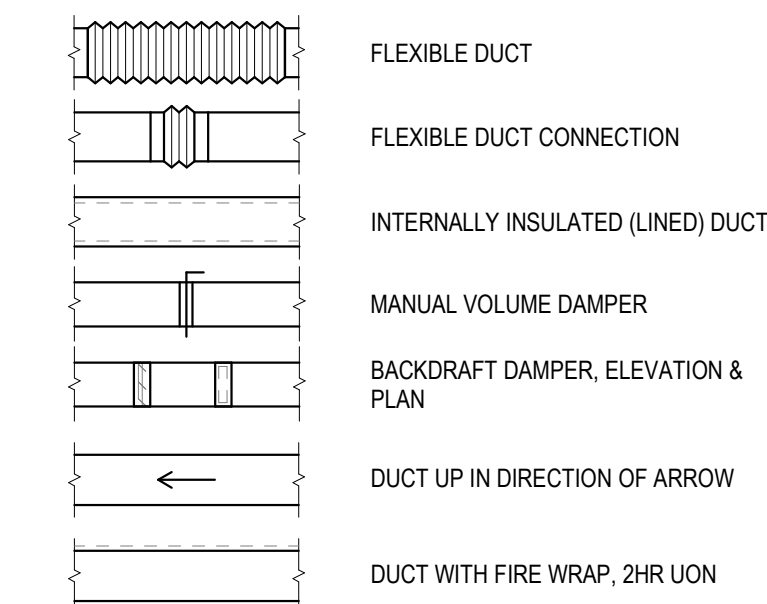
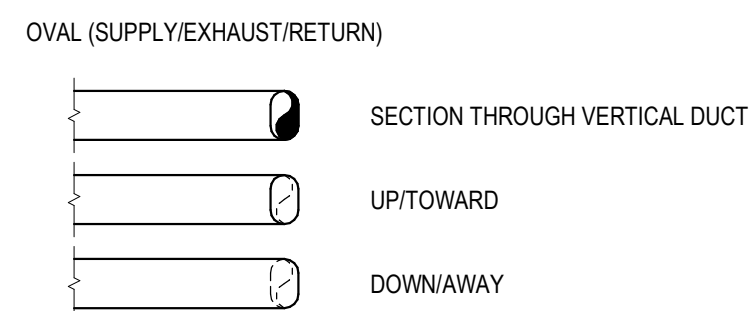
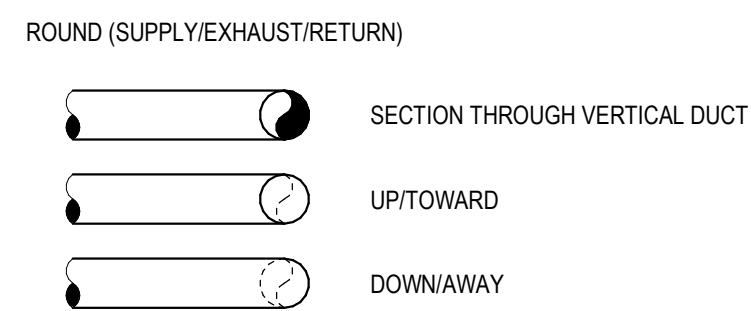
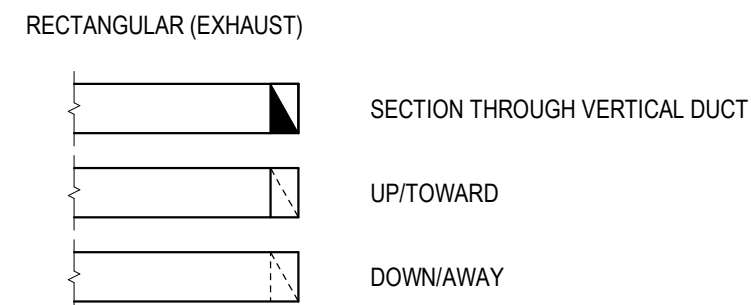
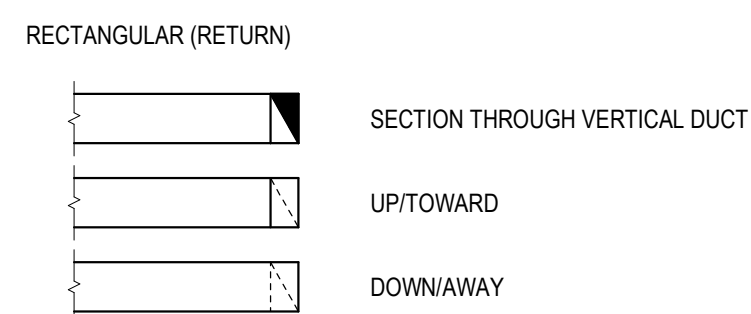
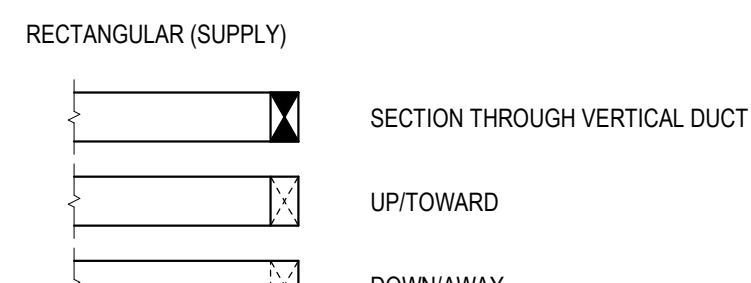
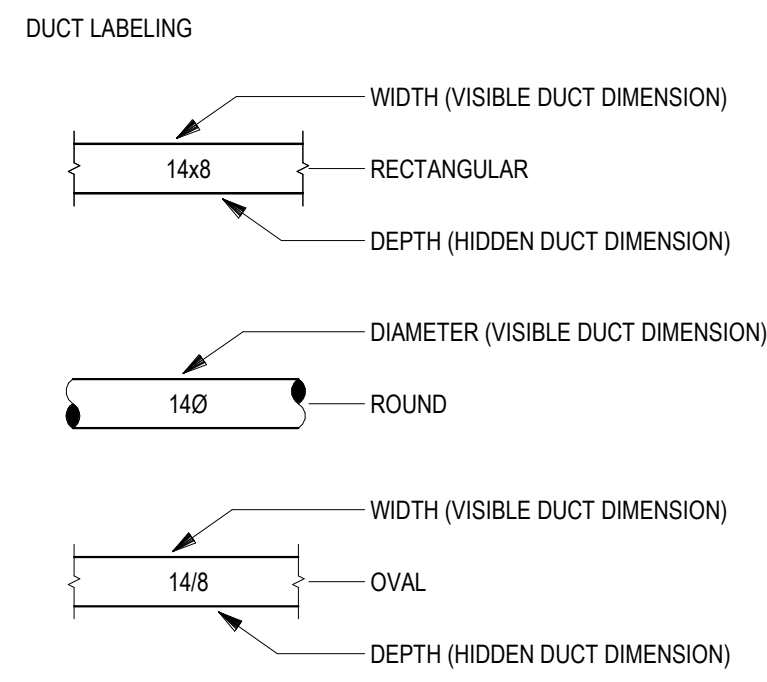
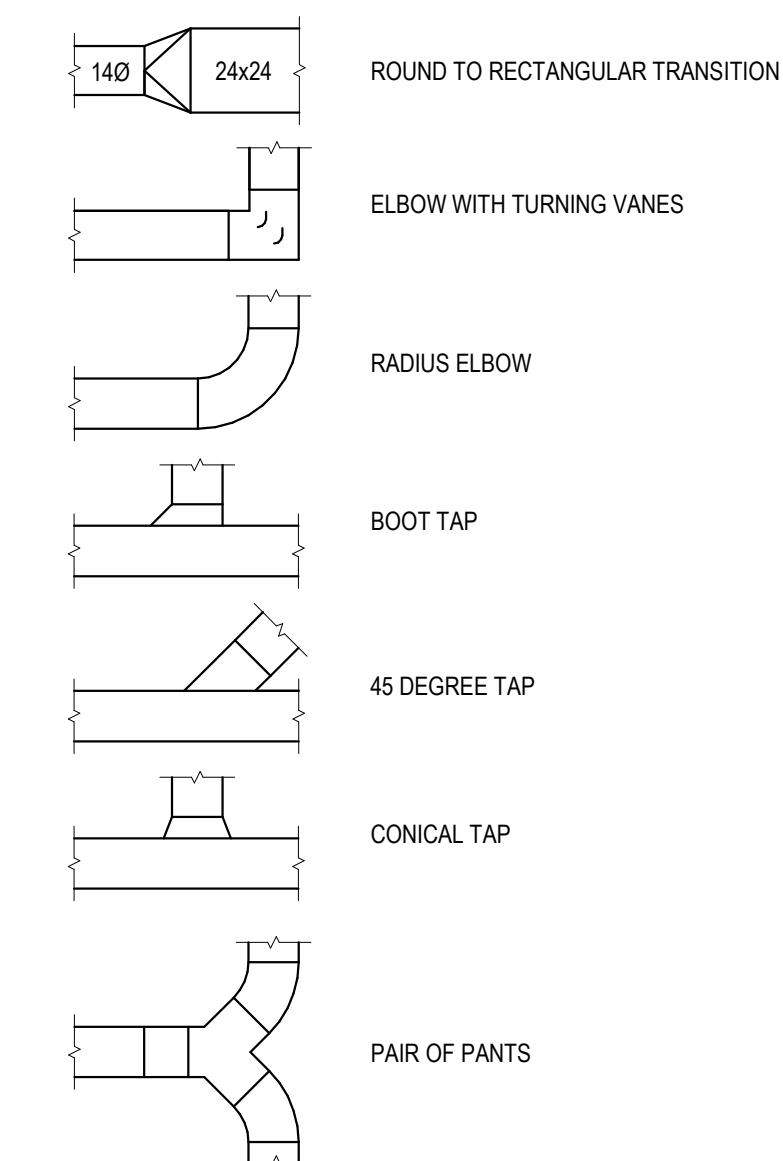


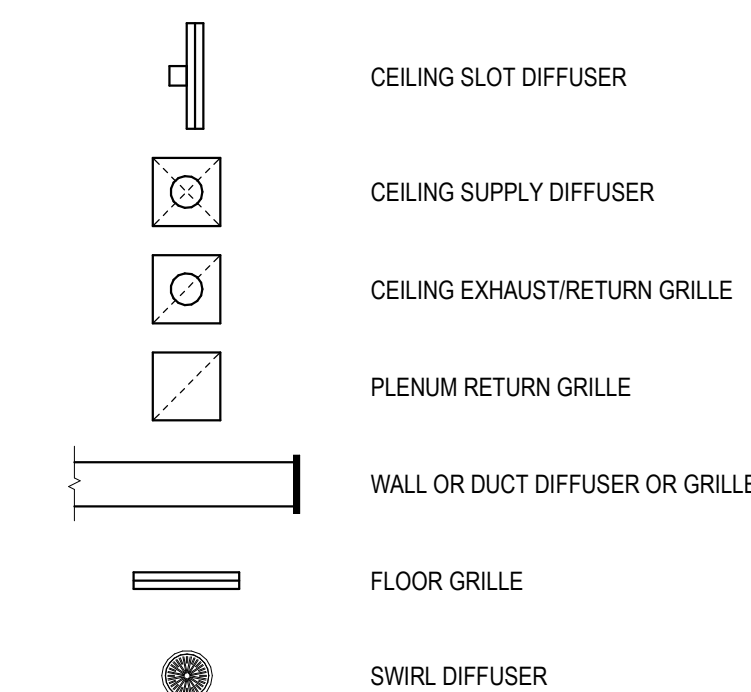
DUCT & DIFFUSERS



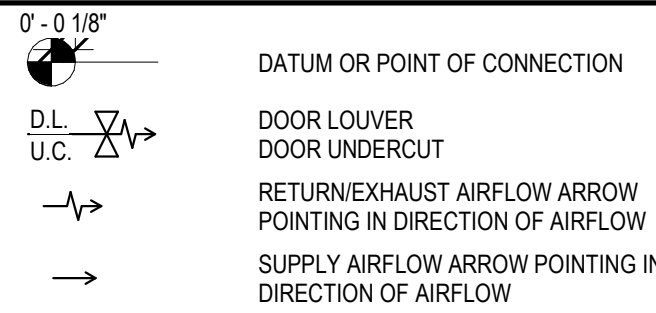
REPRESENTATIVE DUCT FITTINGS
(SEE SPECIFICATIONS FOR REQUIREMENTS)



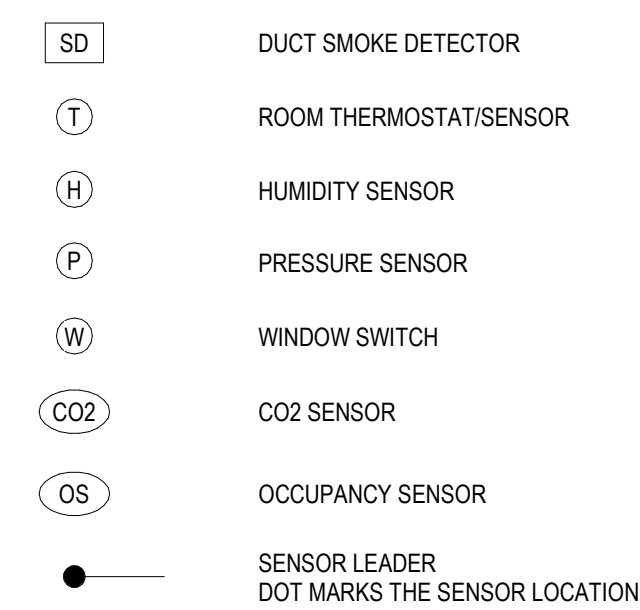
DIFFUSERS



GENERAL



SENSORS

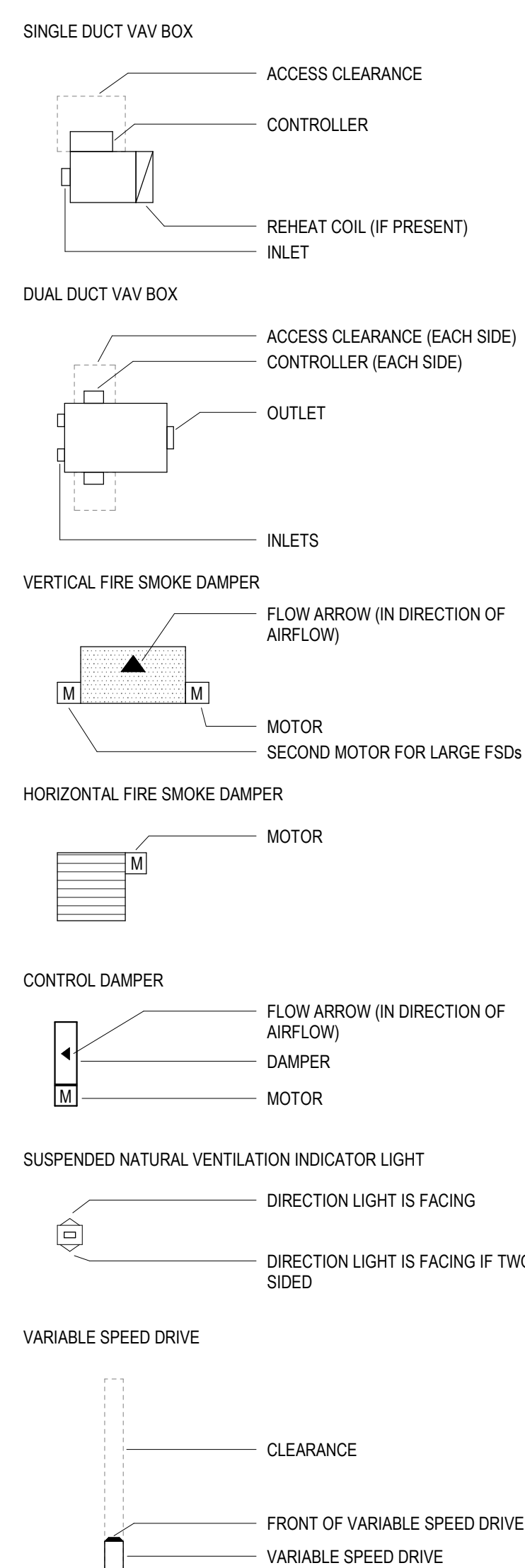


ELEVATION REFERENCE

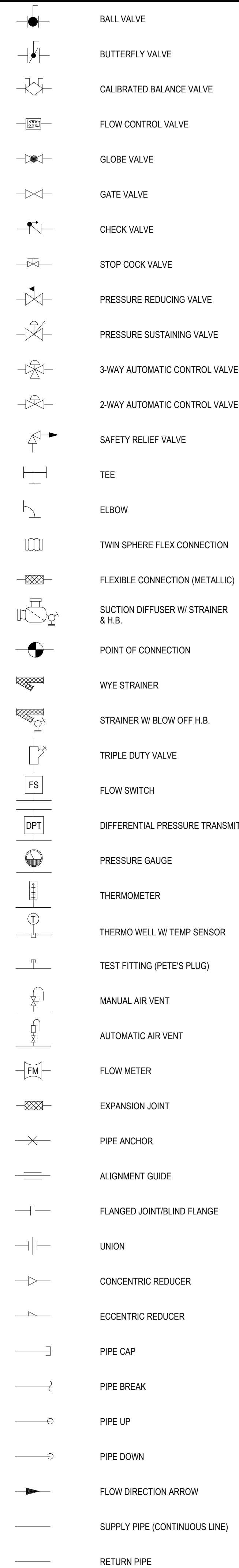
T-9'10"	TOP OF DUCT, PIPE, GRILLE AT 9'10" AFF
T-EL+25'0"	TOP OF DUCT, PIPE, GRILLE AT 25'0" ABOVE 0'0" DATUM ELEVATION
B-9'10"	BOTTOM OF DUCT, PIPE, GRILLE AT 9'10" AFF
B-EL+25'0"	BOTTOM OF DUCT, PIPE, GRILLE AT 25'0" ABOVE REF ELEVATION
CL+9'10"	CENTER LINE OF DUCT, PIPE, GRILLE AT 9'10" ABOVE REF ELEVATION
CL-EL+25'0"	CENTER LINE OF DUCT, PIPE, GRILLE AT 25'0" ABOVE REF ELEVATION
[B-10'0"]	BOTTOM OF BEAM (STRUCTURE) AT THIS EXACT LOCATION
[W4X162 B-10'6"]	BOTTOM OF BEAM (STRUCTURE) ALONG LENGTH OF BEAM

ELEVATIONS PROVIDED FOR REFERENCE ONLY - FINAL ELEVATIONS AND COORDINATION ARE THE RESPONSIBILITY OF THE CONTRACTOR

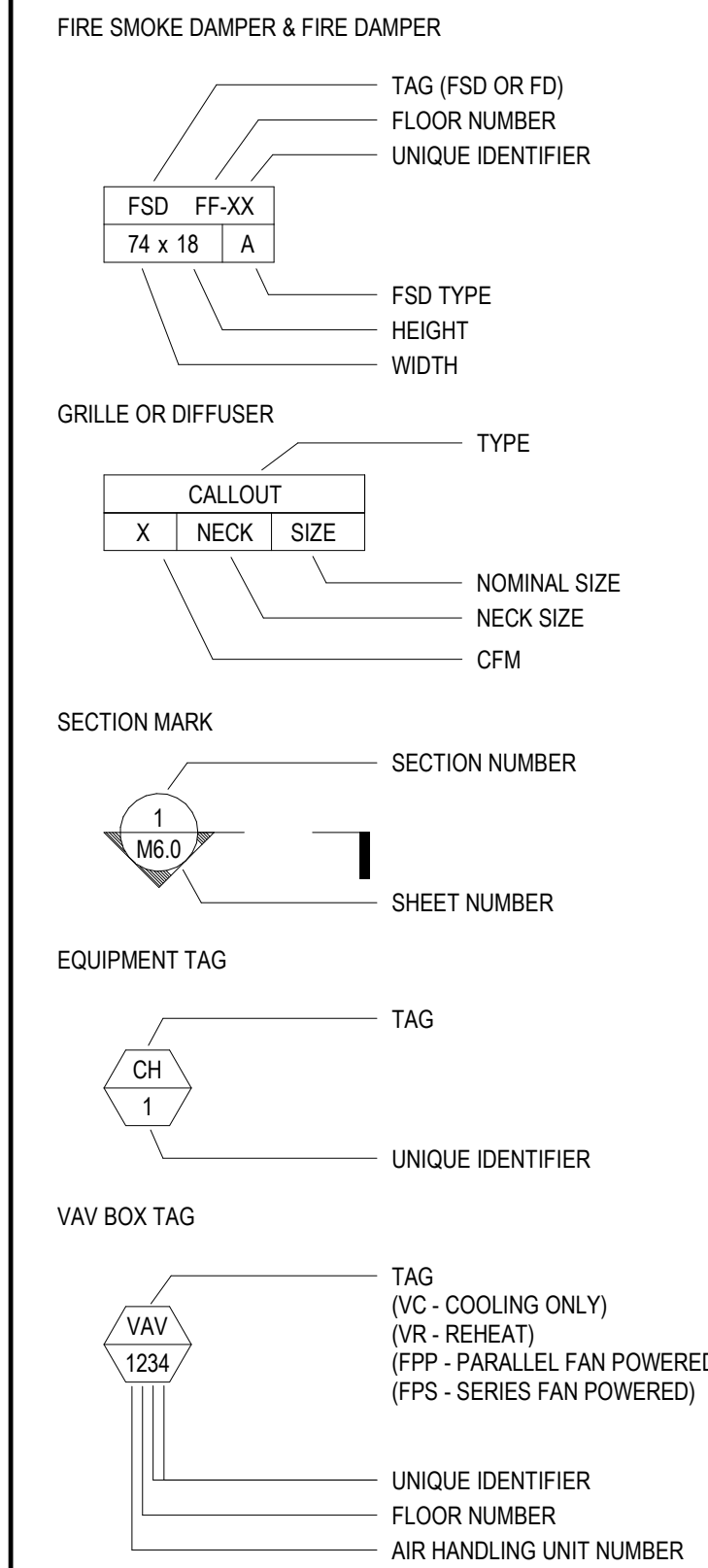
EQUIPMENT



MECHANICAL PIPING

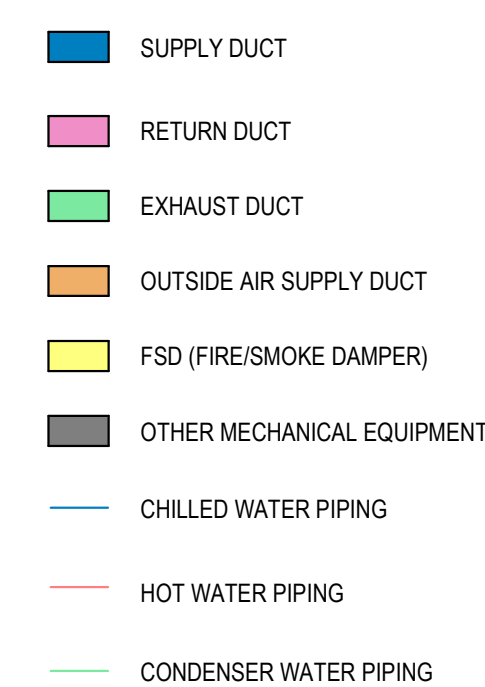


TAGS

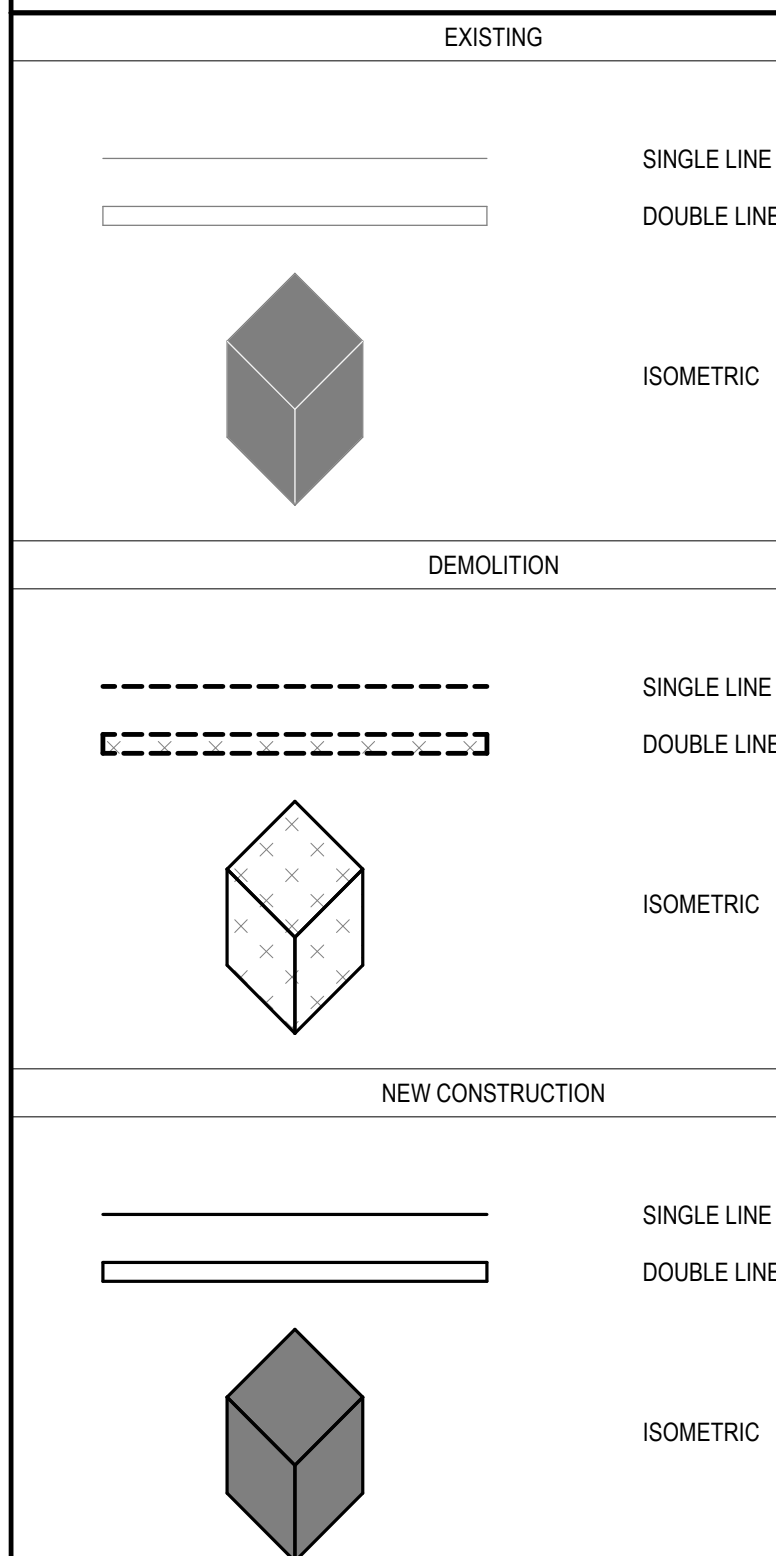


MECHANICAL EQUIPMENT COLOR LEGEND

(FOR DRAWINGS IN COLOR)



PHASING



ABBREVIATIONS

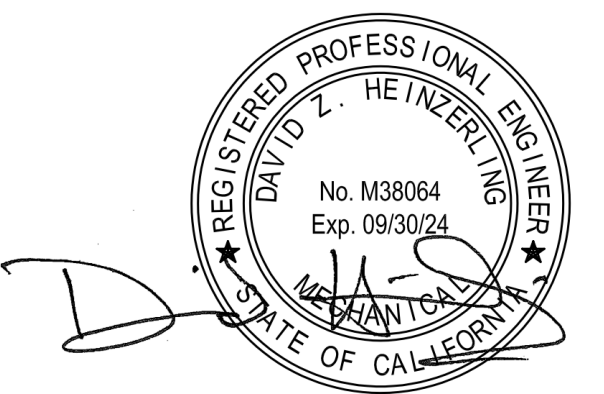
ABBREVIATION	DESCRIPTION
Ø	ROUND
Ø	PHASE
EX	EXISTING
(N)	NEW
(R)	RELOCATED
ABBR.	ABBREVIATION
ABS	ABSOLUTE
AF	AIRFOIL
AFF	ABOVE FINISHED FLOOR
AI	ANALOG INPUT
AO	ANALOG OUTPUT
AP	ACCESS PANEL
APD	AIR PRESSURE DROP IN INCHES WATER COLUMN
B+	BOTTOM ELEVATION
BD	BELT DRIVE
BDD	BACK DRAFT DAMPER
BF	BOTTOM FLAT
BHP	BRAKE HORSEPOWER
BP	BEAM PENETRATION
C.A.	COMBUSTION AIR
CAP	CAPACITY
CAP STAGE	CAPACITY STAGES
C.A.P.	CEILING ACCESS PANEL
CARTR	CARTRIDGE
CENTR	CENTRIFUGAL
CF	CAP FOR FUTURE
CFM	CUBIC FEET PER MINUTE
CHOR	CHANGE-OVER RETURN
CHOS	CHANGE-OVER SUPPLY
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CL	CENTERLINE
CLG	CEILING
CO	CARBON MONOXIDE
CO2	CARBON DIOXIDE
COMP	COMPRESSOR
COF	COEFFICIENT OF PERFORMANCE
COWR	CLOSED CONDENSER WATER RETURN
COWS	CLOSED CONDENSER WATER SUPPLY
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
DD	DIRECT DRIVE
DEFL	DEFLECTION
DELTA P	DIFFERENTIAL PRESSURE
DI	DIGITAL INPUT
DL	DRAIN LINE
DO	DIGITAL OUTPUT
DPS	DIFFERENTIAL PRESSURE SWITCH
DPT	DIFFERENTIAL PRESSURE TRANSMITTER/TRANSDUCER
E.A.	EXHAUST AIR
E-PWR	EFFICIENCY POWER
ECM	ELECTRICALLY COMMUTATED MOTOR
EDB	ENTERING DRY BULB TEMPERATURE
EER	ENERGY EFFICIENCY RATING
EFF	EFFICIENCY
ET	EXPANSION TANK
ESP	EXTERNAL STATIC PRESSURE
EWB	ENTERING WET BULB TEMPERATURE
EW	ENTERING WATER TEMPERATURE
FAS	FIRE ALARM SYSTEM
FD	FIRE DAMPER
FF	FOULING FACTOR
FPI	FINS PER INCH
FPM	FINS PER FOOT
FPF	FEET PER MINUTE
FPF	FAN POWERED PARALLEL VAV BOX
FPS	FAN POWERED SERIES VAV BOX
FSD	FIRE SMOKE DAMPER
FT	FEET
F2	SQUARE FEET
GPM	GALLONS PER MINUTE
H	HEIGHT
H.B.	HOSE BIB
HEAD	PRESSURE RISE IN FEET OF WATER COLUMN
HP	HORSEPOWER
HR	HEAT RECOVERY RETURN
HR	HEAT RECOVERY SUPPLY
HRS	HUMIDITY SENSOR
HWR / HHWR	HOT WATER RETURN / HEATING HOT WATER RETURN
HWS / HHWS	HOT WATER SUPPLY / HEATING HOT WATER SUPPLY
HX	HEAT EXCHANGER
ID	INSIDE DIMENSION
IN	INCHES
IN WC	INCHES OF WATER COLUMN
INLV	INTEGRATED PART LOAD VALUE
KBH	1,000 BTU/H
KW	KILOWATTS
LDB	LEAVING DRY BULB TEMPERATURE
LWB	LEAVING WET BULB TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
MANUF	MANUFACTURER
MCA	MINIMUM CIRCUIT AMPS
MOPP	MAXIMUM OVERCURRENT PROTECTION
MED	MEDIUM
MERV	MINIMUM EFFICIENCY REPORTING VALUE
MIN	MINIMUM
MIN O.A.	MINIMUM OUTDOOR AIR CFM
MO	MODULATING CAPACITY CONTROL
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
NPLV	NON-STANDARD PART LOAD VALUE
O.F.	OVER FLOW
O-PWR	OPTIONAL STANDBY POWER
O.A.	OUTSIDE AIR
OADB	OUTDOOR AIR DRY BULB TEMPERATURE
OAWB	OUTDOOR AIR WET BULB TEMPERATURE
OD	OUTSIDE DIMENSION
OC2	OCCUPIED
OP WT	OPERATING WEIGHT
P.O.C.	POINT OF CONNECTION
P.C.	PULSING CONTRACTOR
PD	PRESSURE DROP
PRESS	PRESSURE
PROP	PROPELLER
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH, ABSOLUTE
PSIG	POUNDS PER SQUARE INCH, GAUGE
QTY	QUANTITY
QTY@HL	QUANTITY AT HEIGHT BY LENGTH
RA	RETURN AIR
RLA	RATED LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
REFR	REFRIGERANT
S.A.	SUPPLY AIR
S.A.D.	SEE ARCHITECTURAL DRAWINGS
S.M.	SHEET METAL
S-PWR	STANDBY POWER (LEGALLY REQUIRED)
SC	SATURATED CONDENSING TEMPERATURE
SD	SMOKE DETECTOR
SENS	SENSIBLE
SST	SATURATED SUCTION TEMPERATURE
ST	STORAGE TANK
T+	TOP ELEVATION
TF	TOP FLAT
TS	TEMPERATURE SENSOR
TSP	TOTAL STATIC PRESSURE
Typ	TYPICAL
UON	UNLESS OTHERWISE NOTED
V	VOLTS
VFD	VARIABLE FREQUENCY DRIVE
VSD	VARIABLE SPEED DRIVE
VO	VARIABLE VOLUME COOLING ONLY
VR	VARIABLE VOLUME REHEAT
W	WIDTH
WI	WITH
W.A.P.	WALL ACCESS PANEL
WPD	WATER PRESSURE DROP IN FEET WATER COLUMN

StopWaste

taylor | engineers

1080 Marina Village Parkway
Suite 501
Alameda, CA 94501-1142

STAMP



ISSUES / REVISIONS

[illegible]

StopWaste

Drawn by	MU
Scale	12" = 1'-0"

HVAC LEGENDS AND ABBREVIATIONS

M0.01

STATE OF CALIFORNIA

Mechanical Systems

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-MCH-4

This document is used to demonstrate compliance for mechanical systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.4, or 141.0(b)2 for alterations.

Project Name: StopWaste.Org

Report Page: (Page 1 of 16)

Project Address: 1537 Webster St, Oakland, CA 94612

Date Prepared: 2023-04-12T20:57:47-04:00

A. GENERAL INFORMATION

01 Project Location (city)

Oakland

04 Total Conditioned Floor Area

10570

02 Climate Zone

3

05 Total Unconditioned Floor Area

1460

03 Occupancy Types Within Project:

06 # of Stories (Habitable Above Grade)

2

• Library • Office

B. PROJECT SCOPE

This document is used to demonstrate compliance for mechanical systems or components that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.4, 170.2(b) or 141.0(b)2 and 180.2(b)2 for alterations.

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Registration Number:

Generated Date/Time:

Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Compliance ID: 87918-0423-0006

Schema Version: rev 20220101

Report Generated: 2023-04-12 17:57:52

STATE OF CALIFORNIA

Mechanical Systems

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-MCH-4

Project Name: StopWaste.Org

Report Page: (Page 4 of 16)

Date Prepared: 2023-04-12T20:57:47-04:00

F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

Dry System Equipment Efficiency (other than Package Terminal Air Conditioners (PTAC) and Package Terminal Heat Pumps (PTHP), DX-DOAS and Dual Fuel Heat Pumps)

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DAVID Z. HEINZLERLING
No. M38064
Exp. 09/30/24
MECHANICAL
STATE OF CALIFORNIA

[illegible]

STATE OF CALIFORNIA		CALIFORNIA ENERGY COMMISSION	
Mechanical Systems		NRCC-MCH-E	
CERTIFICATE OF COMPLIANCE		(Page 12 of 16)	
Project Name: StopWaste.Org	Report Page:	Date Prepared: 2023-04-12T20:57:47-04:00	

A. DISTRIBUTION (DUCTWORK AND PIPING)				
			Dwelling Units: Total duct leakage of duct system shall not exceed 12% or duct system to outside shall not exceed 6% per RA3.1.4 required for systems? Duct leakage testing per CMCA Section 603.10.1 required for these systems?	--- Yes
11	No	The scope of the project includes only duct systems serving healthcare facilities		
12	No	Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system.		
13	Yes	The space conditioning system serves less than 5,000 ft ² of conditioned floor area.		
14	No	The <u>combined</u> surface area of the ducts is more than 25% of the total surface area of the entire duct system:		
15	No	The scope of the project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos.		
16	No	The scope of the project includes an existing duct system that is documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in the Reference Nonresidential Appendix NA2.		
17	Yes	All Ductwork and plenums with pressure class ratings shall be constructed to Seal Class A		
18	No	All ductwork is an extension of an existing duct system		
19	No	Ductwork serving individual dwelling unit		
20	No	< 25 ft of new or replacement space conditioning ducts installed		
21	R-8	Duct Insulation R-value		
The answers to the questions below apply to the following duct systems:			AC-4 NR / Common Use: Duct leakage testing shall not exceed 6% per NA7.5.3 required for these systems?	No

Registration Number:	Generated Date/Time:	Documentation Software: Energy Code Ace
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance	Report Version: 2022.0.000 Schema Version: rev 20220101	Compliance ID: 87918-0423-0006 Report Generated: 2023-04-12 17:57:52

STATE OF CALIFORNIA

Mechanical Systems

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-MCH-EH

Project Name: StopWaste.Org

Report Page: (Page 15 of 16)

Date Prepared: 2023-04-12T20:57:47-04:00

Q. MANDATORY MEASURES DOCUMENTATION LOCATION		
This table is used to indicate where mandatory measures are documented in the plan set or construction documentation.		
O1		O2
Compliance with Mandatory Measures documented through MCH Mandatory Measures Note Block	No	Plan sheet or construction document location
O3		O4
Mandatory Measure		Plan sheet or construction document location
Heating Equipment Efficiency per 110.1		238119
Cooling Equipment Efficiency per 110.1		238119
Furnace Standby Loss Control per 110.2(d)		N/A
Duct Insulation per 120.4		230000
Heat Pump with Supplemental electric Resistance Heater Controls per 110.2(b)		238119
The air duct and plenum system is designed per 120.4(a)-(f)		230000
Kitchen range hoods shall be rated for sound in accordance with Section 7.2 of ASHRAE 62.2		N/A

P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION
<i>There are no NRCV forms required for this project.</i>

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<i>There are no NRCV forms required for this project.</i>

Registration Number:	Generated Date/Time:	Documentation Software: Energy Code Ace
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1080 Marina Village Parkway
Suite 501
Alameda, CA 94501-1142

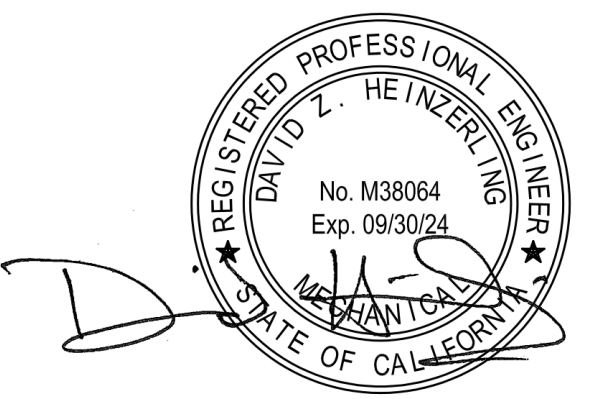
[illegible]

Drawn by	MU
Scale	12" = 1'-0"

M1.01

PLUMBING WATER HEATER SCHEDULE (ALTERNATE)													
TYPE	EQUIPMENT NUMBER	DESCRIPTION	SERVICE	LOCATION	MANUFACTURER	MODEL	TYPE	FIRST HOUR RATING (GAL)	ELECTRICAL				REMARKS
									WATT	VOLT	PHASE	AMPS	
WH	1	HEAT PUMP WATER HEATER	BUILDING	RM 109	AO SMITH	HPTU-50N	HYBRID HEAT PUMP	66	-	208	1	30	

STAMP



ISSUES / REVISIONS

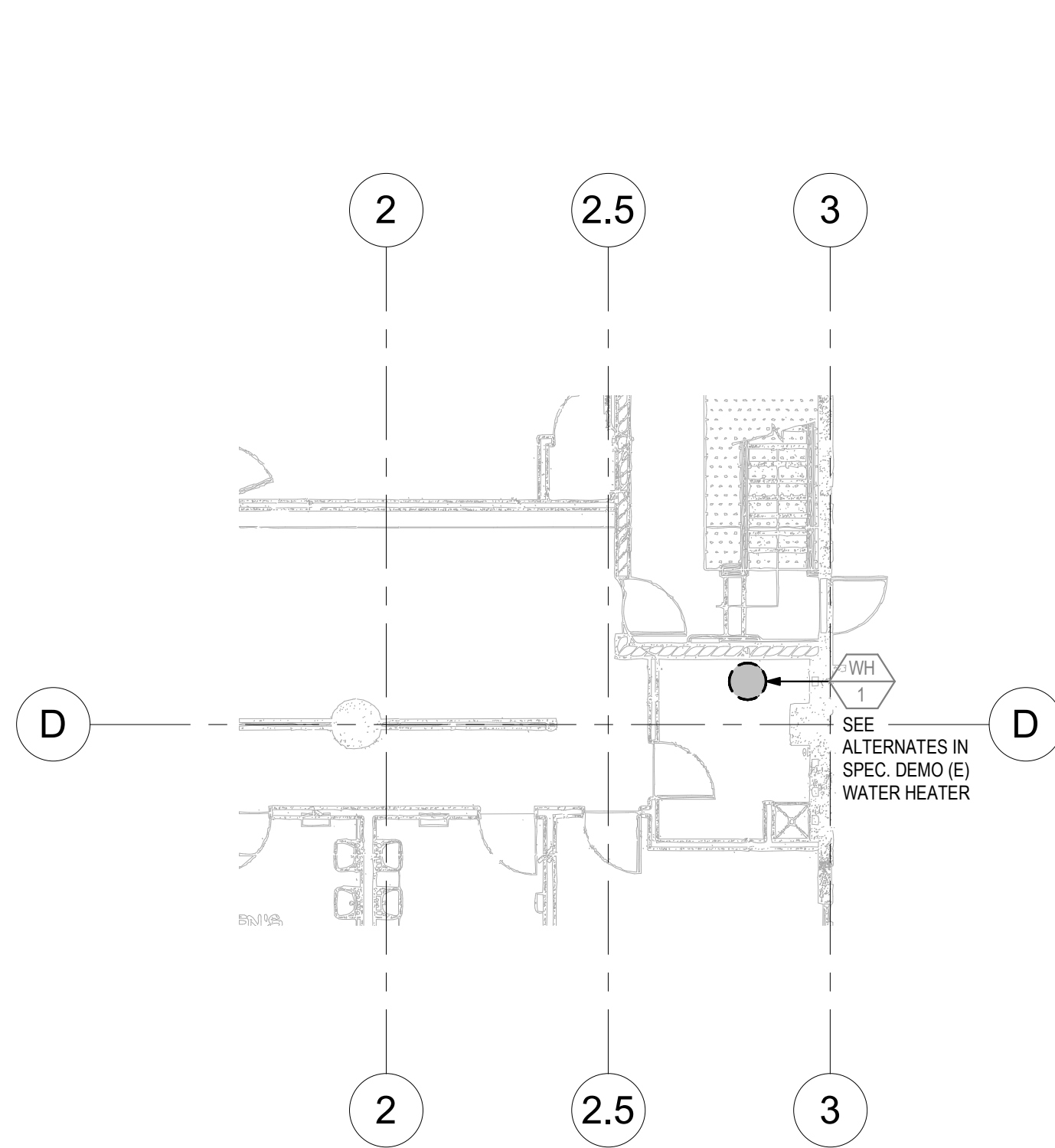
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StopWaste

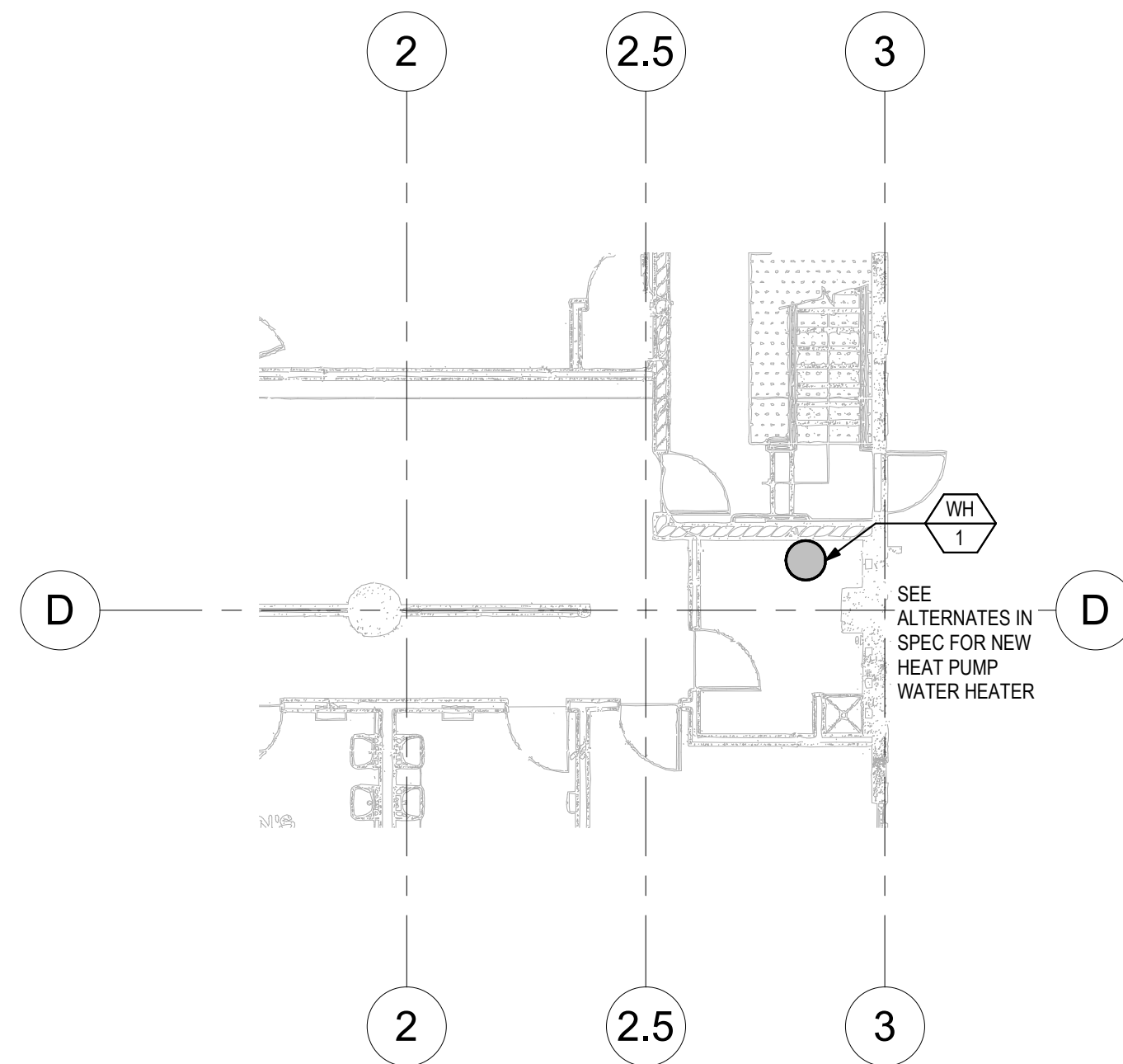
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HVAC PLANS

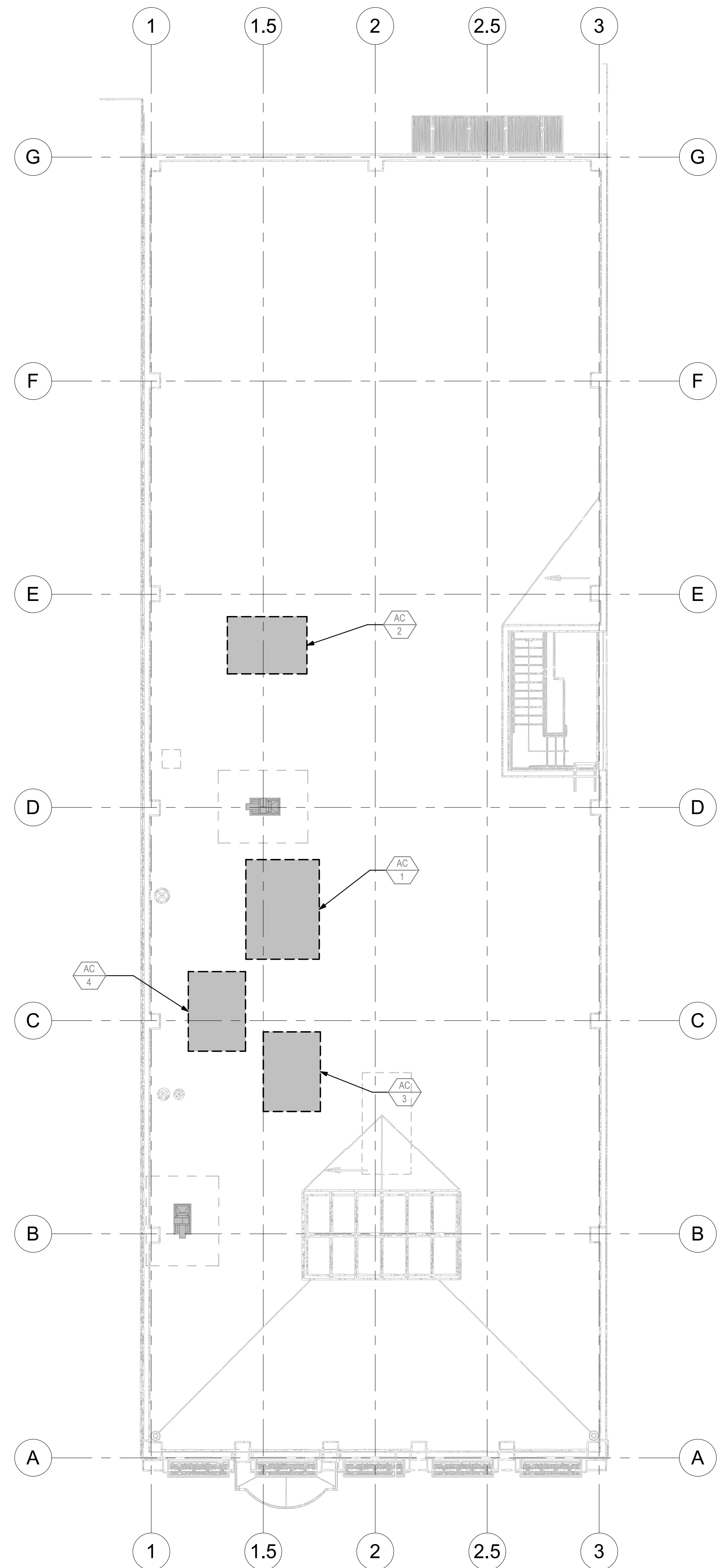
M2.01



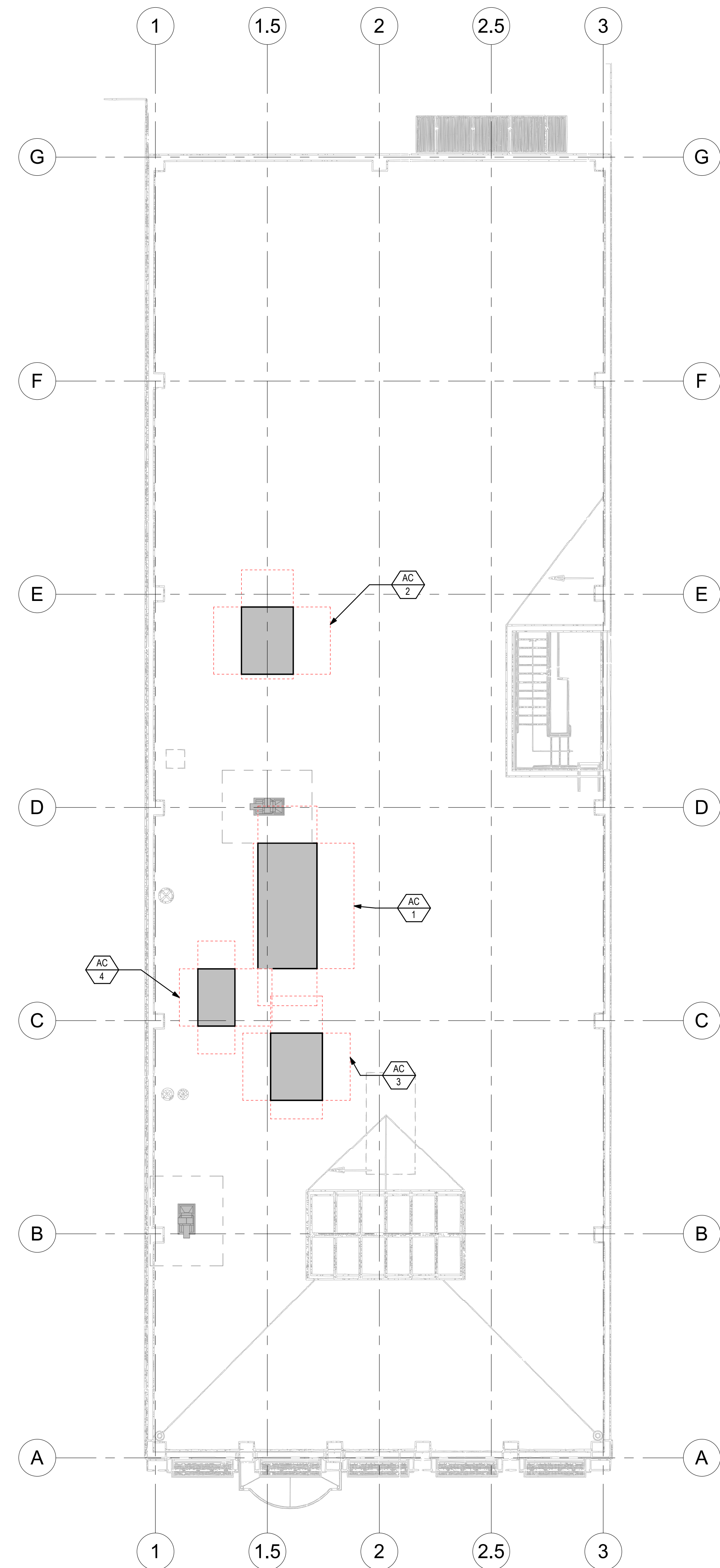
3 DEMO PLUMBING GROUND FLOOR PLAN
1/8" = 1'-0"



4 HVAC GROUND FLOOR PLAN
1/8" = 1'-0"



2 DEMO HVAC ROOF PLAN
1/8" = 1'-0"



① HVAC ROOF PLAN
1/8" = 1'-0"