HVAC ABBREVIATIONS

°F	DEGREES FAHRENHEIT
°C	DEGREES CELSIUS
Ø	DIAMETER
A	AMPERE
AAV	AUTOMATIC AIR VENT
ACD	AUTOMATIC CONTROL DAMPER
AD	ACCESS DOOR
ADDL	ADDITIONAL
ADJ	ADJUSTABLE
ADL	ACOUSTICAL DUCT LINER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFS	ABOVE FINISHED SLAB
AP	ACCESS PANEL
ARCH	ARCHITECT
ATC	AUTOMATIC TEMPERATURE COTNROL
ATD	AIR TERMINAL DEVICE
AVG	AVERAGE
BDD	BACKDRAFT DAMPER
BFF	BELOW FINISHED FLOOR
BHP	BRAKE HORSEPOWER
BLDG	BUILDING
BOB	BOTTOM OF BEAM
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNIT PER HOUR
CF	CUBIC FEET
CFM	CUBIC FEET PER MINUTE
CHW	CHILLED WATER
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CL	CENTERLINE
CLG	CEILING
CO	CLEAN-OUT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONTR	CONTRACTOR
CP	CONDENSATE PUMP
CV	CONSTANT VOLUME SUPPLY AIR TERMINAL BOX
CVE	CONSTANT VOLUME EXHAUST AIR TERMINAL BOX
D	DRAIN
DB	DRY BULB TEMPERATURE
DDC	DIRECT DIGITAL CONTROL
DDCFP	DIRECT DIGITAL CONTROL FIELD PANEL
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
EA	EACH
EAT	ENTERING AIR TEMPERATURE
EFF	EFFICIENCY
ELEC	ELECTRICAL
ELEV	ELEVATION
EMER	EMERGENCY
EMS	ENERGY MANAGEMENT SYSTEM
ENT	ENTERING
EQUIP	EQUIPMENT
ESP	EXTERNAL STATIC PRESSURE
EXH	EXHAUST
EWT	ENTERING WATER TEMPERATURE
FA	FREE AREA
FCU	FAN COIL UNIT
FD	FIRE DAMPER (W/ ACCESS DOOR)
FLR	FLOOR
FLRDR	FLOOR DRAIN
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FRE	FIRE RATED ENCLOSURE
FT	FEET
FURN	FURNISHED
GA	GAUGE
GAL	GALLONS
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GE	GENERAL EXHAUST
GND	GROUND
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GRD	GRADE (GOUND LEVEL)
H	HEIGHT
HP	HORSEPOWER
HR	HOUR
HW	HOT WATER
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
HZ	HERTZ
ID	INSIDE DIAMETER
IN	INCHES
INSUL	INSULATION
KW	KILOWATT
L	LENGTH
LAT	LEAVING AIR TEMPERATURE
LF	LINEAR FEET
LVG	LEAVING
LWT	LEAVING WATER TEMPERATURE
M	ONE THOUSAND
MAV	MANUAL AIR VENT
MAX	MAXIMUM
MBH	ONE THOUSAND BRITISH THERMAL UNITS PER HOUR
MCA	MINIMUM CIRCUIT AMPS
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MOCP	MAXIMUM OVER CURRENT PROTECTION
MOD	MOTOR OPERATED DAMPER
MTD	MOUNTED
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NCR	NOISE CRITERIA
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NO.	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OBD	OPPOSED BLADE DAMPER
OC	ON CENTER
ODP	OPEN DRIP PROOF
OED	OPEN END DUCT
PD	PRESSURE DROP
PH	PHASE
PLBG	PLUMBING
POS	PROVIDED BY OTHER SECTION(S)
PRESS	PRESSURE
PRIM	PRIMARY
PSIA	POUNDS PER SQUARE INCH ABSOLUTE
PSID	POUNDS PER SQUARE INCH DIFFERENTIAL
PSIG	POUNDS PER SQUARE INCH GAUGE
PVC	POLYVINYL CHLORIDE
RA	RETURN AIR
REP	REPRESENTATIVE
RET	RETURN
REQD	REQUIRED
REQS	REQUIREMENTS
RH	RELATIVE HUMIDITY
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
RVD	REMOTE VOLUME DAMPER (CABLE OPERATED)
SA	SUPPLY AIR
SCH	SCHEDULE
SCR	SCREEN
SD	SMOKE DAMPER
SDET	SMOKE DETECTOR
SEF	SMOKE EXHAUST FAN
SFD	COMBINATION FIRE/SMOKE DAMPER W/ ACCESS DOOR
SM	SHEETMETAL
SP	STATIC PRESSURE
SPECS	SPECIFICATIONS
SQ	SQUARE
SQFT	SQUARE FEET
STD	STANDARD
STDBY	STANDBY
STL	STEEL
TA	THROWAWAY
TEFC	TOTALLY ENCLOSED FAN COOLED
TEMP	TEMPERATURE
TOD	TOP OF DUCT
TOP	TOP OF PIPE
TR	TRANSFER
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UC	UNDERCUT DOORWAY (BY GC)
V	VENT
VD	VOLUME DAMPER
VEL	VELOCITY
VV	VARIABLE VOLUME SUPPLY AIR TERMINAL BOX
VVE	VARIABLE VOLUME EXHAUST AIR TERMINAL BOX
W	WIDTH
W/	WITH
W/O	WITHOUT
WB	WET BULB TEMPERATURE
WF	WIDE FLANGE
WG	WATER GAUGE
WMS	WIRE MESH SCREEN
WRT	WITH RESPECT TO
X	EXISTING EQUIPMENT TO BE REMOVED
XFER	TRANSFER
XM	EXISTING EQUIPMENT TO REMAIN
XN	NEW LOCATION OF RELOCATED EQUIPMENT
XR	EXISTING EQUIPMENT TO BE RELOCATED

PIPING LEGEND

- BALL VALVE
- BALL VALVE WITH MEMORY STOP (BALANCING VALVE)
- BALL VALVE WITH HOSE BIB, CAP & CHAIN (DRAIN VALVES)
- BUTTERFLY VAVLE
- BUTTERFLY VALVE WITH MEMORY STOP (BALANCING VALVE)
- GLOBE VALVE
- PLUG VALVE
- CHECK VALVE
- STRAINER W/ BALL VALVE, HOSE BIB & CAP
- AUTOMATIC CONTROL VALVE, MODULATING ACTUATOR
- AUTOMATIC CONTROL VALVE, TWO POSITION ACTUATOR
- THREE WAY AUTOMATIC CONTROL VALVE, MODULATING ACTUATOR
- THREE WAY AUTOMATIC CONTROL VALVE, TWO POSITION ACTUATOR
- AUTOMATIC FLOW CONTROL VALVE (PRESSURE INDEPENDENT)
- COMBINATION FLOWMETER / SHUT OFF / BALANCING VALVE (CIRCUIT SETTER)
- FM — FLOW MEASURING DEVICE
- FLOW SWITCH
- SAFETY RELIEF VALVE
- UNION OR FLANGE (AS INDICATED BY PIPE SIZE - SEE SPEC)
- BLIND FLANGE
- END CAP
- PRESSURE GAUGE WITH GAUGE CLOCK
- THERMOMETER
- PT — PRESSURE / TEMPERATURE WELL
- AAV — AUTOMATIC AIR VENT WITH ISOLATION VALVE
- MAV — MANUAL AIR VENT
- REDUCER (ECCENTRIC - FLAT ON BOTTOM OR FLAT ON TOP)
- REDUCER (CONCENTRIC)
- FLEXIBLE CONNECTION
- E — EXPANSION JOINT
- PIPE GUIDE
- ANCHOR
- RISE (SINGLE LINE - PLAN VIEW)
- DROP (SINGLE LINE - PLAN VIEW)
- VALVE IN VERTICAL
- TOP TAKE-OFF
- BOTTOM TAKE-OFF
- PIPE BREAK (SINGLE LINE)
- W — WATER METER DIAL TYPE
- DIRT LEG
- CO — CLEAN-OUT FOR CONDENSATE DRAIN
- DIRECTION OF FLOW IN PIPE
- UP — PITCH PIPE UP IN DIRECTION OF FLOW
- DN — PITCH PIPE DOWN IN DIRECTION OF FLOW
- SUPPLY LINES
- RETURN LINES
- EXISTING
- DEMO/EXISTING TO BE REMOVED
- FUTURE
- CHWS — CHILLED WATER SUPPLY
- CHWR — CHILLED WATER RETURN
- HWS — HOT WATER SUPPLY
- HWR — HOT WATER RETURN
- D — DRAIN

EQUIP TAG SYMBOLS

EQUIPMENT NOT REQUIRING ELECTRIC SERVICE → TAG / DATA / DATA / DATA

EQUIPMENT REQUIRING ELECTRIC SERVICE → TAG / DATA / DATA

SEE SCHEDULE FOR PERFORMANCE REQUIREMENTS

REFER TO SCHEDULES FOR DEFINITION OF EQUIPMENT SPECIFIC DATA LISTED WITHIN TAG BLOCKS.

- ACD / 1 — AUTOMATIC CONTROL DAMPER
- AHU / 1 — AIR HANDLING UNIT
- CP / 1 — CONDENSATE PUMP
- EF / 1 — EXHAUST FAN
- EHC / 1 — ELECTRIC HEATING COIL
- FCU / 1 — FAN COIL UNIT
- GS / 1 — GREASE DUCT SUMP
- KEF / 1 — KITCHEN EXHAUST FAN
- SATT / 1 — SOUND ATTENUATOR
- SEF / 1 — SMOKE EXHAUST FAN
- SF / 1 — SUPPLY FAN
- TEF / 1 — TOILET EXHAUST FAN
- TF / 1 — TRANSFER FAN
- CV–1 / 600 — CONSTANT VOLUME SUPPLY BOX MAXIMUM CFM
- CVE–1 / 600 — CONSTANT VOLUME EXHAUST BOX MAXIMUM CFM
- VV–1 / 600 / 300 — VARIABLE AIR VOLUME SUPPLY BOX MAXIMUM CFM / MINIMUM CFM
- VVE–1 / 600 / 300 — VARIABLE AIR VOLUME EXHAUST BOX MAXIMUM CFM / MINIMUM CFM

DUCTWORK LEGEND

SINGLE LINE	DOUBLE LINE	
		ROUND DUCT UP (SUPPLY / RETURN / EXHAUST)
		RECTANGULAR DUCT UP (SUPPLY / RETURN / EXHAUST)
		ROUND DUCT DOWN (SUPPLY / RETURN / EXHAUST)
		RECTANGULAR DUCT DOWN (SUPPLY / RETURN / EXHAUST)
		STANDARD RADIUS ELBOW (R = W) (SUPPLY / RETURN / EXHAUST)
		RADIUS WYE SPLIT SUPPLY (SUPPLY / RETURN / EXHAUST)
		DUCT MOUNTED CEILING DIFFUSER W/ BRANCH TAKE-OFF VOLUME DAMPER
		ROUND DUCT TO DIFFUSER / GRILLE W/ BRANCH TAKE-OFF VOLUME DAMPER (INSTALL FLEX DUCT PER SPEC)
		DUCT MOUNTED CEILING DIFFUSER W/ BRANCH TAKE-OFF VOLUME DAMPER

SINGLE LINE	DOUBLE LINE	
WxH	WxH	DUCT (SUPPLY / RETURN / EXHAUST)
WxH ADL	WxH ADL	ACOUSTICALLY LINED DUCT (SUPPLY / RETURN)
		EXISTING DUCT TO BE REMOVED (SUPPLY / RETURN / EXHAUST)
UP OR DN	UP OR DN	RISE OR DROP IN DUCT (SUPPLY / RETURN / EXHAUST)
		OPEN END DUCT W/ VD & 1/2" WMS
		HORIZONTAL OFFSET (SUPPLY / RETURN / EXHAUST)
		BULLHEAD CONVERGE W/ BRANCH TAKE-OFF VOLUME DAMPER (RETURN / EXHAUST)
		90° TAKE-OFF W/ BRANCH TAKE-OFF VOLUME DAMPER (VD IN LOW PRESSURE SYSTEMS ONLY)
		SIDEWALL SUPPLY LINEAR DIFFUSER W/ BRANCH CONNECTION AND VOLUME DAMPER FOR EVERY 4'-0" OF LINEAR (PROVIDE FACTORY INSULATED PLENUM)
		CEILING SUPPLY LINEAR DIFFUSER W/ BRANCH CONNECTION AND VOLUME DAMPER FOR EVERY 4'-0" OF LINEAR (PROVIDE FACTORY INSULATED PLENUM)
		DUCT MOUNTED SIDEWALL REGISTER / GRILLE W/ BRANCH TAKE-OFF VOLUME DAMPER

- AVS — AIR VOLUME TRAVERSE STATION
- SGD — SLIDE GATE DAMPER
- VD — MANUAL VOLUME DAMPER
- FD — SELF-CLOSING FIRE DAMPER W/ ACCESS DOOR
- ACD — AUTOMATIC CONTROL DAMPER W/ ACCESS DOOR
- SD — SMOKE DAMPER W/ ACCESS DOOR
- SFD — COMBINATION FIRE / SMOKE DAMPER W/ ACCESS DOOR
- BDD — BACKDRAFT / BAROMETRIC DAMPER
- UC 1/2" — UC — UNDERCUT DOORWAY (IN)
- LVDR 1.5 SF — LVDR — LOUVERED DOORWAY (SQFT FA)
- RETURN OR EXHAUST AIR FLOW
- SUPPLY AIR FLOW
- T — TEMPERATURE SENSOR OR THERMOSTAT
- H — HUMIDITY SENSOR OR HUMIDISTAT
- P — PRESSURE TRANSMITTER
- C — CARBON DIOXIDE SENSOR
- CO — CARBON MONOXIDE SENSOR
- SDET — DUCT MOUNTED SMOKE DETECTOR
- CONNECT NEW TO EXISTING

- OR — ROOF EXHAUST FAN SHOWN ON ROOF
- OR — ROOF EXHAUST FAN SHOWN ON FLOOR PLAN
- STANDARD 4-WAY BLOW SUPPLY DIFFUSER
- BLANKED FOR 3-WAY BLOW SUPPLY DIFFUSER
- OR — BLANKED FOR 2-WAY BLOW SUPPLY DIFFUSER
- BLANKED FOR 1-WAY BLOW SUPPLY DIFFUSER

CALL OUT SYMBOLS

H6.01 / 01 — SECTION DESIGNATION / SHEET NUMBER

01 KITCHEN SECTION — 1/2" = 1'-0" — SECTION / DETAIL SCALE; SECTION / DETAIL DESIGNATION

REFER TO DRAWINGS (XXX) FOR CONTINUATION

SYMBOL DESIGNATES ASSOCIATED SYSTEM OR SERVICE (ie LPS)

S / 1 — RISER DESIGNATION / RISER NUMBER

1 — REVISION NUMBER

DIFFUSER, GRILLE, REGISTER LETTER DESIGNATOR (See schedule for ATD type)

DESIGN CFM

A(200)

LEGEND SHEET IS TYPICAL FOR ALL PROJECTS, NOT ALL SYMBOLS MAY BE REFERENCED

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NUMBER	REVISION DESCRIPTION	DATE

PROJECT NUMBER 07087 LEVEL 17 | DRAWN BY: SG | CHECKED BY: RR | ISSUE DATE 16 JULY 07 | SCALE NO SCALE

SHEET NUMBER H0.01

LEGENDS

PERMIT SET