

LUMINAIRE SALIENT CHARACTERISTICS SCHEDULE

MARK	SALIENT CHARACTERISTICS	SOURCE DATA		COLOR TEMP (K)	DIMMING PROTOCOL	VOLTAGE	MOUNTING	FINISH	REMARKS
		LUMENS	LOAD (VA)						
1	4 FOOT LED VAPOR TIGHT, POLYCARBONATE HOUSING, IP65 RATED, 80 CRI, 6 INCHES WIDE OR LESS	4946	42	40	NONE	120	CEILING	LIGHT GRAY	1
2	LED 2X4 FLAT PANEL LENSED, METAL FRAME, SATIN WHITE LENS, 3 INCHES DEEP OR LESS	3200	25	35	NONE	120	RECESSED GRID	WHITE	
3	LED VANDAL RESISTANT WALL PACK, UV STABILIZED POLYCARBONATE REFRACTOR, DIE-CAST ALUMINUM HOUSING, IP65 RATED	3150	11	40	NONE	120	REMARK 2	DARK BRONZE	2,4
X1	LED WET LOCATION EXIT LIGHT GRAY THERMO PLASTIC HOUSING, SINGLE FACE, NICKEL-CADMIUM BATTERY, SELF-DIAGNOSTICS, RED LETTERS 6 INCHES HIGH BY 3/4" WIDE	NA	3	-	NONE	120	WALL	GRAY	
X2	LED WET LOCATION EMERGENCY LIGHT GRAY COMPACT, LOW PROFILE, THERMO PLASTIC HOUSING, SEALED LEAD-CALCIUM BATTERY, 2-HALOGEN 7 WATT LAMPS	NA	6	-	NONE	120	WALL	GRAY	
X3	LED WET LOCATION EMERGENCY LIGHT GRAY THERMO PLASTIC HOUSING, SEALED NICKEL-CADMIUM BATTERY, 2-LED 1.9 WATT LAMPS, 32 DEGREE F, TO 122 DEGREE F. RATED	NA	6	-	NONE	120	REMARK 3	GRAY	2,3

GENERAL NOTES
 a SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
 b CONTRACTOR TO VERIFY INSTALLATION REQUIREMENTS PRIOR TO ORDERING.

REMARKS
 1 CHAIN HUNG.
 2 MOUNT ON GALVANIZED UNISTRUT FRAMEWORK AT 7'-6" ABOVE PLATFORM.
 3 COLD WEATHER RATED DOWN TO 32 DEGREE FAHRENHEIT.
 4 MOUNT ON WEATHERPROOF BOX.

TRANSFER SWITCH SCHEDULE

MARK	VOLTAGE	POLES	AMPS	TRANSITION TYPE	SERVICE ENTRANCE RATED	TRANSFER SEQUENCE	NEMA ENCLOSURE	A.I.C. RATING	POWER SYSTEM BRANCH	REMARKS
	120/208V	3	200	AUTO, OPEN	NO	-	N3R	65,000	EMERGENCY (ART 700)	

GENERAL NOTES
 a. WITHSTAND AND CLOSING RATING (WCR) OF EQUIPMENT SHALL BE EQUAL TO OR GREATER THAN THE AVAILABLE FAULT CURRENT WHEN PROTECTED BY THE OVERCURRENT DEVICES FURNISHED.
 b. GENERATOR START DELAY SHALL BE EQUAL TO OR GREATER THAN 1 SECOND.

FEEDER AND BRANCH CIRCUIT SCHEDULE

MARK	CONDUCTORS AND CONDUIT
2 WIRE PLUS GROUND	
20F2	2 #12, #12 GND. 1/2" C.
30F2	2 #10, #10 GND. 3/4" C.
40F2	2 #8, #10 GND. 3/4" C.
3 WIRE PLUS GROUND	
20F3	3 #12, #12 GND. 1/2" C.
30F3	3 #10, #10 GND. 3/4" C.
40F3	3 #8, #10 GND. 1" C.
450F3	3 #4/0, #2 GND. IN EACH OF (2) 2" C.
4 WIRE PLUS GROUND	
100F4	4 #2, #8 GND. 1-1/4" C.
175F4	4 #2/0, #6 GND. 2" C.
225F4	4 #4/0, #4 GND. 2-1/2" C.
SERVICE CONDUCTORS	
1200S4	4 600 KCMIL IN EACH OF (3) 4" C.

MECHANICAL / ELECTRICAL COORDINATION SCHEDULE

ABBREVIATIONS:

A	AMPS	C	COMBINATION STARTER AND SAFETY SWITCH	S	SWITCH	N1	NEMA 1
ENCL	ENCLOSURE	CB	CIRCUIT BREAKER	SF	SWITCH AND FUSTAT	N3R	NEMA 3R
HP	HORSEPOWER	CP	CONTROL PANEL	SS	SAFETY SWITCH	N4X	NEMA 4X
KW	KILOWATTS	C+P	CORD AND PLUG	T	LINE VOLTAGE THERMOSTAT		
PH	PHASE	I	INTEGRAL WITH EQUIPMENT	VFC	VARIABLE FREQUENCY CONTROLLER	SCCR	SHORT CIRCUIT CURRENT RATING
V	VOLTAGE	NF	NON-FUSED				
W	WATTS	OS	OCCUPANCY SENSOR	EC	ELECTRICAL CONTRACTOR		
				MC	MECHANICAL CONTRACTOR		

MARK	DESCRIPTION	LOAD	ELECTRICAL SYSTEM		DISCONNECT			LINE VOLTAGE CONTROLLER			AVAILABLE FAULT CURRENT (AMPS)	REMARKS			
			V	PH	FEEDER OR BRANCH CIRCUIT	PANEL - CIRCUIT	FURNISHED BY/ INSTALLED BY	TYPE	RATING (AMPS)	ENCL			FURNISHED BY/ INSTALLED BY	TYPE	ENCL
ACCU-1	CONDENSING UNIT	27.4 MCA	208	1	40F2	3A	EC/EC	SS	60	N3R	MC/-	-	-	>5000	6
B-1	BOILER	5 A	120	1	20F2	M-25	EC/EC	SF	20	N1	MC/-	-	-	-	5
B-2	BOILER	5 A	120	1	20F2	M-26	EC/EC	SF	20	N1	MC/-	-	-	-	5
BP-1	BOILER PUMP	12 A	120	1	30F2	M-29	EC/EC	S	30	N1	MC/-	-	-	-	
BP-2	BOILER PUMP	12 A	120	1	30F2	M-30	EC/EC	S	30	N1	MC/-	-	-	-	
CH-1	CHILLER	364 MCA	208	3	450F3	MDP-15	MC/-	I	-	-	MC/-	-	-	<65,000	4
CH-1	CHILLER CONTROLS		120	1	20F2	M-28	EC/EC	S	20	N3R	-	-	-	-	
CWP-1	COLD WATER PUMP	5 HP	208	3	30F3	-	-	-	-	-	MC/MC	VFC	N1	-	
CWP-2	COLD WATER PUMP	5 HP	208	3	30F3	-	-	-	-	-	MC/MC	VFC	N1	-	
FU-1	FURNACE	12.8 A	120	1	20F2	3A	EC/EC	S	20	N1	MC/-	-	-	-	6
HWP-1	HOT WATER PUMP	3 HP	208	3	20F3	-	-	-	-	-	MC/-	VFC	N1	-	
HWP-2	HOT WATER PUMP	3 HP	208	3	20F3	-	-	-	-	-	MC/-	VFC	N1	-	
VFC-1	CWP VARIABLE FREQUENCY CONTROLLER	5 HP	208	3	40F3	M-7	MC/-	I	-	-	-	-	-	22,000	
VFC-2	CWP VARIABLE FREQUENCY CONTROLLER	5 HP	208	3	40F3	M-8	MC/-	I	-	-	-	-	-	22,000	
VFC-1	HWP VARIABLE FREQUENCY CONTROLLER	3 HP	208	3	30F3	M-1	MC/-	I	-	-	-	-	-	22,000	
VFC-2	HWP VARIABLE FREQUENCY CONTROLLER	3 HP	208	3	30F3	M-2	MC/-	I	-	-	-	-	-	22,000	
DOAS-1	DEDICATED OUTSIDE AIR SYSTEM SUPPLY FANS	2-3.5 HP	208	3	40F3	M-13	MC/-	I	-	-	MC/-	-	-	-	4
DOAS-1	DEDICATED OUTSIDE AIR SYSTEM EXHAUST FAN	2-3.5 HP	208	3	40F3	M-14	MC/-	I	-	-	MC/-	-	-	-	4
DOAS-1	DEDICATED OUTSIDE AIR SYSTEM	1/2 HP	120	1	20F2	M-27	EC/EC	S	20	N1	MC/-	-	-	-	
FCUB-1	FAN COIL UNIT	0.68 A	120	1	20F2	FC-1	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCUB-2	FAN COIL UNIT	1.2 A	120	1	20F2	FC-1	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU1-01	FAN COIL UNIT	0.48 A	120	1	20F2	FC-3	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU1-02	FAN COIL UNIT	1.17 A	120	1	20F2	FC-3	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU1-03	FAN COIL UNIT	1.17 A	120	1	20F2	FC-3	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU1-04	FAN COIL UNIT	1.17 A	120	1	20F2	FC-3	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU1-05	FAN COIL UNIT	0.48 A	120	1	20F2	FC-9	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU1-06	FAN COIL UNIT	0.55 A	120	1	20F2	FC-9	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU1-07	FAN COIL UNIT	0.54 A	120	1	20F2	FC-9	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU1-08	FAN COIL UNIT	0.68 A	120	1	20F2	FC-7	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU1-09	FAN COIL UNIT	0.55 A	120	1	20F2	FC-7	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU1-10	FAN COIL UNIT	0.55 A	120	1	20F2	FC-7	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU1-11	FAN COIL UNIT	0.68 A	120	1	20F2	FC-7	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU1-12	FAN COIL UNIT	0.55 A	120	1	20F2	FC-7	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU1-13	FAN COIL UNIT	0.68 A	120	1	20F2	FC-7	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU1-14	FAN COIL UNIT	0.68 A	120	1	20F2	FC-5	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU1-15	FAN COIL UNIT	0.55 A	120	1	20F2	FC-5	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU1-16	FAN COIL UNIT	1.17 A	120	1	20F2	FC-3	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU1-17	FAN COIL UNIT	1.17 A	120	1	20F2	FC-3	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU2-01	FAN COIL UNIT	0.48 A	120	1	20F2	FC-2	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU2-02	FAN COIL UNIT	1.17 A	120	1	20F2	FC-2	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU2-03	FAN COIL UNIT	1.29 A	120	1	20F2	FC-2	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU2-04	FAN COIL UNIT	0.68 A	120	1	20F2	FC-2	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU2-05	FAN COIL UNIT	0.55 A	120	1	20F2	FC-2	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU2-06	FAN COIL UNIT	0.68 A	120	1	20F2	FC-8	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU2-07	FAN COIL UNIT	0.68 A	120	1	20F2	FC-8	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU2-08	FAN COIL UNIT	1.28 A	120	1	20F2	FC-6	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU2-09	FAN COIL UNIT	0.68 A	120	1	20F2	FC-6	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU2-10	FAN COIL UNIT	1.29 A	120	1	20F2	FC-6	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU2-11	FAN COIL UNIT	0.68 A	120	1	20F2	FC-6	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU2-12	FAN COIL UNIT	0.68 A	120	1	20F2	FC-6	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU2-13	FAN COIL UNIT	1.17 A	120	1	20F2	FC-6	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU2-14	FAN COIL UNIT	1.29 A	120	1	20F2	FC-4	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU2-15	FAN COIL UNIT	0.48 A	120	1	20F2	FC-4	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU2-16	FAN COIL UNIT	1.17 A	120	1	20F2	FC-2	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3
FCU2-17	FAN COIL UNIT	1.17 A	120	1	20F2	FC-2	MC/-	I / C+P	-	-	MC/-	-	-	-	1, 2, 3

GENERAL NOTES:
 a VERIFY/COORDINATE RATINGS FOR EQUIPMENT SUPPLIED BY THE SELECTED MANUFACTURER. WHERE RATINGS ARE OTHER THAN AS REQUIRED FOR SPECIFIED UNIT, DISCONNECTS, MOTOR STARTERS, OVERCURRENT DEVICES AND RELATED REVISIONS SHALL BE PROVIDED ACCORDINGLY. THE CONTRACTOR THAT FURNISHES EQUIPMENT WITH RATINGS OTHER THAN AS NOTED SHALL BE RESPONSIBLE FOR COORDINATION AND COSTS FOR REVISIONS TO ACCOMMODATE SELECTED EQUIPMENT.
 b SHORT CIRCUIT CURRENT RATING (SCCR) OF EQUIPMENT SHALL BE EQUAL TO OR GREATER THAN THE AVAILABLE FAULT CURRENT LISTED. SHORT CIRCUIT CURRENT RATING APPLIES TO EQUIPMENT AND DISCONNECT.
 c FRACTIONAL HORSEPOWER SINGLE PHASE MOTORS SHALL BE PROVIDED WITH INTEGRAL OVERLOAD PROTECTION.
 d DISCONNECTS SHALL BE FUSIBLE UNLESS NOTED OTHERWISE.
 e ELECTRICAL CONTRACTOR SHALL PROVIDE CIRCUIT TO EQUIPMENT AS INDICATED.
 f WHERE DISCONNECT IS NOT INDICATED ON PLANS, LOCATE AT EQUIPMENT PER NEC.

REMARKS
 1 CONNECT MULTIPLE FAN COIL UNITS TO ONE 120V 15 AMP CIRCUIT, REFER TO PANEL 'FC' SCHEDULE ON SHEET E6-2.
 2 BETWEEN PANEL 'FC' AND THE FIRST FAN COIL UNIT IN CIRCUIT PROVIDE BRANCH CIRCUIT SIZE 30F2.
 3 ROUTE BRANCH CIRCUIT WIRING TO FAN COIL UNITS IN THE SAME PATH AS THE MECHANICAL PIPING.
 4 PROVIDE FUSES IN FACTORY FURNISHED DISCONNECT SWITCH PER MANUFACTURER RECOMMENDATIONS.
 5 PROVIDE EMERGENCY BOILER SHUT OFF SWITCHES AND WIRING.
 6 PROVIDE CONTROL WIRING IN 3/4" CONDUIT BETWEEN ACCU-1 AND FU-1.

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FINAL CONSTRUCTION DOCUMENTS

A/E FIRM PRIME: KENNETH HAHN ARCHITECTS, INC. OMAHA, NE. SUBCONTRACTOR: ALVINE ENGINEERING OMAHA, NE.	DESIGNED: RCF DRAWN BY: JAS TECH. REVIEW: GAN DATE: 2/15/2024	SUB SHEET NO. E6-1	TITLE OF SHEET ELECTRICAL SCHEDULES BUCKSTAFF BATHHOUSE HVAC HOT SPRINGS NATIONAL PARK HOT SPRINGS, AK	DRAWING NO. XXX/XXXX PMIS NO. 177425 SHEET 49 OF 51
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