

CUSTOM PACKAGED AIR HANDLING UNIT SCHEDULE (FULL BREAK DOWN FOR SITE ASSEMBLY)

MECHANICAL (237313, 237316, 237333, 237339)														
EQUIPMENT TAG	APPLICATION	FACE & BYPASS DAMPERS (YES/NO)	BLENDER & MIXER (code 8)	MINIMUM OUTDOOR AIR CFM	COOLING	HEATING COIL	AIR PRE-FILTER	AIR FINAL-FILTER	HUMIDIFIER	SUPPLY FAN	RETURN FAN	MANUFACTURER BID OPTION #1	MANUFACTURER BID OPTION #2	MODEL NUMBER
AH1HW-11	EMERGENCY	YES	N/A	5,250	AHUC 11	EXISTING	AHUF 11	AHUF 11	AHUF 11	AHUS 11	EXISTING	FANWALL	ACOUSIT10	NA
AH2HW-19	OR SUITE	YES	YES	10,000/18,000	AHUC 19	AHUC 19	AHUF 19	AHUF 19	AHUF 19	AHUS 19	AHUR 19	VENTROL/FANWALL	HAKON/ACOUSIT10	CUSTOM
AH2HW-20	OR SUITE	YES	YES	8,000/18,000	AHUC 20	AHUC 20	AHUF 20	AHUF 20	AHUF 20	AHUS 20	AHUR 20	VENTROL/FANWALL	HAKON/ACOUSIT10	CUSTOM
AH2HW-27	GI	YES	N/A	10,500	AHUC 27	EXISTING	AHUF 27	AHUF 27	AHUF 27	AHUS 27	EXISTING	FANWALL	ACOUSIT10	NA
MECHANICAL NOTES: ANY SELECT FAN ARRAY SIZE OF THEIR PREFERENCE. HOWEVER, AT LEAST ONE(1) SUPPLY AND ONE(1) RETURN FAN SHOULD BE FULLY REDUNDANT TO THE REMAINDER BEING SIZED FOR THE FULL UNIT CAPACITY.														
2. MANUFACTURER SHOULD PROVIDE ALTERNATE LINE ITEM PRICING FOR THE UNIT COST OF EACH ADDITIONAL FAN AND MOTOR TO BE PROVIDED FOR EMERGENCY REPLACEMENT (TO BE STORED ON SITE BY OWNER).														
3. PROVIDE COMPENSATOR MOTOR FOR ALL DAMPERS BEING SUPPLIED BY THE MANUFACTURER. COMPENSATOR MOTOR SHOULD BE SIZED ON MINIMUM BASIS TO PROVIDE THE SAME PRESSURE DROPPED BY THE DAMPER BEING REPLACED (TO BE STORED ON SITE BY OWNER).														
4. PROVIDE ALL NEW SUPPLY AND RETURN FANS, WITH SPRING TYPE VIBRATION ISOLATORS AND PIZO RINGS, OR ALTERNATE METHOD OF AIRFLOW MEASUREMENT FOR ENTIRE SUPPLY/RETURN AIRFLOW RATE MONITORING.														
5. PROVIDE BACKDRAFT OR AIRCUT DAMPERS FOR ALL SUPPLY AND RETURN FANS. PROVIDE NECESSARY CONTROLS TO ISOLATE OFF EACH INDIVIDUAL FAN WITHOUT AFFECTING UNIT PERFORMANCE. WHEN NECESSARY, 2. UNIT SHALL HAVE 2" INSULATED WALLS WITH 18 GA GALVANIZED STEEL EXTERIOR PANELS AND 20 GA INTERIOR 304 STAINLESS STEEL WITH ANTI-MICROBIAL COATING IN ALL SECTIONS. FLOORS HEAVY GUAGE ALUMINUM CHECKER PLATE OR STAINLESS.														
7. SURETLY UNITS #19 AND #20 BOTH SHALL BE PROVIDED WITH AIRROLL BLADE CONTROL DAMPERS FOR BYPASS AROUND BLENDER SECTION DURING BACKDRAFT MODE OF OPERATION. REFER TO MANUFACTURER DRAWINGS.														
10. ALL DAMPERS TO BE PROVIDED BY THE UNIT MANUFACTURER WITH AIRROLL BLADES. DAMPER ACTUATORS ARE TO BE PROVIDED BY THE CONTROLS CONTRACTOR. CONTROL DAMPERS INCLUDE A. INAKE (12 per note 3), RELIEF AIR, MAKING BOX, RETURN AIR, AND ON UNITS #19 AND #20 ADDITIONAL CONTROL DAMPERS FOR BYPASS OPERATION CONTROL. (refer to note #3). O.A. INAKE AND RELIEF DAMPERS SHALL HAVE INSULATED BODIES WITH INTEGRAL, THERMAL BREAK.														
ELECTRICAL NOTES: 1. SEE SUPPLY FAN SCHEDULE AND RETURN FAN SCHEDULE FOR ELECTRICAL INFORMATION.														
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VARIABLE FREQUENCY MOTOR CONTROLLER SCHEDULE

MECHANICAL/ELECTRICAL (230923)														
EQUIPMENT TAG	QUANTITY	EQUIPMENT SERVED	VOLTAGE	PHASE	ENCLOSURE	ENCLOSURE TYPE	ENCLOSURE TYPE	ENCLOSURE TYPE	ENCLOSURE TYPE	ENCLOSURE TYPE	ENCLOSURE TYPE	ENCLOSURE TYPE	ENCLOSURE TYPE	ENCLOSURE TYPE
VFC 01	4 or 3	AHUS 11	480 V	3	–	NEMA 4X	NO	CONSTANT TORQUE	NO	NO	NO	H-O-A	NO	A.B.C
VFC 02	1	AHUR 11	480 V	3	–	NEMA 4X	NO	CONSTANT TORQUE	NO	NO	NO	H-O-A	NO	A.B.C
VFC 03	12 or 4	AHUS 19	480 V	3	–	NEMA 4X	NO	CONSTANT TORQUE	NO	NO	NO	H-O-A	NO	A.B.C
VFC 04	2	AHUR 19	480 V	3	–	NEMA 4X	NO	CONSTANT TORQUE	NO	NO	NO	H-O-A	NO	A.B.C
VFC 05	12 or 4	AHUS 20	480 V	3	–	NEMA 4X	NO	CONSTANT TORQUE	NO	NO	NO	H-O-A	NO	A.B.C
VFC 06	2	AHUR 20	480 V	3	–	NEMA 4X	NO	CONSTANT TORQUE	NO	NO	NO	H-O-A	NO	A.B.C
VFC 07	6 or 3	AHUS 27	480 V	3	–	NEMA 4X	NO	CONSTANT TORQUE	NO	NO	NO	H-O-A	NO	A.B.C
VFC 08	2	AHUR 27	480 V	3	–	NEMA 4X	NO	CONSTANT TORQUE	NO	NO	NO	H-O-A	NO	A.B.C
GENERAL NOTES: A. VFD'S SHALL BE MANUFACTURED BY ABB. OTHER VFD BRANDS WILL NOT BE CONSIDERED WITHOUT WRITTEN APPROVAL FROM V.A. CORP. B. VFD'S SHALL BE SIZED TO PROVIDE THE SAME PRESSURE DROPPED BY THE DAMPER BEING REPLACED (TO BE STORED ON SITE BY OWNER). C. VFD'S TO HAVE INTEGRAL DISCONNECT UNLESS NOTED OTHERWISE.														
NOTES:														

AIR HANDLING UNIT – PREFILTER SCHEDULE

MECHANICAL (2324100)														
EQUIPMENT TAG	SERIED	TYPE	CFM	NUMBER OF MODULES	SIZE PER MODULE (FT ² X ² X ²)	EFFICIENCY (%)	MERV	AD CLEAN	AD AT SIZE	MANUFACTURER	MODEL	NOTES	MECHANICAL	NOTES
AHUF 11	AH1HW-11	4" FLEATED	21,000	X	24"X24"X4"	60%	11	0.35"	1.0"	CAMFL-FARR	OPW11	1.2,3	MECHANICAL	NOTES
AHUF 19	AH2HW-19	4" FLEATED	36,000/60,000	X	24"X24"X4"	60%	11	0.35"	1.0"	CAMFL-FARR	OPW11	1.2,3,4	MECHANICAL	NOTES
AHUF 20	AH2HW-20	4" FLEATED	36,000/60,000	X	24"X24"X4"	60%	11	0.35"	1.0"	CAMFL-FARR	OPW11	1.2,3,4	MECHANICAL	NOTES
AHUF 27	AH2HW-27	4" FLEATED	42,000	X	24"X24"X4"	60%	11	0.35"	1.0"	CAMFL-FARR	OPW11	1.2,3	MECHANICAL	NOTES
MECHANICAL NOTES: 1. PROVIDE PREFILTERS WITH ANGLED RACK TO REDUCE FACE VELOCITY BELOW 500 FPM DURING HIGHER AIRFLOW BACKDRAFT OPERATION AND MINIMIZE PRESSURE DROP. 2. INCLUDE MAGNETIC CAGE, IN ADDITION TO DIGITAL PRESSURE SENSORS PROVIDED BY CONTROLS CONTRACTOR, TO MEASURE PRESSURE DROP ACROSS FILTERS. 3. PROVIDE OPEN TRANSITION MANUAL CHANGE OVER SWITCH FOR DUAL VFD SELECTION. 4. FILTER CONDITIONS SHOWN ARE FOR FULL BYPASS MODE OF OPERATION AT 80,000 CFM. LOWER FLOW NORMAL OPERATION WILL RESULT IN LOWER VELOCITY AND PD.														
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AIR HANDLING UNIT – FINAL FILTER SCHEDULE

AIR HANDLING UNIT – HUMIDIFIER SCHEDULE															
MECHANICAL (232413)															
EQUIPMENT TAG	SERIAL	TYPE	CFM	EA/D	EA/WB	STEAM CAPACITY (GPH)	INLET STEAM PRESSURE (PSIG)	NUMBER OF HUMIDIFIERS	MANIFOLD LENGTH (IN)	TUBE SPACING (IN)	ASSIGNMENT (T)	FEEDWATER RATE (GPM)	MANUFACTURER	MODEL NUMBER	MECHANICAL NOTES
AHUF 11	AH1HW-11	DIRECT INJECT	21,000	24	1	225	30	1	96"	6"	<18"	N/A	DR-STEAM	ULTRA-SOIB model IV	1.2,4
AHUF 19	AH2HW-19	DIRECT INJECT	36,000/60,000	49.0	39.5	650	30	1	102"	6"	<18"	N/A	DR-STEAM	ULTRA-SOIB model IV	1.2,3,4
AHUF 20	AH2HW-20	DIRECT INJECT	24,000/60,000	49.0	39.5	650	30	1	102"	6"	<18"	N/A	DR-STEAM	ULTRA-SOIB model IV	1.2,3,4
AHUF 27	AH2HW-27	DIRECT INJECT	42,000	54	44	450	30	1	108"	6"	<18"	N/A	DR-STEAM	ULTRA-SOIB model IV	1.2,4