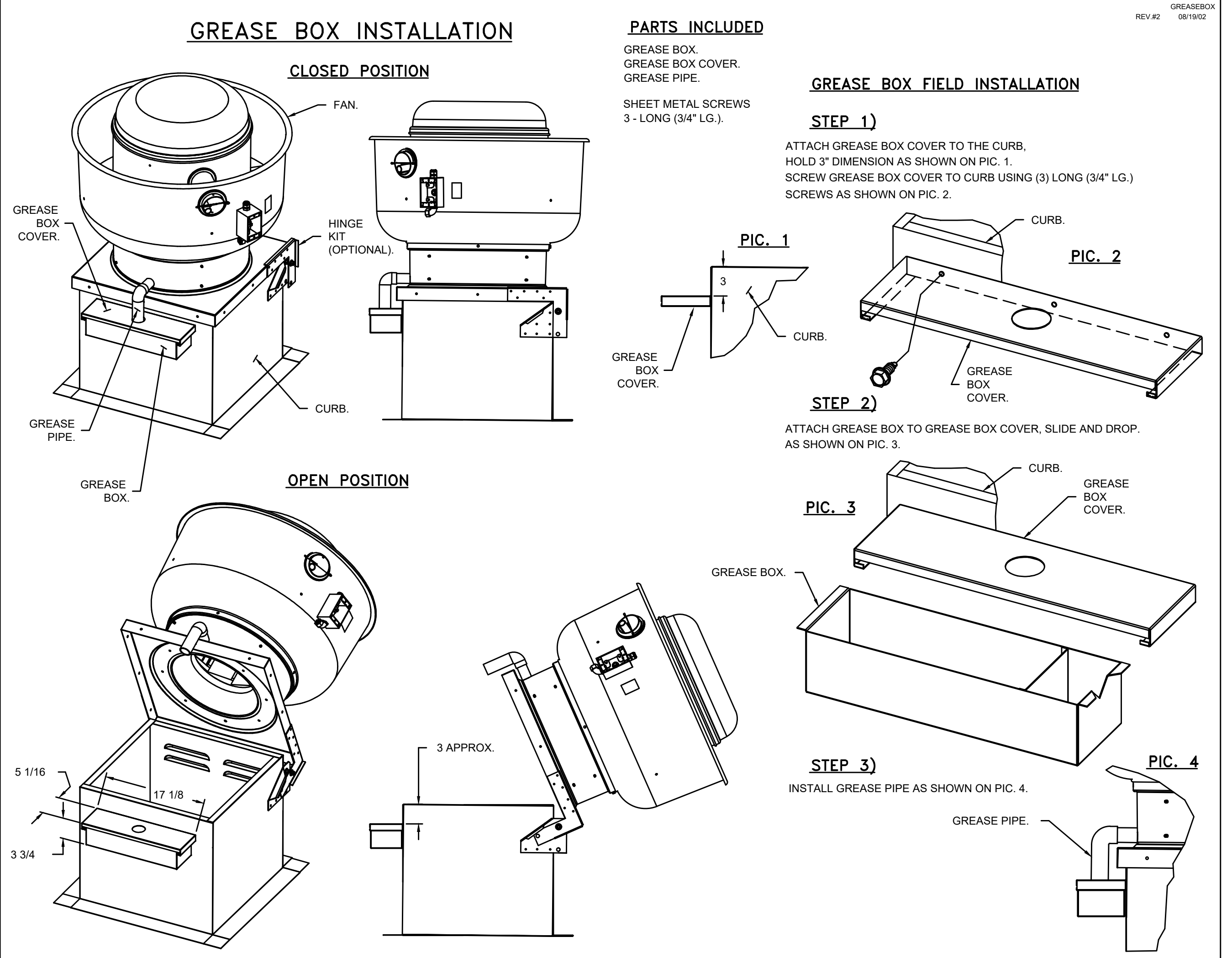
M4.4

GREASE DUCT & CHIMNEY SPECIFICATIONS:
 PROVIDE GREASE DUCT EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW"
 ROUND 20 GAUGE 430 STAINLESS STEEL DUCTWORK. MODEL "DW"
 IS LISTED TO UL-1978 AND IS INSTALLED USING "V" CLAMP LOCKING
 CONNECTIONS SEALED WITH 3M FIRE BARRIER 2000 PLUS. MODEL "DW"
 DOES NOT REQUIRE WELDING PROVIDING IT HAS BEEN INSTALLED PER
 THE MANUFACTURES INSTALLATION GUIDE.
 PROVIDE RATED ACCESS DOORS AT EVERY CHANGE IN DIRECTION AND EVERY 12' ON CENTER. PER
 MANUFACTURES LISTING MODEL "DW" HORIZONTAL RUNS LESS THAN 75 FT. CAN BE SLOPED 1/16" PER 12",
 HORIZONTAL RUNS MORE THAN 75 FT. CAN BE SLOPED 3/16" PER 12".
 DUCT SHOULD BE SLOPED AS MUCH AS POSSIBLE TO REDUCE THE CHANCE OF GREASE ACCUMULATION IN
 HORIZONTAL RUNS.

IF THE DUCT OR CHIMNEY IS WITHIN 18 INCHES OF COMBUSTIBLE MATERIAL, PROVIDE UL-2221 OR UL-103 HT
 LISTED DOUBLE WALL GREASE DUCT OR DOUBLE WALL CHIMNEY EQUAL TO CAPTIVEAIRE SYSTEMS MODEL
 "DW- 2R, 2R TYPE HT, 3R, OR 3Z" ROUND 20 GAUGE 430 STAINLESS INNER DUCT INSULATED WITH A 24 GAUGE
 430 STAINLESS OUTER SHELL.

CUSTOMER APPROVAL TO MANUFACTURE:

APPROVED AS NOTED	<input type="checkbox"/>
APPROVED WITH NO EXCEPTION TAKEN	<input type="checkbox"/>
REVISE AND RESUBMIT	<input type="checkbox"/>
SIGNATURE _____	
YOUR TITLE _____	DATE _____



REVISIONS

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CAPTIVEAIRE
 Inland Empire
 www.captiveaire.com
 3002 Dow Avenue, Suite 202, Tustin, CA, 92780 PHONE: (951) 231-1512 EMAIL: reg.102@captiveaire.com

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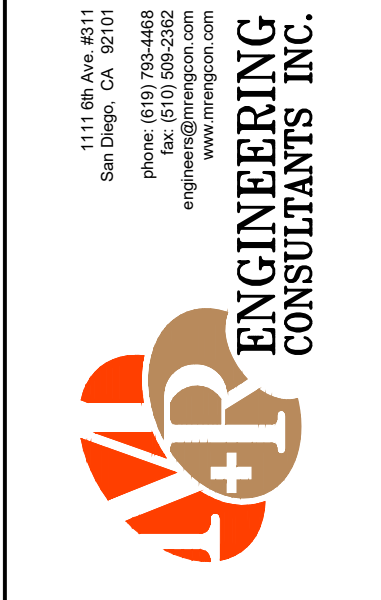
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**ENGINEERING
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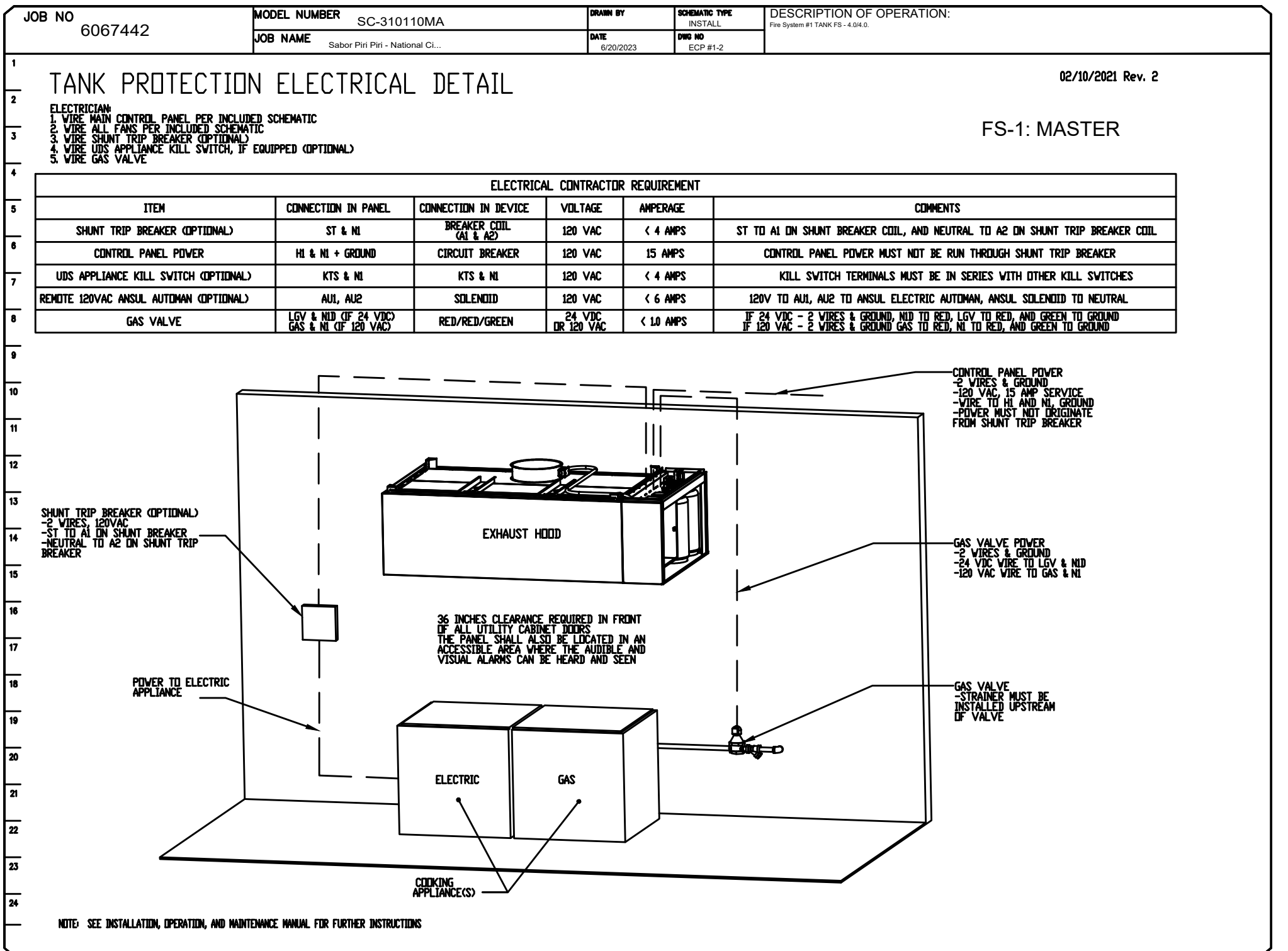
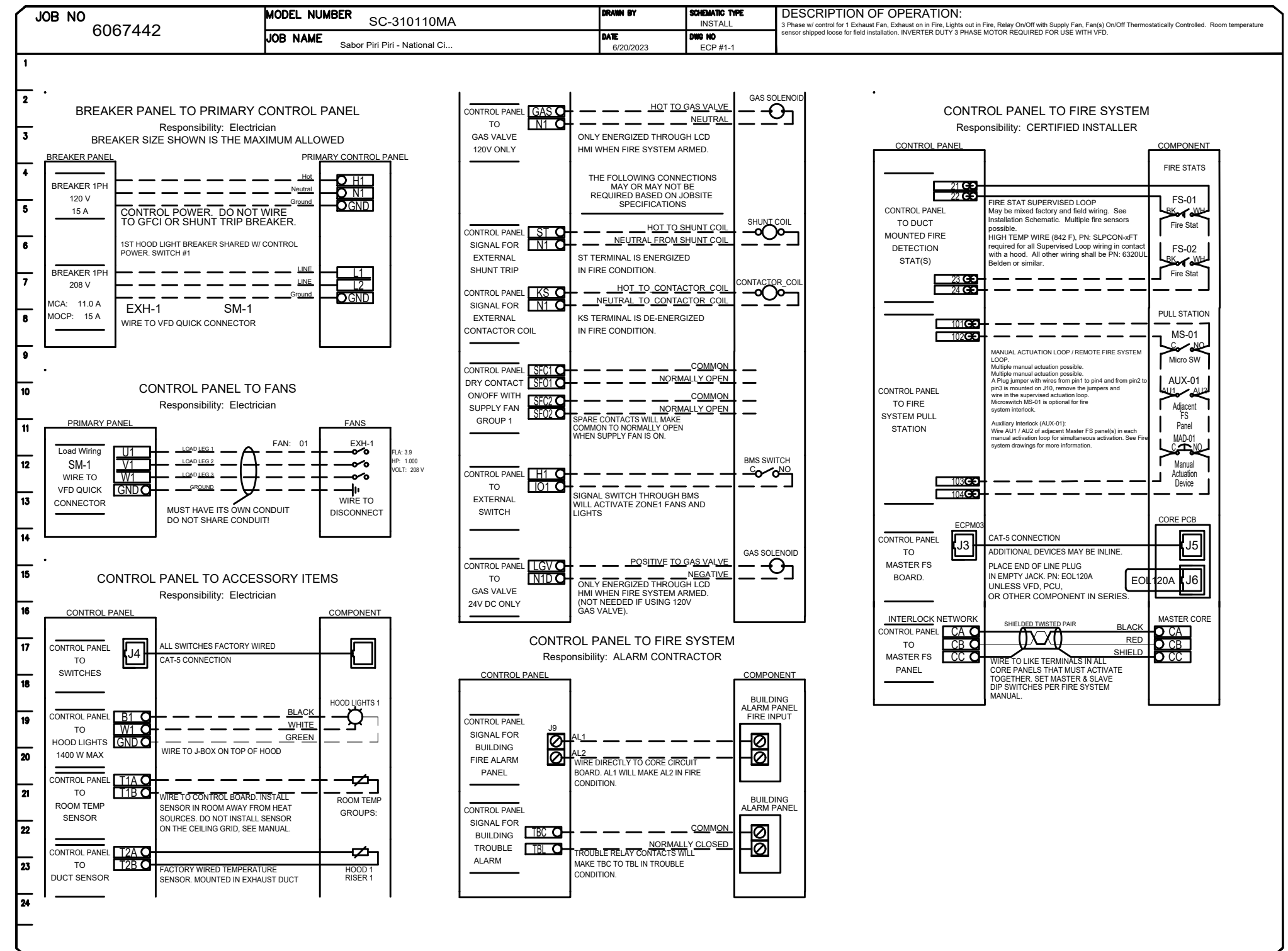
TITLE:
**MECHANICAL
 HOOD
 DETAILS**

JOB NO: B2306-AA123
 DRAWN: CL
 CHECKED: CZ
 SCALE: NONE
 DATE: 06.28.2023

M4.5

ELECTRICAL PACKAGE -- JOB#6067442

NO	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED				
				LOCATION	QUANTITY		TYPE	HP	VOLT	FLA	
1		SC-310110MA	UTILITY CABINET RIGHT	UTILITY CABINET RIGHT	1 LIGHT	SMART CONTROLS THERMOSTATIC CONTROL W/ RELAY ON/OFF WITH SUPPLY	EXHAUST	3	1,000	208	3.9



DUCT TEMPERATURE SENSOR

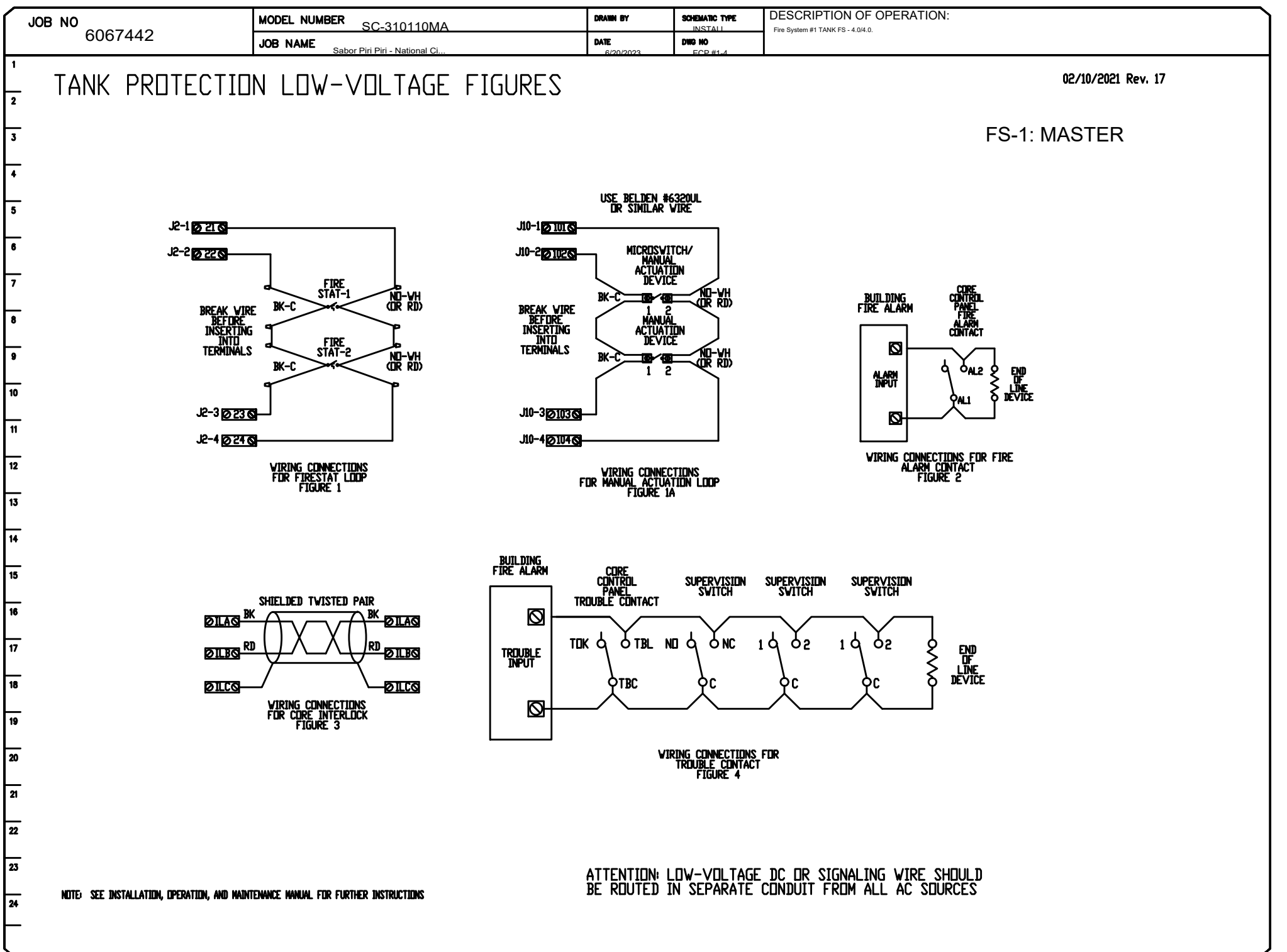
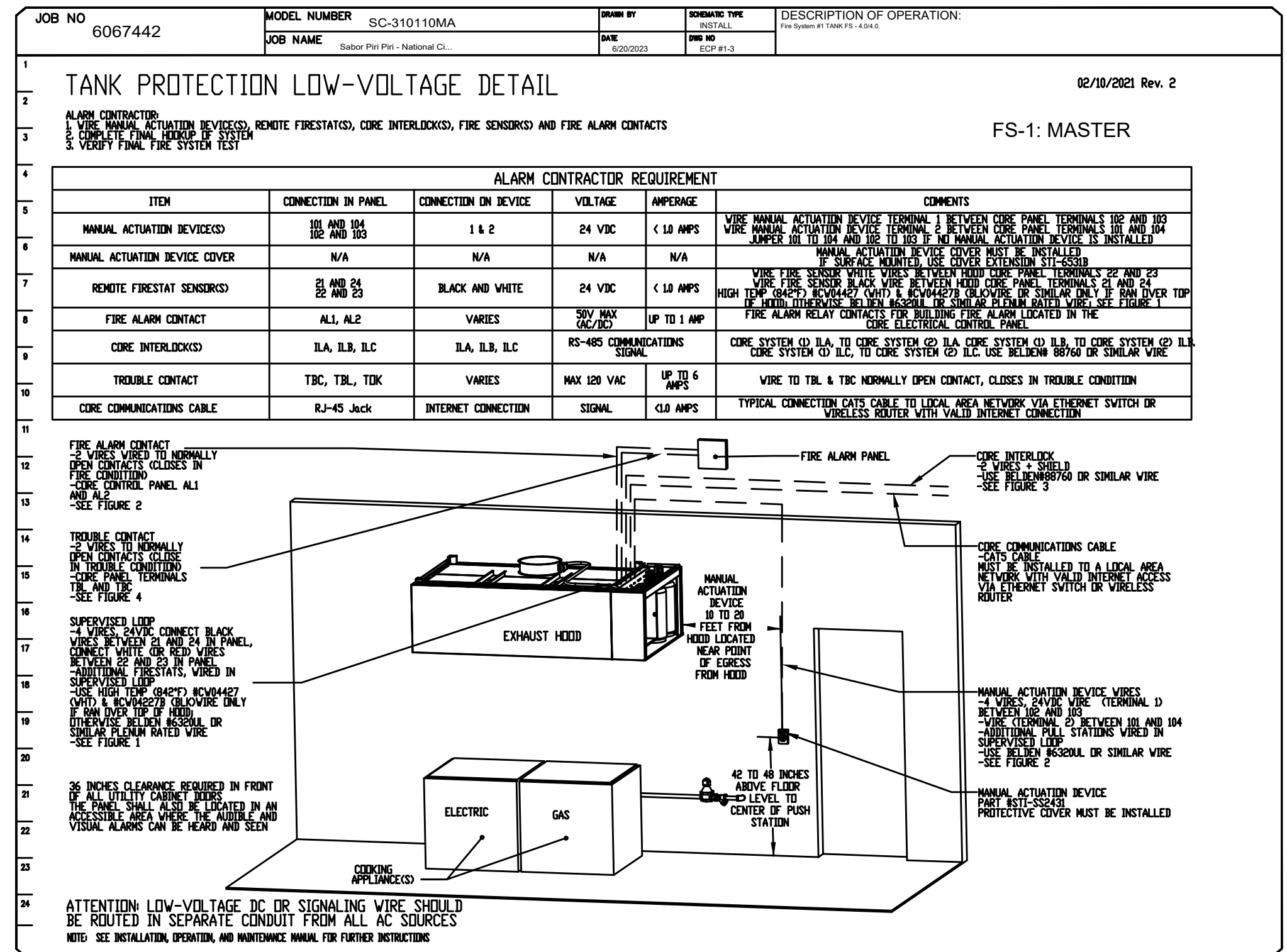
Provides exhaust air temperature for proper hood control operation. For all installations excluding a single hood with factory risers and a hood mounted panel, duct mounted temperature sensors will need to be field wired. 2-wire 18 AWG plenum rated thermistor cable must be used.

ROOM TEMPERATURE SENSOR

Provides room override based on temperature differential between the room and duct. Installed by electrician on a wall, 5'-8" off the finished floor, in the space but not directly under the hood or close to an appliance (including the electrical control box) so the reading is accurate for space.

HOOD CONTROL INTERFACE

The LCD interface provides user control and hood status. The facplate is connected to the hood control panel through CAT-5 cable. A facplate has 2 RJ-45 connectors. One connects to port J4 or J5 in the hood control panel and the other will typically be occupied by a RJ-45 end-of-line terminator.



REVISIONS

NO.	DESCRIPTION	DATE

CAPTIVE
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Sabor Piri Piri - National City rev.3
 NATIONAL CITY, CA, 91950

DATE: 6/20/2023
DWG.#: 6067442
DRAWN BY: MR-102
SCALE: 3/4" = 1'-0"
MASTER DRAWING
SHEET NO. 8

REV	DESCRIPTION	DATE

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 800 B AVENUE SUITE 804
 NATIONAL CITY CA 91950

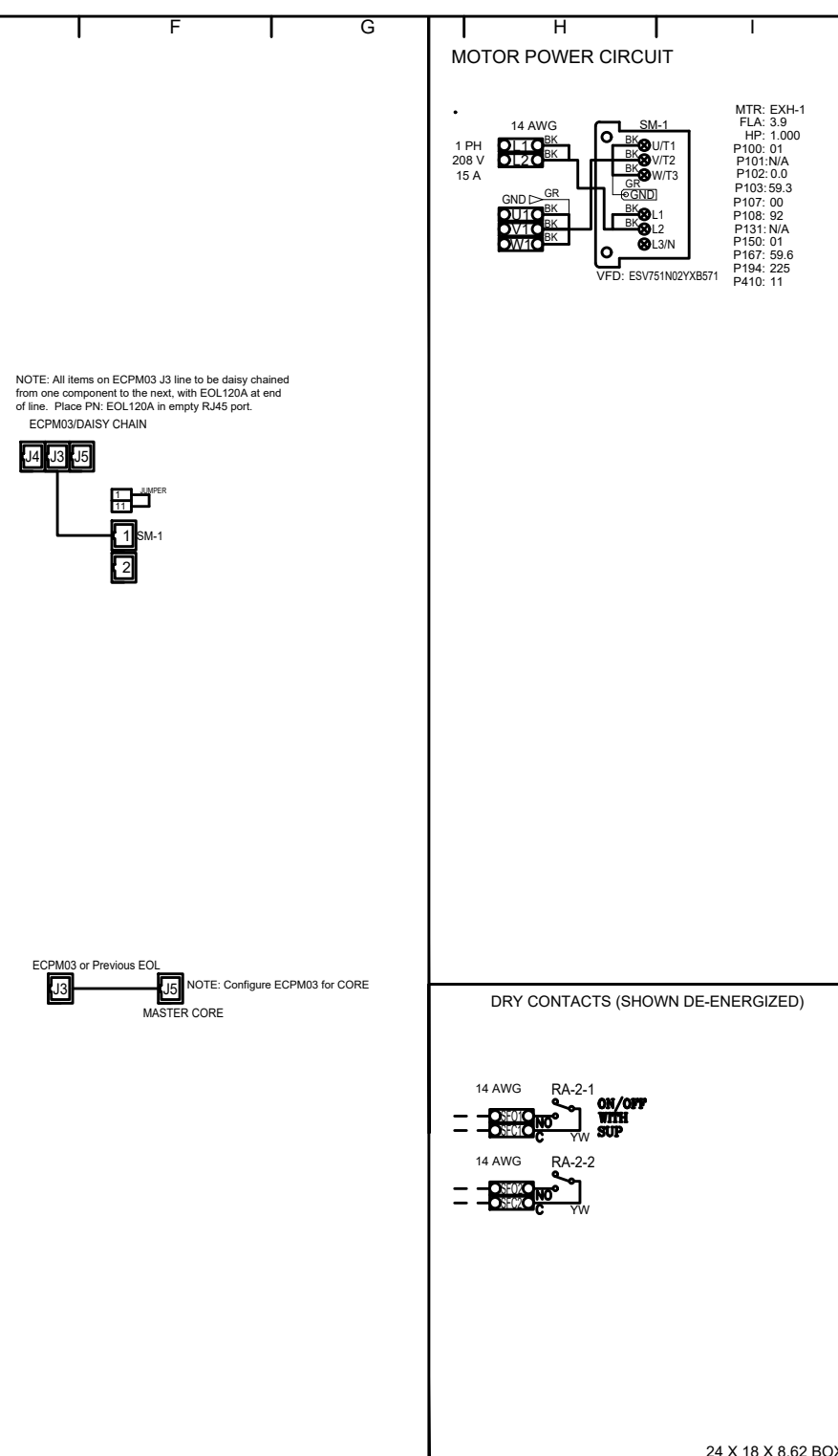
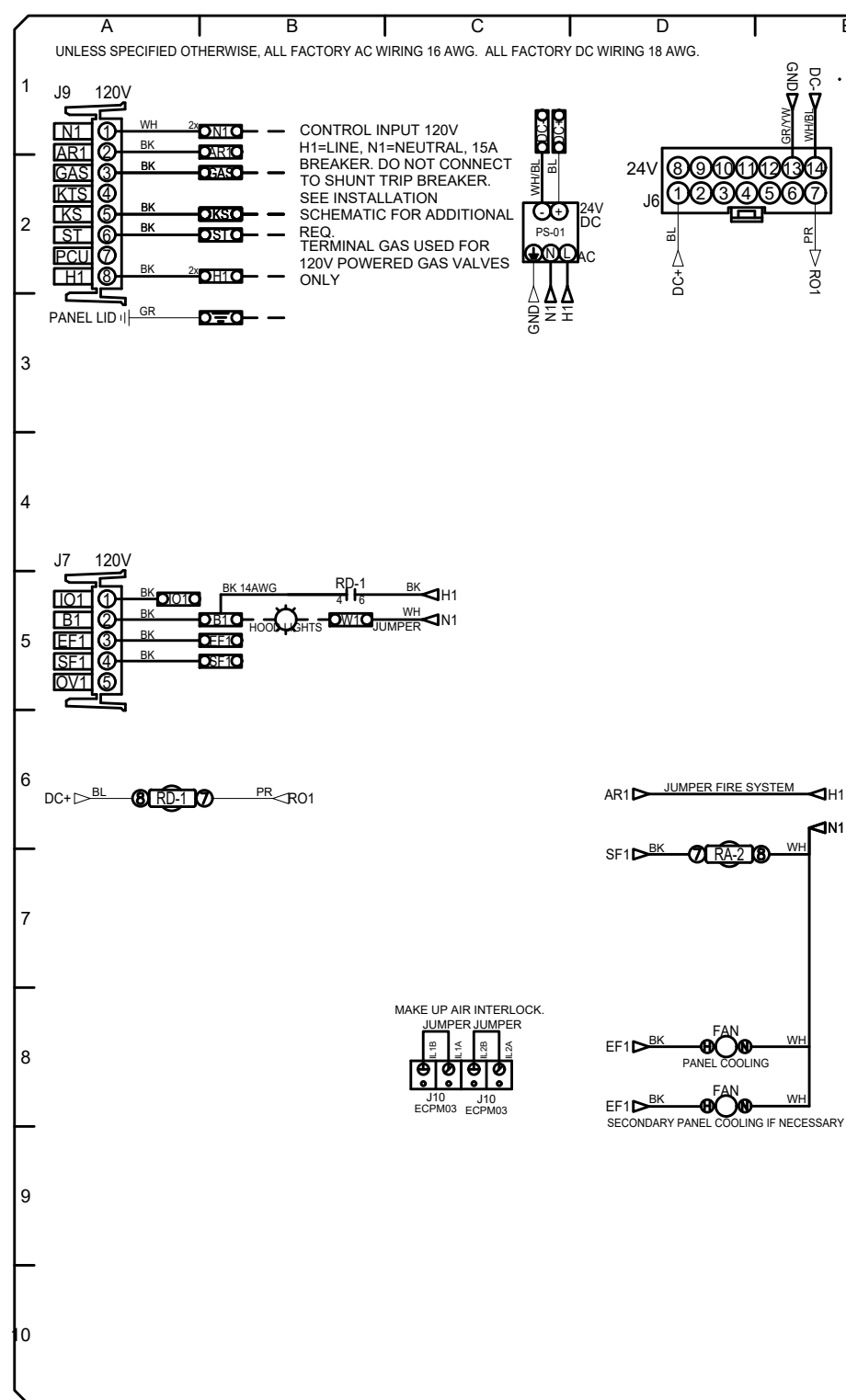
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ENGINEERING CONSULTANTS INC.

MECHANICAL
 STATE OF CALIFORNIA
 No. M26141
 Ren. 5/30/23

TITLE:
MECHANICAL HOOD DETAILS

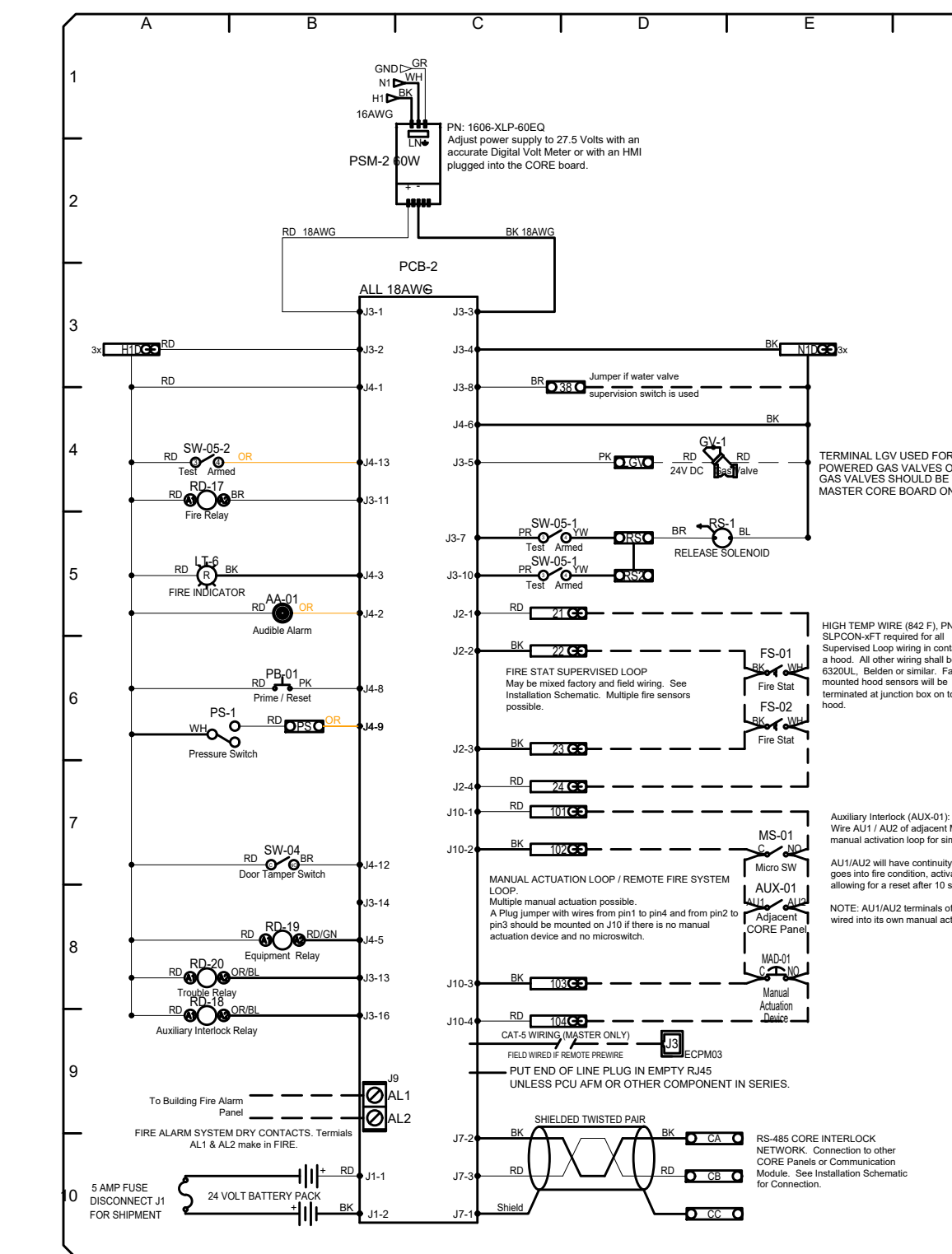
JOB NO: B2306-AA123
 DRAWN: CL
 CHECKED: CZ
 SCALE: NONE
 DATE: 06.28.2023

M4.6



COMPONENT LIST

ITEM	DESCRIPTION	QTY
1	120V Breaker	1
2	15A Breaker	1
3	120V Line	1
4	120V Neutral	1
5	120V Ground	1
6	120V Power	1
7	120V Gas Valve	1
8	120V Gas Valve	1
9	120V Gas Valve	1
10	120V Gas Valve	1
11	120V Gas Valve	1
12	120V Gas Valve	1
13	120V Gas Valve	1
14	120V Gas Valve	1
15	120V Gas Valve	1
16	120V Gas Valve	1
17	120V Gas Valve	1
18	120V Gas Valve	1
19	120V Gas Valve	1
20	120V Gas Valve	1



COMPONENT LIST

ITEM	DESCRIPTION	QTY
1	120V Breaker	1
2	15A Breaker	1
3	120V Line	1
4	120V Neutral	1
5	120V Ground	1
6	120V Power	1
7	120V Gas Valve	1
8	120V Gas Valve	1
9	120V Gas Valve	1
10	120V Gas Valve	1
11	120V Gas Valve	1
12	120V Gas Valve	1
13	120V Gas Valve	1
14	120V Gas Valve	1
15	120V Gas Valve	1
16	120V Gas Valve	1
17	120V Gas Valve	1
18	120V Gas Valve	1
19	120V Gas Valve	1
20	120V Gas Valve	1

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NO.	DESCRIPTION	DATE



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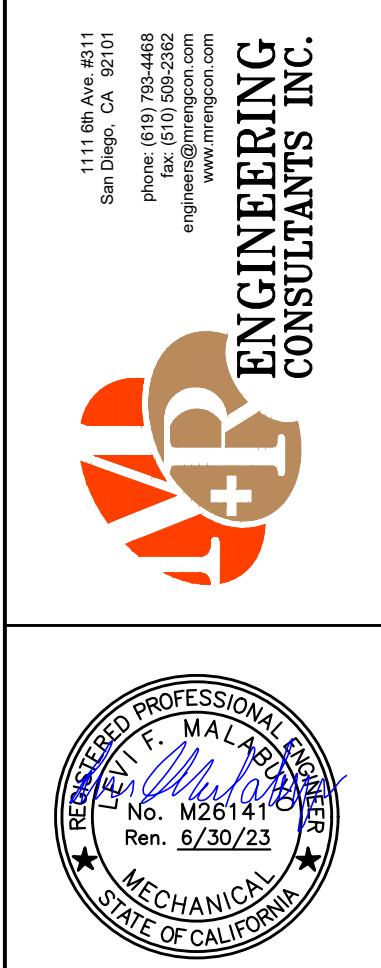
DATE: 6/20/2023
DWG.#: 6067442
DRAWN BY: MR-102
SCALE: 3/4" = 1'-0"
MASTER DRAWING
SHEET NO. 9

REV	DESCRIPTION	DATE

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TITLE:
MECHANICAL HOOD DETAILS
JOB NO: B2306-AA123
DRAWN: CL
CHECKED: CZ
SCALE: NONE
DATE: 06.28.2023

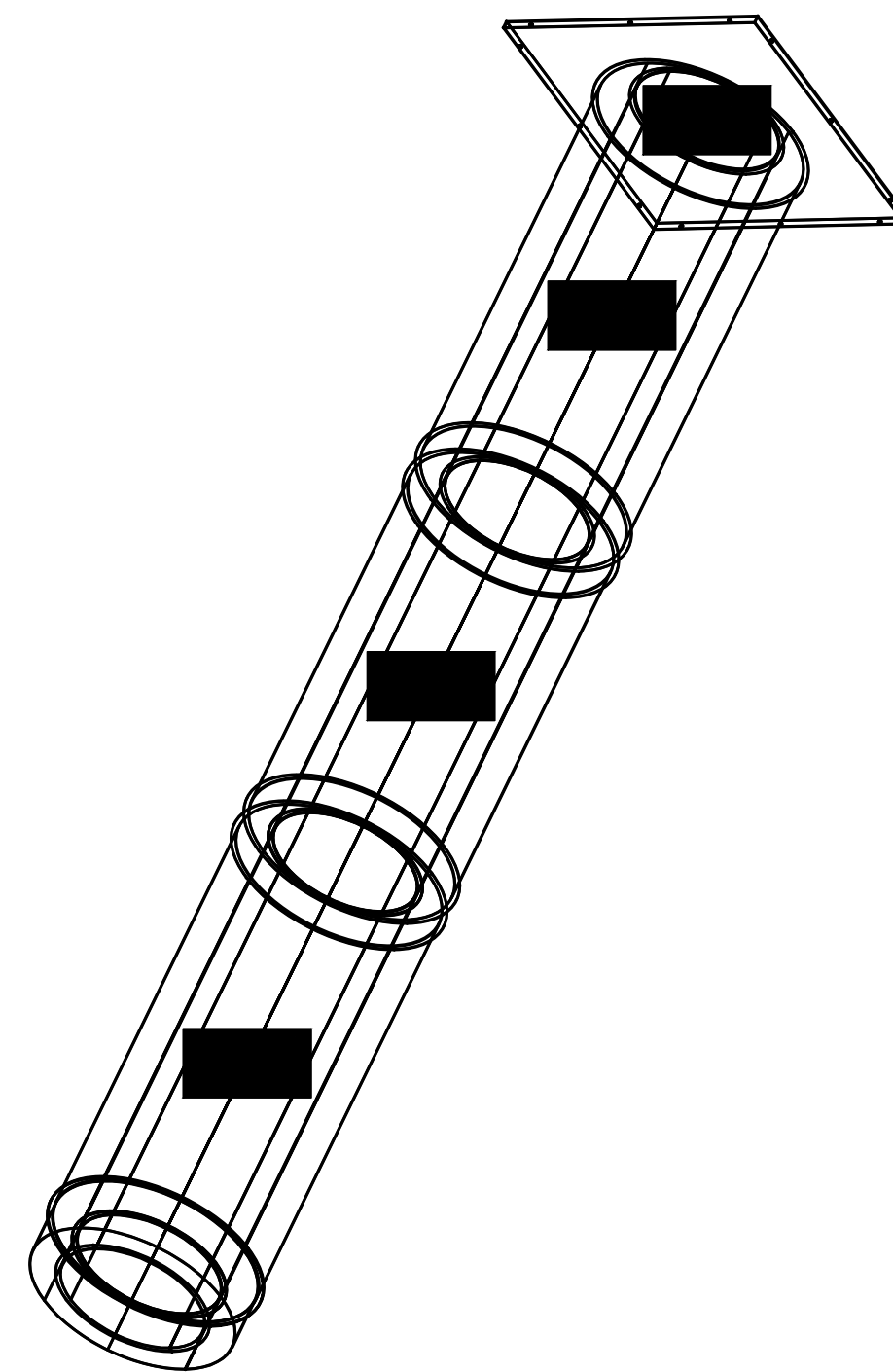
M4.7

DUCTWORK #1 PARTS - JOB#6067442 DOUBLE WALL

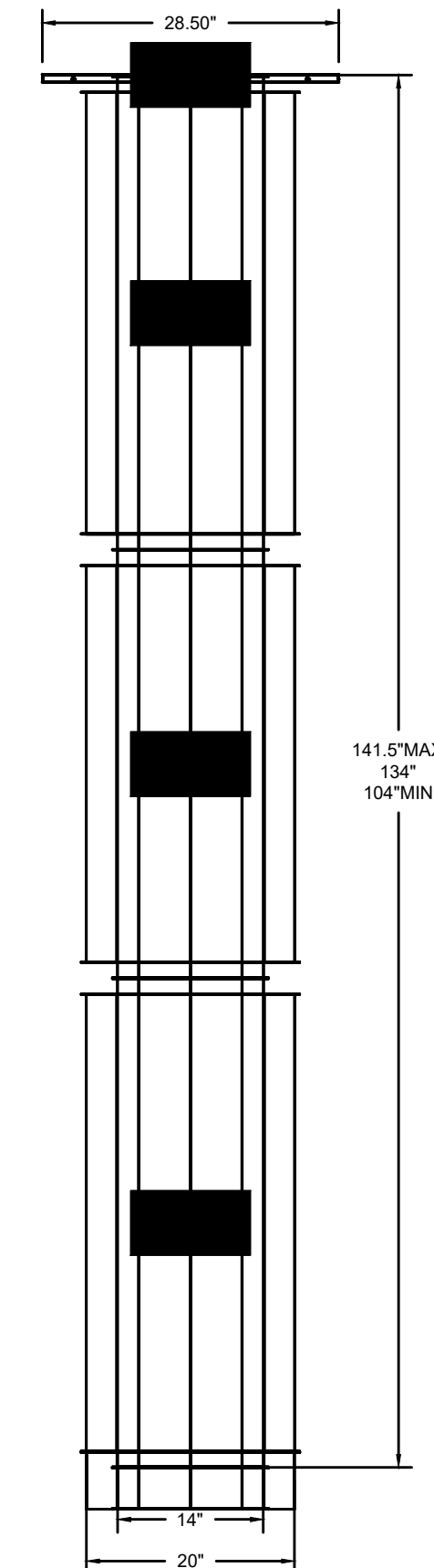
TAG	PART #	CFM	GPM	ZONE	COVEREDBY	SP	WEIGHT	VELOCITY	QTY	DESCRIPTION
P1	DW1447DWLT-3Z-S	1725				-0.018	76.70	1613.64	1	DOUBLE WALL DUCT - 14" INNER DUCT, 47" LONG - 3 LAYERS ZERO CLEARANCE - 20" STAINLESS STEEL OUTER SHELL.
P2	DW1447DWAJD-3Z-S	1725				-0.016	109.38	1613.64	1	DOUBLE WALL ADJUSTABLE DUCT - 14" INNER DUCT - 3 LAYERS ZERO CLEARANCE - 20" STAINLESS STEEL OUTER SHELL. MIN LENGTH = 11' / MAX LENGTH = 48.5' / ADJUSTMENT = 30.5' / ADJUSTABLE SECTION MAY NEED TO BE CUT. INCLUDES SINGLE AND DOUBLE WALL "V" CLAMPS.
P3 ASSEMBLED W/P4	DW144550DWLTP-3Z-S	1725				-0.018	74.89	1613.64	1	DOUBLE WALL DUCT - 14" INNER DUCT, 45.5" LONG - 3 LAYERS ZERO CLEARANCE - 20" STAINLESS STEEL OUTER SHELL - USED WITH TRANSITION PLATE.
P4 ASSEMBLED W/P3	DW2814TPDBEX	1725					9.00	1613.64	1	DUCT TO CURB TRANSITION 3/4" DOWN TURN, 28" CURB TO 14" DUCT, 16 GA ALUMINIZED. TRANSITION PLATE OD IS 28.5" DESIGNED FOR USE WITH EXHAUST FAN. NON-STANDARD PART.
SYSTEM AT P4						-0.763	0.00			
	3M-2000PLUS						0.80		1	DUCT - 3M FIRE BARRIER 2000 PLUS SILICONE - USED AS SEALANT TO SEAL DUCT JOINTS.
TOTAL WEIGHT							270.77			

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

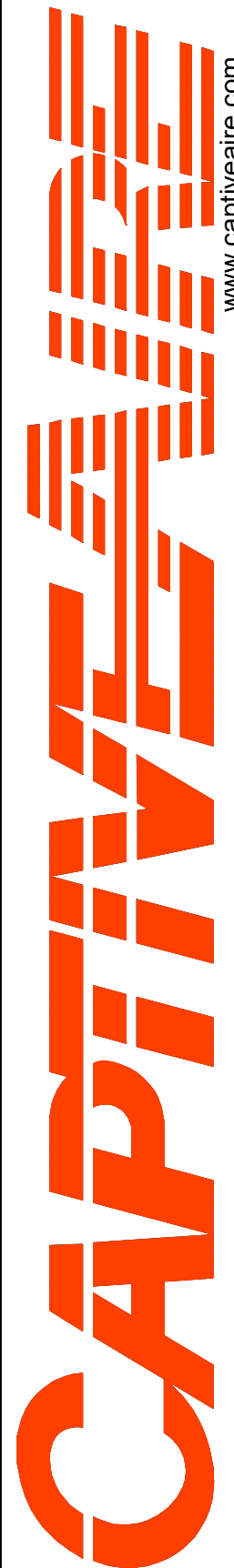
DUCTWORK #1 SE VIEW



DUCTWORK #1 FRONT VIEW



REVISIONS		
DESCRIPTION	DATE	


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DATE: 6/20/2023
DWG.#: 6067442
DRAWN BY: MR-102
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO.
 10

REV	DESCRIPTION	DATE

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TITLE:
MECHANICAL HOOD DETAILS

JOB NO:	B2306-AA123
DRAWN:	CL
CHECKED:	CZ
SCALE:	NONE
DATE:	06.28.2023

M4.8

FIXTURE LOAD CALCULATION							
TAG	DESCRIPTION	QTY	WATER SUPPLY FIXTURE UNIT	DRAINAGE FIXTURE UNIT	TOTAL		
					COLD WATER	HOT WATER	SEWER
7	ICE MACHINE	1	1.0	INDIRECT	1.0	-	-
10	HAND SINK	1	2.0	2.0	2.0	1.50	2.0
11	PREP SINK	1	3.0	INDIRECT	3.0	2.25	-
12	3-COMP. SINK	1	6.0	INDIRECT	6.0	4.50	-
13	MOP SINK	1	3.0	3.0	3.0	2.25	3.0
FD	FLOOR DRAIN	1	-	6.0	-	-	6.0
FS	FLOOR SINK	5	-	6.0	-	-	30.0
TOTAL FIXTURE UNIT:					15.0	10.5	41.0
ESTIMATED GPM:					11.0	8.0	-

NOTES:
1. WATER SUPPLY FIXTURE UNITS BASED UPON APPENDIX A, TABLE A103.1, 2022 CALIFORNIA PLUMBING CODE.
2. DRAINAGE FIXTURE UNITS BASED UPON CHAPTER 7, TABLE 702.1, 2022 CALIFORNIA PLUMBING CODE.

PIPE SIZE TABLE							
PIPE SIZE	COLD WATER				HOT WATER		
	GPM	FLUSH TANK FIXTURE UNIT	FLUSH VALVE FIXTURE UNIT	VELOCITY (FT/S)	GPM	FLUSH TANK FIXTURE UNIT	VELOCITY (FT/S)
1/2"	2.22	1.4	-	3.06	2.22	1.4	3.06
3/4"	5.73	6.7	-	3.80	5.73	6.7	3.80
1"	11.45	15.4	-	4.45	11.45	15.4	4.45
1-1/4"	19.76	29.5	-	5.04	19.59	29.2	5.00
1-1/2"	31.01	56.0	14.0	5.59	27.72	48.2	5.00
2"	63.60	193.0	86.8	6.59	48.23	119.9	5.00
2-1/2"	111.55	438.5	305.6	7.50	74.37	246.7	5.00
3"	169.85	747.1	699.0	8.00	106.16	411.8	5.00

NOTES:
1. PRESSURE AVAILABLE IN THE BUILDING PIPING IS ASSUMED TO BE AT LEAST 4.5PSI/100FT. CONTRACTOR TO VERIFY AT SITE.
2. COLD WATER NOT TO EXCEED 8 FEET PER SECOND.
3. HOT WATER NOT TO EXCEED 5 FEET PER SECOND.

(N)STORAGE TYPE WATER HEATER CALCULATION				
TAG	DESCRIPTION	QTY	GPH PER FIXTURE	TOTAL GPH PER FIXTURE
10	HAND SINK	1	5.0	5.0
11	PREP SINK	1	5.0	5.0
12	3-COMP. SINK	1	45.0	45.0
13	MOP SINK	1	20.0	20.0
(SINGLE-USE UTENSIL) POSSIBLE MAXIMUM DEMAND (GPH X 80%):				60.0
TEMPERATURE RISE (°F):				60.0
MINIMUM WATER HEATER EFFICIENCY:				0.98
MINIMUM INPUT (kW):				9.0

TABLE 120.3-A PIPE INSULATION THICKNESS					
FLUID TEMPERATURE RANGE (°F)	CONDUCTIVITY RANGE (IN BTU-INCH PER HOUR PER SQUARE FOOT PER °F)	INSULATION MEAN RATING TEMPERATURE (°F)	NOMINAL PIPE DIAMETER (IN INCHES)		
			<1	<1 TO <1.5	<1.5 TO <4
ABOVE 350	0.32-0.34	250	4.5	5.0	5.0
251-350	0.29-0.32	200	3.0	4.0	4.5
201-250	0.27-0.30	150	2.5	2.5	2.5
141-200	0.25-0.29	125	1.5	1.5	2.0
105-140	0.22-0.28	100	1.0	1.5	1.5

NOTE: PIPE INSULATION THICKNESS RANGE (105 - 200°F FLUID TEMPERATURE)

PLUMBING PIPE MATERIAL SCHEDULE			
SERVICE	LOCATION	PIPE MATERIAL	SLOPE
WATER	ABOVE GRADE	ASTM B88 TYPE "L" HARD DRAWN COPPER WITH WROUGHT COPPER FITTINGS.	1/32" PER 1'
	BELOW GRADE	ASTM B88 TYPE "K" HARD DRAWN COPPER, FACTORY INSULATED, WITH WROUGHT COPPER BRAZED JOINT FITTINGS.	1/32" PER 1'
SEWER AND VENT	ABOVE GRADE	ASTM A888 SERVICE WEIGHT HUBLESS CAST IRON, ALL FITTINGS SHALL BE AS PER CPC.	1/4" PER 1'
	BELOW GRADE	ABS SCHEDULE 40 (CONFORM TO ASTM D 2321-2000), ALL FITTINGS SHALL BE AS PER CPC.	1/4" PER 1'
NATURAL GAS	ABOVE GRADE	SCHEDULE 40 GALVANIZED STEEL "BLACK" PIPE. ALL FITTINGS SHALL BE AS PER CPC.	1/4" PER 15'
	BELOW GRADE	SCHEDULE 40 GALVANIZED STEEL "BLACK" PIPE W/ FACTORY INSTALLED COATING LISTED FOR DIRECT BURIAL. ALL FITTINGS SHALL BE AS PER CPC.	1/4" PER 15'
CONDENSATE	ABOVE GRADE	ASTM B88 TYPE "L" HARD DRAWN COPPER WITH WROUGHT COPPER FITTINGS.	1/8" PER 1'

PLUMBING FIXTURE & EQUIPMENT SCHEDULE										
TAG	DESCRIPTION	MFR	MODEL	WASTE			VENT	WATER		REMARKS
				DIRECT	INDIRECT	TRAP		CW	HW	
1	HOT FOOD STATION	VOLLRATH	T39710-2	-	YES	-	-	-	-	REFER TO OWNER'S EQUIPMENT LIST.
7	ICE MACHINE	AVANTCO	KMC-H-322-A	-	YES	-	-	1/2"	-	REFER TO OWNER'S EQUIPMENT LIST.
10	HAND SINK	REGENCY	600HS12SP	2"	-	2"	1-1/2"	3/4"	3/4"	REFER TO OWNER'S EQUIPMENT LIST.
11	PREP. SINK	REGENCY	600S1181818XLFT	-	YES	-	-	3/4"	3/4"	REFER TO OWNER'S EQUIPMENT LIST.
12	3-COMP. SINK	REGENCY	600S3162018G	-	YES	-	-	3/4"	3/4"	REFER TO OWNER'S EQUIPMENT LIST.
13	MOP SINK	FLORESTONE	MSR-2424	3"	-	3"	2"	3/4"	3/4"	REFER TO OWNER'S EQUIPMENT LIST.
FD	FLOOR DRAIN	ZURN	Z415B	2"	-	2"	1-1/2"	-	-	FLOOR DRAIN - "ZURN" MODEL Z415B, NO-HUB, DURA-COATED CAST IRON BODY, NICKEL BRONZE TOP TYPE 'B' STRAINER WITH TRAP PRIMER CONNECTION.
FS	FLOOR SINK	ZURN	Z1900	3"	-	3"	2"	-	-	FLOOR SINK - "ZURN" MODEL Z1900 SANI-FLOOR RECEPTOR 12"x12"x6" DEEP CAST IRON BODY AND SQUARE, LIGHT DUTY GRATE.
19	(N)WATER HEATER	RHEEM	ELD40-TB	-	YES	-	-	1"	1"	"RHEEM"ELD40-TB, ELECTRIC STORAGE-TYPE WATER HEATER, 40 GALLON STORAGE CAPACITY AND 68 GPH RECOVERY RATE AT 60°F RISE, ELECTRICAL CHARACTERISTIC: 10kW/3-PHASE/208V; SIMULTANEOUS WIRING
CP-1	HOT WATER CIRCULATOR PUMP	TACO	113S	-	-	-	-	-	3/4"	HOT WATER CIRCULATOR PUMP - "TACO 113S" HW CIRCULATING IN-LINE CENTRIFUGAL PUMP. CAPACITY 2.0 GPM AT TDH-15 FEET, 1/8 HP, 115 V, 60HZ, 1Ø, INSTALL PER MANUFACTURER'S INSTRUCTIONS, S/S MATERIAL FOR DOMESTIC WATER USE, TEMPERATURE CONTROL.
ET-1	EXPANSION TANK	PROFLO	PFXT5	-	-	-	-	-	-	EXPANSION TANK - "PROFLO" MODEL PFXT5, 2.0 GALLONS
(E)GT	HYDROMECHANICAL GREASE INTERCEPTOR	GB-250	GB-250	4"	-	-	4"	-	-	EXISTING HYDROMECHANICAL GREASE INTERCEPTOR; FLOWRATE: 100 GPM; GREASE CAPACITY: 1751 LBS
TP	TRAP PRIMER	MIFAB	M-500	-	-	-	-	1/2"	-	PRESSURE DROP ACTIVATED, BRASS CONSTRUCTION. PROVIDE WITH MULTIPLE DISTRIBUTION UNIT (IF APPLICABLE), PROVIDE WITH APPROVED ACCESS PANEL.
-	BALANCING VALVE	WATTS	LFCSM-61-S	-	-	-	-	-	3/4"	BALANCING VALVE - BALL-TYPE DESIGN, EXTENDED THROTTLING RANGE, AND LARGE PLATE, MAKE FOR ACCURATE FLOW MEASUREMENT, EVEN IN VERY FLOW RANGES.
WCO	WALL CLEAN OUT	ZURN	ZS1468	SEE RISER			-	-	-	ROUND STAINLESS STEEL WALL ACCESS COVER COMPLETE WITH SECURING SCREW AND BRONZE RAISED HEX HEAD PLUG.
FCO	FLOOR CLEAN OUT	ZURN	Z1400	SEE LAYOUT			-	-	-	ADJUSTABLE FLOOR CLEANOUT. DURA-COATED CAST IRON BODY WITH GAS AND WATERTIGHT ABS TAPERED THREAD PLUG AND ROUNDSCORRIATED CAST IRON HEAVY-DUTY SECURED TOP ADJUSTABLE TO FINISHED FLOOR.

NOTES:
1. CONTRACTOR MAY SUBSTITUTE APPROVED EQUIVALENTS FOR SPECIFIED FIXTURES WITH OWNER'S AND ENGINEER'S APPROVAL. PROVIDED ALL THE REQUIREMENTS OF THE APPLICABLE CODE ARE MET.
2. CONTRACTOR TO SUBMIT CUT-SHEETS OF ALL FIXTURES FOR OWNER'S REVIEW AND APPROVAL PRIOR TO INSTALLATION.

GAS LOAD SUMMARY				
TAG	QTY	DESCRIPTION	GAS REQUIREMENT (CFH)	
			PER UNIT	TOTAL
6	1	6 GAS BURNER 60"	276.0	276.0
24	2	FRYER	90.0	180.0
TOTAL GAS DEMAND (CFH) :			456.0	
PIPE LENGTH TO MOST REMOTE OUTLET (FT) :			57.0	
FITTINGS FACTOR :			1.5	
TOTAL DEVELOPED LENGTH (FT) :			86	
EQUIVALENT LENGTH (FT) :			100	
INLET PRESSURE (in. W.C) :			7.0	

GAS PIPE SIZES	
PIPE SIZE	CFH
1/2"	50
3/4"	104
1"	195
1-1/4"	400
1-1/2"	600
2"	1160
2-1/2"	1840
3"	3260
4"	6640
5"	12000

SIZING BASED ON 2022 CPC TABLE 1215.2(1)

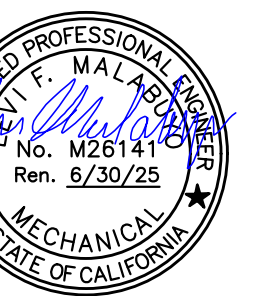
HYDROMECHANICAL GREASE INTERCEPTOR SIZING	
FIXTURES	LOAD (GALLON)
G107 - FOOD/RETAIL 5	
HAND SINK (9x9x4x1)/(231)0.75	1.05
PREP. SINK (18x18x14x1)/(231)0.75	14.73
3-COMP SINK (16x20x12x3)/(231)0.75	37.40
MOP SINK (24x24x10x1)/(231)0.75	18.70
FD	2.00
HOT FOOD STATION	2.00
G107 - FOOD/RETAIL 5 (SUB-TOTAL LOAD FOR OUR TENANT SPACE)	75.88
G108 - FOOD/RETAIL 6 (NOT IN SCOPE)	
REMAINING LOAD FOR FUTURE TENANT SPACE (NOT IN SCOPE)	25.00
TOTAL	174.76
GREASE INTERCEPTOR SIZE	
1 - MINUTE PERIOD	150 GPM
2 - MINUTE PERIOD	100 GPM

NOTE : USE 100 GPM FOR 2 MINUTE PERIOD

MARK	QTY	DESCRIPTION	ELECTRICAL				WATER	WASTE	INPUT	REMARKS
			AMPS	HERTZ	VLTS	PHASE				
1	1	(N) 60" HOT FOOD STATION BRAND: VOLLRATH MODEL: T39710-2	16	60	120	1				60W 24D 49H
2	1	(N) REFRIGERATED PREP TABLE BRAND: BEVERAGE-AIR MODEL: SPE60HC-16	9.6	60	115	1				60W 29.25 D 41.1H
3	1	(N) FREEZER BRAND: AVANTCO MODEL: SS-1F-HC 29"	2.62	60	115	1				29W 32.25D 82.5H
4	1	(N) REFRIGERATOR BRAND: AVANTCO MODEL: SS-2R-HC 54"	6.08	60	115	1				NSF APPROVE
5	1	(N) RICE COOKER BRAND: AVANTCO MODEL: 177RW90			120					NSF APPROVE
6	1	(N) 6 BURNER 60" NATURAL GAS BRAND: COOKING PERFORMANCE GROUP MODEL: S60-GS24-N							276,000	
7	1	(N) ICE MACHINE 22" BRAND: AVANTCO MODEL: KMC-H-322-A	12	60	115		X			
8	1	(N) GLASS DOOR MERCHANDISER 29.5" BRAND: BEVERAGE AIR MODEL: MT23-1B	7	60	115					
9	1	(N) COUNTERTOP HEATED DISPLAY CASE BRAND: AVANTCO MODEL: HDC-36	13.6	60	120					
10	1	(N) WALL MOUNTED HAND SINK BRAND: REGENCY MODEL: 600HS12SP					X	X		9"x9"x4" COMPARTMENT NSF APPROVE
11	1	(N) PREP SINK BRAND: REGENCY MODEL: 600S1181818XLFT					X	X		18"x18"x14" COMPARTMENT INDIRECT DISCHARGE TO FLOOR SINK NSF APPROVE
12	1	(N) THREE COMPARTMENT SINK BRAND: REGENCY MODEL: 600S3162018G					X	X		16"x20"x12" COMPARTMENT INDIRECT DISCHARGE TO FLOOR SINK NSF APPROVE
13	1	(N) MOP SINK BRAND: FLORESTONE MODEL: MSR-2424					X	X		24"x24"x10" COMPARTMENT NSF APPROVE
14	1	(N) FLOOR SINK BRAND: ZURN MODEL: Z1900								NSF APPROVE
15	1	(N) SOAP DISPENSER BRAND: LAVEX MODEL: 712LSD40V								NSF APPROVE
16	1	(N) TOWEL DISPENSER BRAND: LAVEX MODEL: 712LSD40V								NSF APPROVE
17	1	(N) SPLASH GUARD MATERIAL: STAINLESS STEEL HEIGHT: 12"								NSF APPROVE
18	2	(N) COUNTER CUSTOM MADE MODEL: QUARTZ								2 DRY STORAGE UNDERSHELF 24X60 2 TIER NSF APPROVE
19	1	(N) WATER HEATER BRAND: RHEEM MODEL: ELD40TB					X			SEE SPEC SHEET ON THIS SHEET NSF APPROVE
20	1	(N) AIR CURTAIN BRAND: CURTRON MODEL: AP-2-36-1-SS	1/3	120	1					PROVIDED WITH AUTOMATIC DOOR PLUNGER SWITCH NSF APPROVE
21	1	(N) DRAIN BOARD DIMENSIONS: 12X24X36								NSF APPROVE
22	1	(N) EMPLOYEE LOCKERS BRAND: GLOBAL INDUSTRIAL 4 DOOR MODEL: T9F493455GY								NSF APPROVE
23	2	(N) WIRE RACK (14X36) BRAND: REGENCY MODEL: 460EB1848K85								2 DRY STORAGE UNDERSHELF 18X24 6 TIER NSF APPROVE TOTAL DRY STORAGE: 48 LF
24	1	(N) DEEP FRYER BRAND: MAINSTREET EQUIPMENT MODEL: 541FF40N							90,000	15.5"W X 30.25"D X 47 1/8"H NSF APPROVE

REV	DESCRIPTION	DATE

SABOR PIRI PIRI
TENANT IMPROVEMENT
800 B AVENUE SUITE 804
NATIONAL CITY CA 91950



TITLE:
PLUMBING SCHEDULES
JOB NO: B2306-AA123
DRAWN: JP
CHECKED: CZ
SCALE: NONE
DATE: 06.28.2023

P0.2

STATE OF CALIFORNIA
Domestic Water Heating System
 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE NRCC-PLB-E
This document is used to demonstrate compliance for nonresidential occupancies with requirements in 110.1, 110.3, 120.3, and 140.5, and with requirements in 141.0 for additions and alterations, for domestic water heating scopes using the prescriptive path. For high-rise residential and hotel/motel occupancies compliance is demonstrated with requirements in 110.1, 110.3, 160.4 and 170.2(d), and with requirements 180.1 for additions and 180.2 for alterations.

Project Name: SABOR PIRI PIRI TENANT IMPROVEMENT Report Page: (Page 1 of 7)
 Project Address: 800 B AVENUE SUITE 804 NATIONAL CITY CA 91950 Date Prepared: 2023-06-26T17:56:42-04:00

A. GENERAL INFORMATION

01	Project Location (city)	NATIONAL CITY	02	Climate Zone	7
03	Occupancy Types Within Project (select all that apply):				
<input checked="" type="checkbox"/> Restaurant					

B. PROJECT SCOPE

This table includes domestic water heating systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive paths outlined in 140./170.2(d) and 141.0(a)/180.1, or 141.0(b)2N/180.2 for additions or alterations. Solar water heating systems are documented on the NRCC-SAB compliance document. Combined hydronic water heating systems are documented on the NRCC-MCH compliance document.

01	02	03
My project consists of (check all that apply):	System Type ^{1,2}	System Components
<input checked="" type="checkbox"/> New system (DHW system being installed for the first time)	Central System (serving nonresidential spaces)	<input checked="" type="checkbox"/> Equipment <input checked="" type="checkbox"/> Distribution <input checked="" type="checkbox"/> Controls
<input type="checkbox"/> System Alteration (equipment, distribution or controls)		<input type="checkbox"/> Equipment <input type="checkbox"/> Distribution <input type="checkbox"/> Controls

¹FOOTNOTES: Point of use water heaters, or other non-central systems used to serve nonresidential spaces, are considered individual systems.
² Dwelling units refers to hotel/motel guest rooms and units in a multifamily residential occupancy.
³ DHW systems serving 2 or more dwelling units are considered "Central Systems" for multifamily occupancies

C. COMPLIANCE RESULTS

Table C will indicate if the project data input into the compliance document is compliant with water heating requirements. If this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D, or the table indicated as not compliant for guidance.

01	02	03	04
Domestic Hot Water Equipment	Distribution Systems	Controls	Compliance Results
Table F	Table G	Table H	
Yes	Yes	Yes	

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

Generated Date/Time: Documentation Software: Energy Code Ace
 CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: 115932-0623-0003
 Schema Version: rev 20220101 Report Generated: 2023-06-26 14:56:43

STATE OF CALIFORNIA
Domestic Water Heating System
 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE NRCC-PLB-E
This document is used to demonstrate compliance for nonresidential occupancies with distribution requirements in 120.3 and 140.5. For multifamily and hotel/motel occupancies, compliance is demonstrated with requirements 110.3(c), 160.4, 170.2(d).

Project Name: SABOR PIRI PIRI TENANT IMPROVEMENT Report Page: (Page 3 of 7)
 Project Address: 800 B AVENUE SUITE 804 NATIONAL CITY CA 91950 Date Prepared: 2023-06-26T17:56:42-04:00

G. DOMESTIC HOT WATER DISTRIBUTION SYSTEM

This table is used to demonstrate compliance for nonresidential occupancies with distribution requirements in 120.3 and 140.5. For multifamily and hotel/motel occupancies, compliance is demonstrated with requirements 110.3(c), 160.4, 170.2(d).

Recirculation Loops in Central Systems Serving Dwelling Units or Nonresidential Spaces

	Yes	No	Not Applicable	Requirement
01	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Air release valve or vertical pump installation per 110.3(c)4A
02	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Check valve or similar located between recirculation pump and water heating equipment to prevent backflow per 110.3(c)4B
03	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Hose bibb installed between pump and equipment and isolation valve between hose bibb and equipment per 110.3(c)4C
04	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Isolation valves on both sides of the pump per 110.3(c)4D
05	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Cold water and recirculation loop piping shall not be connected to the hot water storage tank drain port per 110.3(c)4E
06	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Check valve installed on cold water supply between hot water system and next closest tee on cold water supply per 110.3(c)4F
07	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	DWELLING UNITS ONLY: For central systems serving multiple dwelling units, design includes a recirculation system serving separate dwelling units per 170.2(d) unless building has <=8 dwelling units.
08	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	DWELLING UNITS ONLY: For heat pump water heating systems, the hot water return from the recirculation loop shall connect to a recirculation loop tank and shall not directly connect to the primary heat pump water heater inlet or the primary thermal storage tanks per 170.2(d)2A.
09	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	DWELLING UNITS ONLY: For heat pump water heating systems, the fuel source for the recirculation loop tank shall be electricity if auxiliary heating is needed. The recirculation loop heater shall be capable of multi-pass water heating operation per 170.2(d)2B.

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 CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: 115932-0623-0003
 Schema Version: rev 20220101 Report Generated: 2023-06-26 14:56:43

STATE OF CALIFORNIA
Domestic Water Heating System
 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE NRCC-PLB-E
This document is used to demonstrate compliance with mandatory equipment requirements in 110.1 and 110.3. Compliance with prescriptive requirements in 140.5(c) / 170.2(d) must also be demonstrated and with 141.0 / 180.1 / 180.2 for addition and alteration scopes.

Project Name: SABOR PIRI PIRI TENANT IMPROVEMENT Report Page: (Page 2 of 7)
 Project Address: 800 B AVENUE SUITE 804 NATIONAL CITY CA 91950 Date Prepared: 2023-06-26T17:56:42-04:00

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. DOMESTIC HOT WATER EQUIPMENT

This table is used to demonstrate compliance with mandatory equipment requirements in 110.1 and 110.3. Compliance with prescriptive requirements in 140.5(c) / 170.2(d) must also be demonstrated and with 141.0 / 180.1 / 180.2 for addition and alteration scopes.

Equipment Schedule: Water Heating Efficiency and Standby Loss

03		04		05		06			
System Name	19	Exception to 140.5(c)/170.2(d)3	Exceptions Do Not Apply	<input type="checkbox"/>	Gas Service Water Heating System >= 1MMBtu/h ¹	Capacity-weighted Average Efficiency %			
07	08	09	10	11	12	13	14	15	
Name or Item Tag	Equipment Type	Volume (gal)	Rated Input Capacity (Btu/h)	Max GPM/ First Hour Rating (FHR)	Rated Efficiency	Minimum Efficiency Required	Efficiency Unit	Designed Standby Loss	Maximum Standby Loss
19	Commercial Electric Storage Water Heater	40	34,121.42					0.97	0.98

¹FOOTNOTE: In systems >= 1MMBtu/h with multiple units, gas water heaters with input capacity > 100,000 Btu/h may meet 90% Et requirements via an input capacity-weighted average.

Water Heating Equipment All Occupancies

	Yes	No	Not Applicable	Requirement
18	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Unfired storage tank insulation shall have Internal + External >=R-16 OR External >=R-3.5. Label required per 110.3(c)3
19	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	New state buildings 60% of energy for service water heating from site solar energy or recovered energy per 110.3(c)5
20	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Isolation valves for instantaneous water heater with input rating >= 6.8 kBtu/h or 2 kW has been specified per 110.3(c)6
21	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	School buildings < 25,000 ft ² and < 4 stories must install a heat pump water heating system per 140.5(a)1. Water heating systems serving an individual bathroom space may be an instantaneous electric water heater.

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STATE OF CALIFORNIA
Domestic Water Heating System
 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE NRCC-PLB-E
This document is used to demonstrate compliance for nonresidential occupancies with distribution requirements in 120.3 and 140.5. For multifamily and hotel/motel occupancies, compliance is demonstrated with requirements 110.3(c), 160.4, 170.2(d).

Project Name: SABOR PIRI PIRI TENANT IMPROVEMENT Report Page: (Page 4 of 7)
 Project Address: 800 B AVENUE SUITE 804 NATIONAL CITY CA 91950 Date Prepared: 2023-06-26T17:56:42-04:00

G. DOMESTIC HOT WATER DISTRIBUTION SYSTEM

Mandatory Pipe Insulation All Occupancies

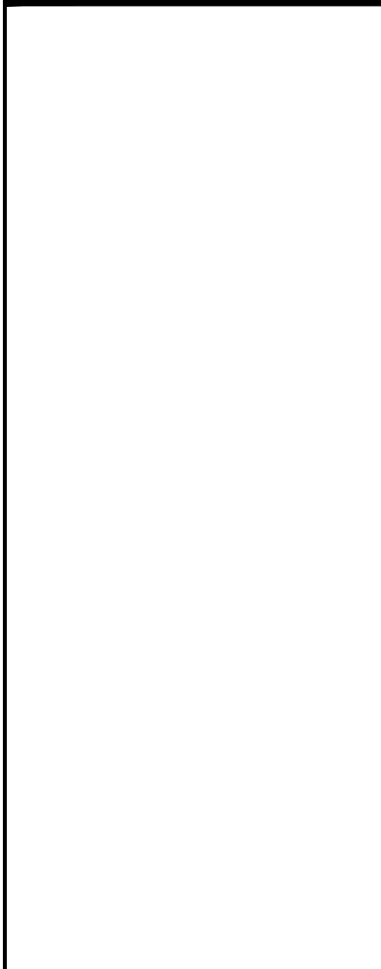
13	<input type="checkbox"/>	For systems serving dwelling units, pipe insulation must meet the minimum insulation requirements in Table 160.4-A (see below) except: <ul style="list-style-type: none"> Piping that penetrates framing members shall not be required to have pipe insulation for the distance of the framing penetration. Piping that penetrates metal framing shall use grommets, plugs, wrapping or other insulating material to assure that no contact is made with the metal framing. Insulation shall abut securely against all framing members Piping installed in interior or exterior walls shall not be required to have pipe insulation if all of the requirements are met for compliance with Quality Insulation Installation (QII) as specified in the Reference Residential Appendix RA3.5. Piping surrounded with a minimum of 1 inch of wall insulation, 2 inches of crawspace insulation, or 4 inches of attic insulation, shall not be required to have pipe insulation.
14	<input checked="" type="checkbox"/>	For systems serving nonresidential spaces, pipe insulation for the following applications is specified to comply with Table 120.3-A (see below) per 120.3: <ul style="list-style-type: none"> Recirculating system piping, including supply and return piping of the water heater The first 8 ft of hot and cold outlet piping, including between storage tank and heat trap, for a nonrecirculating storage system Pipes that are externally heated
15	<input checked="" type="checkbox"/>	Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather shall be installed with a cover suitable for outdoor service per 120.3(b) / 160.4(f). Pipe insulation buried below grade must be installed in a water proof and non-crushable casing or sleeve.

TABLE 120.3-A / 160.4-A PIPE INSULATION THICKNESS

Fluid Temperature Range (°F)	Conductivity Range (Btu-in per hour per ft ² per °F)	Insulation Mean Rating Temp (°F)	Nominal Pipe Diameter (in)			
			< 1	1 to < 1.5	1.5 to < 4	1.5 to < 4 Multifamily & Hotel/Motel
105-140	0.22 - 0.28	100	Minimum Insulation Required			
			1.0 in or R-7.7	1.5 in or R-12.5	1.5 in or R-11	2.0 in or R-16

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 CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: 115932-0623-0003
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REV	DESCRIPTION	DATE



SABOR PIRI PIRI TENANT IMPROVEMENT
 800 B AVENUE SUITE 804 NATIONAL CITY CA 91950



TITLE:

PLUMBING T-24 FORMS

JOB NO: B2306-AA123
 DRAWN: JP
 CHECKED: CZ
 SCALE: NONE
 DATE: 06.28.2023

P0.3

STATE OF CALIFORNIA
Domestic Water Heating System
 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE NRCC-PLB-E

Project Name: SABOR PIRI PIRI TENANT IMPROVEMENT Report Page: (Page 5 of 7)

800 B AVENUE SUITE 804 NATIONAL CITY CA 91950 Date Prepared: 2023-06-26T17:56:42-04:00

H. DOMESTIC HOT WATER CONTROLS

This table is used to demonstrate compliance with control requirements in 110.3 for all occupancies. For multifamily residential and hotel/motel occupancies, compliance is also demonstrated with requirements in 160.4(e) / 170.2(d).

	Yes	No	Not Applicable	Requirement
01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Construction documents require manufacturer certification that service water-heating systems are equipped with automatic temperature controls capable of adjusting temperature settings per 110.3(a).
02	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Systems with capacity > 167,000 BTUH equipped with outlet temperature controls per 110.3(c)1 unless covered by California Plumbing Code 613.0.
03	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Controls for circulating pumps or electrical heat trace systems are capable of automatically turning off the system per §110.3(c)2 unless systems serves healthcare facility.
04	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	For recirculation systems serving multiple dwelling units, design includes automatic pump controls per 170.2(d) or 180.1(b)3 for additions.
05	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	For recirculation systems serving individual dwelling units, design includes manual on/off controls as specified in Reference Appendix RAA.4.9 per 170.2(d).
06	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Combustion air positive shut-off shall be provided per 160.4(3) on all newly installed commercial boilers as follows: <ul style="list-style-type: none"> Boilers with input capacity >= 2.5 MMBtu/h, in which the boiler is designed to operate with a nonpositive vent static pressure Boilers where one stack serves two or more boilers with a total combined input capacity per stack of 2.5 MMBtu/h.
07	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Boiler combustion air fans with motor >= 10 hp shall meet one of the following <ul style="list-style-type: none"> The fan motor shall be driven by a variable speed drive OR The fan motor shall include controls that limit the fan motor demand to <=30% of the total design wattage at 50% of the design air volume.
08	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Newly installed boilers with an input capacity (d:gte/) 5MMBTU/h and a steady state full-load combustion efficiency < 90% shall maintain excess (stack-gas) oxygen concentrations <= 5% by volume on a dry basis over firing rates of 20-100%. Combustion air volume shall be controlled with respect to firing rate or flue gas oxygen concentration. Use of a common gas and combustion air control linkage or jack shaft is prohibited.

Generated Date/Time: Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Compliance ID: 115932-0623-0003

Report Version: 2022.0.000 Schema Version: rev 20220101 Report Generated: 2023-06-26 14:56:43

STATE OF CALIFORNIA
Domestic Water Heating System
 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE NRCC-PLB-E

Project Name: SABOR PIRI PIRI TENANT IMPROVEMENT Report Page: (Page 6 of 7)

800 B AVENUE SUITE 804 NATIONAL CITY CA 91950 Date Prepared: 2023-06-26T17:56:42-04:00

I. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title

NRCI-PLB-E - Must be submitted for all buildings

J. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no forms required for this project.

K. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

There are no forms required for this project.

Generated Date/Time: Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Compliance ID: 115932-0623-0003

Report Version: 2022.0.000 Schema Version: rev 20220101 Report Generated: 2023-06-26 14:56:43

STATE OF CALIFORNIA
Domestic Water Heating System
 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE NRCC-PLB-E

Project Name: SABOR PIRI PIRI TENANT IMPROVEMENT Report Page: (Page 7 of 7)

Project Address: 800 B AVENUE SUITE 804 NATIONAL CITY CA 91950 Date Prepared: 2023-06-26T17:56:42-04:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: RAMIL BATIANCLA Documentation Author Signature: *Ramil Batiancla*

Company: www.mrengcon.com Signature Date: 06.25.2023

Address: 39210 STATE ST. STE 106 CEA/HERS Certification Identification (if applicable):

City/State/Zip: FREMONT, CA 94538 Phone: 510-449-4862

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

- The information provided on this Certificate of Compliance is true and correct.
- I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
- The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
- The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
- I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: LEVI F. MALABUYO Responsible Designer Signature: *Levi F. Malabuyo*

Company: MR ENGINEERING CONSULTANTS, INC. Date Signed: 06.25.2023

Address: 39210 STATE ST. STE 106 License: M26141

City/State/Zip: FREMONT, CA 94538 Phone: 510-449-4862

Generated Date/Time: Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Compliance ID: 115932-0623-0003

Report Version: 2022.0.000 Schema Version: rev 20220101 Report Generated: 2023-06-26 14:56:43

REV	DESCRIPTION	DATE

**SABOR PIRI PIRI
 TENANT IMPROVEMENT**
 800 B AVENUE SUITE 804
 NATIONAL CITY CA 91950

1171 4th Ave, #811
 San Diego, CA 92101
 phone: (619) 730-4468
 fax: (619) 596-3382
 eng@mr-engineers.com
 www.mrengcon.com
**MR ENGINEERING
 CONSULTANTS INC.**



TITLE:

**PLUMBING
 T-24 FORMS**

JOB NO: B2306-AA123

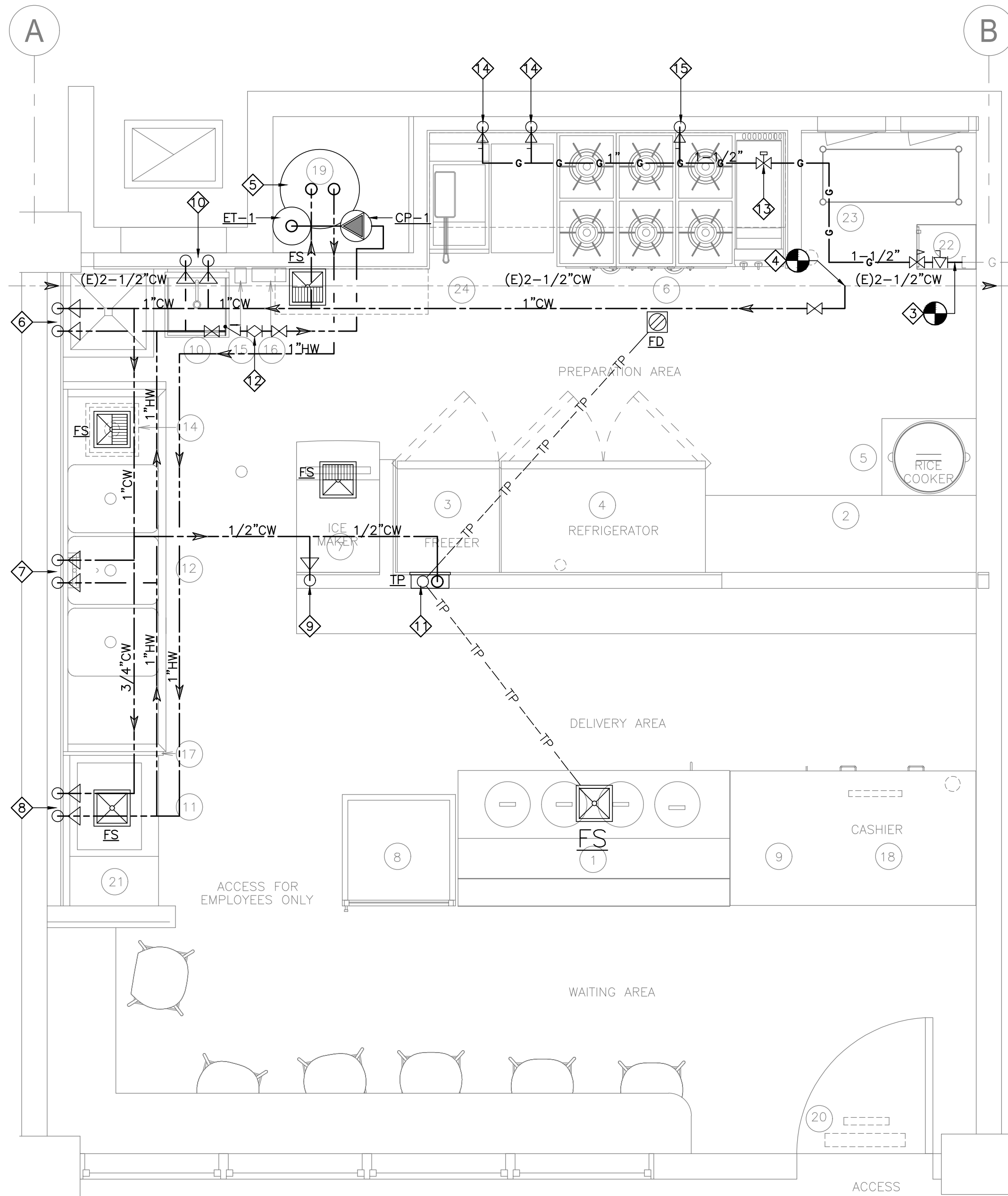
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CHECKED: CZ

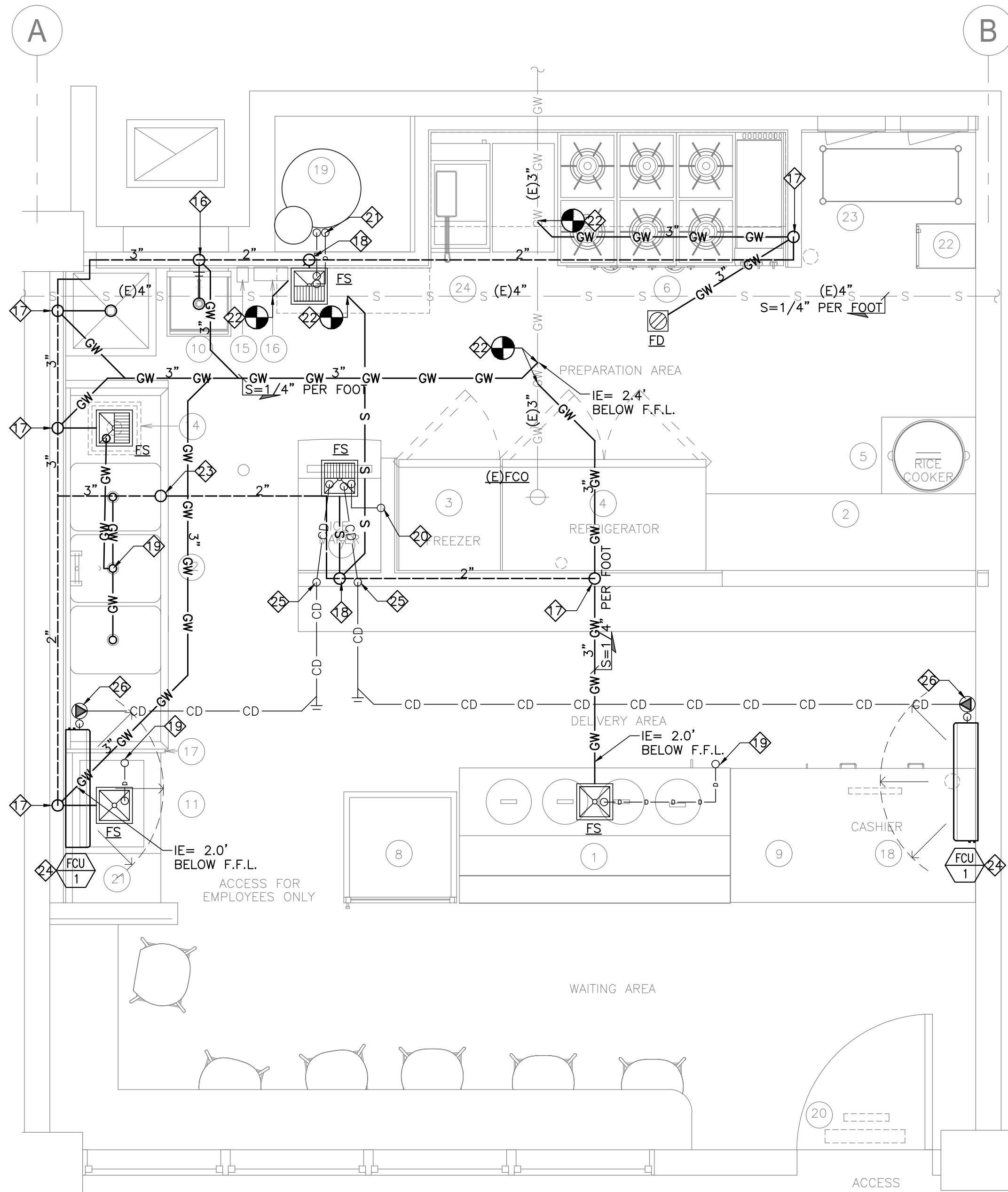
SCALE: NONE

DATE: 06.28.2023

P0.4



1 PLUMBING WATER AND GAS LAYOUT
 P2.1 SCALE: 1/2" = 1'-0"



2 PLUMBING SEWER AND VENT LAYOUT
 P2.1 SCALE: 1/2" = 1'-0"

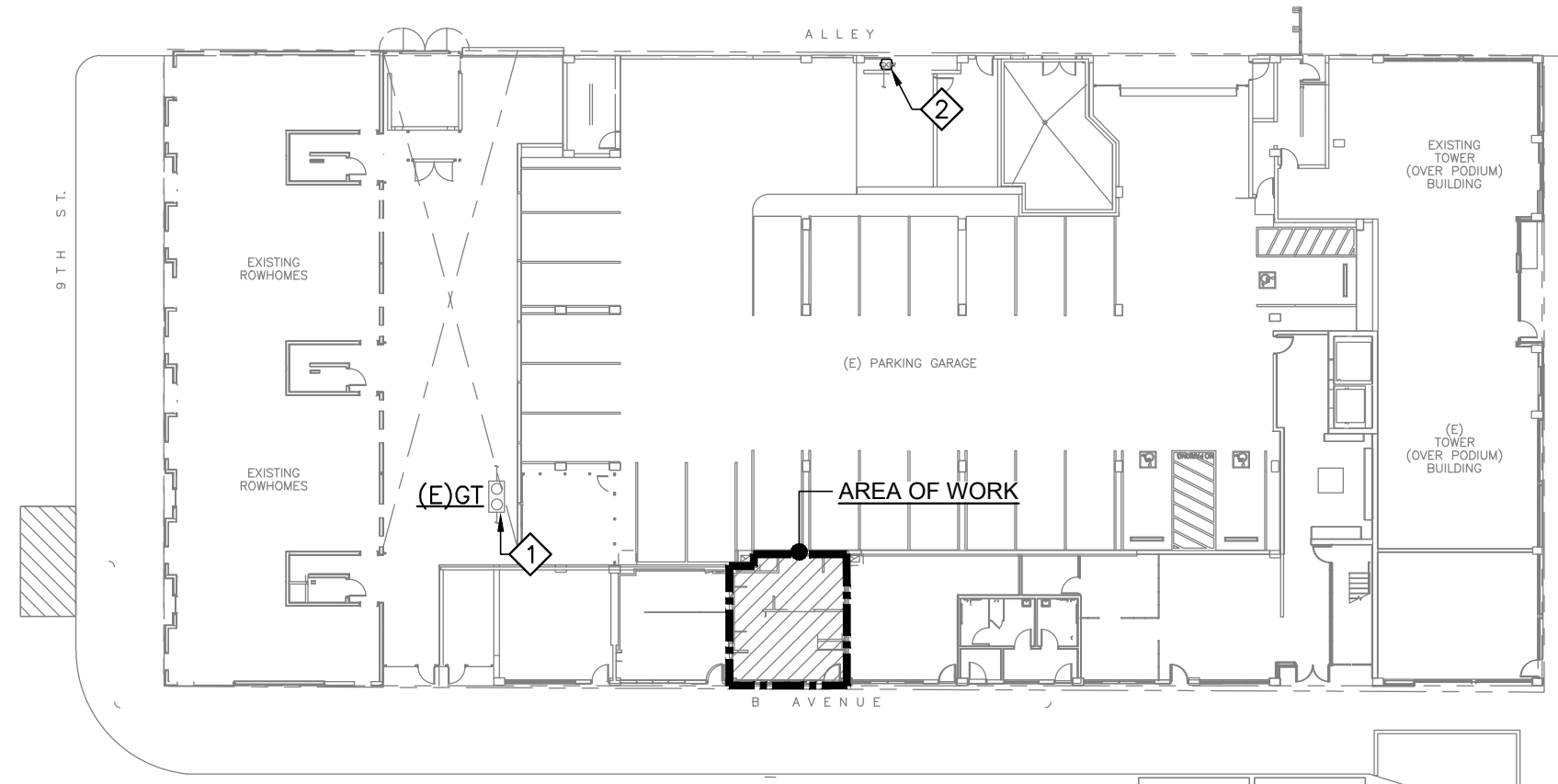
SHEET KEYNOTES

- 1 EXISTING HYDROMECHANICAL GREASE INTERCEPTOR (100 GPM; 1751 GREASE CAPACITY). CONTRACTOR SHALL VERIFY AT SITE.
- 2 NEW GAS METER WITH (465 CFH CAPACITY) @ 5 PSI GAS INLET PRESSURE TO BE CONNECTED TO EXISTING 1/2" MAIN GAS PIPE. GAS METER SHALL BE PROTECTED AGAINST OVER PRESSURE, BACK PRESSURE AND VACUUM. SEC. 1208.7.3, 2022 CALIFORNIA PLUMBING CODE.
- 3 (N)1-1/2"G PIPE TO BE CONNECTED TO EXISTING 1/2" GAS PIPE STUB-OUT. PROVIDE PRESSURE REGULATOR SET TO .25 PSI DISCHARGE PRESSURE. CONTRACTOR SHALL VERIFY THE POINT OF CONNECTION AT SITE.
- 4 (N)1"CW PIPE TO BE CONNECTED TO EXISTING 2-1/2"CW MAIN PIPE, CONTRACTOR TO VERIFY THE POINT OF CONNECTION.
- 5 SUPPLY AND INSTALL NEW ELECTRIC STORAGE TO BE MOUNTED ON CONCRETE PLATFORM AT 48" HIGH FROM FINISHED FLOOR. COMPLETE WITH EXPANSION TANK, RE-CIRCULATION PUMP AND ALL NECESSARY ACCESSORIES, VALVES AND FITTINGS. SUPPORT AND BRACING SHALL BE IN ACCORDANCE WITH CPC 2022, 507.0 AND STRUCTURAL ENGINEER'S REQUIREMENT. PIPE ROUGH-IN SHALL BE:
 - 1" COLD WATER PIPE
 - 1" HOT WATER PIPE
 - 3/4" HOT WATER RETURN PIPE
- 6 3/4"CW AND 3/4"HW PIPES RUN THROUGH WALL WITH ISOLATION VALVE. INSTALL FAUCET WITH INTEGRAL ASSE 1001 COMPLIANT VACUUM BREAKER.
- 7 1"CW AND 1"HW SUPPLY PIPES RUN THROUGH WALL WITH ISOLATION VALVE.
- 8 3/4"CW AND 3/4"HW SUPPLY PIPES RUN THROUGH WALL WITH ISOLATION VALVE.
- 9 1/2"CW SUPPLY PIPE RUN THROUGH WALL WITH ISOLATION VALVE FOR ICE MAKER. SHALL HAVE BUILT IN BACKFLOW PREVENTER. INSTALL SUITABLE WATER FILTER AS RECOMMENDED BY THE MANUFACTURER.
- 10 3/4"CW AND 3/4"HW PIPES RUN THROUGH WALL WITH ISOLATION VALVE. INSTALL ASSE 1070 COMPLIANT THERMOSTATIC MIXING VALVE.
- 11 TRAP PRIMER PROTECTION FOR FLOOR DRAIN AND INDIRECT RECEPTOR. SUPPLY PIPE SHALL BE HARD DRAWN CONTINUOUS SLOPE. PROVIDE WITH MULTIPLE DISTRIBUTION UNIT (IF APPLICABLE). PROVIDE WITH APPROVED ACCESS PANEL.
- 12 3/4" HOT WATER RETURN WITH CIRCUIT SETTER/BALANCING VALVE, TO BE CALIBRATED BY CONTRACTOR AT SITE. CIRCUIT SETTER SET TO 1.0 GPM, SIMILAR TO WATTS LFC5M-61-S OR EQUAL APPROVED.
- 13 AUTOMATIC GAS SHUT OFF VALVE, SIGNAL FROM HOOD ANSUL SYSTEM WILL SHUT OFF GAS SUPPLY.
- 14 3/4"GAS PIPE RUN IN WALL WITH ISOLATION VALVE AND DRIP LEG FOR FRYER.
- 15 1-1/4"GAS PIPE RUN IN WALL WITH ISOLATION VALVE AND DRIP LEG FOR GAS BURNER.
- 16 2" VERTICAL GREASE WASTE PIPE WITH A CLEANOUT RUNS THROUGH THE WALL AND CONNECTS TO A 1-1/2" VENT EXTENDING UP TO THE CEILING.
- 17 3" GREASE WASTE PIPE RUNS BELOW THE FLOOR SLAB AND CONNECTS TO A 2" VENT RUNNING THROUGH THE WALL, EXTENDING UP TO THE CEILING.
- 18 3" WASTE PIPE RUNS BELOW THE FLOOR SLAB AND CONNECTS TO A 2" VENT RUNNING THROUGH THE WALL, EXTENDING UP TO THE CEILING.

- 19 PREP. SINK, 3-COMP. SINK, AND HOT FOOD STATION TO DISCHARGE INDIRECTLY TO FLOOR SINK VIA APPROVED AIR GAP.
- 20 ICE MAKER SHALL INDIRECTLY DISCHARGE TO FLOOR SINK VIA APPROVED AIR GAP.
- 21 WATER HEATER'S TEMPERATURE AND PRESSURE (T&P) DRAIN SHOULD BE CONFIGURED TO INDIRECTLY DISCHARGE TO FLOOR SINK TO VIA APPROVED AIR GAP.
- 22 NEW WASTE PIPE TO BE CONNECTED TO EXISTING SOIL / GREASE WASTE PIPE STUB-OUTS. BEFORE PROCEEDING WITH NEW WASTE PIPE LAYOUT, CONTRACTOR SHALL EXCAVATE EXISTING WASTE PIPE AT IDENTIFY POINT OF NEW CONNECTION AND VERIFY IF EXISTING SOIL AND GREASE WASTE PIPE DEPTH AND SIZE IS ADEQUATE TO ACCOMMODATE NEW WASTE PIPE CONNECTION. CONTRACTOR SHALL PROVIDE INFORMATION ABOUT ANY INVERT ELEVATION PROBLEM THAT MAY ARISE BEFORE PROCEEDING WITH NEW WORK.
- 23 3" VENT PIPE TO BE CONNECTED TO EXISTING VENT AT CEILING SPACE. CONTRACTOR TO VERIFY THE POINT OF CONNECTION.
- 24 INDICATIVE PROFILE OF MECHANICAL MAKE-UP AIR UNITS AND FCU. SEE MECHANICAL DRAWINGS FOR DETAILS.
- 25 3/4" CONDENSATE DRAIN PIPING FROM FAN COIL UNIT DOWN THRU WALL AND DISCHARGE INDIRECTLY TO FLOOR SINK.
- 26 SUPPLY AND INSTALL CONDENSATE PUMP (ASPEN ASP-MLOEM OR APPROVED EQUAL) BELOW FCU DRAIN LINE TO RECEIVE CONDENSATE DRAIN BY GRAVITY. TO BE INSTALLED IN WALL. PROVIDE ACCESS PANEL.

GENERAL NOTES

- A. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION OF ALL PIPING AND UTILITIES PRIOR TO START OF WORK. IN THE EVENT OF ANY DISCREPANCIES OR POTENTIAL CONFLICTS, NOTIFY THE ARCHITECT AND ENGINEER IN WRITING PRIOR TO START OF WORK.
- B. ALL PIPING LOCATIONS ARE DIAGRAMMATIC. CONTRACTOR SHALL COORDINATE WITH ALL TRADES AND OWNER'S REPRESENTATIVE AND VERIFY EXACT ROUTING PRIOR TO START OF WORK.
- C. PIPE PENETRATIONS OF FIRE RATED WALL, FLOOR & CEILING SHALL BE PROTECTED AS PER CBC 714.3.
- D. HOT WATER PIPING SHALL BE INSULATED AND IN COMPLIANCE WITH CEC TABLE 120.3-A.
- E. DOMESTIC WATER PIPING SHALL BE AT CEILING SPACE OR HIGH LEVEL. UNLESS OTHERWISE NOTED.
- F. INSTALL ASSE 1010 COMPLIANT WATER HAMMER ARRESTERS ON LOCATIONS INDICATED IN LAYOUT.
- G. CONTRACTOR SHALL AVOID RUNNING PLUMBING PIPING ABOVE ELECTRICAL EQUIPMENT.
- H. CONTRACTOR SHALL VERIFY THAT WORK SHALL NOT CONFLICT WITH ANY EXISTING STRUCTURAL, UTILITY, OR UNDER-SLAB CONDITION USING NONDESTRUCTIVE VERIFICATION (GROUND PENETRATION RADAR, X-RAY, ETC) SUBSEQUENTLY, PENETRATION LOCATIONS MUST BE REVIEWED AND APPROVED BY LANDLORD PRIOR TO WORK.
- I. DEMOLISH AND REMOVE ALL UNUSED PIPING UNLESS OTHERWISE NOTED. COORDINATED WITH GENERAL CONTRACTOR FOR PATCHING WALL, CEILING OR ROOF AS NEEDED.
- J. NO PLUMBING PIPING SHALL BE CONCEALED AND VISIBLE AT GLAZING.
- K. INSTALL ALL FLOOR SINKS ACCESSIBLE FOR CLEANING AND NOT TO CAUSE TRIP HAZARD (UNDER SINKS OR HALF EXPOSED).
- L. FLOOR SINKS SHALL BE ACCESSIBLE FOR CLEANING AND INSTALLED FLUSH WITH FINISHED FLOOR.
- M. CONTRACTOR SHALL AVOID RUNNING PLUMBING PIPING ABOVE ELECTRICAL EQUIPMENT.
- N. PLUMBING CONTRACTOR TO PROVIDE ISOLATION VALVES ON ALL HOT AND COLD WATER PIPING CONNECTIONS SERVING THE PLUMBING FIXTURES.
- O. EXISTING CONDITION ARE BASED ON LIMITED FIELD VERIFICATIONS. THE CONTRACTOR SHALL ADJUST TO ACTUAL FIELD CONDITIONS AT NO ADDITIONAL EXPENSE TO THE PROJECT. NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR ANY EXTRAS DUE TO CONTRACTOR'S FAILURE TO VISIT THE PROJECT SITE & PREDETERMINATION OF EXISTING CONDITIONS PRIOR TO SUBMITTING THE BID. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT/OWNER/ENGINEER FOR SOLUTION.
- P. ALL HOT AND COLD WATER PIPING SERVING PLUMBING FIXTURES & EQUIPMENT SHALL BE PROVIDED WITH BRANCH SHUT-OFF VALVES.
- Q. VENT THRU ROOF PIPE, PROVIDE 10 FEET MINIMUM AWAY FROM ANY AIR INTAKE INTO THE BUILDING OR OPENING WINDOW/ROOF ACCESS INTO THE BUILDING.



3 SITE PLAN
 P2.1 SCALE: 1/32" = 1'-0"

REV	DESCRIPTION	DATE

SABOR PIRI PIRI
TENANT IMPROVEMENT
 800 B AVENUE SUITE 804
 NATIONAL CITY CA 91950



TITLE:
PLUMBING LAYOUT
 JOB NO: B2306-AA123
 DRAWN: JP
 CHECKED: CZ
 SCALE: AS SHOWN
 DATE: 06.28.2023

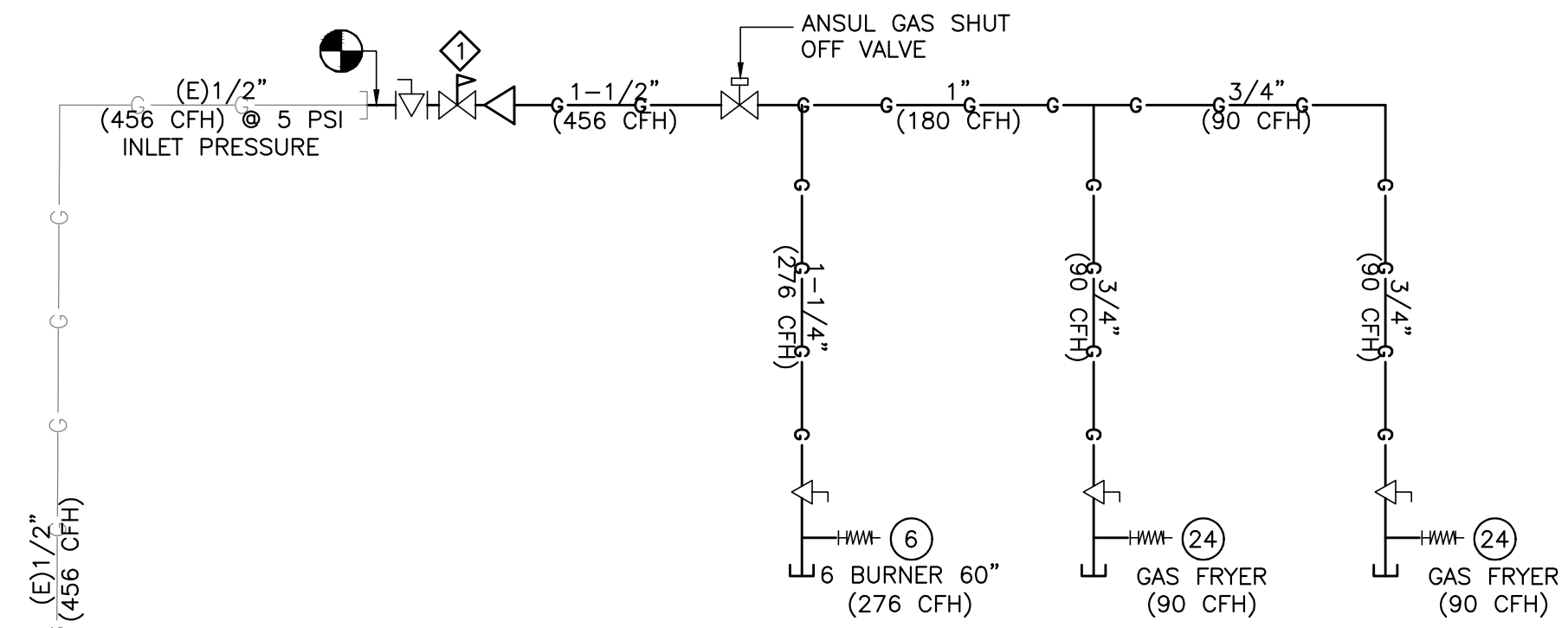
P2.1

LEVEL P2

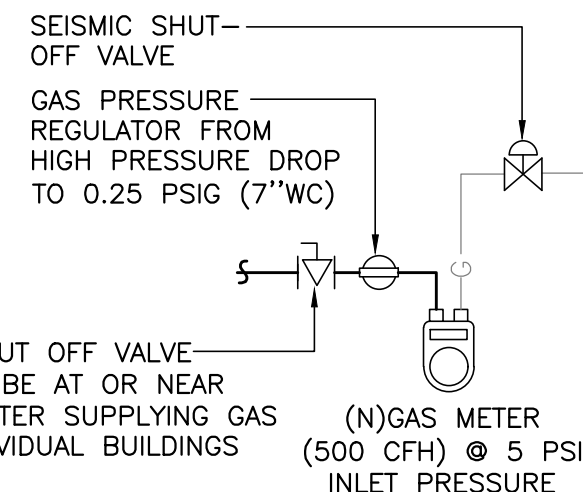
SHEET NOTES

◇ PROVIDE PRESSURE REGULATOR SET AT 25 PSI DISCHARGE PRESSURE

"MAXITROL" 325-L SERIES LINE PRESSURE REGULATOR - 5PSI



LEVEL P1 LOBBY

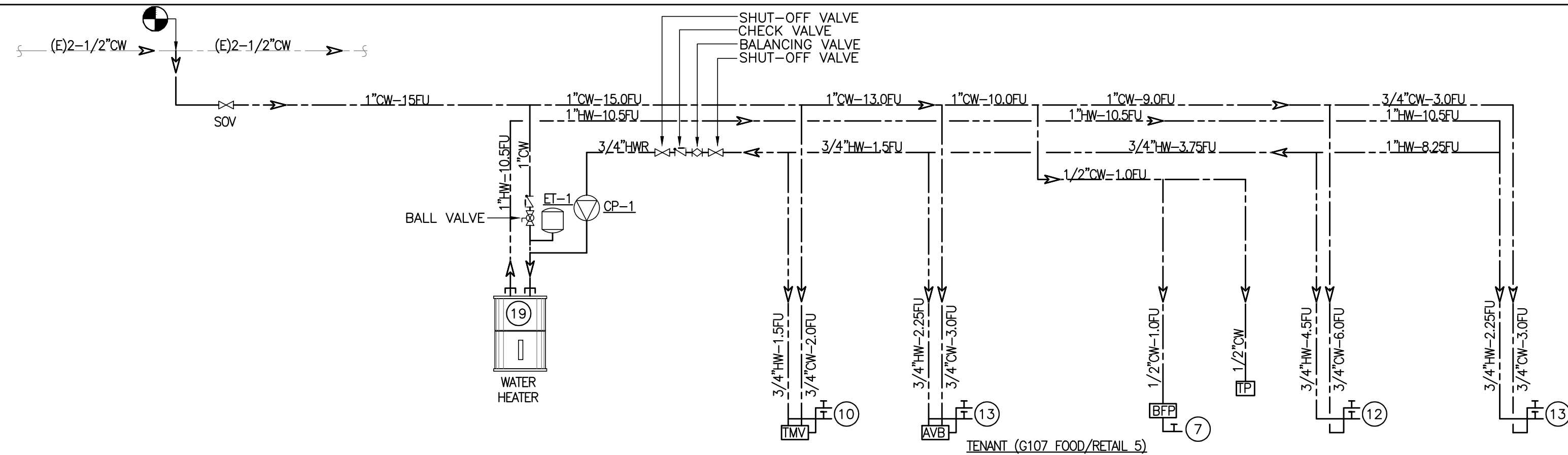


LEVEL P0 GROUND

1 GAS DIAGRAM

P3.1 NTS

LEVEL P2



LEVEL P1 LOBBY

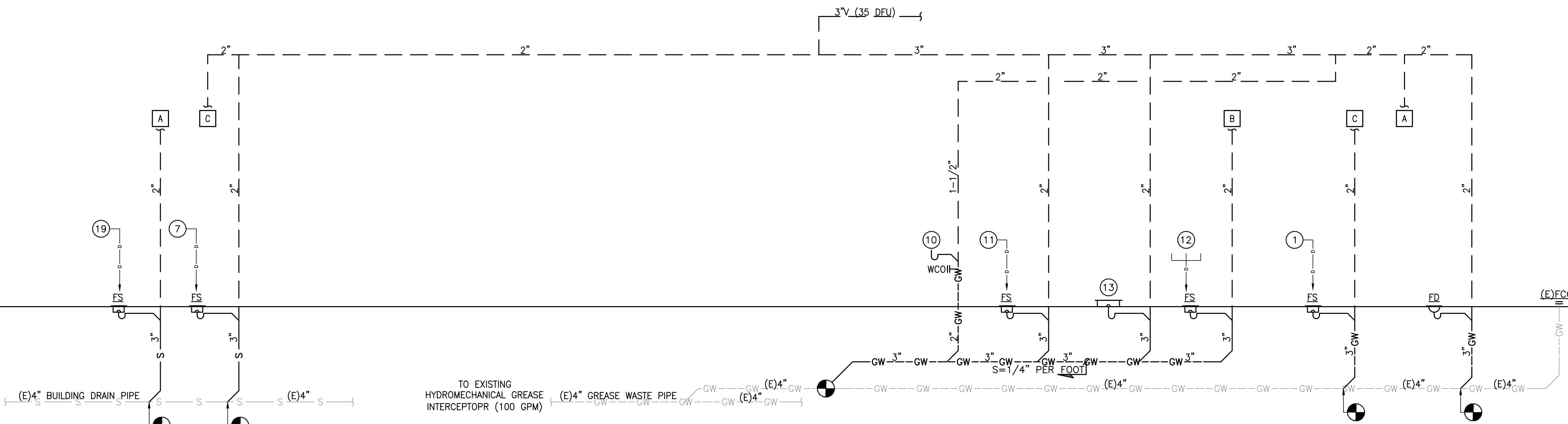
2 WATER DIAGRAM

P3.1 NTS

LEVEL P2

LEGEND:

[X] - PIPE CONTINUATION NOTE



LEVEL P1 LOBBY

3 SEWER AND VENT DIAGRAM

P3.1 NTS

REV	DESCRIPTION	DATE

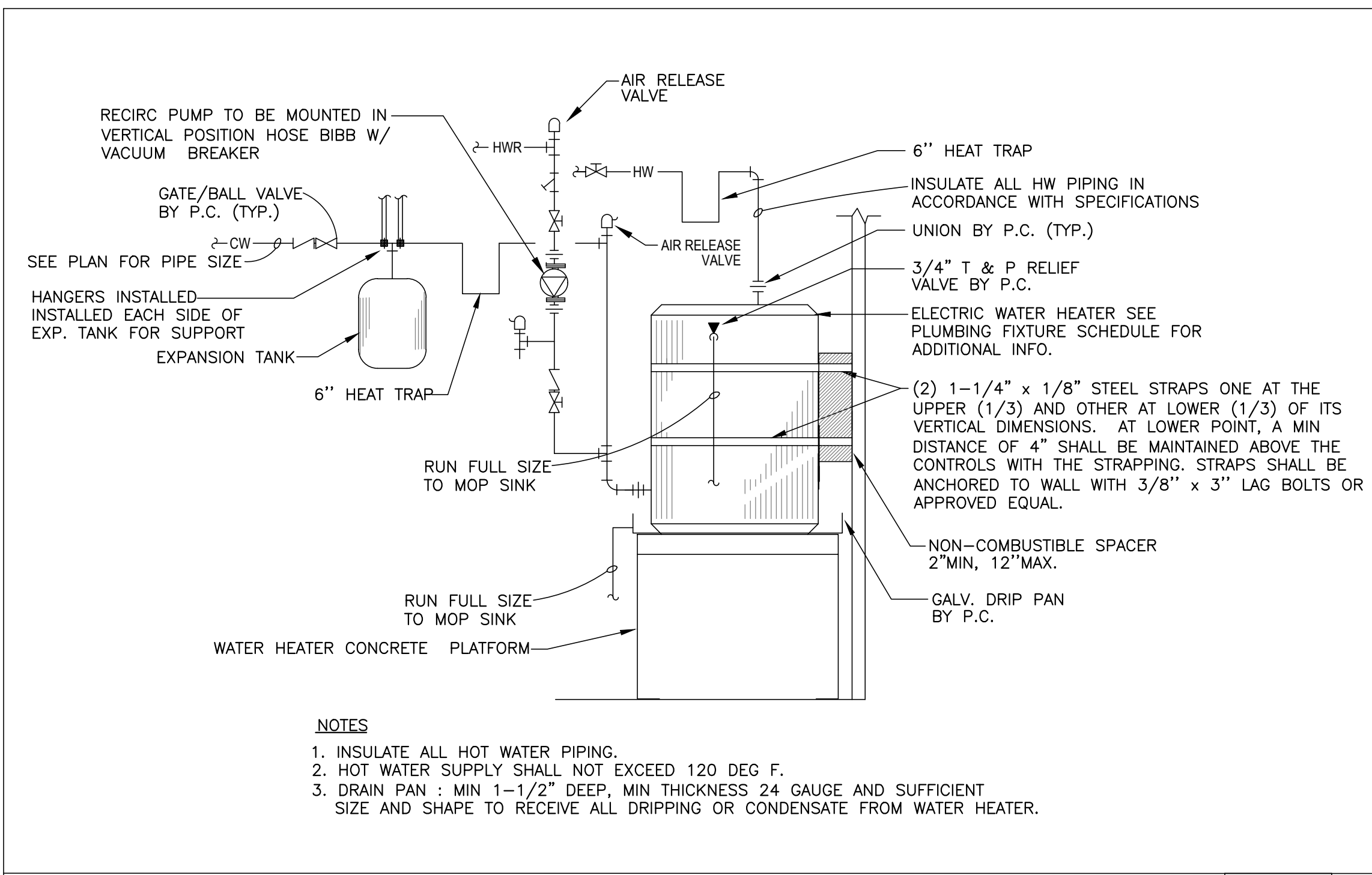
SABOR PIRI PIRI
TENANT IMPROVEMENT
 800 B AVENUE SUITE 804
 NATIONAL CITY CA 91950



TITLE:
PLUMBING SCHEMATIC DIAGRAM

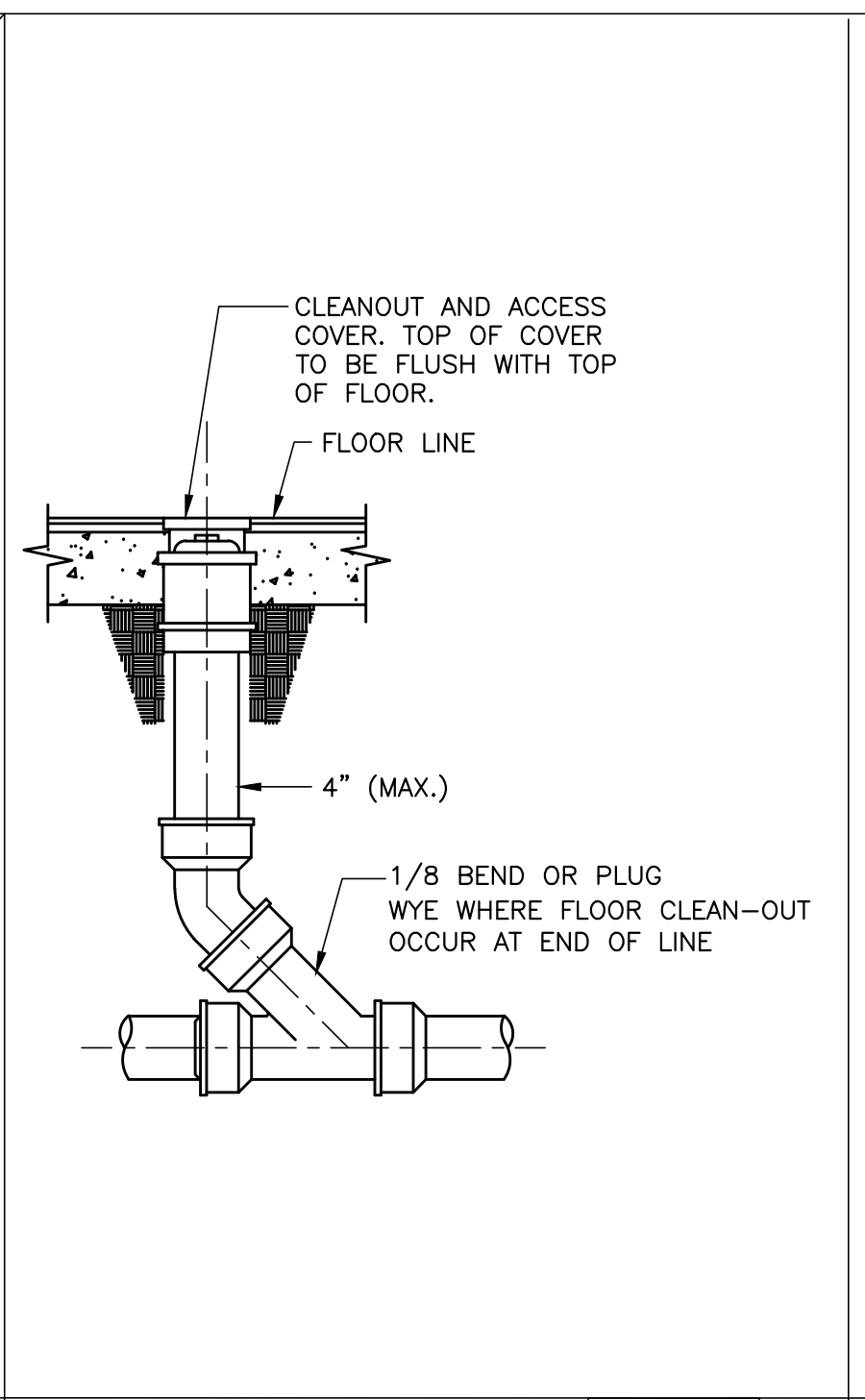
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 DRAWN: JP
 CHECKED: CZ
 SCALE: NONE
 DATE: 06.28.2023

P3.1

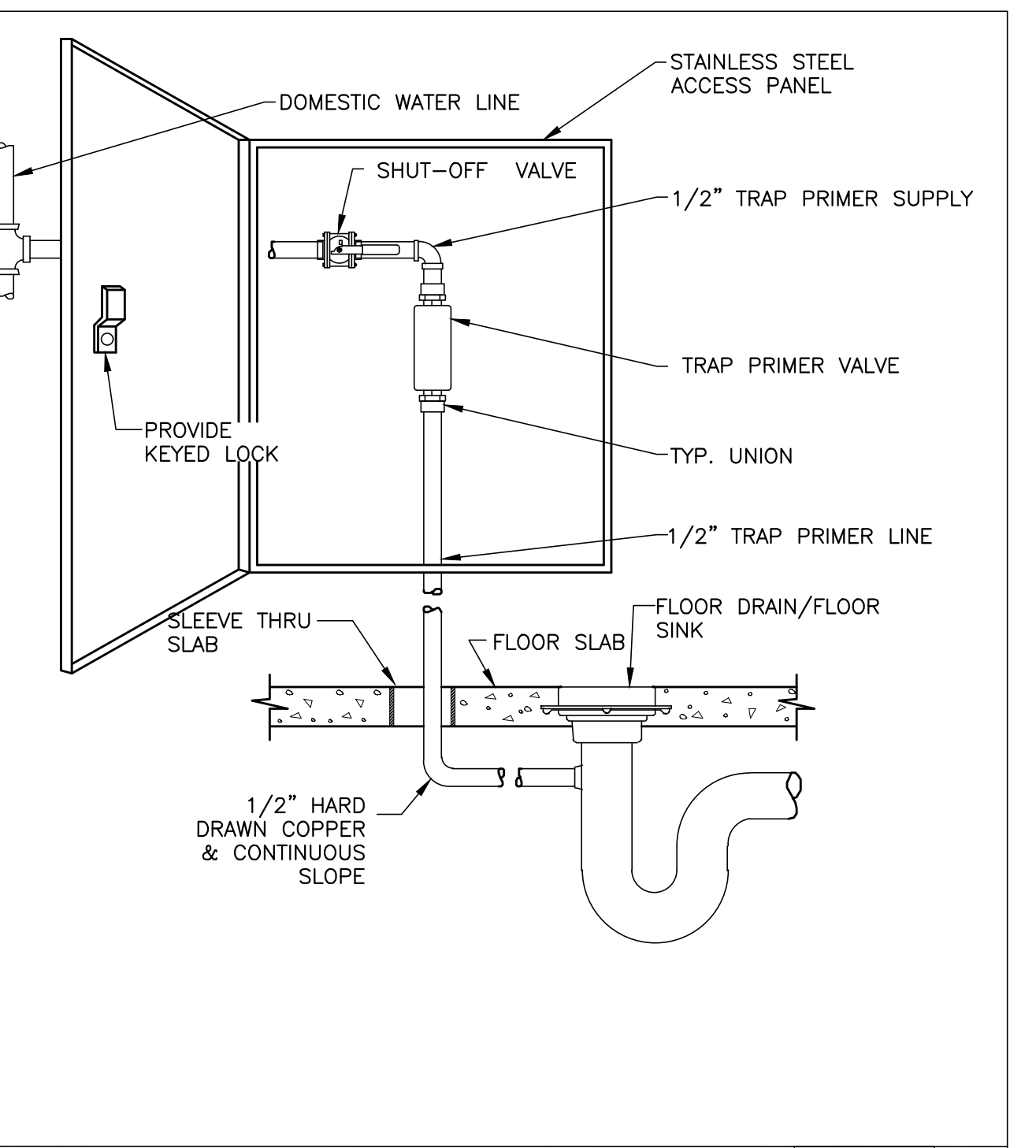


- NOTES**
1. INSULATE ALL HOT WATER PIPING.
 2. HOT WATER SUPPLY SHALL NOT EXCEED 120 DEG F.
 3. DRAIN PAN : MIN 1-1/2" DEEP, MIN THICKNESS 24 GAUGE AND SUFFICIENT SIZE AND SHAPE TO RECEIVE ALL DRIPPING OR CONDENSATE FROM WATER HEATER.

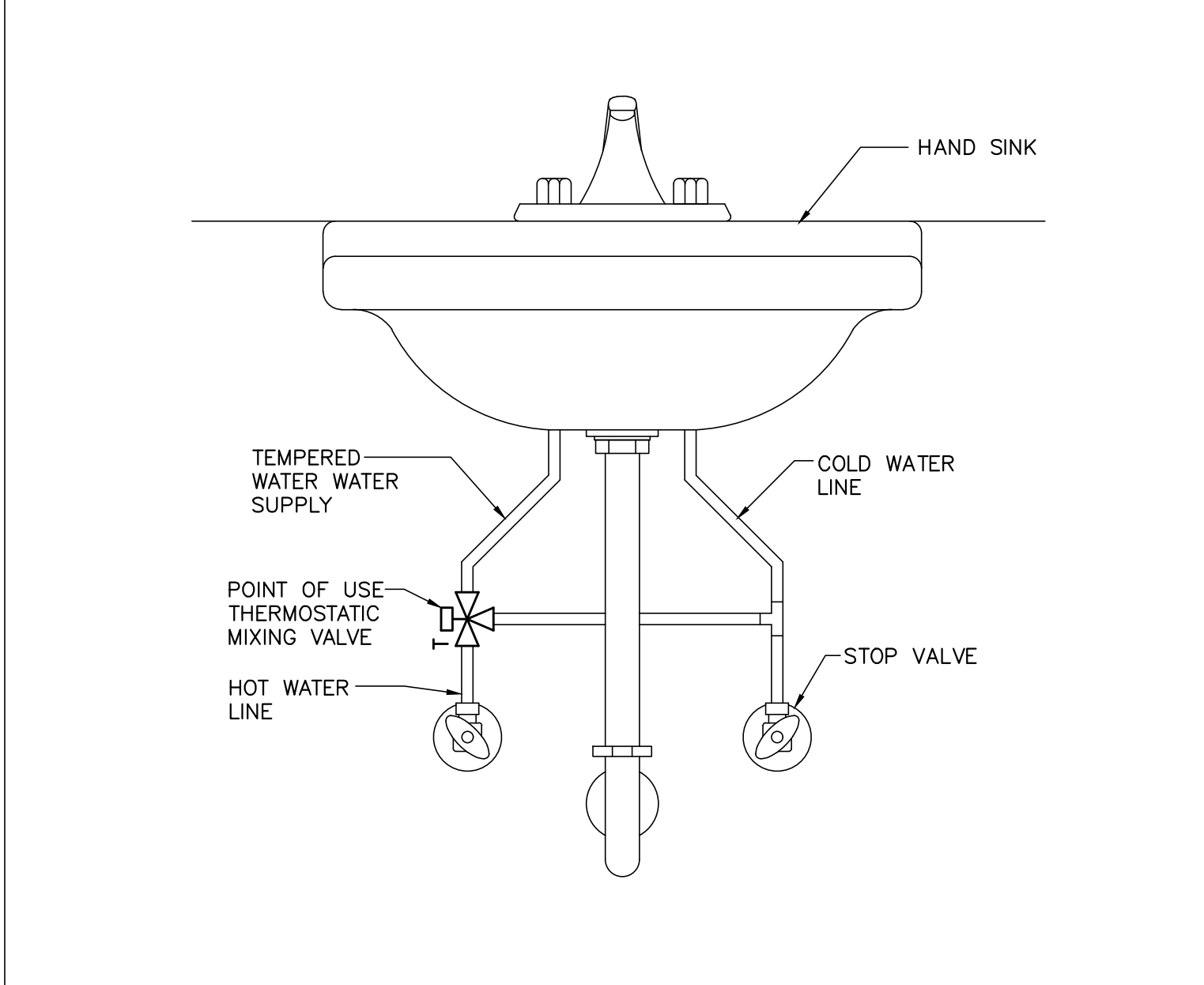
HOT WATER HEATER PIPING DETAIL SCALE NONE 1 NOT USED



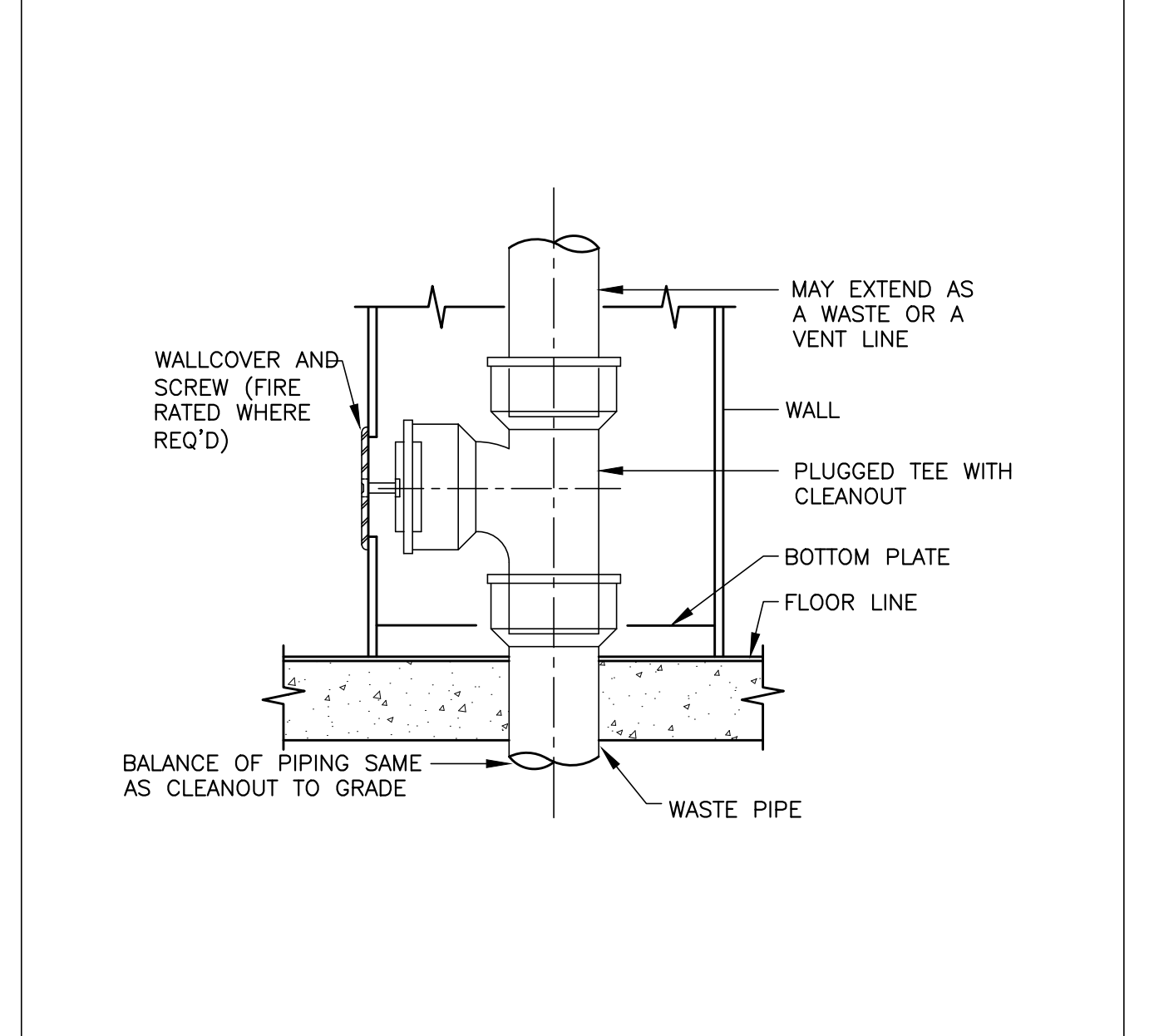
SCALE NONE 2 FLOOR CLEANOUT DETAIL



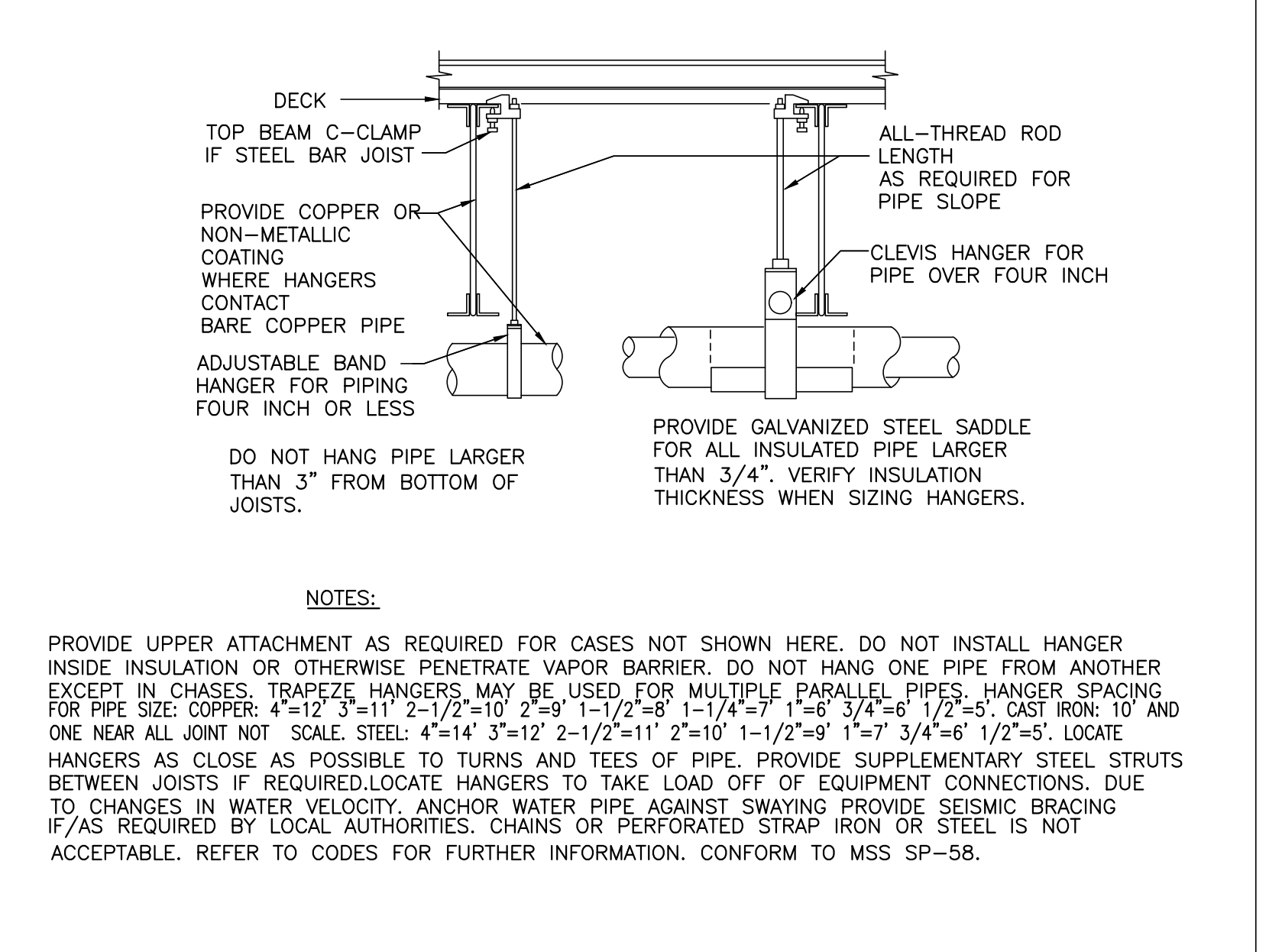
SCALE NONE 3 TRAP PRIMER DETAIL



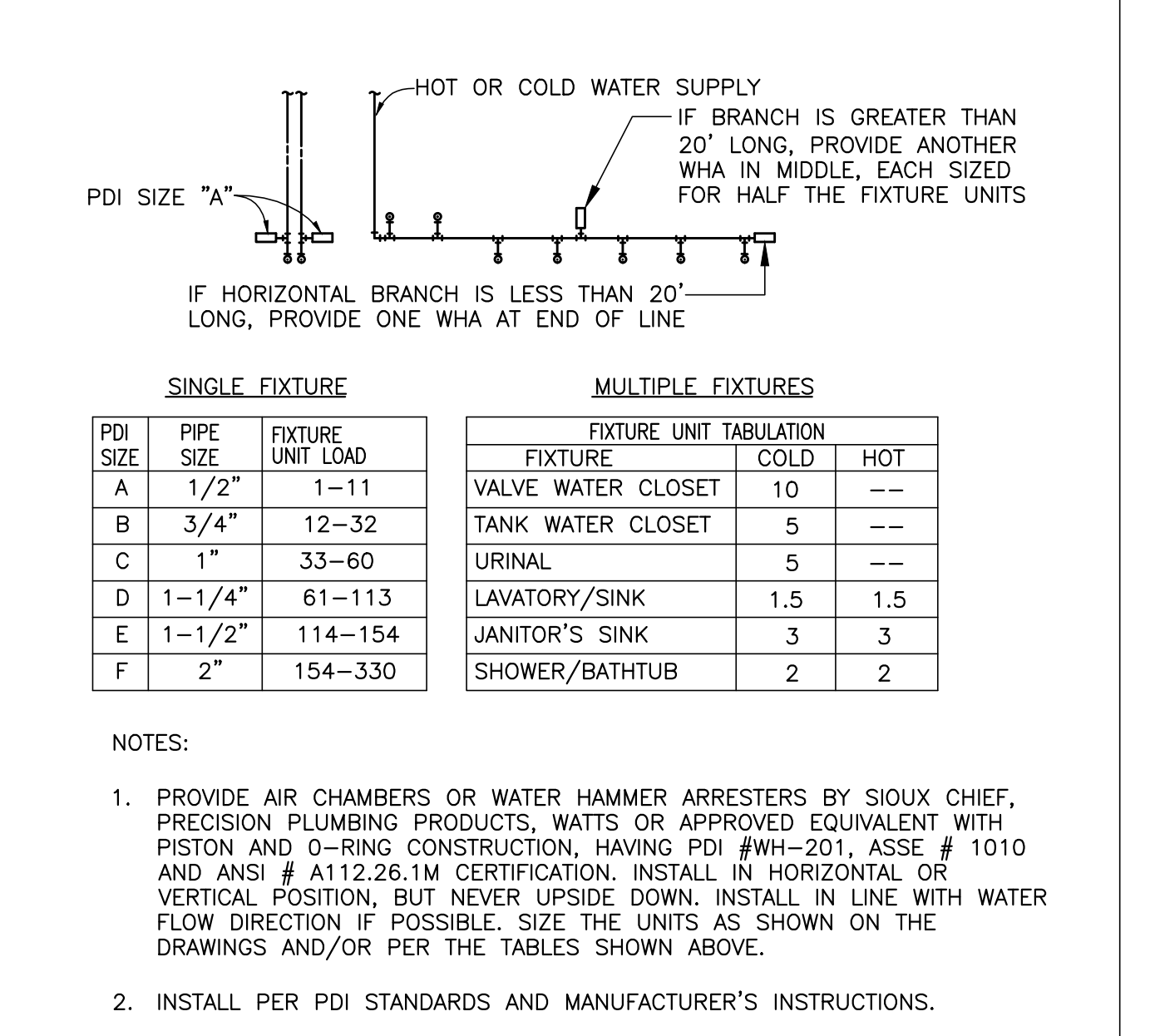
SCALE NONE 5



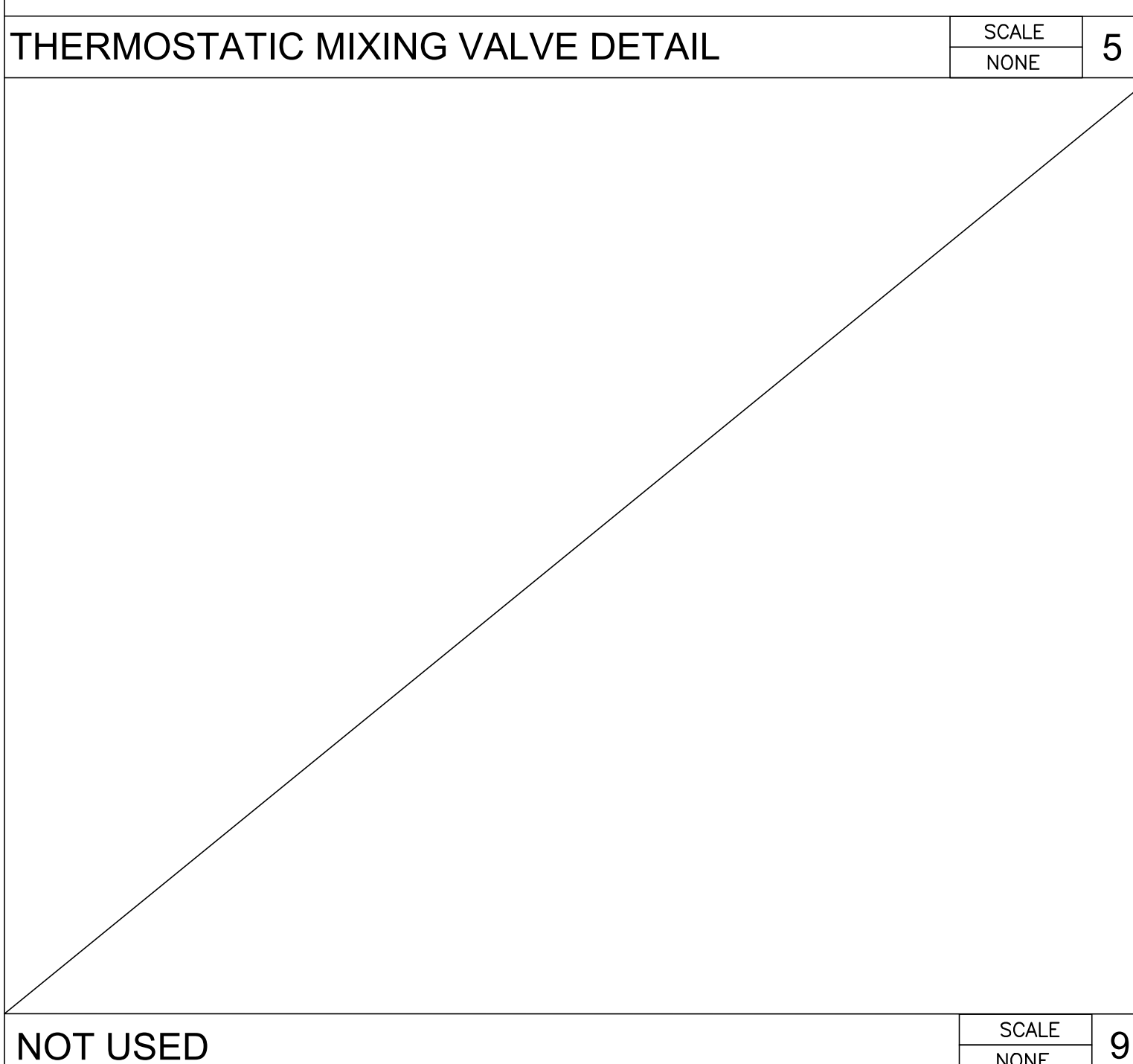
SCALE NONE 6



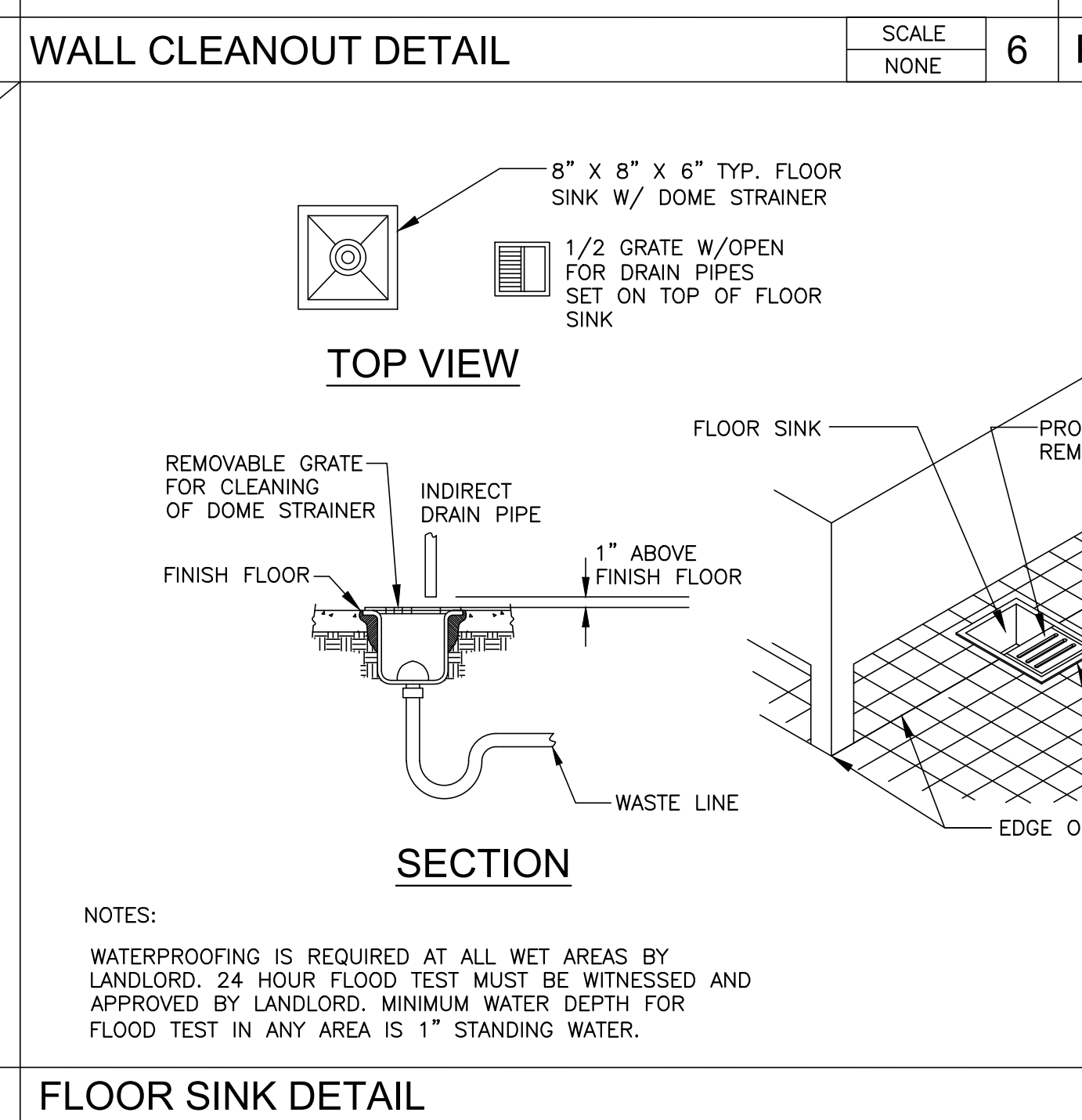
SCALE NONE 7



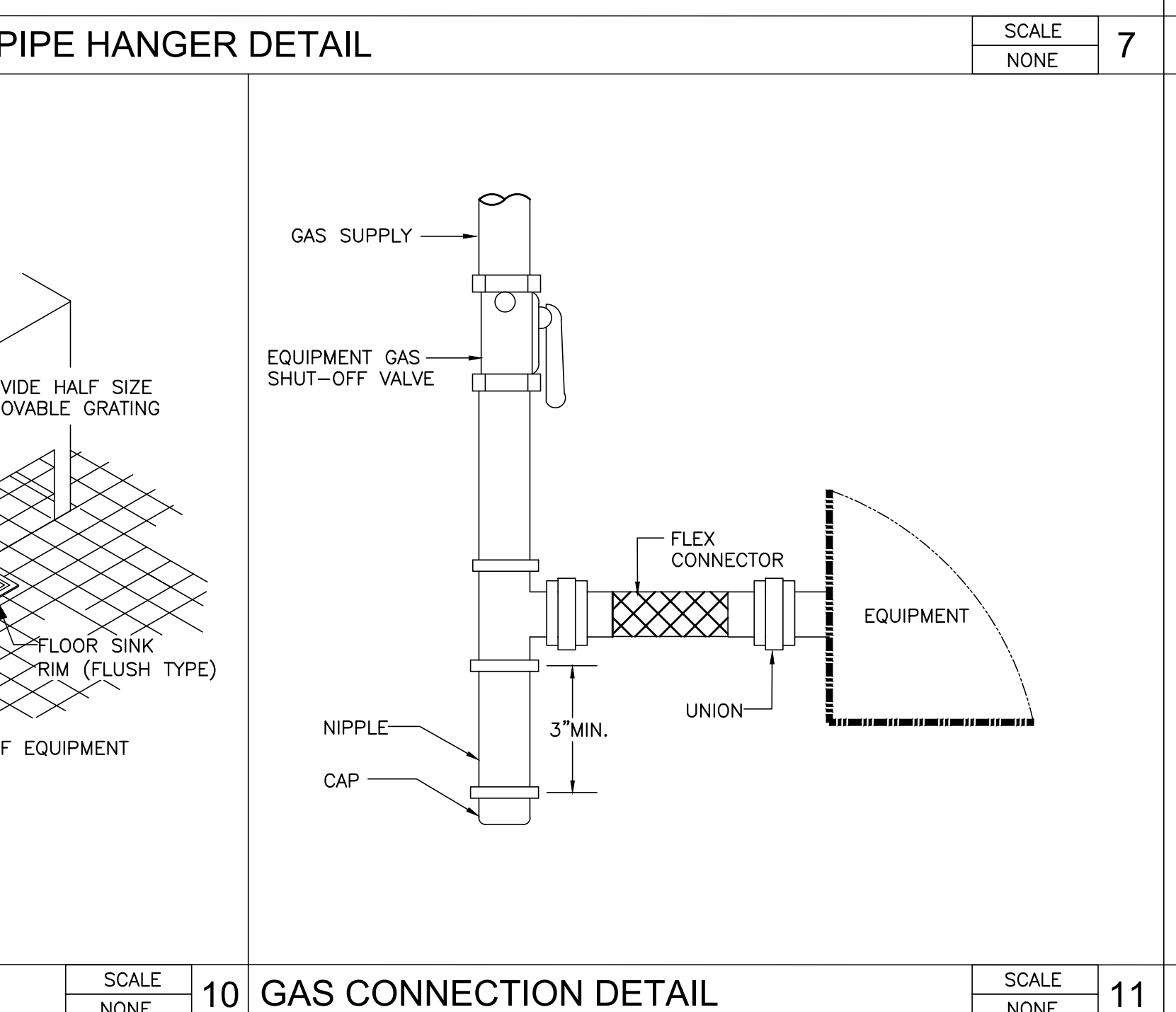
SCALE NONE 8



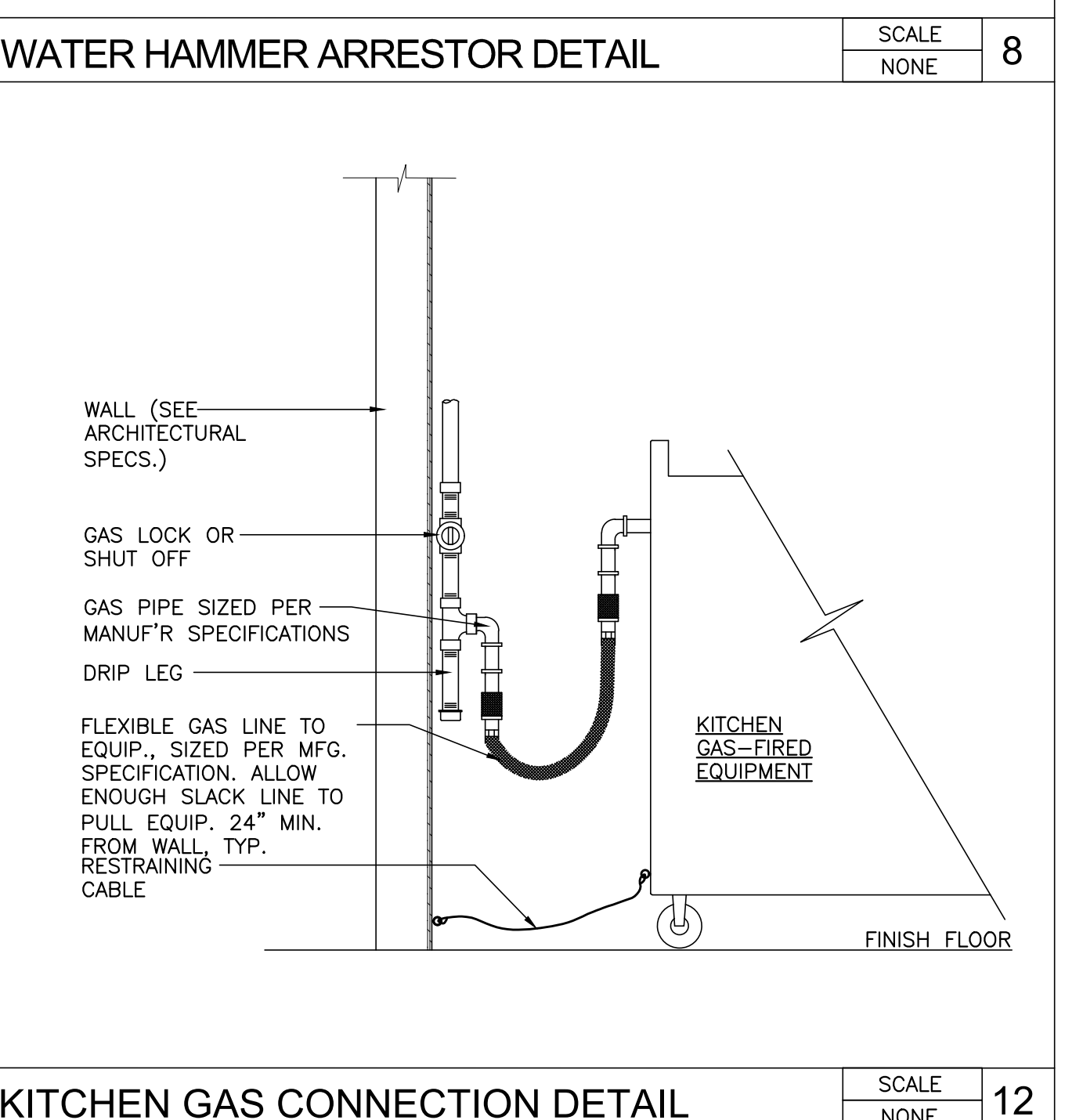
SCALE NONE 9



SCALE NONE 10



SCALE NONE 11



SCALE NONE 12

REV	DESCRIPTION	DATE

SABOR PIRI PIRI
TENANT IMPROVEMENT
800 B AVENUE SUITE 804
NATIONAL CITY CA 91950



TITLE:
PLUMBING DETAILS

JOB NO: B2306-AA123
DRAWN: JP
CHECKED: CZ
SCALE: NONE
DATE: 06.28.2023

P4.1

THROUGH-PENETRATION FIRESTOP SYSTEM

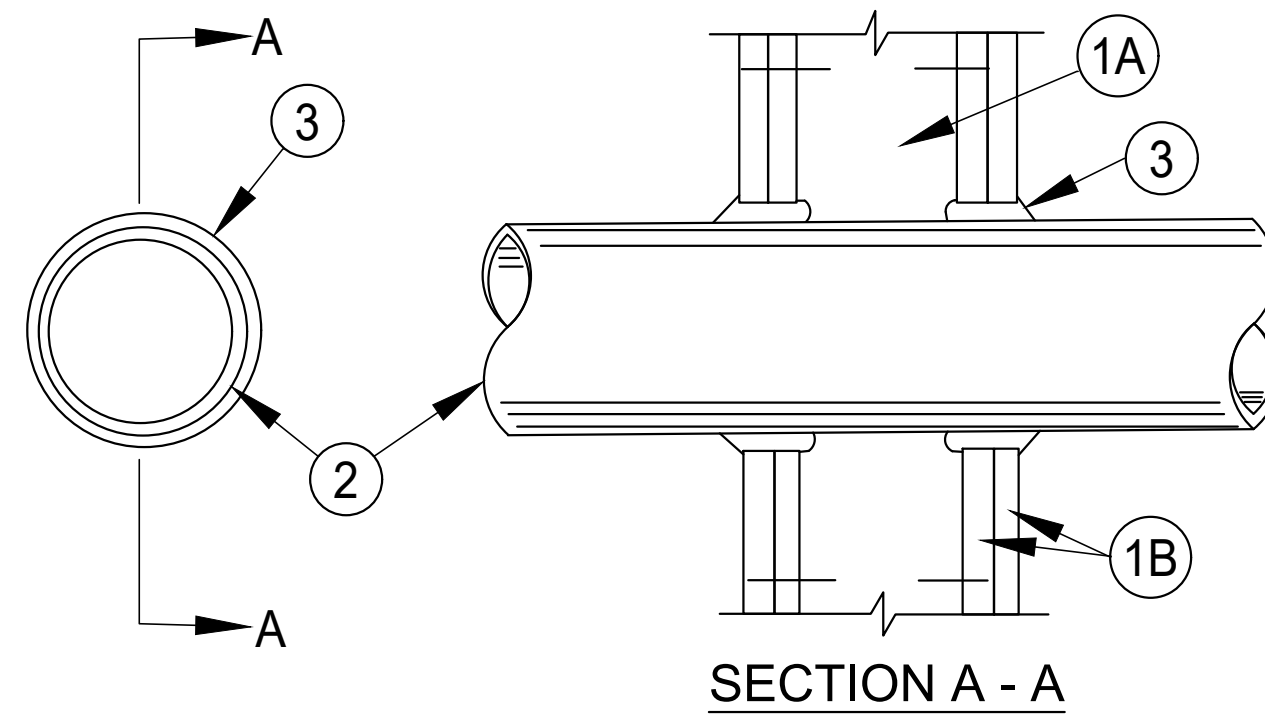
ASSEMBLY USAGE DISCLAIMER

XHEZ - THROUGH-PENETRATION FIRESTOP SYSTEMS

SEE GENERAL INFORMATION FOR THROUGH-PENETRATION FIRESTOP SYSTEMS

SYSTEM NO. W-L-1001
JUNE 15, 2005

F RATINGS - 1, 2, 3 AND 4 HR (SEE ITEMS 2 AND 3)
T RATINGS - 0, 1, 2, 3, AND 4 HR (SEE ITEM 3) L
RATING AT AMBIENT - LESS THAN 1 CFM/SQ FT L
RATING AT 400 F - LESS THAN 1 CFM/SQ FT



1. WALL ASSEMBLY - THE 1, 2, 3 OR 4 HR FIRE-RATED GYPSUM WALLBOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL OR PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:

- A. STUDS - WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS (MAX 2 H FIRE RATED ASSEMBLIES) OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER SPACED 16 IN. (406 MM) OC WITH NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER END PLATES AND CROSS BRACES. STEEL STUDS TO BE MIN 3-5/8 IN. (92 MM) WIDE BY 1-3/8 IN. (35 MM) DEEP CHANNELS SPACED MAX 24 IN. (610 MM) OC.
- B. GYPSUM BOARD* - NOM 1/2 OR 5/8 IN. (13 OR 16 MM) THICK, 4 FT. (122 CM) WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM WALLBOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX DIAM OF OPENING IS 26 IN. (660 MM).

2. THROUGH-PENETRANT - ONE METALLIC PIPE, CONDUIT OR TUBING INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN PIPE, CONDUIT OR TUBING AND PERIPHERY OF OPENING SHALL BE MIN OF 0 IN. / (0 MM). (POINT CONTACT) TO MAX 2 IN. (51 MM) PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:

- A. STEEL PIPE - NOM 24 IN. (610 MM) DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
- B. IRON PIPE - NOM 24 IN. (610 MM) DIAM (OR SMALLER) SERVICE WEIGHT (OR HEAVIER) CAST IRON SOIL PIPE, NOM 12 IN (305 MM) DIAM (OR SMALLER) OR CLASS 50 (OR HEAVIER) DUCTILE IRON PRESSURE PIPE.
- C. CONDUIT - NOM 6 IN. (152 MM) DIAM (OR SMALLER) STEEL CONDUIT OR NOM 4 IN (102 MM) DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING
- D. COPPER TUBING - NOM 6 IN. (152 MM) DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING
- E. COPPER PIPE - NOM 6 IN. (152 MM) DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.
- F. THROUGH PENETRATING PRODUCT* - FLEXIBLE METAL PIPING THE FOLLOWING TYPES OF STEEL FLEXIBLE METAL GAS PIPING MAY BE USED:

- 1. NOM 2 IN. (51 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. OMEGA FLEX INC
 - 2. NOM 1 IN. (25 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. GASTITE, DIV OF TITFLEX
 - 3. NOM 1 IN. (25 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. WARD MFG L L C
3. FILL, VOID OR CAVITY MATERIAL* - CAULK OR SEALANT - MIN 5/8. , 1-1/4, 1-7/8 AND 2-1/2 IN. (16, 32, 48 AND 64 MM) THICKNESS OF CAULK FOR 1, 2, 3 AND 4 HR RATED ASSEMBLIES, RESPECTIVELY, APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. MIN 1/4 IN. (6 MM) DIAM BEAD OF CAULK APPLIED TO GYPSUM BOARD/PENETRANT INTERFACE AT POINT CONTACT LOCATION ON BOTH SIDES OF WALL. THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE HOURLY F RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS SHOWN IN THE FOLLOWING TABLE. THE HOURLY T RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE TYPE OR SIZE OF THE PIPE OR CONDUIT AND THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS TABULATED BELOW:

Max Pipe or Conduit Diam In (mm)	F Rating Hr	T Rating Hr
1 (25)	1 or 2	0+, 1 or 2
1 (25)	3 or 4	3 or 4
4 (102)	1 or 2	0
6 (152)	3 or 4	0
12 (305)	1 or 2	0

+WHEN COPPER PIPE IS USED, T RATING IS 0 H. 3M COMPANY - CP 25WB+ OR FB-3000 WT.

1. MIN. FLOOR OR WALL: 4-1/2" THICK CONCRETE. MAX. DIA. OF OPENING IS 22-1/2"

1A. OPTIONAL STEEL SLEEVE. MAXIMUM 12" DIA.

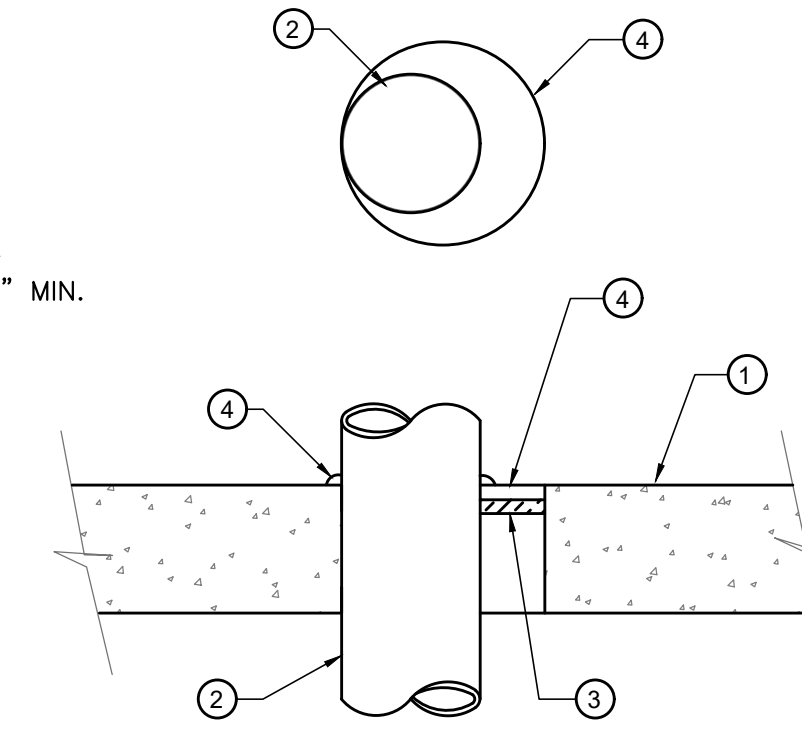
2. MAX. 20" STEEL PIPE, 6" COPPER TUBE, OR 4" CAST IRON PIPE. MAX. ANNULAR SPACE BETWEEN PIPE AND OPENING NOT TO EXCEED 2-1/2". MIN. SPACE IS 0".

3. PACKING MATERIAL, POLYETHYLENE BACKER ROD OR 1" THICK TIGHTLY PACKED CERAMIC (ALUMINA SILICA) FIBER BLANKET, MINERAL WOOL BATT OR FIBER GLASS INSULATION. PACKING MATERIAL TO BE RECESSED AS REQUIRED TO ACCOMMODATE FOR THE THICKNESS OF THE CAULK FILL MATERIAL. AS AN ALTERNATE WHEN MAX. PIPE SIZE IS 10" AND MAX. ANNULAR SPACE IS 1" - A MIN. 1" THICK TIGHTLY PACKED CERAMIC FIBER BLANKET OR MINERAL WOOL BATT MAY BE USED, AND SHOULD BE RECESSED 1/2" MIN. FROM BOTTOM SIDE OF FLOOR OR BOTH SIDES OF CONCRETE WALL.

4. FILL, VOID OR CAVITY MATERIAL - *CAULK - CAULK FILL MATERIAL INSTALLED TO COMPLETELY FILL ANNULAR SPACE TO THE MIN. THICKNESS SHOWN IN THE FOLLOWING TABLE.

MAX. PIPE DIAMETER	MAXIMUM ANNULAR SPACE	PACKING MAT'L TYPE(a)	MIN. CAULK THICKNESS
10"	1"	BR, CF, GF OR MW	1/2"(b)
10"	1"	CF OR MW	1/2"(c)
20"	2-1/2"	BR, CF, GF OR MW	1"(b)

- (a) BR=POLYETHYLENE BACKER ROD. CF=CERAMIC FIBER BLANKET. GF=GLASS FIBER INSULATION. MW=MINERAL WOOL BATT.
 - (b) CAULK INSTALLED FLUSH WITH TOP SURFACE OF FLOOR OR BOTH SURFACES OF CONCRETE WALL.
 - (c) CAULK INSTALLED FLUSH WITH BOTTOM SURFACE OF FLOOR OR ONE SURFACE OF CONCRETE WALL.
- MINNESOTA MINING & MFG. CO.--TYPE CP 25N/S(ULISTED F-A-5016)
* BEARING THE UL CLASSIFICATION MARKING. REFER TO SCHEDULE 9, THIS SHEET



"F" RATING---3HOUR.
"T" RATING---0 HOUR.

FIRESTOP PENETRATIONS DETAIL

SCALE NONE

1

NON-INSULATED PENETRATION (CONCRETE FLOOR)

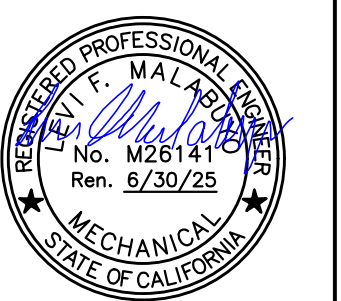
SCALE NONE

2

REV	DESCRIPTION	DATE

**SABOR PIRI PIRI
TENANT IMPROVEMENT**
800 B AVENUE SUITE 804
NATIONAL CITY CA 91950

1111 4th Ave. #811
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phone: (619) 732-4488
fax: (619) 596-3382
eng@mrng.com
www.mrng.com



TITLE:

**PLUMBING
DETAILS**

JOB NO: B2306-AA123

DRAWN: JP

CHECKED: CZ

SCALE: NONE

DATE: 06.28.2023

P4.2