

GENERAL HVAC NOTES

1. COORDINATE GRILLE LOCATIONS WITH LIGHT FIXTURES, SPRINKLERS AND CEILING GRID.
2. INDICATED DUCT SIZES ARE NET FREE AREA.
3. ADJUST ALL AIR QUANTITIES AS SHOWN ON THE PLANS AFTER COMPLETION OF THE JOB.
4. INSULATE THE SUPPLY GRILLE TOPS, RETURN AIR GRILLE PLENUMS AND EXHAUST AIR PLENUMS WITH 2 IN., 3/4 LB DENSITY FOIL BACKED INSULATION.
5. FIRE AND/OR SMOKE DAMPERS ARE INDICATED ON MECHANICAL DRAWINGS. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY LOCATIONS AND FIRE RATING REQUIREMENTS WHERE ANY DUCT PASSES THROUGH A PARTITION. REFER TO ARCHITECTURAL PLANS FOR LOCATION OF ALL FIRE AND SMOKE PARTITIONS. VERIFY REQUIRED DAMPER ASSEMBLY IN ALL DUCTS PENETRATING THESE WALLS PER ALL STATE AND LOCAL CODES.
6. EXTERNALLY INSULATE ALL ROUND SUPPLY AND RETURN DUCT. INTERNALLY INSULATE ALL RECTANGULAR SUPPLY AND RETURN DUCT PER MECHANICAL CODE. ATTACH THE INTERNAL INSULATION TO THE DUCT WITH APPROVED ADHESIVE AND WELDED FASTENERS.
7. MECHANICAL CONTRACTOR SHALL COORDINATE ALL DUCTWORK WITH FIELD CONDITIONS AND PROVIDE ALL OFFSETS, BENDS, TRANSITIONS AND SPECIAL FITTINGS FOR A COMPLETE INSTALLATION OF THE SYSTEMS.
8. INTERIOR OF ALL DUCT PLENUMS VISIBLE THROUGH GRILLE SHALL BE PAINTED MATTE BLACK PRIOR TO INSTALLATION.
9. INTERLOCK EXHAUST FANS WITH LIGHT SWITCHES. REFER TO ELECTRICAL PLANS.
10. PAINT ALL SUPPLY AND RETURN AIR GRILLES NOT SPECIFIED AS PRE-FINISHED, TO ARCHITECT'S SPECIFICATIONS UNLESS OTHERWISE SPECIFIED.
11. MAINTAIN 10 FT. MINIMUM CLEARANCE BETWEEN FRESH AIR INTAKES AND ALL EXHAUST OUTLETS, GAS FLUES AND PLUMBING VENTS.
12. INSTALL VOLUME CONTROL DAMPERS IN SUPPLY, RETURN, EXHAUST AND FRESH AIR BRANCH DUCT RUNS.
13. REGULATING AIR SYSTEMS WITH A FAN CAPACITY GREATER THAN 2,000 NOMINAL CFM SHALL AUTOMATICALLY SHUT DOWN BY MEANS OF AN APPROVED SMOKE DETECTOR PLACED IN THE RETURN AIR STREAM PRIOR TO ANY EXHAUSTING FROM THE BUILDING OR MIXING WITH FRESH AIR MAKEUP. ALL CONTROLS SHALL BE LISTED. UPON ACTIVATION OF THE SAFETY CONTROL, THE SYSTEM SHALL NOT RESTART UNTIL THE SAFETY CONTROL IS MANUALLY RESET.
14. ALL MECHANICAL INSTALLATIONS SHALL CONFORM TO THE LATEST ACCEPTABLE MECHANICAL CODE.
15. SEAL ALL DUCT SEAMS WITH HARDCAST IRON GRIP 601 SEALANT SYSTEM OR AN APPROVED EQUAL DUCT TAPE, WHETHER LISTED OR NOT, WILL NOT BE ACCEPTED.
16. FABRICATE AND INSTALL ALL GALVANIZED DUCT SYSTEMS TO SMACNA DUCT CONSTRUCTION STANDARDS, LATEST EDITION, AND MECHANICAL CODE.
17. FABRICATE AND INSTALL AUXILIARY CONDENSATE DRAIN PAN UNDER ENTIRE AIR HANDLER WITH CONDENSATE PAN SWITCH INTERLOCKED WITH AIR HANDLER FOR SHUT DOWN WHEN CONDENSATE OVER FLOW IS SENSED.
18. SMOKE DETECTOR PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR.
19. SUPPLY AIR SYSTEMS AND RETURN AIR SYSTEMS INSTALLED IN AN ATTIC, VENTILATED CRAWL SPACE OR OTHER NON-CONDITIONED AREA SHALL BE INSULATED.
20. SPRINKLER CONTRACTOR TO BE RESPONSIBLE FOR ROUTING ALL SPRINKLER PIPING TO AVOID ALL UNCONDITIONED SPACES.
21. DO NOT SCALE DIRECTLY FROM THE HVAC DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL INFORMATION.

MECHANICAL LEGEND

■

SUPPLY DUCT SECTION

■

RETURN OR EXHAUST DUCT SECTION

⊠

CEILING SUPPLY GRILLE

⊠

CEILING RETURN GRILLE

⊠

CEILING EXHAUST GRILLE

⏏

SIDEWALL SUPPLY OR RETURN GRILLE

①

SEE KEYED NOTES

SUPPLY, RETURN, OR EXHAUST DUCT

⏏

VOLUME DAMPER

▬

RECTANGULAR DUCT FIRE DAMPER

Ⓢ

ROUND DUCT FIRE DAMPER (NUMBER DENOTES FIRE RATING OF IFD WALL. EXAMPLE: 1FD = ONE HR. RATED WALL)

Ⓢ

FLEX DUCT CONNECTION MAXIMUM OF 5 FT.

Ⓢ

SMOKE DETECTOR

F-1

THERMOSTAT. MOUNT AT 48" A.F.F. TO TOP (NUMBER DENOTES FURNACE OR AIR HANDLER UNIT)

FURNACE SCHEDULE (OWNER PROVIDED)

MARK	MFG.	MODEL	ESP		HEATING		FUEL TYPE	OUTSIDE AIR (CFM)	FAN MOTOR HP	VOLT/PH/HZ	REMARKS / ACCESSORIES
			IN. IN.	CFM	INPUT (MBH)	OUTPUT (MBH)					
F-1	DAIKIN	DR96SN0805CN	0.5	1600	80	76	GAS	200	3/4	115 / 1 / 60	1 THRU 9
F-2	DAIKIN	DR96SN0805CN	0.5	1600	80	76	GAS	250	3/4	115 / 1 / 60	1 THRU 9
F-3	DAIKIN	DR96SN0804CN	0.5	1400	80	76	GAS	350	3/4	115 / 1 / 60	1 THRU 9
F-4	DAIKIN	DR96SN1005CN	0.5	2000	100	95	GAS	300	3/4	115 / 1 / 60	1 THRU 9

- REMARKS/ACCESSORIES
1. 92% MIN. AFUE UPFLOW GAS FURNACE.
2. ELECTRONIC SPARK IGNITION.
3. PROVIDE FACTORY VERTICAL CONCENTRIC VENT TERMINATION KITS REFER TO 7/M3.1 FOR DETAIL.
4. 10 YEAR MIN. NON-PROTATED HEAT EXCHANGER.
5. PROVIDE 2" FARR 30/30 FILTERS.
6. PROVIDE FILTER HOUSING EQUAL TO MCDANIEL METALS "ACCOMMODATOR" FILTER HOUSING. HOUSING MUST ACCEPT UP TO 2 INCH FILTER.
7. PROVIDE MATCHING MULTI-POSITION CASED "A" TYPE COIL WITH TXV REFRIGERANT CONTROL.
8. PROVIDE 20 GAUGE METAL FURNACE STAND PER DETAIL 6/M3.1. BUILD TO FIT RETURN AIRFLOW PATH PER PLANS.
9. EQUIPMENT IS TO BE OWNER PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR.

AIR DISTRIBUTION SCHEDULE

MARK	CFM	NECK SIZE	MFG.	MODEL	TYPE	FINISH	FRAME	REMARKS/ ACCESSORIES
A	50-75	6"Ø	TITUS	TMS	4-WAY SUPPLY	WHITE	LAY-IN	1, 6
B	100-200	8"Ø	TITUS	TMS	4-WAY SUPPLY	WHITE	LAY-IN	1, 6
C	205-300	10"Ø	TITUS	TMS	4-WAY SUPPLY	WHITE	LAY-IN	1, 6
D	305-400	12"Ø	TITUS	TMS	4-WAY SUPPLY	WHITE	LAY-IN	1, 6
E	200-1200	22" X 22"	TITUS	355RL	RETURN	WHITE	LAY-IN	1, 4, 6
F	100-375	22" X 22"	TITUS	50F	EXHAUST	WHITE	LAY-IN	2, 4, 6
G	200-400	16" X 8"	TITUS	272RL	SIDEWALL SUPPLY	PRIMED	SURFACE	1, 3, 5, 7
H	800	12" X 10"	TITUS	50F	SIDEWALL EXHAUST	WHITE	SURFACE	2, 5
K	1400	32" X 16"	TITUS	355RL	SIDEWALL RETURN	WHITE	SURFACE	1, 5
L	600	16" X 16"	TITUS	355RL	SIDEWALL RETURN	WHITE	SURFACE	1, 5

- REMARKS/ACCESSORIES
1. STEEL CONSTRUCTION.
2. ALUMINUM CONSTRUCTION.
3. PROVIDE DOUBLE DIRECTIONAL BLADES.
4. NO SCREEN HOLES.
5. PROVIDE WITH COUNTER-SUNK SCREW HOLES.
6. PROVIDE RAPID-MOUNT FRAME FOR GRILLES IN GYPSUM CEILINGS.
7. DIFFUSER TO BE PRIMED FOR PAINT. ARCHITECT TO PROVIDE COLOR FINISH SELECTION.

AIR CONDITIONER SCHEDULE (OWNER PROVIDED)

MARK	MFG.	UNIT MODEL NUMBERS		MOUNTING STYLE	TON(S)	CFM (LO-M1-M2-HI)	COOLING		HEATING MBH	UNIT WEIGHTS		ELECTRICAL (SINGLE POINT CONNECTION)			ACCESSORIES
		OUTDOOR	INDOOR				TMBH	SMBH		OUTDOOR	INDOOR	M.C.A.	M.O.P.	VOLT / PH / HZ	
AC-1	DAIKIN	RKF12AXVJU	FTKF12AXVJU	WALL	1 TON	132-316-436-473	12	9.5	-	75	20	9.15	15	208-230 / 1 / 60	1 THRU 5

- REMARKS/ACCESSORIES
1. PROVIDE WIRELESS REMOTE UNIT.
2. PROVIDE OUTDOOR CONDENSING UNIT, MODEL PUY-A30 (CU-1, 2 & 3), WEIGHT-190 LBS.
3. PROVIDE FACTORY WALL MOUNTING HARDWARE. INSTALL 8'-0" A.F.F. IN LOCATION INDICATED ON PLAN.
4. PROVIDE WITH LOW AMBIENT KIT TO 0° F.
5. EQUIPMENT IS TO BE OWNER PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR.

DEDICATED OUTSIDE AIR UNIT WITH ENERGY RECOVERY VENTALATOR SCHEDULE (OWNER PROVIDED)

DEDICATED OUTSIDE AIR UNIT WITH ENERGY RECOVERY VENTALATOR SCHEDULE (OWNER PROVIDED)																						
MARK	MFG.	MODEL	AIRFLOW			SUPPLY AIR		EXHAUST AIR		COOLING			HEATING			ELECTRICAL			REMARKS / ACCESSORIES			
			SUPP. CFM	EXH. CFM	SUPP. MOTOR HP	EX. MOTOR HP	ESP SUPP./EX.	SUMMER (DB/MB)	WINTER (DB/MB)	SUMMER (DB/MB)	WINTER (DB/MB)	TMBH	EAT °F (DB/MB)	LAT °F (DB/MB)	INPUT / OUTPUT (MBH)	EAT °F	LAT °F	FUEL		MCA	MOP	VOLT/PH/HZ
DOAS-1	DAIKIN	DFSC17	4000	3355	4.4	3	0.5 / 0.5	96.6 / 74.5	10.1 / 8.0	75.0 / 63.8	70.0 / 53.0	185.68	85.0 / 64.5	54.0 / 54.0	300 / 243	42.3	48.3	6AS	49.9	70	460 / 3 / 60	1 THRU 13

- REMARKS/ACCESSORIES
1. PROVIDE HINGED ACCESS PANELS.
2. PROVIDE DOUBLE WALL UNIT CONSTRUCTION.
3. PROVIDE FACTORY NON FUSED DISCONNECT SWITCH.
4. PROVIDE FACTORY HAIL GUARD.
5. PROVIDE FACTORY STAINLESS STEEL CONDENSATE PAN.
6. PROVIDE ENERGY RECOVERY FIXED PLATE HEAT EXCHANGER.
7. PROVIDE MICROPROCESSOR CONTROLS.
8. PROVIDE FACTORY INSTALLED BACnetMSP.
9. PROVIDE HOT GAS REHEAT.
10. PROVIDE FACTORY 2" MERV 8 SUPPLY AND RETURN AIR FILTERS.
11. PROVIDE MODULATING GAS FURNACE.
12. PROVIDE 1 YR UNIT, 5 YR WHEEL, 25 YEAR HEAT EXCHANGER, AND 5 YEAR COMPRESSOR WARRANTY.
13. EQUIPMENT IS TO BE OWNER PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR.

UNIT HEATER SCHEDULE

MARK	MFG	MODEL	HEATING		FUEL TYPE	M.C.A	MOTOR HP	VOLT / PH / HZ	ACCESSORIES
			INPUT (MBH)	OUTPUT (MBH)					
UH-1	STERLING	GG-103	105	86.1	GAS	7.5	1/10	120 / 1 / 60	1, 2, 3, 4, 5

- REMARKS/ACCESSORIES
1. PROVIDE RELAY FOR LOW VOLTAGE CONTROL (24V).
2. PROVIDE LOW VOLTAGE THERMOSTAT AND SUBBASE.
3. PROVIDE FACTORY COMBINATION VENT AND COMBUSTION AIR KIT. REFER TO 10/M3.1 FOR DETAIL.
4. PROVIDE SPARK IGNITION.
5. PROVIDE FACTORY SUSPENSION HANGING KIT.

CONDENSER SCHEDULE (OWNER PROVIDED)

MARK	MFG.	MODEL	TMBH	SMBH	MCA	MOP	VOLT/PH/HZ	REMARKS / ACCESSORIES
CU-1	DAIKIN	DC55EA4810	45.5	33.2	25.5	40	208-230 / 1 / 60	1 THRU 6
CU-2	DAIKIN	DC55EA4810	45.5	33.2	25.5	40	208-230 / 1 / 60	1 THRU 6
CU-3	DAIKIN	DC55EA4810	45.5	33.2	25.5	40	208-230 / 1 / 60	1 THRU 6
CU-4	DAIKIN	DC55EA6010	56	41	36.4	60	208-230 / 1 / 60	1 THRU 6

- REMARKS/ACCESSORIES
1. MINIMUM 14.0 SEER CONDENSER.
2. PROVIDE LOW AMBIENT TO 0° F CONTROL WITH TXV AND CRANK CASE HEATERS.
3. PROVIDE LIQUID LINE FILTER DRYER.
4. PROVIDE FACTORY HAIL GUARD.
5. SIZE AND INSTALL REFRIGERANT LINES PER MANUFACTURERS RECOMMENDATIONS.
6. EQUIPMENT IS TO BE OWNER PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR.

EXHAUST FAN SCHEDULE

MARK	MFG.	MODEL	CFM	ESP. IN. WC	H.P./WATTS	VOLT/PH/HZ	SONE	RPM	REMARKS / ACCESSORIES
EF-1	GREENHECK	AER-20	3500	0.5	3/4	115 / 1 / 60	24	1687	1, 2, 5, 6, 7, 8
EF-2	GREENHECK	CSP-A100	650	0.5	148 W	115 / 1 / 60	2.1	1238	1, 2, 3, 4
EF-3	GREENHECK	CSP-A200	75	0.5	110 W	115	2.2	825	1, 2, 3, 4

- REMARKS/ACCESSORIES
1. PROVIDE FACTORY BACK DRAFT DAMPER.
2. PROVIDE DIRECT DRIVE MOTOR WITH FAN SPEED CONTROLLER.
3. PROVIDE FACTORY CEILING HUNG VIBRATION ISOLATORS.
4. PROVIDE LINE VOLTAGE THERMOSTAT.
5. PROVIDE WITH WALL SWITCH. INTERLOCK WITH MOTORIZED INTAKE LOUVER PER PLANS.
6. PROVIDE OSHA MOTOR GUARD.
7. PROVIDE FACTORY WALL SLEEVE.
8. PROVIDE EXTERIOR WEATHER HOOD WITH A WHITE FINISH. MATCH LOUVERS.
9. INTERLOCK FAN WITH LIGHT SWITCH.

LOUVER SCHEDULE

MARK	CFM	NECK SIZE	MFG	MODEL	TYPE	FINISH	FRAME	ACCESSORIES
EL-1	650	24" X 16"	GREENHECK	ESD-635	EXHAUST LOUVER	BAKED ENAMEL	FLANGED	1, 2, 3, 6
IL-1	3500	44" X 32"	GREENHECK	EAD-635	INTAKE LOUVER	BAKED ENAMEL	FLANGED	1, 2, 3, 4, 5, 6
IL-2	650	24" X 16"	GREENHECK	ESD-635	INTAKE LOUVER	BAKED ENAMEL	FLANGED	1, 2, 3, 6

- REMARKS/ACCESSORIES
1. ALUMINUM CONSTRUCTION.
2. PROVIDE STEEL BIRD SCREEN.
3. PROVIDE FACTORY SIGHT-PROOF, STATIONARY, DRAINABLE LOUVER.
4. PROVIDE COMBINATION LOUVER/DAMPER WITH 120 VOLT ACTUATOR AND END SWITCH.
5. INTERLOCK MOTORIZED LOUVER WITH EXHAUST FAN AS NOTED ON PLANS.
6. PROVIDE WHITE FINISH TO MATCH EXHAUST FAN WEATHER HOOD.

NOTES:
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REFER TO SHEET M2.1 FOR HVAC PLANS
REFER TO SHEET M3.1 FOR HVAC DETAILS.
REFER TO SHEET M4.1 FOR HVAC CONTROLS.



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A NEW FACILITY FOR
BWHS - Locker Room Building
1359 Gamble Road, Centerton, AR 72719

DRAWN BY:

RJK

CHECK BY:

NEW

ISSUE DATE

04/06/2026

PROJECT NO.

2421.2

REVISION DATES

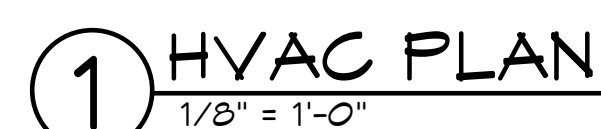
HVAC NOTES, LEGEND & SCHEDULES

S H E E T

M1.1

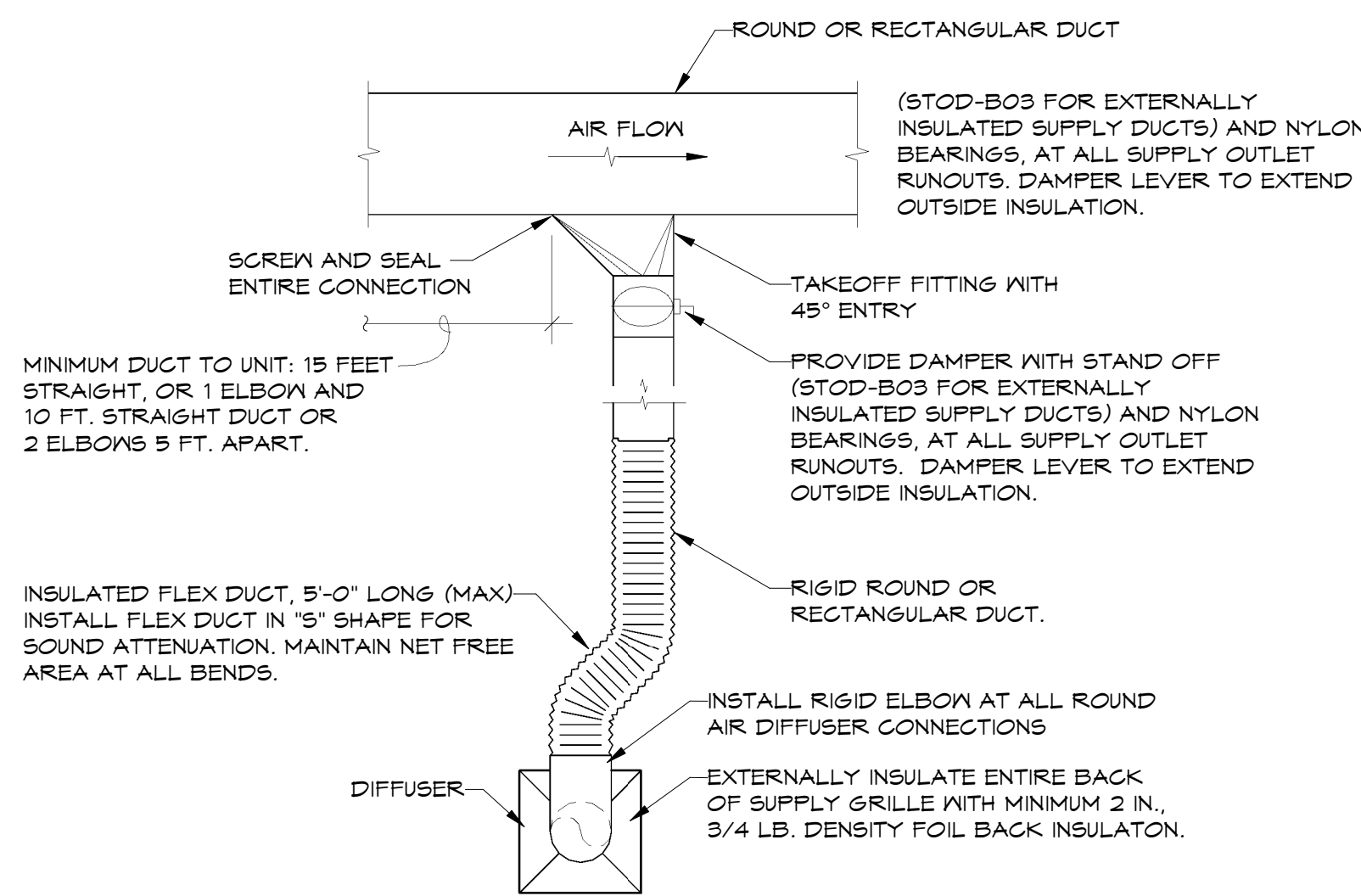
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- 1 SMOKE DETECTORS TO BE INSTALLED IN THE SUPPLY AND RETURN AIR DUCTS AND INTERLOCKED WITH AIR HANDLER FAN FOR SHUT-OFF PER N.F.P.A. 90.4 B ON ALL AIR HANDLERS GREATER THAN 2000 C.F.M. SUPPLY AIR DUCT SMOKE DETECTOR SHALL BE INSTALLED ON SUPPLY SIDE OF AIR HANDLING SYSTEM DOWN STREAM OF ANY AIR FILTERS AND PRIOR TO ANY BRANCH DUCT CONNECTIONS. EXCEPTION: THE SMOKE DETECTOR IN THE SUPPLY AIR STREAM MAY BE OMITTED IN SYSTEMS 2000 C.F.M. OR LESS. CAPACITY. RECIRCULATING AIR SYSTEMS WITH FAN CAPACITY LESS THAN 2000 C.F.M., BUT SERVING AREAS USED FOR EGRESS SHALL HAVE AUTOMATIC SMOKE DETECTION SHUTDOWN. SMOKE DETECTORS SHALL BE PROVIDED AND WIRED BY (MECHANICAL CONTRACTOR) (FIRE ALARM CONTRACTOR). MECHANICAL CONTRACTOR SHALL WIRE SMOKE DETECTOR TO THE FAN SHUT OFF CONTACTS. MECHANICAL CONTRACTOR SHALL PROVIDE ALL ACCESSORIES REQUIRED TO MAKE THE FAN SHUT OFF CONNECTION. LOCATE SMOKE DETECTORS IN RETURN AIR DUCT PRIOR TO THE INTRODUCTION OF THE OUTSIDE AIR. (MECHANICAL CONTRACTOR SHALL PROVIDE SMOKE DETECTORS COMPATIBLE WITH THE BUILDING'S EXISTING FIRE ALARM SYSTEM.)
- 2 MAINTAIN A MINIMUM OF 10 FT. CLEARANCE BETWEEN ALL EXHAUST OUTLETS, FLUES, PLUMBING VENTS AND ANY FRESH AIR INTAKES. IF 10 FT. CLEARANCE CAN NOT BE MAINTAINED EXHAUST OUTLET, FLUE, OR VENT MUST TERMINATE AT A POINT AT LEAST 36 IN. ABOVE HIGHEST FRESH AIR INTAKE WITHIN 10 FT. LIMIT.
- 3 LOCATE THERMOSTAT OR SENSOR AS INDICATED WITH THE TOP OF THE THERMOSTAT AT 48 IN. ABOVE FINISHED FLOOR. SEAL ALL THERMOSTAT CONDUITS AT TOP AND BOTTOM OF CONDUIT. PROVIDE INSULATED BACKING FOR MOUNTING THERMOSTATS.
- 4 COVER DUCT OPENING WITH 3/4" PAINTED EXPANDED METAL WITH 70% FREE AREA.
- 5 COVER DUCT WALL PENETRATION WITH 20 GAUGE GALVANIZED SHEET METAL HOOD. SEAL ALL JOINTS AND CONNECTIONS WITH WEATHER-PROOF SEALANT.
- 6 PROVIDE TYPE "G" SUPPLY GRILLE OFF OF F-2 SUPPLY DUCT WITHIN 4104 - MECHANICAL ROOM. PROVIDE BALANCING DAMPER AND BALANCE GRILLE TO 100 CFM.

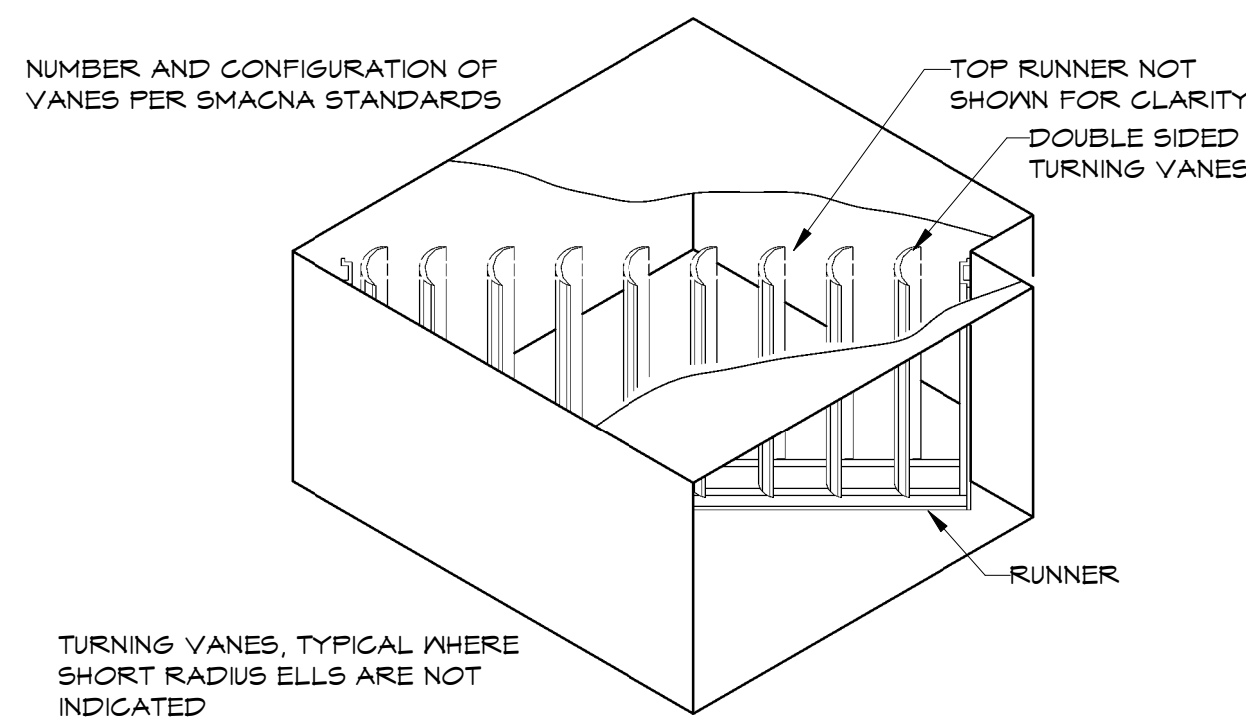


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REFER TO SHEET M4.1 FOR HVAC CONTROLS.

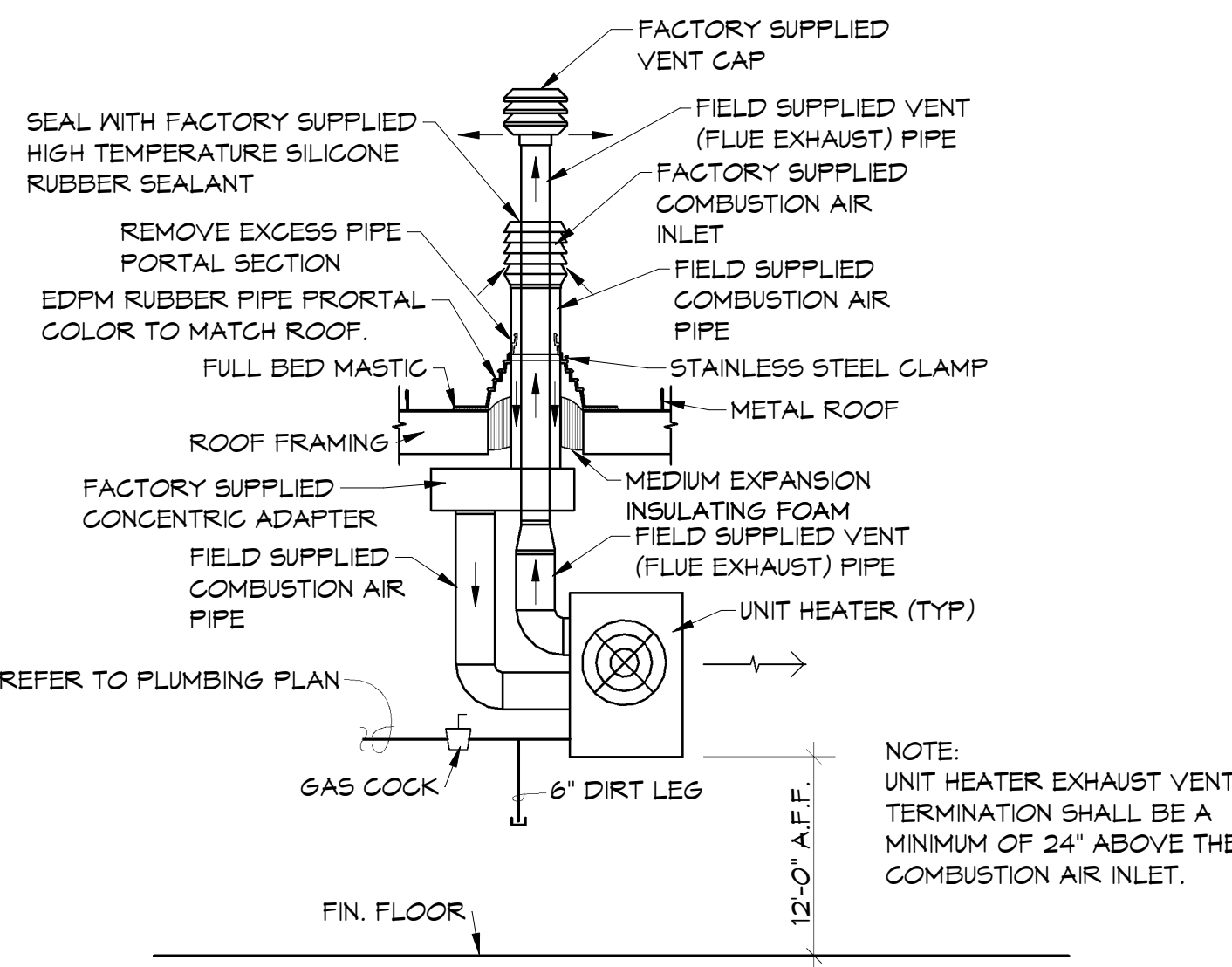




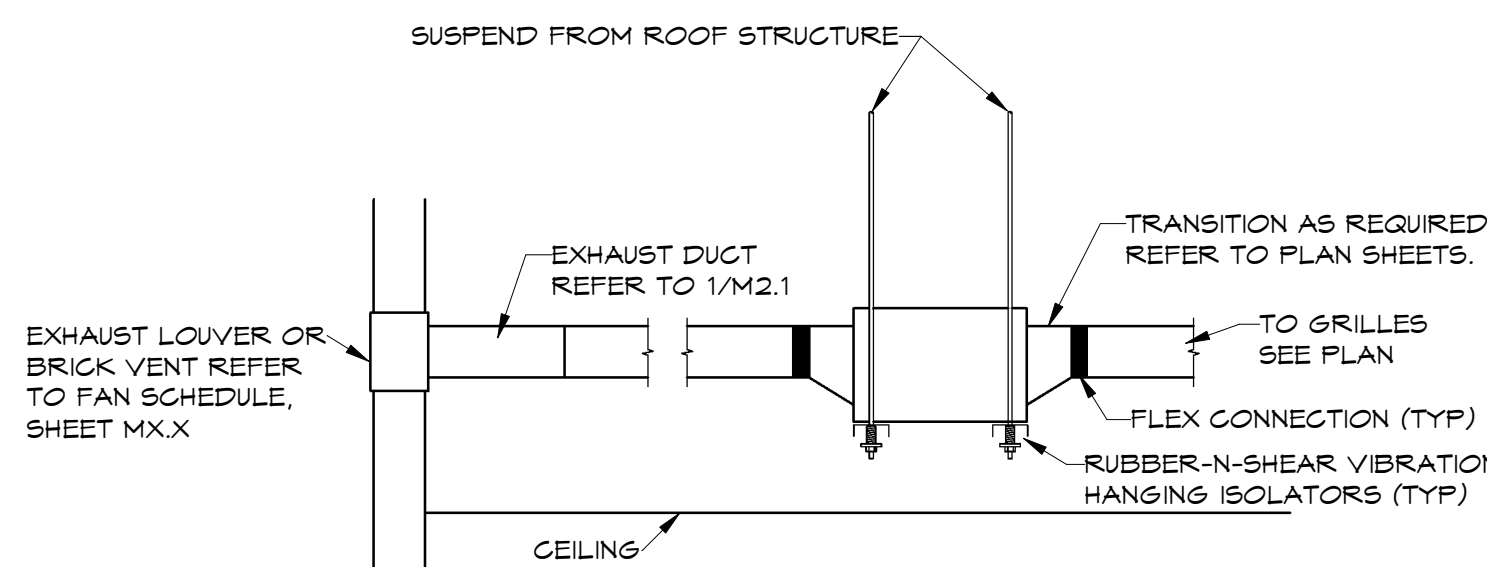
① SUPPLY DUCT CONNECTION DETAIL
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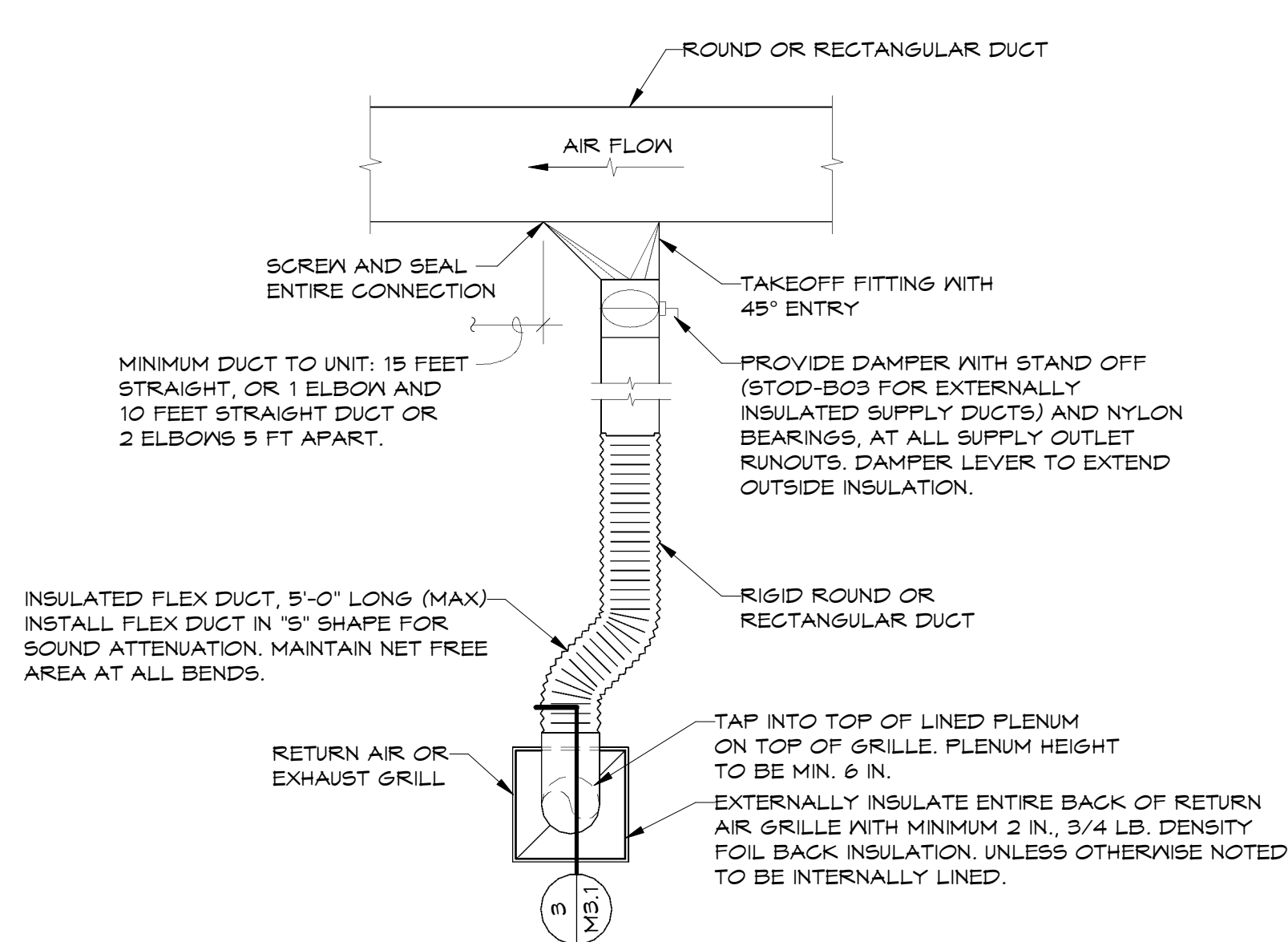
④ TURNING VANE DETAIL
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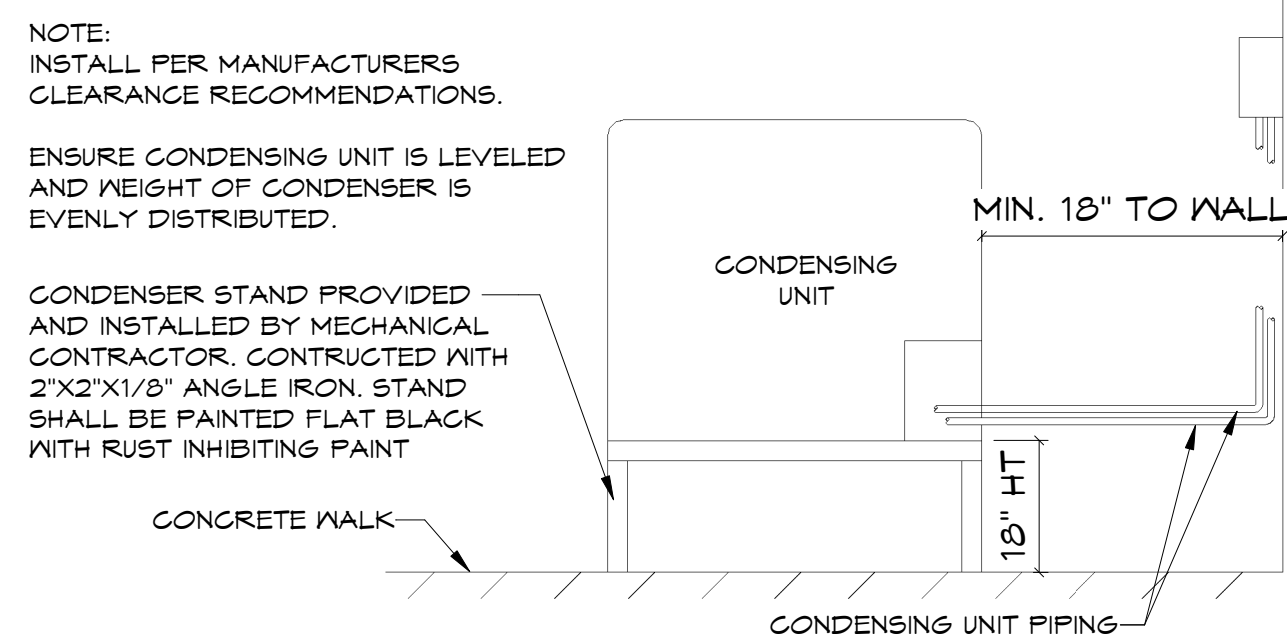
⑧ UNIT HEATER DETAIL
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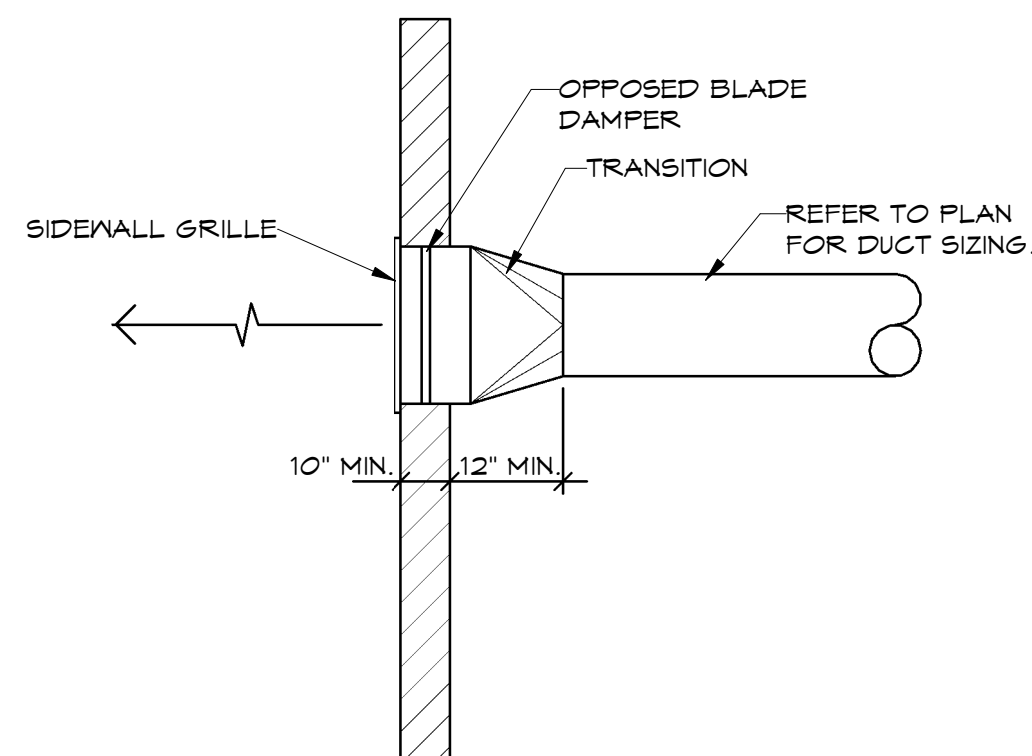
⑨ INLINE EXHAUST FAN DETAIL
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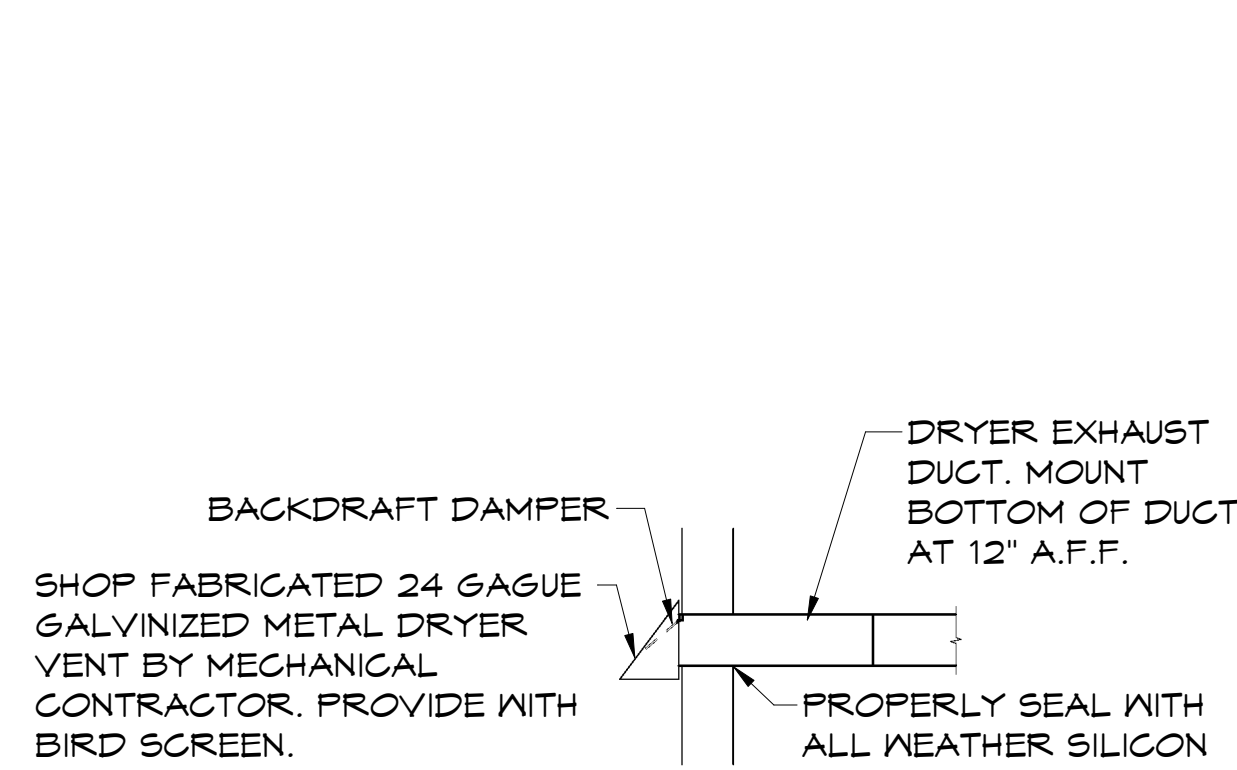
② RETURN DUCT CONNECTION DETAIL
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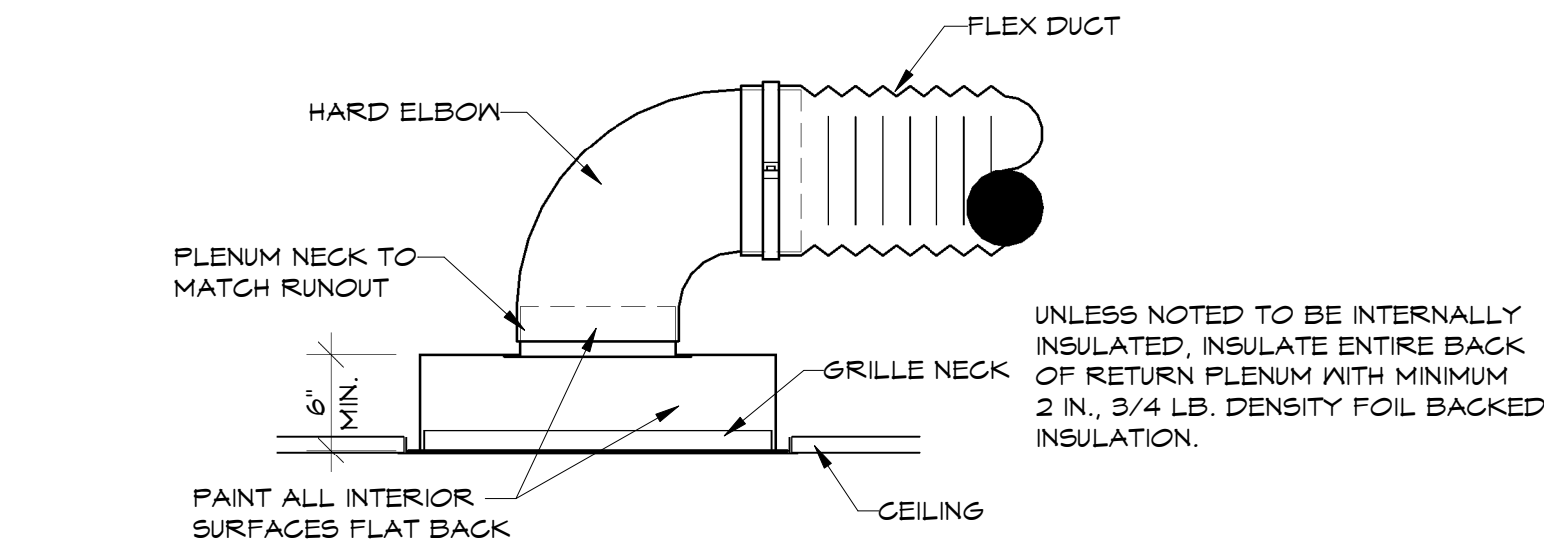
⑤ CONDENSER STAND DETAIL
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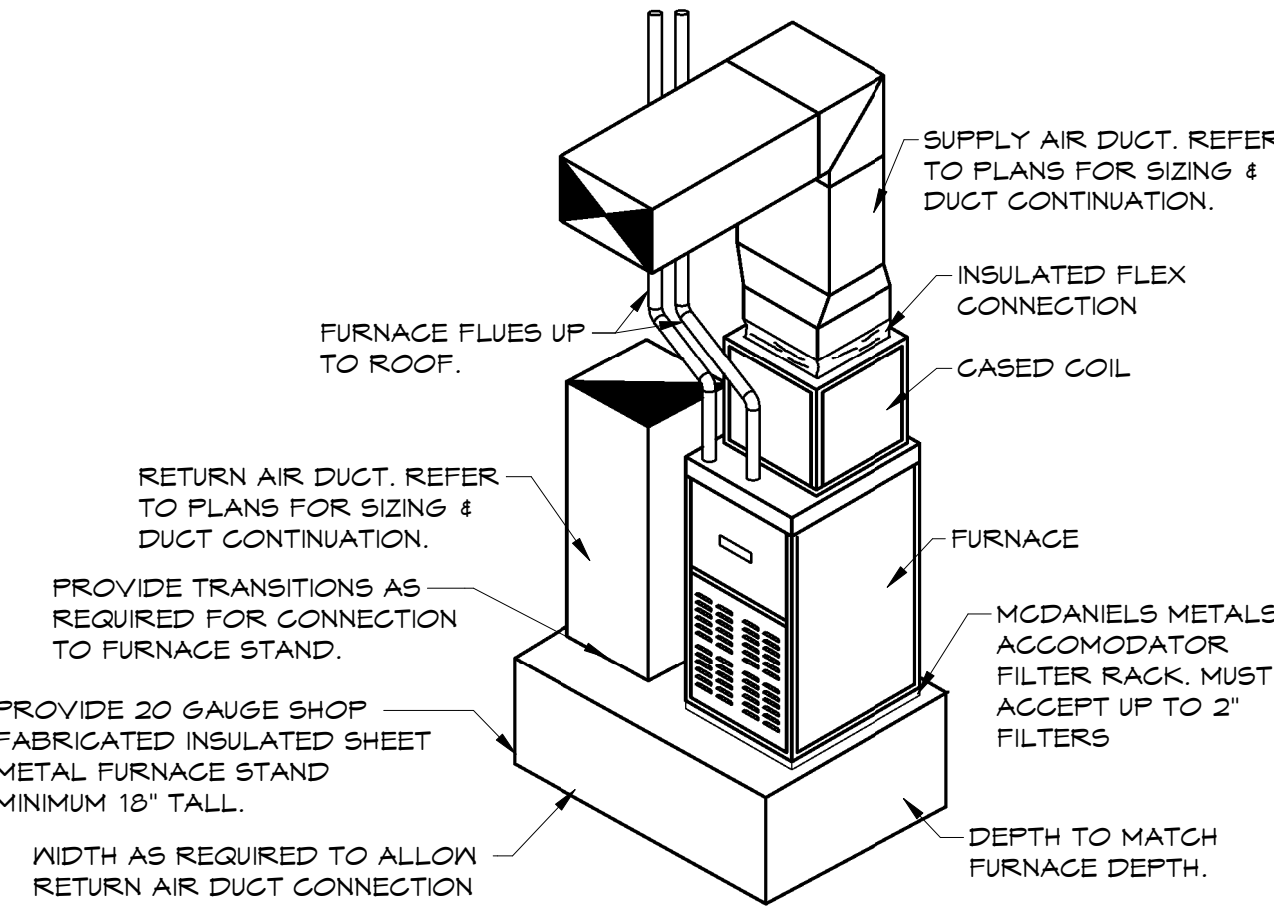
⑩ SIDE WALL GRILLE
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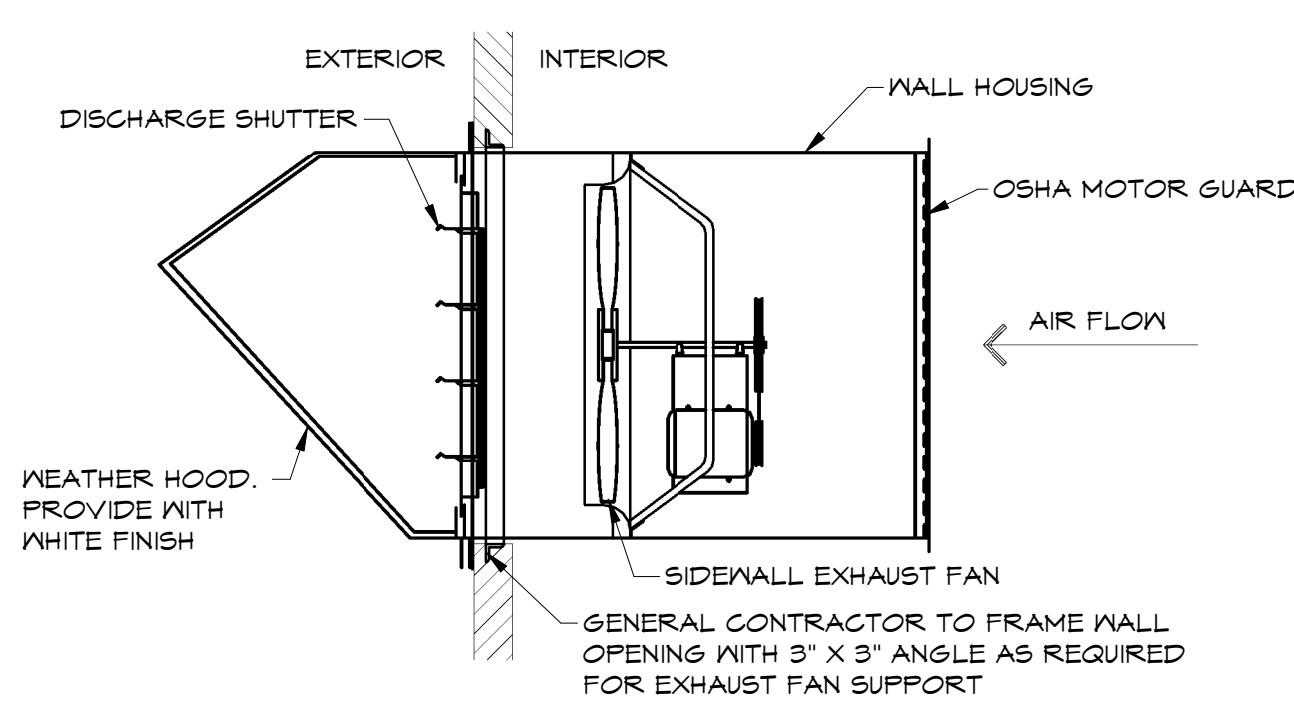
⑪ DRYER WALL CAP DETAIL
NTS



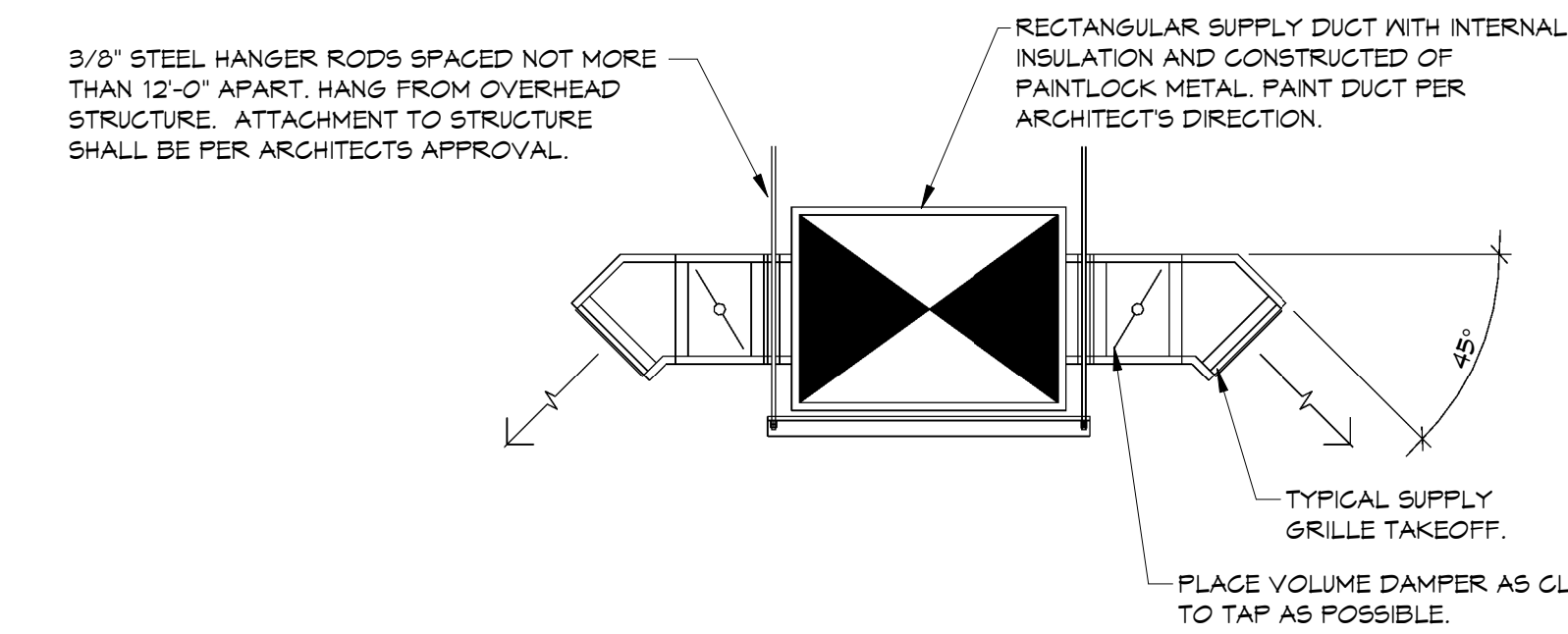
③ RETURN GRILLE CONNECTION SECTION
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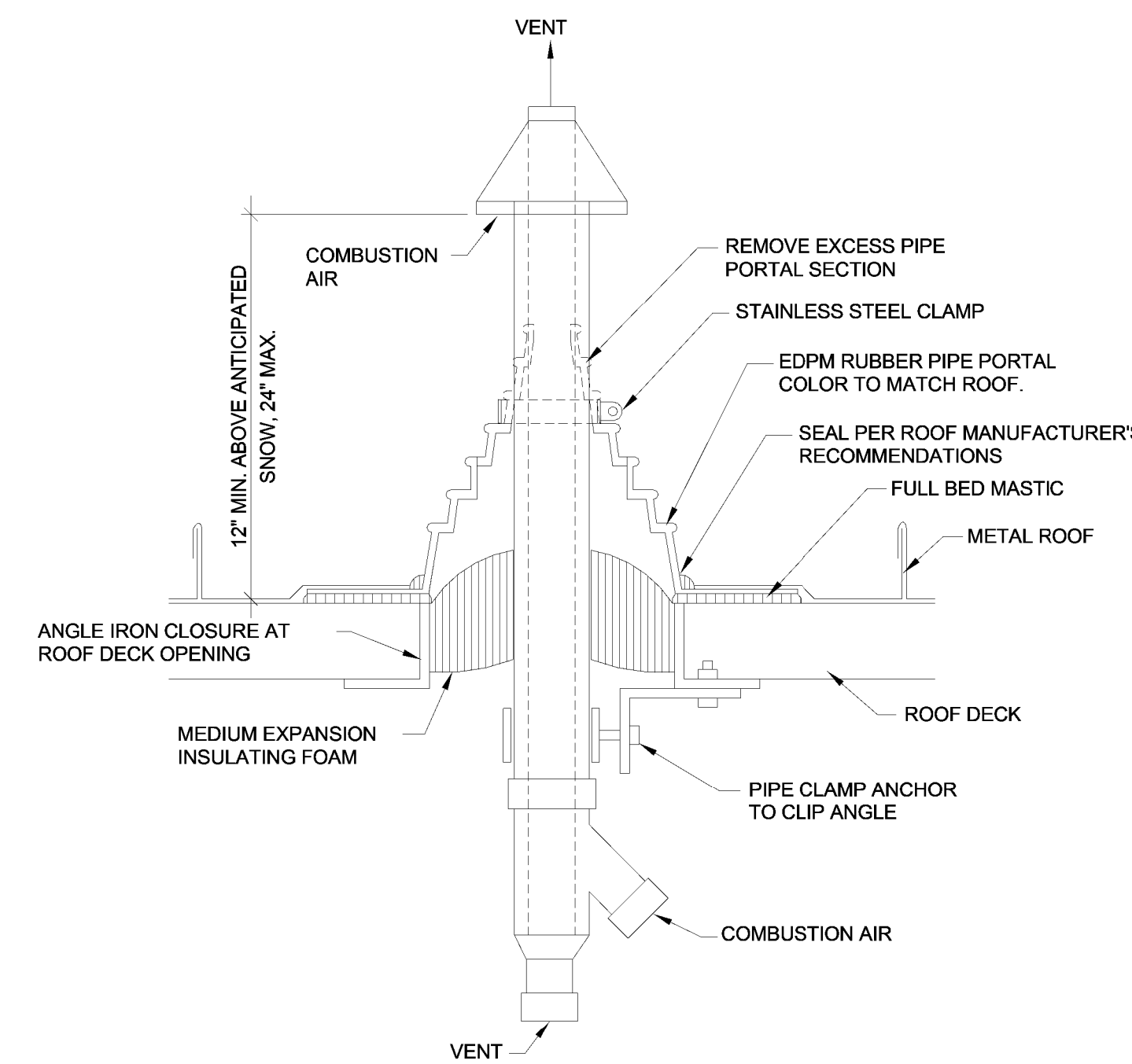
⑥ FURNACE STAND DETAIL
N.T.S.



⑫ WALL PROP EXHAUST FAN DETAIL
N.T.S.



⑬ EXPOSED SIDEWALL SUPPLY GRILLE DETAIL
NTS



⑦ FURNACE CONCENTRIC VENT DETAIL
NTS

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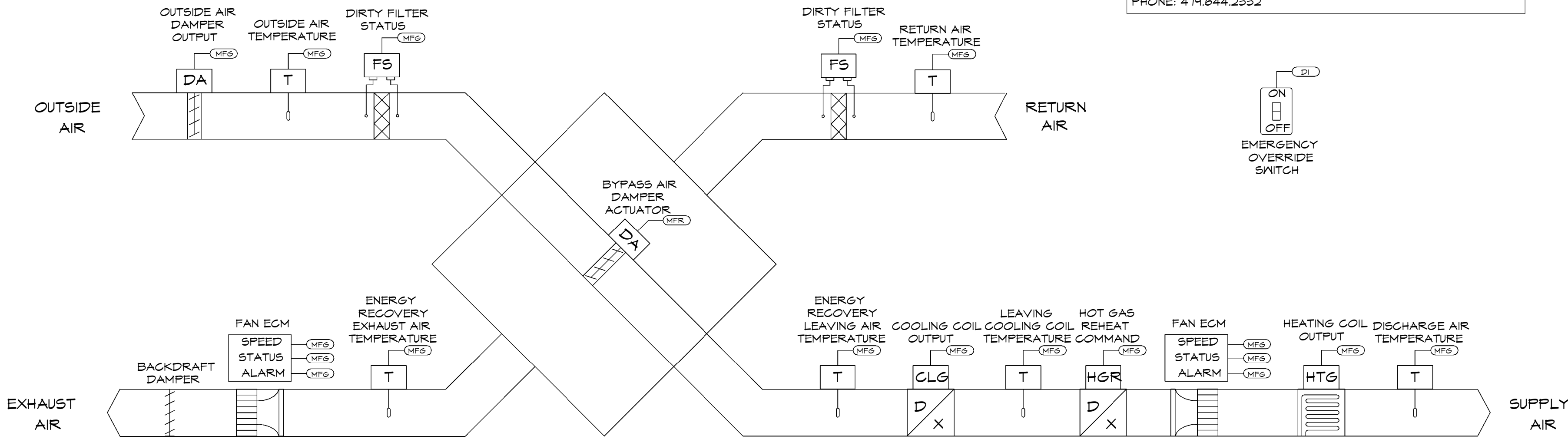
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A NEW FACILITY FOR
BWHS - Locker Room Building
1359 Gamble Road, Centerton, AR 72719

DRAWN BY:
RJK
CHECK BY:
NEW
ISSUE DATE:
04/06/2026
PROJECT NO:
2421.2
REVISION DATES:

HVAC DETAILS
SHEET
M3.1
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1 DOAS-1 CONTROLS
N.T.S.



DOAS SEQUENCE OF OPERATIONS

MODE OF OPERATION:

THE UNIT MODE OF OPERATION SHALL BE EITHER OCCUPIED OR UNOCCUPIED. MODE OF OPERATION SHALL BE DETERMINED BY THE BUILDING AUTOMATION SYSTEM (BAS) SCHEDULE OR OVERRIDE COMMAND FROM THE BAS. THE DOAS UNIT IS INTENDED TO PROVIDE ROOM NEUTRAL AIR FOR VENTILATION DURING THE OCCUPIED MODE.

OCCUPIED OPERATION:

THE SUPPLY FAN WILL OPERATE CONTINUOUSLY. THE FAN WILL RUN AT A CONSTANT SPEED (SPEED SET DURING TEST AND BALANCE) TO MAINTAIN THE SCHEDULED VENTILATION RATE OF THE UNIT.

THE EXHAUST FAN WILL OPERATE CONTINUOUSLY. THE FAN WILL RUN AT A CONSTANT SPEED (SPEED SET DURING TEST AND BALANCE) TO MAINTAIN THE SCHEDULED EXHAUST RATE OF THE UNIT.

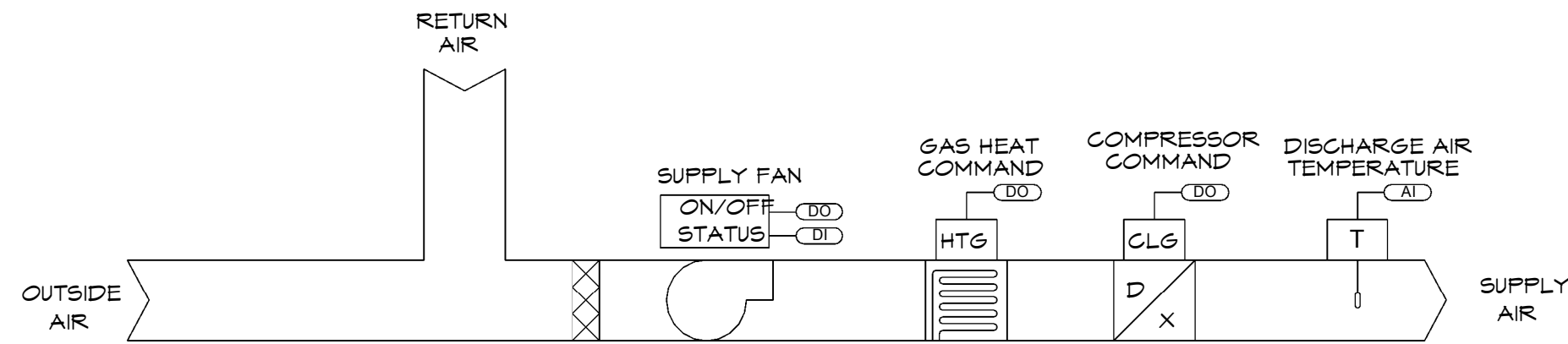
THE VARIABLE SPEED COMPRESSORS SHALL BE MODULATED TO MAINTAIN THE COOLING COIL DISCHARGE AIR TEMPERATURE AT A SETPOINT OF 55°F (ADJ.).

THE HOT GAS REHEAT COIL SHALL BE ENABLED TO REHEAT THE AIR TO THE DISCHARGE AIR TEMPERATURE SETPOINT OF 70°F (ADJ.). IF THE HOT GAS REHEAT COIL IS NOT ABLE TO SATISFY THE DISCHARGE AIR TEMPERATURE SETPOINT, THE GAS HEATING COIL SHALL BE MODULATED AS SUPPLEMENTAL HEAT TO MAINTAIN THE DISCHARGE AIR TEMPERATURE AT SETPOINT.

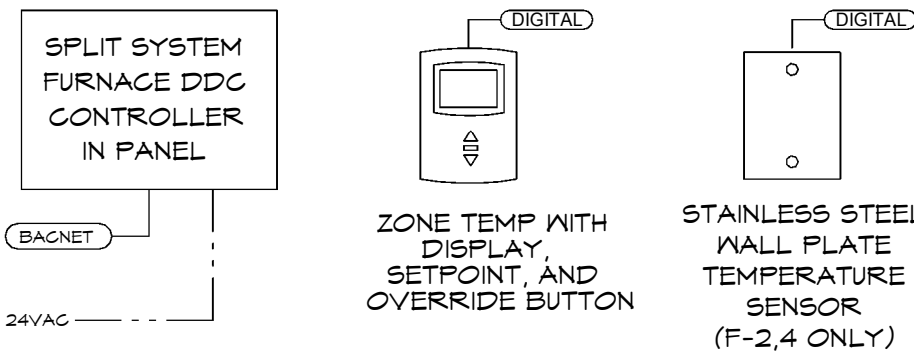
FOR HEAT EXCHANGER FROST PROTECTION, WHEN THE EXHAUST AIR TEMPERATURE INDICATES FREEZING CONDITIONS, THE BYPASS DAMPER SHALL BE OPENED TO BYPASS OUTSIDE AIR AROUND THE HEAT EXCHANGER.

UNOCCUPIED OPERATION:

THE SUPPLY AND EXHAUST FANS SHALL BE COMMANDED OFF AND THE OUTSIDE AIR AND EXHAUST AIR DAMPER ACTUATORS SHALL BE COMMANDED CLOSED UNTIL THE SYSTEM IS CALLED INTO OPERATION.



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SPLIT SYSTEM FURNACE UNIT SEQUENCE OF OPERATION:

MODE OF OPERATION:

THE UNIT MODE OF OPERATION SHALL BE EITHER OCCUPIED OR UNOCCUPIED BASED ON A BUILDING AUTOMATION SYSTEM (BAS) SCHEDULE, AN OPERATOR OVERRIDE COMMAND FROM THE BAS, OR A TEMPORARY OCCUPANCY OVERRIDE SIGNAL AT THE THERMOSTAT.

OCCUPIED MODE:

THE THERMOSTAT SHALL BE SET FOR DUAL HEATING AND COOLING SETPOINTS. THE INITIAL OCCUPIED HEATING SETPOINT SHALL BE 70°F (ADJ.). THE INITIAL OCCUPIED COOLING SETPOINT SHALL BE 72°F (ADJ.). THE SPACE TEMPERATURE SETPOINT RANGE SHALL BE LIMITED BETWEEN A MINIMUM OF 65°F AND MAXIMUM OF 75°F.

THE SUPPLY FAN SHALL RUN CONTINUOUSLY FOR VENTILATION. THE VENTILATION AIRFLOW RATE SHALL BE SET DURING TEST AND BALANCE.

ON AN INCREASE IN SPACE TEMPERATURE ABOVE THE COOLING SETPOINT, THE COMPRESSOR SHALL BE COMMANDED ON UNTIL THE SPACE TEMPERATURE HAS REACHED THE OCCUPIED COOLING SETPOINT.

ON A DECREASE IN SPACE TEMPERATURE BELOW THE HEATING SETPOINT, THE FURNACE SHALL BE COMMANDED ON UNTIL THE SPACE TEMPERATURE HAS REACHED THE OCCUPIED HEATING SETPOINT.

UNOCCUPIED MODE:

DURING UNOCCUPIED MODE, THE FAN, COMPRESSOR, AND FURNACE SHALL BE COMMANDED OFF.

THE THERMOSTAT SHALL BE EQUIPPED WITH A TEMPORARY OCCUPANCY OVERRIDE FEATURE THAT SHALL OVERRIDE THE SYSTEM INTO OCCUPIED MODE FOR A PERIOD OF 2 HOURS (ADJ.).

THE INITIAL UNOCCUPIED HEATING AND COOLING SETPOINTS SHALL BE 65°F (ADJ.) AND 75°F (ADJ.). IF THE SPACE TEMPERATURE FALLS BELOW THE UNOCCUPIED HEATING SETPOINT OR RISES ABOVE THE UNOCCUPIED COOLING SETPOINT, THE FAN SHALL BE ALLOWED TO RUN, THE COMPRESSOR SHALL BE COMMANDED ON FOR COOLING AS NEEDED, AND THE FURNACE SHALL BE COMMANDED ON FOR HEATING AS NEEDED. THE OUTSIDE AIR DAMPER SHALL REMAIN CLOSED DURING UNOCCUPIED OPERATION.

ONCE THE SPACE TEMPERATURE HAS REACHED THE UNOCCUPIED HEATING OR COOLING SETPOINT, THE FAN, COMPRESSOR, AND FURNACE SHALL BE COMMANDED OFF.

2 SPLIT SYSTEM CONTROLS
N.T.S.

NOTES:

REFER TO SHEET M1.1 FOR HVAC NOTES, LEGEND & SCHEDULES
REFER TO SHEET M2.1 FOR HVAC PLANS
REFER TO SHEET M3.1 FOR HVAC DETAILS.
REFER TO SHEET M4.1 FOR HVAC CONTROLS.



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A NEW FACILITY FOR
BWHS - Locker Room Building
1359 Gamble Road, Centerton, AR 72719

DRAWN BY:
RJK

CHECK BY:
NEW

ISSUE DATE

04/06/2026

PROJECT NO.

2421.2

REVISION DATES

HVAC CONTROLS

SHEET

M4.1

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