

HVAC FANS SCHEDULE

EQUIPMENT MARK	DESCRIPTION	LOCATION	STATUS	WEIGHT (lbs)	MANUFACTURER	MODEL	VOLTS	PHASE	WATTS (Watts)	CFM (cfm)	ESP (in WC)	FAN RPM (rpm)	BHP (hp)	HP (hp)	FLA (amps)	MCA (amps)	OCF (amps)	Access
EF-1	INLINE CENTRIFUGAL FAN	ABOVE CEILING		24	GREENEHC	GSP-A250	120	1	30	150	0.3	746						1.3
EF-2	CEILING MOUNTED VENTILATOR	WOMENS		24	GREENEHC	SP-A200	120	1	30	150	0.3	746						1.3
EF-3	CEILING MOUNTED VENTILATOR	MENS		24	GREENEHC	SP-A200	120	1	30	75	0.3	746						1.3
EF-4	CEILING MOUNTED VENTILATOR	SECURITY CLOSET		24	GREENEHC	SP-A200	120	1	30	150	0.3	746						1.3
EF-5	CENTRIFUGAL ROOF VENTILATOR	ROOF		35	GREENEHC	G-103-VG	120	1	755	0.7	0	0.16	1/4	3.7				1.3
EF-6	CENTRIFUGAL ROOF VENTILATOR	ROOF		20	GREENEHC	G-090-VG	120	1	555	0.5	0	0.09	1/10	2.6				1.3
EF-7	CENTRIFUGAL ROOF VENTILATOR	ROOF		20	GREENEHC	G-090-VG	120	1	515	0.5	0	0.08	1/10	2.6				1.3

HVAC ACCESSORIES

ACCESSORIES:

1. MOTOR DAMPER	5. INTAKE HOOD	9. ACCESS DOOR	13. FACE/BYPASS DAMPER	17. DUCT FLANGES	21. ECON POWERED EXHAUST
2. ECONOMIZER	6. VIBRATION ISOLATION	10. FLEX CONNECTIONS	14. CONDENSATE PUMP	18. BASE RAIL	22. ECON BAROMETRIC RELIEF
3. ROOF CURB	7. FLAT FILTER	11. MOUNTING COLLAR	15. MOTOR GUARD	19. HUMIDIFIER	23. HOT GAS RELIEF VALVES
4. HAL GUARDS	8. FILTER/MIXING BOX	12. HOT GAS BYPASS	16. GREASE TRAP	20. CO2 SENSORS	SHAFT GROUNDING BRUSHES

HVAC VENTILATION SCHEDULE

NUMBER	NAME	AREA	AIR CHGS	OA CHGS	PEOPLE RED	OA PER PERSON	OA PER SQ FT.	REQ SUP	ACT SUP	REQ OA	ACT OA	ACT RA	ACT RH	ACT WB	ACT WB	CRIT OA	PRESSURE
100	LOBBY	100 SF			2	5	0.06	176	350	44	88	110	110	70	0.0571	E	
101	SUITE	105 SF			2	20	0.12	208	420	52	104	105	105	70	0.1571	N	
102	SUITE	113 SF			2	20	0.12	216	430	54	108	108	108	70	0.1581	N	
103	SUITE	102 SF			2	20	0.12	232	300	58	75	300	300	70	0.2166	N	
104	SUITE	108 SF			2	20	0.12	232	300	58	75	300	300	70	0.22	N	
105	SUITE	107 SF			2	20	0.12	232	300	58	75	300	300	70	0.22	N	
201	SUITE	105 SF			2	20	0.12	320	300	69	75	300	300	75	0.1571	N	
202	SUITE	107 SF			2	20	0.12	320	300	69	75	300	300	75	0.1571	N	
203	SUITE	107 SF			2	20	0.12	304	300	65	75	300	300	75	0.1651	N	
204	SUITE	147 SF			3	20	0.12	410	410	78	104	410	410	90	0.239	N	
205	SUITE	121 SF			2	20	0.12	260	300	65	75	300	300	70	0.23	N	
206	SUITE	117 SF			2	20	0.12	260	300	65	75	300	300	70	0.2266	N	
207	SUITE	115 SF			2	20	0.12	260	300	65	75	300	300	70	0.2266	N	
208	SUITE	139 SF			2	20	0.12	188	230	58	230	230	230	85	0.3086	N	
209	SUITE	102 SF			2	20	0.12	188	230	47	58	230	230	65	0.2826	N	
210	SUITE	143 SF			3	20	0.12	280	300	80	320	300	300	90	0.3	N	
301	SUITE	122 SF			2	20	0.12	276	300	69	75	300	300	75	0.23	N	
302	SUITE	123 SF			2	20	0.12	276	300	69	75	300	300	75	0.23	N	
303	SUITE	120 SF			2	20	0.12	276	300	69	75	300	300	75	0.2266	N	
304	SUITE	119 SF			2	20	0.12	276	300	65	75	300	300	75	0.2266	N	
305	SUITE	129 SF			2	20	0.12	260	300	65	75	300	300	80	0.23	N	
401	SUITE	119 SF			2	20	0.12	276	300	69	75	300	300	75	0.2266	N	
402	SUITE	113 SF			2	20	0.12	260	300	65	75	300	300	70	0.23	N	
403	SUITE	117 SF			2	20	0.12	276	300	69	75	300	300	70	0.2266	N	
404	SUITE	125 SF			2	20	0.12	276	300	69	75	300	300	75	0.23	N	
405	SUITE	136 SF			2	20	0.12	260	300	65	75	300	300	85	0.2333	N	
500	HALLWAY	187 SF			2	20	0.06	100	200	25	50	200	0	0	0.07	E	
501	HALLWAY	99 SF			0	0	0.06	172	200	43	50	200	0	0	0.04	E	
502	HALLWAY	238 SF			0	0	0.06	184	200	41	50	200	0	0	0.09	E	
503	HALLWAY	102 SF			0	0	0.06	156	200	39	50	200	0	0	0.04	E	
505	SECURITY CLOSET	19 SF			0	0	0	0	0	0	0	0	0	0	150	0	N
506	LAUNDRY	9 SF			0	0	0.06	220	270	55	68	0	0	0	150	0	P
507	WOMENS	15 SF			0	0	0	0	0	0	0	0	0	0	150	0	N
508	MENS	15 SF			0	0	0	0	0	0	0	0	0	0	75	0	P

HVAC DIFFUSERS AND REGISTERS SCHEDULE

TAG	MANUFACTURER	MODEL	FACE	MOUNTING	MATERIAL	FINISH	DAMPER TYPE	BORDER STYLE	REMARKS
CD-1	TITUS	TDCA	24"x24"	CEILING	ALUMINUM	STANDARD WHITE	OPPOSED BLADE	LAY IN MOUNTING	REFER TO M-1.0 FOR DUCT CONNECTION SIZES
CD-2	TITUS	TDCA	24"x24"	CEILING	ALUMINUM	STANDARD WHITE	OPPOSED BLADE	LAY IN MOUNTING	REFER TO M-1.0 FOR DUCT CONNECTION SIZES
CD-3	TITUS	TDCA	12"x12"	CEILING	ALUMINUM	STANDARD WHITE	OPPOSED BLADE	LAY IN MOUNTING	REFER TO M-1.0 FOR DUCT CONNECTION SIZES
DG-1	TITUS	CT-700	12"x24"	SIDEWALL	ALUMINUM	STANDARD WHITE	(none)	SURFACE MOUNT	PROVIDE WITH AUXILIARY FRAME
ER-1	TITUS	50F	12"x24"	CEILING	ALUMINUM	METALLESCENT ALUM. BAKED ENAMEL	PARALLEL BLADE	LAY IN MOUNTING	PROVIDE WITH SQUARE TO ROUND ADAPTOR
RR-1	TITUS	50F	14"x24"	CEILING	ALUMINUM	METALLESCENT ALUM. BAKED ENAMEL	PARALLEL BLADE	LAY IN MOUNTING	PROVIDE WITH SQUARE TO ROUND ADAPTOR
RR-2	TITUS	50F	14"x24"	CEILING	ALUMINUM	METALLESCENT ALUM. BAKED ENAMEL	PARALLEL BLADE	LAY IN MOUNTING	PROVIDE WITH SQUARE TO ROUND ADAPTOR
TG-1	TITUS	350FL	24"x24"	CEILING	ALUMINUM	STANDARD WHITE	PARALLEL BLADE	LAY IN MOUNTING	PROVIDE WITH SQUARE TO ROUND ADAPTOR
TG-2	TITUS	350FL	24"x24"	CEILING	ALUMINUM	STANDARD WHITE	PARALLEL BLADE	LAY IN MOUNTING	PROVIDE WITH SQUARE TO ROUND ADAPTOR

COORDINATION GENERAL NOTES

THE MAGNETIC LOCKING DEVICE FOR THE HURCULITE DOOR SHALL BE PROVIDED AS PART OF THE DOOR PACKAGE AND INSTALLED BY THE GENERAL CONTRACTOR. THE MAGNETIC LOCKING DEVICE AT THE FRONT ENTRY DOOR SHALL BE PROVIDED AND INSTALLED BY THE ACCESS CONTROL CONTRACTOR.

THE FIRE ALARM CONTRACTOR SHALL LAND CONNECTIONS AT THE ACCESS CONTROL PANEL. THE ACCESS CONTROL CONTRACTOR SHALL MAKE THE FINAL CONNECTIONS.

THE GENERAL CONTRACTOR IS RESPONSIBLE FOR MAKING THE CONNECTIONS FROM THE ACCESS CONTROL SYSTEM TO THE FIRE ALARM PANEL AND IF NECESSARY THE FIRE SPRINKLER SYSTEM. THE GENERAL CONTRACTORS FIRE ALARM SUBCONTRACTOR SHALL MAKE THE CONNECTIONS AT THE FIRE ALARM PANEL. THE GENERAL CONTRACTOR SHALL COORDINATE ALL NECESSARY TRADES TO ASSURE THE RELEASE OF THE MAGNETIC LOCKING SYSTEM UPON ACTIVATION OF THE FIRE ALARM SYSTEM OR FIRE SPRINKLER SYSTEM.

ALL TELECOMMUNICATIONS AND SECURITY/ACCESS CONTROL SYSTEMS SHALL BE PLACED IN A SECURE CLOSET. VERIFY REQUIREMENTS FOR THE PROJECT WITH GENERAL CONTRACTOR.

THE SECURITY SYSTEM SHALL BE PROVIDED BY THE OTHERS UNDER A SEPARATE PERMIT.

HVAC ELECTRICAL COORDINATION SCHEDULE

ABBREVIATION	CONTRACTOR TYPE	MOTOR CONTROL TYPE	CONTROL TYPE
DC	ELECTRICAL CONTRACTOR	CS	COMBINATION STARTER
MC	EXISTING	MCC	MOTOR CONTROL STARTER
SP	FIRE PROTECTION CONTRACTOR	MCC	MAGNETIC STARTER OR CONTACT
SC	GENERAL CONTRACTOR	MS	MANUAL STARTER
TS	HVAC CONTRACTOR	MFR	MANUAL STARTER W/ CONTROL RELAY
CB	MANUFACTURER	OV	OVERCURRENT PROTECTION
FLS	PLUMBING CONTRACTOR		
FLA	OWNER OR OTHERS		
MCA			
GP			

EQUIPMENT MARK	DESCRIPTION	VOLTS (V)	PHASE	EMERGENCY	BHP (HP)	HP (HP)	HTG (KW)	WATTS	FLA (A)	MCA (A)	OCF (A)	DC TYPE	DC FURN	DC INST	DC WIRE	MC TYPE	MC FURN	MC INST	MC WIRE	CN TYPE	CN INST	CN WIRE	SD TYPE
EF-1	INLINE CENTRIFUGAL FAN	120	1										EC	EC	EC	MG	MFR	MFR	MFR	TC	EC	EC	EC
EF-2	CEILING MOUNTED VENTILATOR	120	1										EC	EC	EC	MG	MFR	MFR	MFR	MAN	EC	EC	EC
EF-3	CEILING MOUNTED VENTILATOR	120	1										EC	EC	EC	MG	MFR	MFR	MFR	MAN	EC	EC	EC
EF-4	CEILING MOUNTED VENTILATOR	120	1										EC	EC	EC	MG	MFR	MFR	MFR	RLINE	EC	EC	EC
EF-5	CENTRIFUGAL ROOF VENTILATOR	120	1			0.16	1/4				3.7		EC	EC	EC	MG	MFR	MFR	MFR	TC	EC	EC	EC
EF-6	CENTRIFUGAL ROOF VENTILATOR	120	1			0.09	1/10				2.6		EC	EC	EC	MG	MFR	MFR	MFR	TC	EC	EC	EC
EF-7	CENTRIFUGAL ROOF VENTILATOR	120	1			0.08	1/10				2.6		EC	EC	EC	MG	MFR	MFR	MFR	TC	EC	EC	EC
RTU-1	PACKAGED OUTDOOR ROOFTOP UNIT	208	3						20	25		EC	EC	EC	MG	MFR	MFR	MFR	LOW	HC	HC	HC	DUCT SMOKE
RTU-2	PACKAGED OUTDOOR ROOFTOP UNIT	208	3						22	30		EC	EC	EC	MG	MFR	MFR	MFR	LOW	HC	HC	HC	DUCT SMOKE
RTU-3	PACKAGED OUTDOOR ROOFTOP UNIT	208	3						38	50		EC	EC	EC	MG	MFR	MFR	MFR	LOW	HC	HC	HC	DUCT SMOKE
RTU-4	PACKAGED OUTDOOR ROOFTOP UNIT	208	3						29	40		EC	EC	EC	MG	MFR	MFR	MFR	LOW	HC	HC	HC	DUCT SMOKE
RTU-5	PACKAGED OUTDOOR ROOFTOP UNIT	208	3						29	40		EC	EC	EC	MG	MFR	MFR	MFR	LOW	HC	HC	HC	DUCT SMOKE
RTU-6	PACKAGED OUTDOOR ROOFTOP UNIT	208	3						38	50		EC	EC	EC	MG	MFR	MFR	MFR	LOW	HC	HC	HC	DUCT SMOKE

THERMOSTAT/REMOTE SENSOR SPECIFICATIONS

AC UNIT(S) MASTER THERMOSTAT AND/OR REMOTE RTU-UNIT (COOLING/HEATING) WITH REMOTE SENSORS FOR WALL LOBS. ONE SHALL BE PROVIDED PER UNIT. PROVIDE DDOT CONTROLLER FOR EACH AC SYSTEM. INSTALL PER MANUFACTURER PRINTED INSTRUCTIONS.

AC UNIT(S) MASTER THERMOSTAT AND AC-UNIT OR IU-UNIT (COOLING/HEATING) CONTROLLER MAY NOT BE CHANGED OUT UNTIL AFTER COMAS BEING ISSUED.

PROVIDE TEMPERATURE AVERAGE SENSORS AS SHOWN ON THESE PLANS. NUMBER OF SENSORS AS PER PLAN TO AVERAGE ALL CORRESPONDING ZONES. PER MANUFACTURER'S WRITTEN INSTRUCTION. REMOTE SENSORS MUST BE WIRED IN A LINEAR OR DAISY CHAIN FASHION. THE WALL MODULE SERVING EACH AC UNIT SHALL NOT SENSE TEMPERATURE (NOT PART OF AVERAGE) AND SHALL BE USED ONLY FOR CONTROL. EACH WALL MODULE SHALL BE PLACED IN SECURITY CLOSET.

HVAC CONTRACTOR SHALL CONNECT ALL WIRES FROM ACCESS CONTROL RECEIVER FOR AFTER HOURS OPERATION OF HVAC SYSTEMS. ACCESS CONTROL CONTRACTOR SHALL LAND CONTROL WIRES AT THERMOSTAT CONTROLLER LOCATIONS. HVAC CONTRACTOR SHALL PROGRAM THE THERMOSTAT'S CONTROLLER FOR AFTER HOURS PROGRAMMING AND TRAIN TENANT ON OPERATION OF SYSTEM.

MECHANICAL CONTRACTOR MUST INTEGRATE HVAC THERMOSTAT CONTROLLER WITH THE ACCESS CONTROL SYSTEM AND COORDINATE THE CONNECTIVITY. IT IS THE MECHANICAL CONTRACTOR'S RESPONSIBILITY AND COST TO PERFORM THE ASSOCIATED WORK.

HVAC LOAD SCHEDULE

THE HEATING AND COOLING LOAD CALCULATIONS ARE BASED ON THE CLTD/CLF (COOLING LOAD TEMPERATURE DIFFERENCE/COOLING LOAD FACTOR) METHOD. ASSUMPTIONS AND EXECUTION OF THESE METHODS ARE PER ASHRAE 183-2007...

EQUIPMENT MARK	COOLING LOAD BREAKDOWN													HEATING LOAD BREAKDOWN										
	CRFOP	CWALL	CPART	CGLASS	CSOLAR	CLIGHTS	CEQUIP	CPSENS	CSSENS	CFAN	COAS	CTSENS	CPLAT	COAL	CTLAT	CTOT	HROOF	HWALL	HPART	HGLASS	HSLAB	HSPACE	HOA	HTOT
RTU-1	1.1	1.5	0	1.4	2.2	1.7	2</																	