

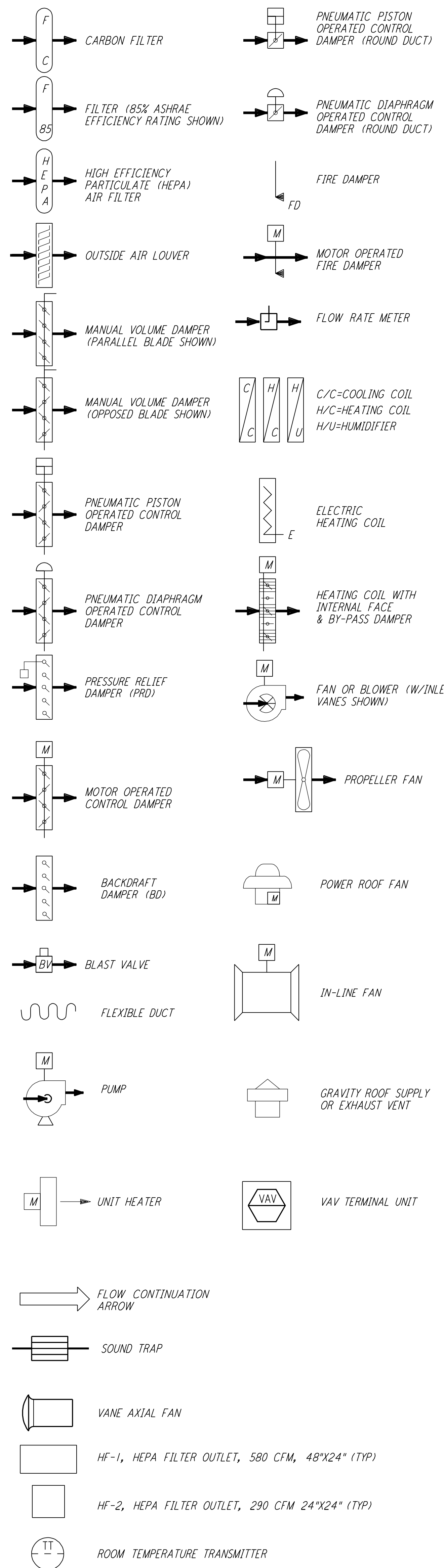
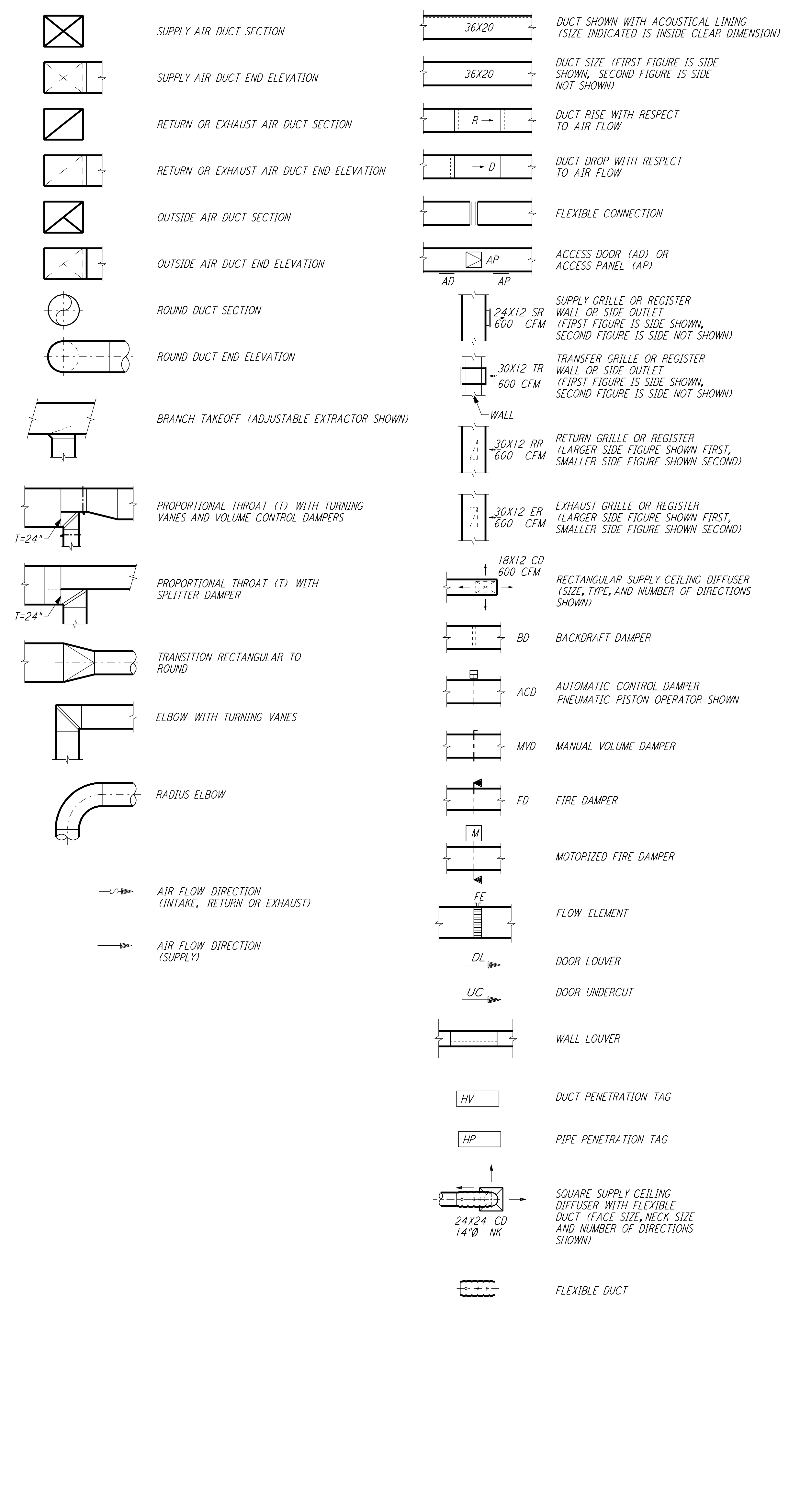
HEATING, VENTILATING AND AIR CONDITIONING LEGEND, SYMBOLS AND ABBREVIATIONS

DOUBLE LINE

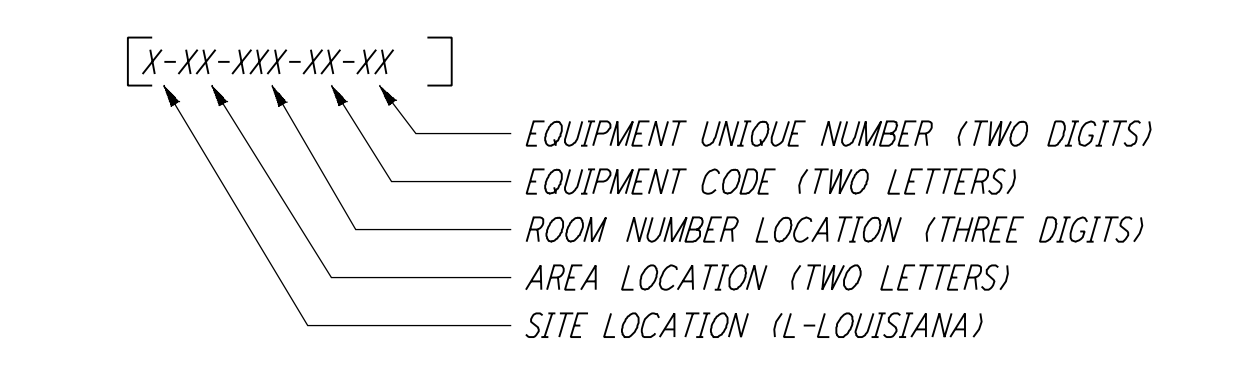
SINGLE LINE

ABBREVIATIONS

EQUIPMENT IDENTIFICATION



ABBREV	WORD OR TERM	ABBREV	WORD OR TERM
ABV	ABOVE	IN (")	INCH
AC	AIR CONDITIONING	INSTR	INSTRUMENT
ACFM	ACTUAL CUBIC FEET PER MINUTE	INSUL	INSULATION
ACH	AIR CHANGES/HR	IN WC	INCHES WATER COLUMN
AFMS	AIR FLOW MEASURING STATION	IN WG	INCHES WATER GAUGE
AI	ANALOG IN	KW	KILOWATT
AO	ANALOG OUT	L	LONG
APPROX	APPROXIMATE	LB	POUND
ARCH	ARCHITECTURAL	LG	LEVEL GAUGE
ATM	ATMOSPHERE	LGTH	LENGTH
AUTO	AUTOMATIC	LRA	LOCKED ROTOR AMPERES
BD	BACKDRAFT DAMPER	LVG	LEAVING
BELOW	BELOW	MAIN	MAINTENANCE
BF	BOTTOM FLAT	MAX	MAXIMUM
BHP	BRAKE HORSEPOWER	MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR
BLDG	BUILDING	MCC	MOTOR CONTROL CENTER
BOG	BOTTOM OF DUCT	MECH	MECHANICAL
BOG	BOTTOM OF LOUVER	MFR	MANUFACTURER
BOB	BOTTOM OF PIPE	MIN	MINIMUM
BOR	BOTTOM OF REGISTER	MTD	MOUNTED
BOT	BOTTOM	MTG	MOUNTING
BOU	BOTTOM OF UNIT	MTR	MOTOR
BTUH	BRITISH THERMAL UNITS PER HOUR	NC	NORMALLY CLOSED
°C	DEGREES CENTIGRADE	NEG	NEGATIVE
C	COMPRESSED AIR	NIC	NOT IN CONTRACT
CAP	CAPACITY	NK	NECK
CCMS	CENTRAL CONTROL MONITORING SYSTEM	NO	NORMALLY OPEN
CW	COUNTERCLOCKWISE	NO. (#)	NUMBER
CD	CEILING DIFFUSER	NTS	NOT TO SCALE
CFH	CUBIC FEET PER HOUR	OA	OUTSIDE AIR
CFM	CUBIC FEET PER MINUTE	OB	OPPOSED BLADE DAMPER
CG	CEILING GRILLE	OC	ON CENTER
CHR	CHILLED WATER RETURN	OD	OUTSIDE DIAMETER
CHS	CHILLED WATER SUPPLY	OOP	OPEN DRIP PROOF
CLG	COOLING	OPER	OPERATING / OPERATOR
CLNTL	CENTRIFUGAL	OPNG	OPENING
COL	COLUMN	ORD	ORDER
CONC	CONCRETE	PD	PRESSURE DROP
COND	CONDENSATE	PNET	PENETRATIONS
CONN	CONNECTION	PH	PHASE
CONT	CONTINUATION OR CONTROL	PL	PLATE
CP	CEILING REGISTER/CONDENSATE RETURN	PL	PLATE
CS	CARBON STEEL (GALVANIZED)	PNEU	PNEUMATIC
CW	CLOCKWISE	PNL	PANEL
CWR	CONDENSER WATER RETURN	POC	POINT OF CONNECTION
CWS	CONDENSER WATER SUPPLY	POS	POSITIVE
D	DRAIN	PRESS	PRESSURE
DA	DIRECT ACTING	PSI	POUNDS PER SQUARE INCH GAUGE
DDC	DIRECT DIGITAL CONTROL	△ P	PRESSURE DIFFERENTIAL
DDCP	DIRECT DIGITAL CONTROL PANEL	QTY	QUANTITY
DET	DETAIL	R	ROWS
DI	DIGITAL IN	RA	RETURN AIR
DISCH	DISCHARGE	RD	REFRIGERANT DISCHARGE
DN	DOWN	RG	RETURN GRILLE
DO	DIGITAL OUT	RH	RELATIVE HUMIDITY
DP	DRIIP PROOF	RHC	REHEAT COIL
DWG	DRAWING	RL	REFRIGERANT LIQUID
Ø / DIA	DIAMETER	RLA	RATED LOAD AMPERES
EA	EACH	RM	ROOM
EFF	EFFICIENCY	RPM	REVOLUTIONS PER MINUTE
EG	EXHAUST GRILLE	RR	RETURN REGISTER
EL	ELEVATION	RS	REFRIGERANT SUCTION
ELB	ELBOW	RV	REFRIGERANT VENT
ELECT	ELECTRICAL	SA	SUPPLY AIR
ENT	ENTERING	SCFM	STANDARD CUBIC FEET PER MINUTE
EP	EXPLOSION PROOF	SCHED	SCHEDULE
EQUIP	EQUIPMENT	SD	SMOKE DETECTOR
ER	EXHAUST REGISTER	SEC	SECONDARY
ESP	EXTERNAL STATIC PRESSURE	SEF	SUPPLY FAN
EXFIL	EXFILTRATION	SG	SUPPLY GRILLE
EXH	EXHAUST	SHT	SHEET
*F	DEGREES FAHRENHEIT	SL	SOUND LINING
*F DB	DEGREES FAHRENHEIT, DRY BULB (AIR)	SP	STATIC PRESSURE
*F WB	DEGREES FAHRENHEIT, WET BULB (AIR)	SPEC	SPECIFICATION
FC	FAIL CLOSED	SR	SUPPLY REGISTER
FD	FIRE DAMPER	SS	STAINLESS STEEL
FIN	FINISHED	STD	STANDARD
FL	FAIL LOCKED	STL	STEEL
FLA	FULL-LOAD AMPERES	STM	STEAM
FLEX	FLEXIBLE	STRUCT	STRUCTURAL
FLG	FLANGE	SV	SOLENOID VALVE
FLR	FLOOR	SW	SWITCH
FLTR	FILTER	TA	THROW AWAY
FO	FAIL OPEN	TEFC	TOTALLY ENCLOSED FAN COOLED
FP	FIRE PROTECTION	TEMP	TEMPERATURE
FPI	FINS PER INCH	TG	TRANSFER GRILLE
FFM	FEET PER MINUTE	TOC	TOP OF CONCRETE
FF	FEET	TOD	TOP OF DUCT
FT ²	SQUARE FEET	TOS	TOP OF STEEL
FT ³	CUBIC FEET	TR	TRANSFER REGISTER
FURN	FURNISHED	TRANSF	TRANSFER
FWD CRV	FORWARD CURVED	TSP	TOTAL STATIC PRESSURE
GA	GAUGE	TYP	TYPICAL
GAL	GALLON	UC	UNDERCUT DOOR
GALV	GALVANIZED	UG	UNDERGROUND
GFE	GOVERNMENT FURNISHED EQUIPMENT	UV	UNIT VENTILATOR
GPM	GALLONS PER MINUTE	V	VENT
H	HIGH	VEL	VELOCITY
HD	HEADER	VERT	VERTICAL
HDR	HEADER	VFD	VARIABLE FREQUENCY DRIVE
HEPA	HIGH EFFICIENCY PARTICULATE AIR FILTER	VIV	VARIABLE INLET VANES
HF	HEPA FILTER OUTLET	W	WIDE
HDA	HAND-OFF/AUTO	W/	WITH
HORIZ	HORIZONTAL	WC	WATER COLUMN
HP	HORSEPOWER	WG	WATER GAUGE
HR	HOUR	WK	WORK
HT	HEIGHT	WN	WELD NECK
HTG	HEATING	WP	WORKING POINT
HVAC	HEATING, VENTILATING AND AIR CONDITIONING	WT	WEIGHT
HWR	HEATING HOT WATER RETURN	WTR	WATER
HWS	HEATING HOT WATER SUPPLY		
HZ	HERTZ		
ID	INSIDE DIAMETER		
I.E.	THAT IS		



CODE	EQUIPMENT
AC	AIR CONDITIONING UNIT/COMPRESSOR (AIR)
AF	FILTER
AH	AIR HANDLING UNIT
AS	SEPARATOR (AIR)
AU	AIR COOLED CONDENSING UNIT
BR	BOILER
CC	COOLING COIL
CH	CHILLER
CT	COOLING TOWER
CU	CONDENSATE RETURN UNIT
DE	DEHUMIDIFIER
DR	DEAERATOR
DV	VARIABLE AIR VOLUME BOX (DOUBLE DUCT)
EF	EXHAUST FAN
FC	FAN COIL UNIT
GP	GLYCOL MIX FEED PUMP
HT	CONVECTOR HEATER
HU	HUMIDIFIER
HC	HEATING COIL
HE	HEAT EXCHANGER
PA	PACKAGED AIR CONDITIONING UNIT
PF	PRESSURIZATION FAN
RC	COMPRESSOR (REFRIGERATION)
RE	RECEIVER
RF	RETURN FAN
SF	SUPPLY FAN
ST	SOUND TRAP/DUCT SILENCER
SV	VARIABLE AIR VOLUME BOX (SINGLE DUCT)
TK	TANK
TP	STEAM TRAP
UH	UNIT HEATER
WP	CIRCULATING WATER PUMP

CODE	SITE LOCATION
L OR LA	LOUISIANA

CODE	AREA LOCATION
CS	CORNER STATION
MA	MID STATION "A"
MB	MID STATION "B"
EA	END STATION "A"
EB	END STATION "B"

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1	8-7-98	DJB				ISSUED FOR AS-BUILT

NO.	DATE	BY	CHKD	ENGR	PROJ	DESCRIPTION
1	11-15-96	CLP				ISSUED FOR CONSTRUCTION
2	10-25-96	MN				CHECKED
3	1-23-96	AA				ENGINEER
4	11-15-96	TDM				PROJ

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 PASADENA, CALIFORNIA

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LASER INTERFEROMETER
 GRAVITATIONAL-WAVE OBSERVATORY
 SITE NO. 2 - LIVINGSTON, LOUISIANA

TITLE	SCALE	CONTRACT NUMBER	PROJECT NUMBER
HVAC LEGEND & ABBREVIATIONS	NONE	PP150969	8094
SHEET NUMBER	LA-H-001		
REVISIONS			