

EXHAUST FAN SCHEDULE							
MARK	GREENHECK MODEL (OR EQUAL)	CFM	EXT. S.P.	ELECTRIC			NOTES
				AMPS	VOLTS	PHASE	
EF-1	SP-A190-QD	150	1/4"	1.3	120	1	1, 2
EF-2	SP-A190-QD	150	1/4"	1.3	120	1	1, 2
EF-3	SP-A510-QD	375	1/4"	3.3	120	1	1, 2
EF-4	SP-A510-QD	375	1/4"	3.3	120	1	1, 2
EF-5							
EF-6							

- NOTES:
- CEILING FAN COMPLETE WITH GRILLE AND BACKDRAFT DAMPER.
  - WIRED ON ROOM LIGHTING CIRCUIT THROUGH LIGHT SWITCH (BY ELECTRICAL CONTRACTOR).
  - WIRED ON ROOM LIGHTING CIRCUIT AHEAD OF LIGHT SWITCH (BY ELECTRICAL CONTRACTOR).
  - CONTROLLED BY WALL MOUNTED COOLING ONLY THERMOSTAT SET TO MAINTAIN 75° F.

ROOFTOP UNIT SCHEDULE															
MARK	CARRIER MODEL (OR EQUAL)	COOLING (MBH)		SUPPLY (CFM)	OUTSIDE AIR (CFM)	EXT. S.P. (IN WC)	HEATING (NAT. GAS)		ELECTRIC				WEIGHT (LBS.)	NOTES	
		TOTAL	SENSIBLE				INPUT (MBH)	OUTPUT (MBH)	FLA	MCA	MOCF	VOLTS			PHASE
RTU-1	48FCDM09A2M6	100.5	77.1	3400	910	1.0"	129.0	103.0	20.0	19.0	25	460	3	1032.0	1, 3, 4, 5, 6, 7, 8
RTU-2	48FCDM09A2M6	100.5	77.1	3400	340	1.0"	125.0	103.0	20.0	19.0	25	460	3	1032.0	1, 3, 4, 5, 6, 7, 8
RTU-3	48FCDM12A3M6	123.8	93.6	3600	432	1.0"	180.0	148.0	26.0	25.0	30	460	3	1062.0	1, 2, 4, 5, 6, 7, 8

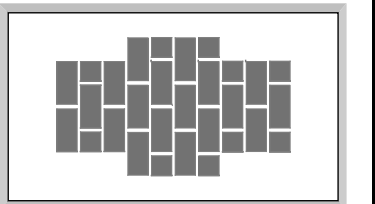
- NOTES:
- DIFFERENTIAL ENTHALPY ECONOMIZER WITH BAROMETRIC RELIEF.
  - HIGH STATIC PRESSURE DRIVE AND MOTOR.
  - MEDIUM STATIC PRESSURE DRIVE AND MOTOR.
  - PRE-FAB ROOF CURB WITH SOUND INSULATION.
  - 7-DAY DIGITAL PROGRAMMABLE HEATING/COOLING THERMOSTAT.
  - CONVENIENCE OUTLET (BY ELECTRICAL CONTRACTOR).
  - TWO STAGE COOLING.
  - SMOKE DETECTOR (RATED FOR USE IN HVAC DUCTWORK) SHALL BE INSTALLED IN RETURN AIR DUCT OR PLENUM UPSTREAM OF ANY FILTERS AND OUTDOOR AIR CONNECTIONS IN ACCORDANCE WITH SECTION 606.2.1, 2017 OBC - MECHANICAL CODE. UPON ACTIVATION, THE SMOKE DETECTOR SHALL SHUT DOWN THE ENTIRE AIR DISTRIBUTION SYSTEM. SYSTEM SUPERVISION CONTROL SHALL BE IN ACCORDANCE WITH SECTION 606.4.1, 2017 OBC - MECHANICAL CODE.

VENTILATION AIR SCHEDULE																	
ZONE	ROOM NAME	ROOM NUMBER	OCCUPANCY CLASSIFICATION	ZONE POPULATION	PEOPLE OUTSIDE AIR RATE (CFM/PERSON)	VENTILATION FOR OCCUPANTS (CFM)	AREA (SQ FT)	AREA OUTDOOR AIR RATE (CFM/SQFT)	VENTILATION FOR AREA (CFM)	BREATHING ZONE OUTSIDE AIR (CFM)	DISTRIBUTION EFFECTIVENESS	ZONE OUTDOOR AIRFLOW (CFM)	PRIMARY OUTDOOR AIR FRACTION	REQUIRED OUTSIDE AIR (CFM)	ACTUAL OUTSIDE AIR (CFM)	ACTUAL SUPPLY AIR (CFM)	NOTES
RTU-1	VESTIBULE	-- --	CORRIDORS	-- --	-- --	-- --	84	.06	5	5	0.8	6.3	.02	42	45	300	1, 3
RTU-1	SHOWROOM	100	SALES	27	7.5	202.5	1802	.12	216	419	0.8	523.425	.19 *	378	405	2700	1, 3
RTU-1	BREAKROOM	101	BREAK ROOMS	3	5	15	124	.06	7	22	0.8	28.05	.11	35	37.5	250	1, 3
RTU-1	CORRIDOR	-- --	CORRIDORS	-- --	-- --	-- --	265	.06	16	16	0.8	19.875	.16	17.5	18.75	125	1, 3
EF-1	MEN	102	PUBLIC RESTROOMS	-- --	-- --	-- --	162	-- --	-- --	-- --	-- --	-- --	-- --	-- --	15	150	1, 2, 4
EF-2	WOMEN	103	PUBLIC RESTROOMS	-- --	-- --	-- --	162	-- --	-- --	-- --	-- --	-- --	-- --	-- --	15	150	1, 2, 4
RTU-2	CONFERENCE ROOM	104	CONFERENCE ROOM	22	5	110	459	.06	28	138	0.8	171.925	.21 *	72	80	800	1, 4
RTU-2	OFFICE	105	OFFICE SPACE	1	5	5	252	.06	15	20	0.8	25.15	.09	24.75	27.5	275	1, 4
RTU-2	OFFICE	106	OFFICE SPACE	1	5	5	252	.06	15	20	0.8	25.15	.09	24.75	27.5	275	1, 4
RTU-2	OFFICE	107	OFFICE SPACE	1	5	5	198	.06	12	17	0.8	21.1	.09	20.25	22.5	225	1, 4
RTU-2	OFFICE	108	OFFICE SPACE	1	5	5	198	.06	12	17	0.8	21.1	.09	20.25	22.5	225	1, 4
RTU-2	OFFICE	109	OFFICE SPACE	1	5	5	198	.06	12	17	0.8	21.1	.09	20.25	22.5	225	1, 4
RTU-2	OFFICE	110	OFFICE SPACE	1	5	5	198	.06	12	17	0.8	21.1	.09	20.25	22.5	225	1, 4
EF-3	WOMEN	112	PUBLIC RESTROOMS	-- --	-- --	-- --	254	-- --	-- --	-- --	-- --	-- --	-- --	-- --	25	250	1, 2, 4
EF-4	MEN	113	PUBLIC RESTROOMS	-- --	-- --	-- --	239	-- --	-- --	-- --	-- --	-- --	-- --	-- --	25	250	1, 2, 4
RTU-2	OFFICE	114	OFFICE SPACE	1	5	5	150	.06	9	14	0.8	17.5	.15	10.35	11.5	115	1, 4
RTU-2	OFFICE	115	OFFICE SPACE	1	5	5	150	.06	9	14	0.8	17.5	.15	10.35	11.5	115	1, 4
RTU-2	IT	116	OFFICE SPACE	1	5	5	150	.06	9	14	0.8	17.5	.15	10.8	12	120	1, 4
RTU-3	OPEN OFFICE	111	OFFICE SPACE	22	5	110	4322	.06	259	369	0.8	461.65	.13 *	379.5	414	3450	1, 5
RTU-3	IT	117	OFFICE SPACE	1	5	5	150	.06	9	14	0.8	17.5	.12	16.5	18	150	1, 5

- NOTES:
- OUTDOOR VENTILATION AIR BASED ON ASHRAE STANDARD 62.1-2016 "VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY" IN ACCORDANCE WITH SECTION 403.2 (EXCEPTION), 2017 OBC-MC.
  - REQUIRED EXHAUST AIR PROVIDED BY LOCAL CEILING MOUNTED EXHAUST FAN IN ACCORDANCE WITH TABLE 6.5 "MINIMUM EXHAUST RATES" ASHRAE STANDARD 62.1-2016.
  - RTU-1: WHERE  $V_{ow} = D \times (OA \text{ FOR PEOPLE}) + (OA \text{ FOR SPACE})$  AND D IS THE OCCUPANT DIVERSITY,  $V_{ow} = (1 \times 217.5) + 244 = 461.5$  CFM.  
 $Z_p = 0.19$ ;  $E_v = 0.96$ ; OUTDOOR AIR INTAKE  $V_{ot} = V_{ow} / E_v = 461.5/0.96 = 480.7$  CFM.
  - RTU-2: WHERE  $V_{ow} = D \times (OA \text{ FOR PEOPLE}) + (OA \text{ FOR SPACE})$  AND D IS THE OCCUPANT DIVERSITY,  $V_{ow} = (1 \times 155) + 133 = 288$  CFM.  
 $Z_p = 0.21$ ;  $E_v = 0.94$ ; OUTDOOR AIR INTAKE  $V_{ot} = V_{ow} / E_v = 288/0.94 = 306.4$  CFM.
  - RTU-3: WHERE  $V_{ow} = D \times (OA \text{ FOR PEOPLE}) + (OA \text{ FOR SPACE})$  AND D IS THE OCCUPANT DIVERSITY,  $V_{ow} = (1 \times 115) + 268 = 383$  CFM.  
 $Z_p = 0.13$ ;  $E_v = 1.0$ ; OUTDOOR AIR INTAKE  $V_{ot} = V_{ow} / E_v = 383/1.0 = 383$  CFM.
- \*MAXIMUM  $Z_p$  FOR THE SYSTEM.

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REVISIONS:

PROJECT: **FAIRFIELD COMMERCE PARK #3**  
**TENANT IMPROVEMENT**  
110 MERCANTILE DRIVE  
FAIRFIELD, OHIO 45014

SHEET TITLE: **HVAC - NOTES AND SCHEDULES**

DRN: CHK: CAD REF:  
CGD BJM 15971H-1

DATE:  
09-08-22

SHEET No.:  
**H200**