

MECHANICAL LEGEND

	SUPPLY AIR DIFFUSER	AFF	ABOVE FINISH FLOOR
	RETURN AIR GRILLE	AHU	AIR HANDLING UNIT
	EXHAUST AIR GRILLE	B.D.	BOTTOM OF DUCT
	PERFORATED RETURN AIR PANEL	BHP	BRAKE HORSEPOWER
	DIRECTIONAL AIR FLOW	BTU	BRITISH THERMAL UNITS
	MANUAL VOLUME DAMPER	CFM	CUBIC FEET PER MINUTE
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	CONN.	CONNECTION
	RETURN AIR DUCT UP & DOWN	CONT.	CONTINUATION
	EXHAUST AIR DUCT UP & DOWN	CW	DOMESTIC COLD WATER
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	DB	DRY BULB
	RETURN AIR DUCT UP & DOWN	DIA.	DIAMETER
	EXHAUST AIR DUCT UP & DOWN	DIST.	DISTRIBUTION
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	EA	EXHAUST AIR
	RETURN AIR DUCT UP & DOWN	EDB	ENTERING DRY BULB TEMPERATURE
	EXHAUST AIR DUCT UP & DOWN	EWB	ENTERING WET BULB TEMPERATURE
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	EWT	ENTERING WATER TEMPERATURE
	RETURN AIR DUCT UP & DOWN	FF	FINISH FLOOR
	EXHAUST AIR DUCT UP & DOWN	FIXT.	FIXTURE
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	FPM	FEET PER MINUTE
	RETURN AIR DUCT UP & DOWN	FPS	FEET PER SECOND
	EXHAUST AIR DUCT UP & DOWN	FT.	FEET / FOOT
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	GA.	GAUGE
	RETURN AIR DUCT UP & DOWN	GPM	GALLONS PER MINUTE
	EXHAUST AIR DUCT UP & DOWN	H	HEIGHT
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	HP	HORSEPOWER
	RETURN AIR DUCT UP & DOWN	I.D.	INSIDE DIAMETER
	EXHAUST AIR DUCT UP & DOWN	IN.	INCHES
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	L	LENGTH
	RETURN AIR DUCT UP & DOWN	LBS.	POUNDS
	EXHAUST AIR DUCT UP & DOWN	LDB	LEAVING DRY BULB
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	LWB	LEAVING WET BULB
	RETURN AIR DUCT UP & DOWN	LWT	LEAVING WATER TEMPERATURE
	EXHAUST AIR DUCT UP & DOWN	MAX.	MAXIMUM
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	MBH	THOUSANDS OF BTUs PER HOUR
	RETURN AIR DUCT UP & DOWN	MIN.	MINIMUM
	EXHAUST AIR DUCT UP & DOWN	NC	NOISE CRITERIA
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	N.C.	NORMALLY CLOSED
	RETURN AIR DUCT UP & DOWN	N.I.M.	NOT IN MECHANICAL
	EXHAUST AIR DUCT UP & DOWN	NO.	NUMBER
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	N.O.	NORMALLY OPEN
	RETURN AIR DUCT UP & DOWN	O.A.	OUTSIDE AIR
	EXHAUST AIR DUCT UP & DOWN	P	PERSON
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	PSI	POUNDS PER SQUARE INCH
	RETURN AIR DUCT UP & DOWN	P/T	PRESSURE / TEMPERATURE
	EXHAUST AIR DUCT UP & DOWN	R.A.	RETURN AIR
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	RECT.	RECTANGULAR
	RETURN AIR DUCT UP & DOWN	REQ'D	REQUIRED
	EXHAUST AIR DUCT UP & DOWN	S.A.	SUPPLY AIR
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	S.P.	STATIC PRESSURE
	RETURN AIR DUCT UP & DOWN	SQ.	SQUARE
	EXHAUST AIR DUCT UP & DOWN	TEMP.	TEMPERATURE
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	TYP.	TYPICAL
	RETURN AIR DUCT UP & DOWN	VAV	VARIABLE AIR VOLUME
	EXHAUST AIR DUCT UP & DOWN	W	WIDTH
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	WB	WET BULB
	RETURN AIR DUCT UP & DOWN	WPD	WATER PRESSURE DROP
	EXHAUST AIR DUCT UP & DOWN	Ø	DIAMETER
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN		(E) EXISTING
	RETURN AIR DUCT UP & DOWN		(D) DEMOLISH
	EXHAUST AIR DUCT UP & DOWN		NEW WORK
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN		HWS (HWS) HEATING WATER SUPPLY
	RETURN AIR DUCT UP & DOWN		HWR (HWR) HEATING WATER RETURN
	EXHAUST AIR DUCT UP & DOWN		FIRE DAMPER
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN		FIRE / SMOKE DAMPER
	RETURN AIR DUCT UP & DOWN		SMOKE DAMPER
	EXHAUST AIR DUCT UP & DOWN		SEISMIC BRACING
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN		LATERAL BRACING
	RETURN AIR DUCT UP & DOWN		LONGITUDINAL BRACING
	EXHAUST AIR DUCT UP & DOWN		LONGITUDINAL & LATERAL BRACING

VENTILATION AIR SCHEDULE

ROOM NUMBER AND NAME	AREA (SQ. FT.)	OCCUPANT LOAD (#/1000 SQ. FT.)	NUMBER OF OCCUPANTS	OUTSIDE AIR REQUIREMENT (CFM/P)	OUTSIDE AIR REQUIREMENT (CFM/SQ FT.)	OUTSIDE AIR REQUIRED (CFM)	ZONE OSA (CFM)	SUPPLY AIR (CFM)	PRIMARY OSA FRACTION	RETURN AIR (CFM)	EXHAUST AIR (CFM)	Zone Ventilation Efficiency	Corrected OSA CFM	AIR SYSTEMS	
	Az		Pz	Rp	Ra	Vbz	Ez	Voz	Vpz	Zp		Evz			
CONFERENCE A	485	50	28	5	0.06	184	1.0	154	1240	0.12	1240	0	1.06	17240 EX AHU-1	
CONFERENCE B	272	50	14	5	0.06	95	1.0	95	660	0.13	660	0	1.06	9682 EX AHU-1	
CONFERENCE C	272	50	14	5	0.06	95	1.0	95	660	0.13	660	0	1.06	9682 EX AHU-1	
DINING	1475	70	104	1.8	0.14	1045	1.0	1045	3225	0.14	3225	0	0.89	146939 EX AHU-1	
LOBBY	1820	30	58	1.8	0.06	522	1.0	522	2250	0.25	2250	0	0.86	25352 EX AHU-1	
KITCHEN*	1165						1.0	0	900	0.00	0	950	1.21	0.00 EX AHU-1	
TOTAL	5486		212			1893		1893 Vou	9075 Vps		8175	950	0.89 Ev	2117	
CORRECTED TOTAL OUTDOOR AIR FLOW RATE											2117	CFM	Corrected OSA Fraction	Zs =	0.23

*KITCHEN EXHAUST REQUIREMENT : 0.70 CFM/SQFT
0.70 CFM/SQFT X 1165 = 816 CFM
KITCHEN DESIGN EXHAUST = 950 CFM

VAV BOXES WITH HOT WATER REHEAT

MARK NO.	TYPE	MAX COOLING CFM	20% OF COOLING CFM	MIN VENTILATION CFM	MIN 300 CFM	MAXIMUM DEADBAND CFM	MAXIMUM HEATING CFM 50% or VENT	INLET IN.	OUTLET IN.	SA INLET TEMP DEG. F	SA TEMP AT HEATING DEG. F	REHEAT COIL LOAD MBH	INLET WATER TEMP (F)	OUTLET WATER TEMP (F)	GPM	CONN. SIZE IN.	VALVE TYPE	MAX. STATIC LOSS *	MAX. DISCHARGE SOUND POWER LEVEL **	MAX. RADIATED SOUND POWER LEVEL **	CONTROL TYPE
VAV-B6	VAV	900	180	40	0	180	450	10	14X13	55	100	21.9	140	110	1.5	3/4	2-WAY CV	0.75	67	59	DDC

* - INCLUDING COIL, SOUND ATTENUATOR SECTION & VAV BOX
** - THIRD OCTAVE CERTIFIED RATING IN ACCORDANCE WITH ARI STANDARD 880-94

EXHAUST FANS

MARK NUMBER	GEF 1 *	GEF 2 *	EF 1 ****
TYPE	UTILITY SET	UTILITY SET	SIDWALL
SYSTEM	GREASE HOOD	GREASE HOOD	DISHWASHER
CFM	630	1195	950
TOTAL SP. (IN H2O)	1"	1.0"	0.75"
RPM	1550	1669	1590
MOTOR HP	1/4	1/2	1/4
CONTROLLED BY	**	**	LIGHTS***
FAN CONFIGURATION ARR/ROTATION/DISCHARGE	10/CW/UB	10/CW/UB	
BDD/2-POS DAMPER	NO/NO	NO/NO	NO/YES*****
ISOLATION	BASE/SPRING	EXTERNAL	EXTERNAL
DESIGN WEIGHT (LBS)	250	250	190
MAX. INLET SONES	8	12	9.5
B.O.D.: GREENHECK	USF-310-10-BI-4	USF-310-10-BI-5	CW-101-VG

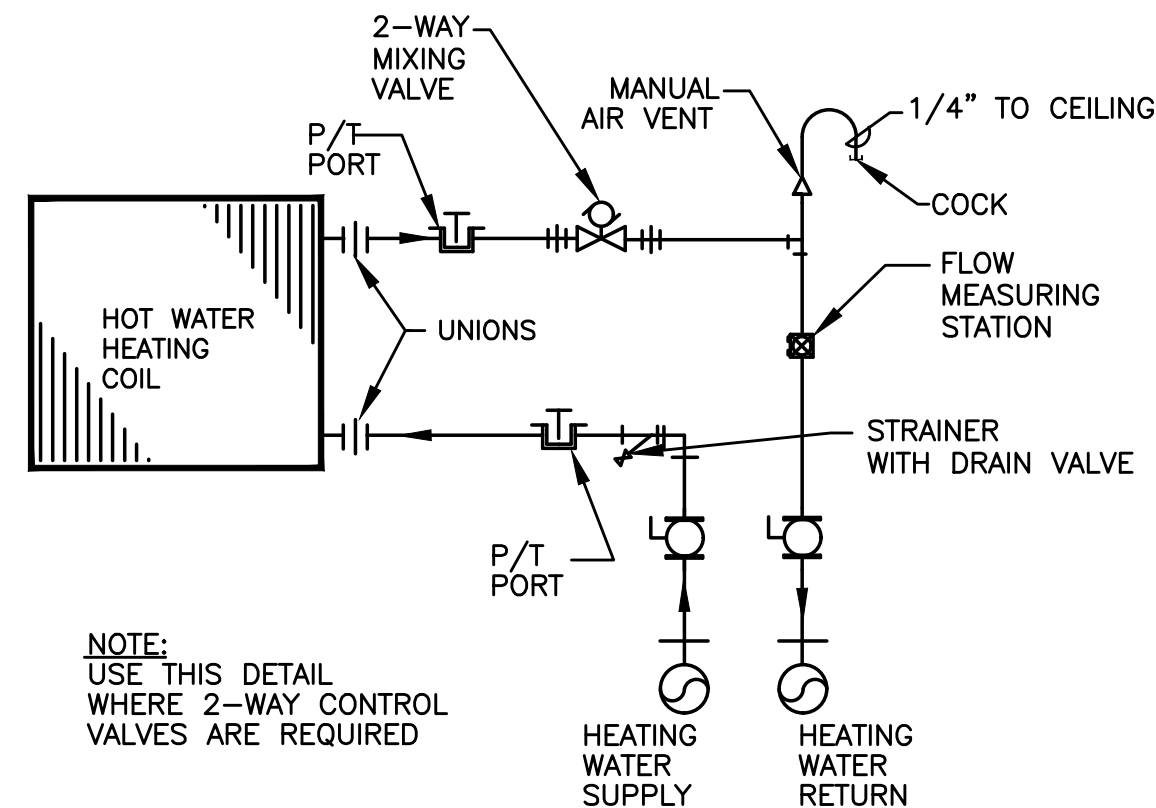
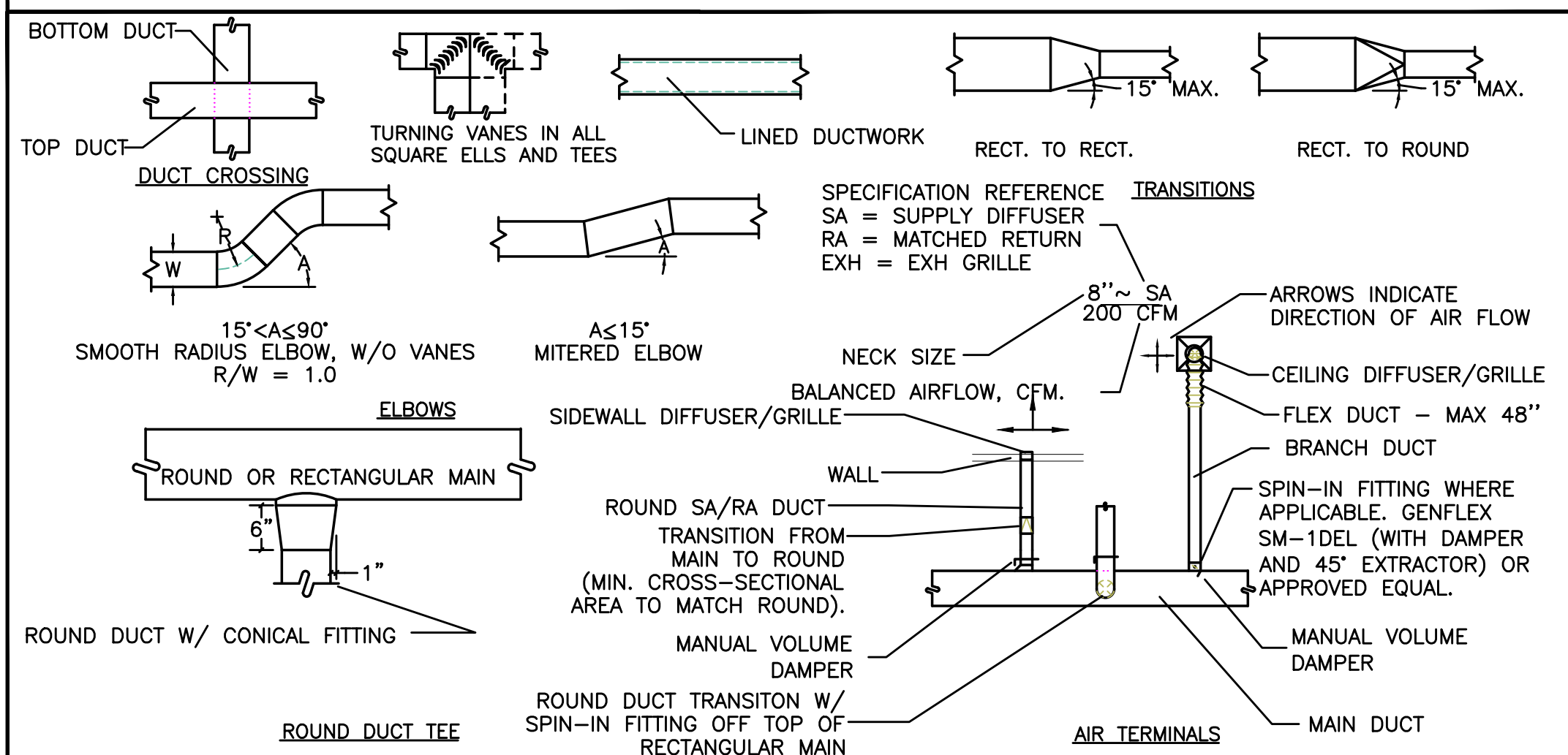
* EXHAUST FAN TO BE U.L. 762 LISTED FOR RESTAURANT EXHAUST APPLIANCES WITH DRAIN CONNECTIONS.
** KITCHEN GREASE EXHAUST FAN START/STOP FROM KITCHEN HOOD CONTROL PANEL. SEE K.E.S. PLANS. COORDINATE GREASE FAN CONTROL REQUIREMENTS WITH K.E.S.
*** LIGHTS ARE CONTROLLED BY OCCUPANCY SCHEDULE THROUGH LIGHTING CONTROL PANEL. EF-1 IS INTENDED TO RUN CONTINUOUSLY DURING OCCUPIED PERIOD, PER MECHANICAL CODE.
**** PROVIDE EXHAUST FAN WITH EC MOTOR. EC MOTOR USED TO BALANCE FAN ONLY.
***** PROVIDE WITH S.S. DAMPER

MULTI-SPLIT SYSTEMS

SYSTEM	MED VACUUM ROOM
INDOOR UNIT MARK NUMBER	IAC 1A IAC 1B
TYPE (INDOOR UNIT)	WALL MOUNTED
COOLING CAPACITY	18,000 BTU/HR
CFM (HIGH)	500 CFM
WEIGHT	30 #
BASIS OF DESIGN: DAIKIN	FXAQ18PVJU
OUTDOOR UNIT MARK NUMBER	HP 1
TYPE (OUTDOOR UNIT)	HEAT PUMP
OUTDOOR COOLING CAPACITY	36,000 BTU/HR
EFFICIENCY (SEER/HSPF)	11.6
PIPING LENGTH	MIN. 140 FT
PIPING ELEV. CHANGE	MIN 20 FT.
OUTDOOR UNIT DESIGN WT.	180 LBS.
PUMPED CONDENSATE	YES - **
BOD: DAIKIN	RXTQ36TAVJU

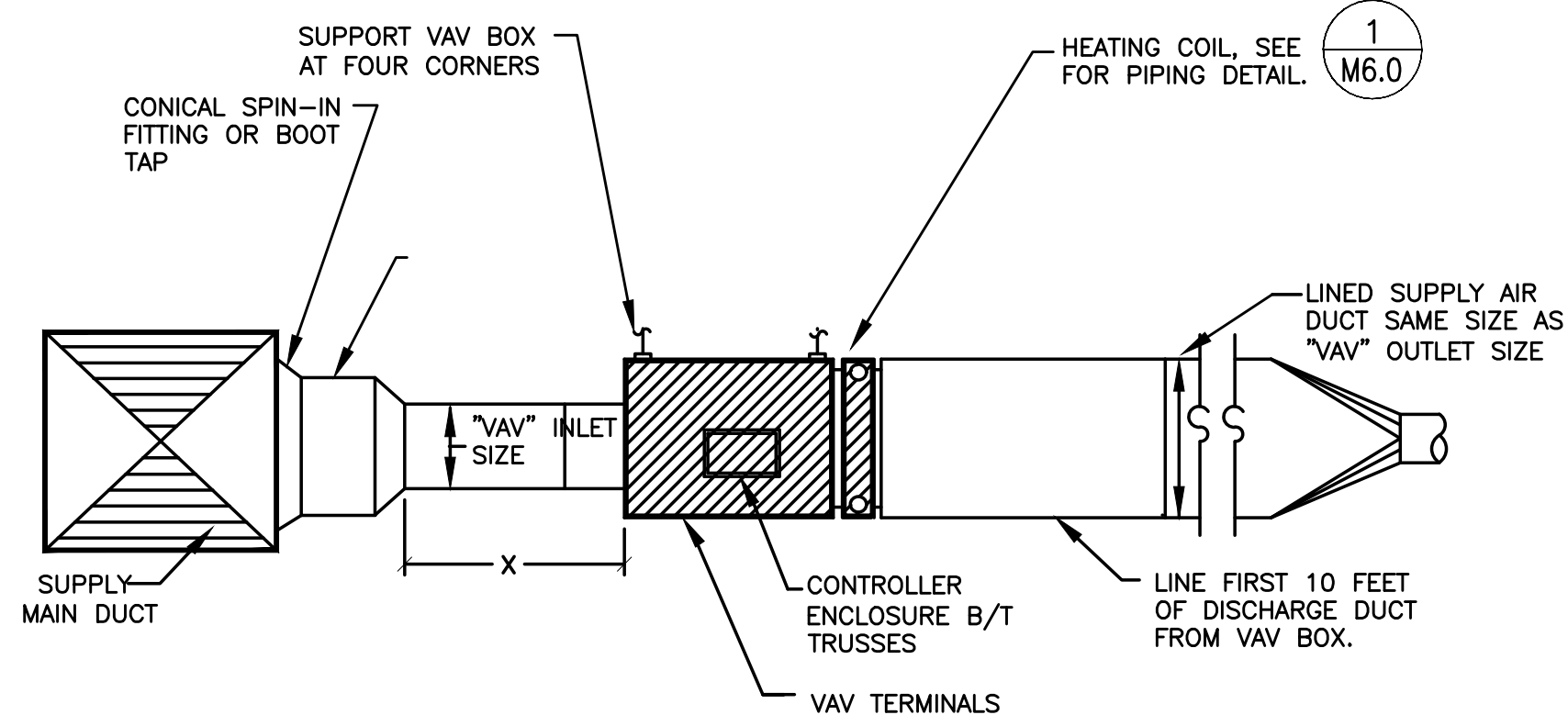
** - ROUTE CONDENSATE TO FLOOR DRAIN
** - PROVIDE ALL UNITS THAT CANNOT BE DRAINED BY GRAVITY WITH A CONDENSATE PUMP. ROUTE CONDENSATE DRAINS FROM EACH UNIT TO FLOOR DRAINS SHOWN ON PLUMBING PLANS. KEEP ALL CONDENSATE DRAINS HIDDEN WITHIN STRUCTURE AS MUCH AS POSSIBLE. COORDINATE ALL CONDENSATE LINES WITH ARCHITECT PRIOR TO INSTALLATION.

AIR DISTRIBUTION DETAILS



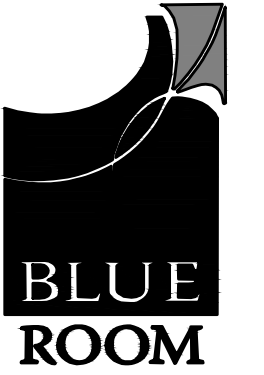
2-WAY CONTROL VALVE

1 VAV PIPING DETAIL
SCALE: N/A



X = 18" FOR INLET SIZES 6"Ø AND UNDER;
24" FOR 8"Ø; 30" FOR 10"Ø;
36" FOR 12"Ø; 42" FOR 14"Ø;
60" FOR 24x16

2 VAV BOX INSTALLATION DETAIL
SCALE: N/A



BLUE ROOM ARCHITECTURE & DESIGN, P.S.

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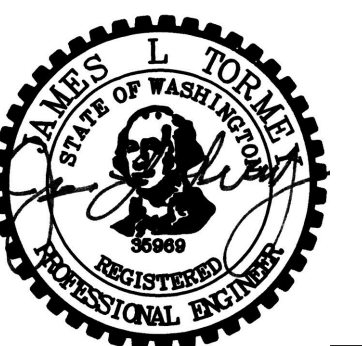
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THIS PROJECT INCLUDES THE INTERIOR REMODEL OF AN EXISTING CRITICAL ACCESS HOSPITAL FACILITY THAT IS TO REMAIN OPERATIONAL AT ALL TIMES. CONTRACTOR BIDS SHALL BE BASED ON VERIFICATION OF EXISTING ON-SITE CONDITIONS. UNINTERRUPTED ESSENTIAL HEALTHCARE SERVICES DURING THE CONSTRUCTION PERIOD, ONGOING COORDINATION OF ALL RELATED TRADES FOR CURRENT CODE COMPLIANCE, PATIENT SAFETY, JURISDICTIONAL REVIEW, SYSTEM PERFORMANCE AND UNFORESEEN (CLINICAL DISRUPTIONS).

INTERIOR REMODEL FOR:

SKYLINE
HOSPITAL
KITCHEN/CAFETERIA
CRS 60155468

211 SKYLINE DRIVE
WHITE SALMON, WASHINGTON 98672

PROJECT NUMBER: 18002c
DATE: 2/14/2018
DRAWN: TB
REVISIONS:

PERMIT SET

MECHANICAL DETAILS,
LEGENDS, AND
SCHEDULES

M6.0

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