

AIR HANDLING UNIT SCHEDULE (CW/HW)

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SYMBOL	SERVES	CFM	OA CFM	EXT SP	CFM	SUPPLY FAN DATA										CHILLED WATER COOLING COIL DATA										HOT WATER HEATING COIL										FILTER DATA				LENGTH	HEIGHT	WIDTH	UNIT WEIGHT	BASIS OF DESIGN					
						QUANTITY	FAN SIZE	DRIVE	TYPE	RPM	TOT HP (EA)	TOT BHP	TOT SP	VFD	VOLTAGE	PHASE	HZ	EAT °F DB	WB	LAT °F DB	WB	SP IN	TOT MBH	SENS MBH	GPM	EWT °F	LWT °F	WPD (FT)	FINS PER FT	ROWS	FACE VEL. (FPM)	EAT °F DB	LAT °F DB	SP IN	TOT MBH	GPM	EWT °F	LWT °F	WPD (FT)						FINS PER FT	ROWS	FACE VEL. (FPM)	FILTER	%
34-AHU-1	1ST & 2ND FLOOR	14,700	4,000	3.00	14,700	1	32	BELT	PLENUM	1,800	25	21.67	6.65	YES (BY EC)	460	3	60	88.6	72.5	56.5	55.7	0.70	784.9	496.8	156.8	45.0	55.0	15.5	132	4	538	45.5	83.2	0.25	617.7	62.9	135.0	115.1	3.4	96	2	538	PRE 30 8 ANGLED	0.15	292"	85"	93"	7,691 LBS	JCI SOLUTION-XTI-75x75
34-AHU-2	1ST FLOOR PUBLIC SPACE	2820	430	1.50	2820	1	20"	BELT	PLENUM	1,800	3.0	2.54	3.38	YES (BY EC)	460	3	60	83.5	69.1	55.4	54.4	0.66	131.8	88.1	26.3	45.0	55.0	7.3	132	5	542	55.0	69.5	0.09	44.5	4.5	135.0	115.0	0.2	132	1	542	PRE 30 7 ANGLED	0.27	174"	44"	57"	2,290 LBS	JCI SOLUTION-XTI-33x45

NOTES:
1. 34-AHU-1 SHALL HAVE TOP AND BOTTOM RETURN AIR CONNECTION. INSTALL STEEL GRATING IN RETURN AIR FAN SECTION FOR SERVICING FROM FACTORY. OPTION OF FIELD CUTTING TOP RETURN IN FIELD.

RETURN FAN DATA

SYMBOL	SERVES	EXT SP	CFM	QUANTITY	FAN SIZE	DRIVE	TYPE	RPM	HP (EA)	TOT BHP	TOT SP	VFD	VOLTAGE	PHASE	HZ	BASIS OF DESIGN
34-RF-1	AHU-2	1.3	2,390	1	-	BELT	INLINE	2,821	3	1.67	1.73	YES (BY EC)	460	3	60	GREENHECK TCB-2-12-30
34-RF-2	AHU-1	2.65	14,700	1	20-20	BELT	FC	1,800	20	15.28	3.28	YES (BY EC)	460	3	60	-

REHEAT COIL SCHEDULE (HW)

SYMBOL	SERVES	CFM	EAT °F DB	LAT °F DB	SP IN	TOT MBH	GPM	EWT °F	LWT °F	WPD (FT)	FINS PER FT	ROWS	FACE VEL. (FPM)	BASIS OF DESIGN
34-HC-2	AHU-2	7,000	55.0	74.5	0.12	149.0	15.1	135.0	115.0	3.3	96	1	511	-

WATER-WATER HEAT PUMP SCHEDULE

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SYMBOL	LOCATION	HEAT PUMP MODULES	VALVE MODULES	SOURCE FLUID	LOAD FLUID	EER	TONS	HEAT EXTRACTED (MBH)	COOLING PERFORMANCE								COP	MBH	HEAT EXTRACTED (MBH)	HEATING PERFORMANCE								PHASE	HZ	VOLTAGE	MCA	MOP	LENGTH	WIDTH	HEIGHT	BASIS OF DESIGN
									SOURCE WATER				LOAD WATER							SOURCE WATER				LOAD WATER												
									GPM	PD (FT)	EWT	LWT	GPM	PD (FT)	EWT	LWT				GPM	PD (FT)	EWT	LWT	GPM	PD (FT)	EWT	LWT									
34-WWHP-1	PUMP ROOM/MECH ROOM BA01	4 @ 30 TON EACH	3	15% PROP. GLYCOL	WATER	14.8	63.1	931.3	202	5.9	80.0	99.0	151.3	6.9	55.0	45.0	2.5	1009	602.8	202	5.9	40.3	32	101.6	1.6	115.0	135.0	3	60	460	256	300	172"	78-1/4"	64"	MULTISTACK VME

FAN COIL UNIT SCHEDULE (WATER)

FAN COIL UNIT SCHEDULE (WATER)																													
SYMBOL	CFM	ESP	MOTOR DATA				CHILLED WATER COOLING COIL DATA (3 ROW)										CHW PIPE BRANCH SIZE (INCHES)	HOT WATER HEATING COIL DATA (1 ROW)						HW PIPE BRANCH SIZE (INCHES)	BASIS OF DESIGN				
			SPEED	WATTS	AMPS	ELEC CHAR	EAT °F DB	LAT °F WB	TOTAL MBH	SENS MBH	GPM	EWT °F	LWT °F	WPD FT	EAT °F DB	LAT °F DB		TOTAL MBH	GPM	EWT °F	LWT °F	WPD FT							
34-FCU-1	600	0.62	LOW	466	2.8 FLA	208-160	75	63	53.4	18.83	14.29	3.8	45	54.9	8.51	1"	NO HEATING COIL						ENVIRO-TEC HPP-12						
34-FCU-2	1338	0.50	LOW	914	4.4 FLA	208-160	75	63	56.7	33.98	27.08	6.7	45	55	9.65	1-1/4"	70	85.9	23.15	2.4	135	115.1	1.31	3/4"	ENVIRO-TEC HPP-16				

NOTES:
1. FCUs LOCATED ON FIRST FLOOR REQUIRE CONDENSATE PUMPS; SEE PLUMBING DWGS FOR CONDENSATE ROUTING
2. SEE DRAWINGS FOR QUANTITY

EXHAUST FAN SCHEDULE

SYMBOL	LOCATION	SERVES	TYPE	SYSTEM CFM	FAN CFM	RPM	STATIC PRESSURE	TIP SPEED	O.V. (FPM)	DRIVE	BHP	HP	VFD	PHASE	HZ	VOLTAGE	WEIGHT	CONTROL TYPE	BASIS OF DESIGN
34-EF-1	2ND FLOOR MECH ROOM	RESTROOMS	INLINE	1,325	1,325	1725	1.7"	6,973	-	BELT	0.9	1.0	NO	3	60	460	96 LBS	DOC	GREENHECK BSQ-100-10
34-EF-2	BASEMENT	KITCHEN	INLINE	150	150	2023	1.3"	5,926	-	BELT	0.27	1/3	NO	1	60	115	80 LBS	DOC	GREENHECK BSQ-70-3

NOTES:
1. ADJUST BELT DRIVEN FANS TO PROVIDE SYSTEM CFM.
2. PROVIDE SECOND SET OF SHEAVES AND BELTS AFTER INITIAL BALANCING.

CABINET UNIT HEATER SCHEDULE (WATER)

SYMBOL	CFM	MBH	GPM	WTD °F	PD FT	FAT °F	HP	PHASE	HZ	VOLTAGE	RECESS	MOUNTED	DISCHARGE	BASIS OF DESIGN
34-CUH-1	630	19.2	3.0	29.8	0.63	125	1/10	1	60	115	FULL	CEILING	FRONT	STERLING - RC06
34-CUH-2	630	19.2	3.0	29.8	0.63	125	1/10	1	60	115	PARTIAL	WALL	FRONT	STERLING - RW06
34-CUH-3	335	9.4	1.5	26.6	0.16	120	1/10	1	60	115	FULL	WALL	FRONT	STERLING - RW03
34-CUH-4	630	19.2	3.0	29.8	0.63	125	1/10	1	60	115	FULL	WALL	FRONT	STERLING - RW06

NOTES:
1. HEATING CAPACITIES BASED ON 125°F EWT AND 60°F EAT.
2. INTEGRAL THERMOSTAT ON EACH UNIT.
3. SEE DRAWINGS FOR QUANTITY.

PUMP SCHEDULE

PUMP No.	TYPE FLR MTD/IN-LINE	SYSTEM	OPERATION DUTY/STAND-BY	FLUID TYPE	GPM	FEET HD	EFF %	BHP	MOTOR HP	RPM	ELEC. CHAR	EMERGENCY POWER	VARIABLE FREQ DRIVE	OPERATING CONDITIONS	IMPELLER SIZE	BASIS OF DESIGN
34-HWP-1	FLR MTD END SUCTION	HOT WATER	DUTY	WATER	0	48	0	0	3	1750	3-60-480V	NO	YES (BY EC)	GPM 102 FT HD 43 EFF 67.09	6.875	BELL & GOSSETT 1510 2 BC
34-HWP-2	FLR MTD END SUCTION	HOT WATER	STAND-BY	WATER	0	48	0	0	3	1750	3-60-480V	NO	YES (BY EC)	GPM 102 FT HD 43 EFF 67.09	6.875	BELL & GOSSETT 1510 2 BC
34-CWP-1	FLR MTD END SUCTION	CHILLED WATER	DUTY	WATER	100	46	63	1.8	3	1150	3-60-480V	NO	YES (BY EC)	GPM 151 FT HD 40 EFF 68.29	10.25	BELL & GOSSETT 1510 2E
34-CWP-2	FLR MTD END SUCTION	CHILLED WATER	STAND-BY	WATER	100	46	63	1.8	3	1150	3-60-480V	NO	YES (BY EC)	GPM 151 FT HD 40 EFF 68.29	10.25	BELL & GOSSETT 1510 2E
34-GWP-1	FLR MTD END SUCTION	GEOTHERMAL WATER	DUTY	15% PROP. GLYCOL	150	74	68	4.1	7.5	1750	3-60-480V	NO	YES (BY EC)	GPM 202 FT HD 68 EFF 74.41	8.5	BELL & GOSSETT 1510 2-1/2 BB
34-GWP-2	FLR MTD END SUCTION	GEOTHERMAL WATER	STAND-BY	15% PROP. GLYCOL	150	74	68	4.1	7.5	1750	3-60-480V	NO	YES (BY EC)	GPM 202 FT HD 68 EFF 74.41	8.5	BELL & GOSSETT 1510 2-1/2 BB

AIR CURTAIN SCHEDULE (WATER)

SYMBOL	CFM	ESP	MAX VELOCITY FPM	NOZZLE WIDTH (IN)	MOTOR DATA		HOT WATER HEATING COIL				AIR TEMP RISE °F	UNIT WEIGHT	BASIS OF DESIGN
					No At HP	ELEC CHAR	GPM	TOTAL MBH	EWT °F	LWT °F	WPD FT		
34-AC-1	2193	0.08	3844	84	2 @ 1/2	208-160	3.0	54.7	135	98.4	0.2	22.9	203LBS BERNER VSA2084W

NOTE:
1. PROVIDE AIR CURTAIN WITH 2 ROW COIL, 10 F.P.I.
2. UNIT SELECTED AT LOW FAN SPEED; UNIT SHALL BE SET AT LOW FAN SPEED IN FIELD FOR BOTH TEMPERATURE CONTROL AND DOOR INTERLOCK.
3. PROVIDE COMFORT PLUS PACKAGE FOR MULTI-SPEED AND TEMPERATURE CONTROL.

PADDLE FAN SCHEDULE

SYMBOL	LOCATION	SERVES	TYPE	SYSTEM CFM	FAN CFM	WATTS	VFD	PHASE	HZ	VOLTAGE	WEIGHT	CONTROL TYPE	BASIS OF DESIGN
34-PF-1	COMMONS CEILING	COMMONS	PADDLE	6,550 @ HIGH SPEED	6,550 @ HIGH SPEED	87	NO	1	60	208	119 LBS	DDC	MODERNFANCO - CIRRUS - 52"

NOTES:
1. FAN SHALL BE SUPPLIED WITH 12" DOWN ROD.
2. FAN SHALL ONLY HAVE THE ABILITY TO OPERATE WHEN 34-AHU-2 IS COMMANDED TO OFF.
3. FINISH, COLOR, AND ADDITIONAL OPTIONS PROVIDED BY ARCHITECT.

ARCHITECT:



Project Number 3468

Scale NO SCALE

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Drawing Title

MECHANICAL SCHEDULES

Approved: Project Director

Project Title

Behavioral Health Complex

Location 1700 South Lincoln Ave. Lebanon, PA 17042

Date 07/27/2012

Checked TME

Drawn DJA

VA Project Number

595-109

Building Number

34

Drawing Number

MH602

Dwg. 82 of 123

Office of Facilities Management



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