

VENTILATION COMPLIANCE SCHEDULE												
SPACE NAME	OCCUPANCY TYPE	AIR FILTRATION	CONDITIONED AREA (SQFT)	2021 IMC VENTILATION CRITERIA								
				OCCUPANT DENSITY (PERSONS PER 1000 SQFT)	PEOPLE FACTOR (Rp)	AREA FACTOR (Ra)	REQUIRED MIN OA CFM	SUPPLY CFM	OA% PROVIDED	EXHAUST CFM	EXHAUST CFM/SQFT	
100 - ENTRY VESTIBULE	CORRIDORS	MERV 8, MERV 13	91.4	0	0	0.06	5.5	650	22.0%	143.0	-	-
101 - HOST	CORRIDORS	MERV 8, MERV 13	62.6	0	0	0.06	3.8	240	22.0%	52.8	-	-
102 - BAR LOUNGE	DINING ROOMS	MERV 8, MERV 13	499.9	70	70	0.18	352.4	1410	25.0%	352.5	-	-
103 - BAR SEATING	DINING ROOMS	MERV 8, MERV 13	201.3	70	70	0.18	141.9	570	25.0%	142.5	-	-
103 - COCKTAIL BAR	BAR, COCKTAIL LOUNGES	MERV 8, MERV 13	183.8	100	100	0.18	170.9	710	25.0%	177.5	-	-
104 - DINING 1	DINING ROOMS	MERV 8, MERV 13	953.8	70	70	0.18	672.4	2690	25.0%	672.5	-	-
105 - DINING 2	DINING ROOMS	MERV 8, MERV 13	775.9	70	70	0.18	547.0	2490	22.0%	547.8	-	-
106 - DINING 3	DINING ROOMS	MERV 8, MERV 13	570.5	70	70	0.18	402.2	2030	22.0%	446.6	-	-
106 - CHURRASCO GRILL	KITCHENS (COOKING)	MERV 8, MERV 13	675	20	20	0.12	182.3	1770	11.0%	194.7	-	-
109 - PRIVATE DINING ROOM 1	DINING ROOMS	MERV 8, MERV 13	767.5	70	70	0.18	541.1	3130	17.3%	541.2	-	-
110 - PRIVATE DINING ROOM 2	DINING ROOMS	MERV 8, MERV 13	763.6	70	70	0.18	538.3	2580	20.9%	538.7	-	-
111 - RESTROOM CORRIDOR	CORRIDORS	MERV 8, MERV 13	240.1	0	0	0.06	7.2	60	25.0%	15.0	-	-
112 - MENS RESTROOM	OFFICE SPACE	MERV 8, MERV 13	278.9	5	5	0.06	23.7	130	25.0%	32.5	190.0	0.7
113 - WOMENS RESTROOM	OFFICE SPACE	MERV 8, MERV 13	279.8	5	5	0.06	23.8	110	25.0%	27.5	160.0	0.6
117 - BEVERAGE	KITCHENS (COOKING)	MERV 8, MERV 13	205.1	20	20	0.12	55.4	150	25.0%	113.0	-	-
118 - HOT PREP COOKLINE	KITCHENS (COOKING)	MERV 8, MERV 13	541.4	20	20	0.12	146.2	4940	75.3%	3719.8	4200.0	7.8
119 - DISHWASHING	KITCHENS (COOKING)	MERV 8, MERV 13	240.1	20	20	0.12	64.8	590	11.0%	64.9	600.0	2.5
124 - OFFICE	OFFICE SPACE	MERV 8, MERV 13	63.1	5	5	0.06	5.4	180	11.0%	19.8	-	-
125 - EMPLOYEE RESTROOM	OFFICE SPACE	MERV 8, MERV 13	57	5	5	0.06	4.8	50	11.0%	5.5	125.0	2.2
127 - MECH ROOM / KITCHEN UTILITY	CORRIDORS	MERV 8, MERV 13	639.5	0	0	0.06	38.4	520	11.0%	57.2	-	-

AIR BALANCE SCHEDULE										
UNIT	DINING (CFM)				KITCHEN (CFM)					
	SUPPLY CFM	RETURN CFM	OUTSIDE CFM	EXHAUST	SUPPLY CFM	RETURN CFM	OUTSIDE CFM	EXHAUST		
RTU-1	2580	2045	539	-	-	-	-	-	-	
RTU-2	3130	2590	541	-	-	-	-	-	-	
RTU-3	5410	4220	1190	-	-	-	-	-	-	
RTU-4	5680	4290	1420	-	-	-	-	-	-	
RTU-5	1770	1610	195	-	1340	1160	147	-	-	
RTU-6	-	-	-	-	5090	1260	3833	-	-	
DOAS-1	4400	0	4400	-	-	-	-	-	-	
EF-1	-	-	-	-	-	-	-	-	2200	
EF-2	-	-	-	-	-	-	-	-	2000	
EF-3.1	-	-	-	2500	-	-	-	-	-	
EF-3.2	-	-	-	2500	-	-	-	-	-	
EF-4	-	-	-	-	-	-	-	-	600	
EF-5	-	-	-	350	-	-	-	-	-	
EF-6	-	-	-	-	-	-	-	-	125	
TOTALS	22970	14755	8285	5350	6430	2420	3980	4925	-	
DINING SPACE PRESSURIZATION (CFM): [SUPPLY CFM - RETURN CFM - EXHAUST CFM]				2865	KITCHEN SPACE PRESSURIZATION (CFM): [SUPPLY CFM - RETURN CFM - EXHAUST CFM]					-915
DINING SPACE PRESSURIZATION (%): [SPACE PRESSURIZATION CFM / SUPPLY CFM]				12.5%	KITCHEN SPACE PRESSURIZATION (%): [SPACE PRESSURIZATION CFM / SUPPLY CFM]					-14.2%
OVERALL SPACE PRESSURIZATION (CFM): [SUPPLY CFM - RETURN CFM - EXHAUST CFM]				1950						
OVERALL SPACE PRESSURIZATION (%): [SPACE PRESSURIZATION CFM / SUPPLY CFM]				6.6%						

FAN SCHEDULE												
TAG	SERVES	MAX. CFM	EXT. S.P.	MAX. SONES	RPM	MOTOR ENCL	HP	BHP	DISCHARGE VELOCITY	VOLTS/PH	MANUFACTURER / MODEL	NOTES
EF-1	PREP	2200	1,000	10.6	1033	ODP, PREMIUM	2,000	0.762	508	208 / 3	CAPTIVEAIRE / DU180HFA	1,2,4,5,6,7
EF-2	PREP	2000	1,250	12.1	1097	ODP, PREMIUM	2,000	0.875	462	208 / 3	CAPTIVEAIRE / DU180HFA	1,2,4,5,6,7
EF-3.1	GRILL	2500	1,150	23.3	1493	ODP, PREMIUM	3,000	1.799	1,450	208 / 3	CAPTIVEAIRE / CASRE18DD	1,2,4,5,6,7
EF-3.2	GRILL	2500	1,150	23.3	1493	ODP, PREMIUM	3,000	1.799	1,450	208 / 3	CAPTIVEAIRE / CASRE18DD	1,2,4,5,6,7
EF-4	DISH	600	0,500	10.7	1242	TEAO-ECM	0,333	0.119	297	115 / 1	CAPTIVEAIRE / DU33HFA	1,3,4,5,6
EF-5	PUBLIC TOILET	350	0,500	6.6	1326	TEAO-ECM	0,250	0.104	-	115 / 1	CAPTIVEAIRE / DR12HFA	1,3,4,5,8,9
EF-6	EMPLOYEE TOILET	125	0,500	5	1453	TEAO-ECM	1,666	0.058	-	115 / 1	CAPTIVEAIRE / DR10HFA	1,3,4,5,8,9

NOTES:
1. PROVIDE INTEGRAL DISCONNECT, IF AN INTEGRAL DISCONNECT IS NOT AVAILABLE CONTRACTOR IS TO PROVIDE DISCONNECT.
2. PROVIDE WITH VENTED HINGED CURB.
3. PROVIDE WITH CURB.
4. EQUIPMENT FURNISHED BY OWNER, CONTRACTOR INSTALLED. REFER TO KITCHEN VENDOR DRAWINGS FOR REQUIREMENTS.
5. ALL EXHAUST FANS ARE TO DISCHARGE A MINIMUM OF 10' AWAY FROM ALL OUTDOOR AIR INTAKES.
6. UL 782 RATED FOR KITCHEN APPLICATION.
7. PROVIDE WITH GREASE RESERVOIR.
8. PROVIDE BIRD SCREEN.
9. FURNISH WITH INTERNALLY MOUNTED SPEED CONTROLLER

PACKAGED ROOFTOP UNIT SCHEDULE																									
AIR HANDLING UNIT	SUPPLY FAN DATA			DX COOLING DATA				REHEAT DATA			GAS HEAT DATA				OUTDOOR AIR DATA			ELECTRICAL DATA				MANUFACTURER / MODEL	NOTES		
	CFM	EXT. S.P. (\"WG)	DRIVE	TYPE	EAT DB / WB (\"F)	LAT DB / WB (\"F)	CAP TOTAL / SENS (MBH)	IEER	DISCHARGE DB/WB (\"F)	CAPACITY DESIRED / MAX (MBH)	MOISTURE REMOVAL RATE (LBS/HR)	TYPE	INPUT BTUs	OUTPUT BTUs	TEMP RISE (\"F)	REQUIRED INPUT GAS PRESSURE (IN. WC.)	CFM	SUMMER TEMP DB / WB (\"F)	WINTER TEMP DB / WB (\"F)	HP	VOLTS / PH			MCA	MOCPP
	RTU-1	2580	0.88	DIRECT	DX	77.6 / 65.7	53.8 / 53.8	90.2 / 65.7	18.6	70.0 / 60.1	46.6 / 60.0	22.6	NATURAL	97,709	79,144	28.0	7 - 14	539	92.3	74.4	4.0			208 / 3	40.4
RTU-2	3130	0.88	DIRECT	DX	77.1 / 65.0	54.8 / 54.6	95.8 / 74.8	18.6	70.0 / 60.5	52.9 / 60.0	19.2	NATURAL	109,583	88,762	26.0	7 - 14	541	92.3	74.4	5.0	208 / 3	40.4	45	CAPTIVEAIRE / CAS-HVAC1-I,125-18-7.5T	1 - 21
RTU-3	5410	0.88	DIRECT	DX	77.7 / 65.8	53.3 / 53.2	204.6 / 143.6	18.8	70.0 / 60.6	100.8 / 129.6	54.3	NATURAL	212,407	172,050	29.0	7 - 14	1190	92.3	74.4	7.5	208 / 3	78.5	90	CAPTIVEAIRE / CAS-HVAC3-I,250-24-15T	1 - 21
RTU-4	5680	0.88	DIRECT	DX	78.1 / 66.3	54.7 / 54.5	204.4 / 144.8	18.8	70.0 / 60.7	96.7 / 129.6	53.7	NATURAL	239,177	193,733	31.0	7 - 14	1420	92.3	74.4	10.0	208 / 3	85.9	110	CAPTIVEAIRE / CAS-HVAC3-I,250-24-15T	1 - 21
RTU-5	3110	0.88	DIRECT	DX	76.4 / 64.0	54.3 / 54.0	89.5 / 73.5	18.6	70.0 / 60.5	54.4 / 60.0	14.7	NATURAL	95,693	77,511	23.0	7 - 14	342	92.3	74.4	5.0	208 / 3	40.4	45	CAPTIVEAIRE / CAS-HVAC1-I,125-18-7.5T	1 - 21
RTU-6	HOOD ON - 5090 HOOD OFF - 3420	0.88	DIRECT	DX	84.3 / 73.9	54.6 / 52.3	349.2 / 160.4	14.9	70.0 / 58.5	87.1 / 204.6	171.1	NATURAL	431,935	349,867	59.0	7 - 14	HOOD ON - 3833 HOOD OFF - 1265	92.3	74.4	5.0	208 / 3	142.2	150	CAPTIVEAIRE / CAS-HVAC3-I,500-24-30T	ALL

NOTES:
1. PROVIDE INTEGRAL DISCONNECT.
2. INVERTER SCROLL COMPRESSOR WITH INTEGRATED OIL SENSOR, DIGITAL OR STAGED SCROLL NOT AN APPROVED EQUAL.
3. DIRECT DRIVE PLENUM BLOWER, BELT DRIVEN BLOWERS ARE NOT ACCEPTABLE.
4. INTEGRATED MONITORING VIA CELLULAR CONNECTION BY MANUFACTURER.
5. PROVIDE TEMPERATURE AND HUMIDITY CONTROL.
6. AVERAGING INTAKE, EVAP. AND DISCHARGE TEMPERATURE SENSORS (DISCHARGE SENSOR TO BE FACTORY MOUNTED WITHIN UNIT).
7. SUPPLY CFM MONITORING INTEGRAL TO UNIT WITH CFM MEASUREMENT INCLUDED THROUGH DIGITAL INTERFACE.
8. CONTRACTOR TO PROVIDE AND INSTALL RETURN DUCT SMOKE DETECTOR TO DISABLE UNIT. CONNECT SMOKE DETECTOR TO FIRE ALARM PANEL. COORDINATE WITH FIRE ALARM INSTALLER.
9. REFRIGERATION PRESSURE MONITORING ON HIGH AND LOW PRESSURE SIDE OF SYSTEM INCLUDED THROUGH DIGITAL INTERFACE.
10. EC MOTOR CONDENSING FANS.
11. ELECTRONIC EXPANSION VALVE, TXV NOT ACCEPTABLE.
12. SUCTION LINE ACCUMULATOR.
13. 81% EFFICIENT FURNACE, WITH MODULATING INDUCER TO MAINTAIN CONSTANT COMBUSTION EFFICIENCY ACROSS FIRING RANGE, 6:1 TURN DOWN W/ NG AND 5:1 TURNDOWN W/ LP.
14. 2\" EXTERIOR DUAL-WALL CONSTRUCTION W/ R-13 INSULATION - MINIMUM 20GA EXTERIOR W/ 14GA BASE.
15. HAIL GUARD FOR CONDENSING COIL.
16. BOTTOM SUPPLY CONNECTION.
17. PROVIDE 2\" MERV 8 AND 2\" MERV 13 FILTERS.
18. PROVIDE INTAKE AND RETURN DAMPERS.
19. SUPPLY AND INSTALL ON FACTORY ROOF CURB.
20. FACTORY COMMISSIONING WITH 5 YEAR PARTS WARRANTY, 25 YEAR WARRANTY ON STAINLESS STEEL HEAT EXCHANGER.
21. AIR HANDLING UNITS AND ROOF CURBS ARE CONTRACTOR FURNISHED, CONTRACTOR INSTALLED.
22. PROVIDE FACTORY PACKAGED CONTROLS FOR INTERLOCK WITH KITCHEN HOODS AND KITCHEN CONTROL PANEL.

DOAS UNIT SCHEDULE																									
AIR HANDLING UNIT	SUPPLY FAN DATA			DX COOLING DATA				REHEAT DATA			GAS HEAT DATA				OUTDOOR AIR DATA			ELECTRICAL DATA				MANUFACTURER / MODEL	NOTES		
	CFM	EXT. S.P. (\"WG)	DRIVE	TYPE	EAT DB / WB (\"F)	LAT DB / WB (\"F)	CAP TOTAL / SENS (MBH)	IEER	DISCHARGE DB/WB (\"F)	CAPACITY DESIRED / MAX (MBH)	MOISTURE REMOVAL RATE (LBS/HR)	TYPE	INPUT BTUs	OUTPUT BTUs	TEMP RISE (\"F)	REQUIRED INPUT GAS PRESSURE (IN. WC.)	CFM	SUMMER TEMP DB / WB (\"F)	WINTER TEMP DB / WB (\"F)	HP	VOLTS / PH			MCA	MOCPP
	DOAS-1	4400	0.85	DIRECT	DX	87.5 / 77.1	56.6 / 53.1	349.2 / 144.0	14.9	70.0 / 58.5	65.3 / 204.6	185.3	NATURAL	446,030	361,284	69.0	7 - 14	4400	92.3 / 74.4	11.6 / 4.7	5.0			208/3	142.2

NOTES:
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3. DIRECT DRIVE PLENUM BLOWER, BELT DRIVEN BLOWERS ARE NOT ACCEPTABLE.
4. INTEGRATED MONITORING VIA CELLULAR CONNECTION BY MANUFACTURER.
5. PROVIDE TEMPERATURE AND HUMIDITY CONTROL.
6. AVERAGING INTAKE, EVAP. AND DISCHARGE TEMPERATURE SENSORS (DISCHARGE SENSOR TO BE FACTORY MOUNTED WITHIN UNIT).
7. SUPPLY CFM MONITORING INTEGRAL TO UNIT WITH CFM MEASUREMENT INCLUDED THROUGH DIGITAL INTERFACE.
8. CONTRACTOR TO PROVIDE AND INSTALL RETURN DUCT SMOKE DETECTOR TO DISABLE UNIT. CONNECT SMOKE DETECTOR TO FIRE ALARM PANEL. COORDINATE WITH FIRE ALARM INSTALLER.
9. REFRIGERATION PRESSURE MONITORING ON HIGH AND LOW PRESSURE SIDE OF SYSTEM INCLUDED THROUGH DIGITAL INTERFACE.
10. EC MOTOR CONDENSING FANS.
11. ELECTRONIC EXPANSION VALVE, TXV NOT ACCEPTABLE.
12. SUCTION LINE ACCUMULATOR.
13. 81% EFFICIENT FURNACE, WITH MODULATING INDUCER TO MAINTAIN CONSTANT COMBUSTION EFFICIENCY ACROSS FIRING RANGE, 6:1 TURN DOWN W/ NG AND 5:1 TURNDOWN W/ LP.
14. 2\" EXTERIOR DUAL-WALL CONSTRUCTION W/ R-13 INSULATION - MINIMUM 20GA EXTERIOR W/ 14GA BASE.
15. HAIL GUARD FOR CONDENSING COIL.
16. BOTTOM SUPPLY CONNECTION.
17. PROVIDE 2\" MERV 8 AND 2\" MERV 13 FILTERS.
18. PROVIDE INTAKE AND RETURN DAMPERS.
19. SUPPLY AND INSTALL ON FACTORY ROOF CURB.
20. FACTORY COMMISSIONING WITH 5 YEAR PARTS WARRANTY, 25 YEAR WARRANTY ON STAINLESS STEEL HEAT EXCHANGER.
21. PROVIDE FACTORY PACKAGED CONTROLS FOR INTERLOCK WITH KITCHEN HOODS AND KITCHEN CONTROL PANEL.
22. INSTALL HMW1 AT UNIT, INSTALL HMW2 IN MANAGERS OFFICE.
23. EQUIPMENT FURNISHED BY TEXAS METALS (KITCHEN VENDOR), CONTRACTOR INSTALLED. REFER TO KITCHEN VENDOR DRAWINGS FOR REQUIREMENTS.

MECHANICAL INSULATION SCHEDULE							
ITEM	SIZE	TYPE	MATERIAL	THERMAL CONDUCTIVITY (BTU / INCH THICKNESS)	THICKNESS	JACKET	NOTES
SUPPLY DUCTWORK - ABOVE ACOUSTIC CEILING TILES	ALL	BLANKET / WRAP	FIBERGLASS	0.27	2"	FOIL SCRIM KRAFT	1,2,3
RETURN DUCTWORK - ABOVE ACOUSTIC CEILING TILES	ALL	-	-	-	-	-	-
SUPPLY DUCTWORK - VISIBLE DUCTWORK IN DINING AREAS	ALL	DUCT LINER	FIBERGLASS	0.27	1-1/2"	-	1,2,3,4,5
RETURN DUCTWORK - VISIBLE DUCTWORK IN DINING AREAS	ALL	DUCT LINER	FIBERGLASS	0.27	1"	-	1,2,3,4,5
TOILET EXHAUST DUCTWORK	ALL	-	-	-	-	-	-
TYPE I AND TYPE II EXHAUST DUCTWORK	ALL	HIGH TEMPERATURE FOIL ENCAPSULATED FIBER BLANKET	INORGANIC FIBERS	0.60 @ 500\" F 2.94 @ 2000\" F	1-1/2"	SCRIM-REINFORCED FOIL	3,6

NOTES:
1. PRODUCTS SHALL NOT CONTAIN FORMALDEHYDE, ASBESTOS, LEAD, MERCURY, OR MERCURY COMPOUNDS.
2. INSULATION SHALL CONFORM TO THE REQUIREMENTS OF SECTION C403.11 OF 2018 INTERNATIONAL ENERGY CONSERVATION CODE.
3. SEE SPECIFICATIONS FOR FURTHER INSULATION REQUIREMENTS.
4. PRODUCT SHALL BE JOHNS MANVILLE UNACOUSTIC OR EQUIVALENT; TO BE INSTALLED ON THE INTERIOR OF THE DUCT.
5. DUCT DIMENSIONS SHOWN ON PLANS ARE OF THE NET FREE AREA; INTERNALLY INSULATED DUCTS MUST INCREASE THE OUTER DIMENSION SIZE TO ACCOUNT FOR THE INSULATION THICKNESS.
6. PRODUCT SHALL BE 3M FIRE BARRIER DUCT WRAP 615+.

AIR DEVICE SCHEDULE									
TAG	TYPE	SIZE	FINISH	THROW	NECK SIZE	MANUFACTURER / MODEL	NOTES		
S1	SQUARE PLAQUE DIFFUSER	24\"x24"	NOTE 3	4-WAY	NOTE 1	TITUS / OMNI-AA	2,3,4		
S2	SQUARE PLAQUE DIFFUSER	12\"x12"	NOTE 3	4-WAY	NOTE 1	TITUS / OMNI-AA	2,3,4		
S3	LINEAR SUPPLY DIFFUSER	5'	NOTE 3	JET THROW	NOTE 1	TITUS / FL-15-JT 2-SLOT	ALL		
S4	ROUND ADJUSTABLE PLAQUE DIFFUSER	22"	NOTE 3	N/A	10\" Ø NECK	TITUS / TMRA-AA	2,3,4		
R1	LOUVERED RETURN GRILLE	24\"x24"	NOTE 3	N/A	NOTE 1	TITUS / 350FL	2,3,4		
R2	LOUVERED RETURN GRILLE	12\"x12"	NOTE 3	N/A	NOTE 1	TITUS / 350FL	2,3,4		
R3	LOUVERED RETURN GRILLE	24\"x24"	NOTE 3	N/A	FULL FACE	TITUS / 350FL	2,3,4		
E1	LOUVERED EXHAUST GRILLE	24\"x24"	NOTE 3	N/A	NOTE 1	TITUS / 350FL	2,3,4		
E2	LOUVERED EXHAUST GRILLE	12\"x12"	NOTE 3	N/A	NOTE 1	TITUS / 350FL	2,3,4		

NOTES:
1. NECK AND / OR DUCT RUNOUT SIZE

NECK AND / OR DUCT RUNOUT SIZE	AIRFLOW
6\"Ø	0-90
8\"Ø	91-180
10\"Ø	181-350
12\"Ø	351-550
14\"Ø	551-850
16\"Ø	851-1250

2. COORDINATE ALL FINISHES WITH ARCHITECTURAL PLANS.
3. CONTRACTOR TO COORDINATE MOUNTING STYLE WITH ARCHITECTURAL CEILING PLANS.
4. INSIDE OF ALL PLENUM BOXES TO BE PAINTED BLACK.
5. SUPPORT DIFFUSERS FROM STEEL ABOVE WHEN USED OVER MILLWORK CEILING SYSTEMS. SELECT APPROPRIATE BORDER CLIP TYPE WHEN USED WITH ACP CEILINGS.

ELECTRIC UNIT HEATER					
TAG	MOUNTING	HEATER SIZE (W)	ELECTRICAL DATA (VOLT/PH) FLA	MANUFACTURER / MODEL	NOTES
EUH-1	WALL MOUNTED	1000	120/1 8.3	INDEECO / 934W-D1012-W	ALL

NOTES:
1. EUH-1 SHALL BE SURFACE MOUNTED.
2. PROVIDE AND INSTALL OPTIONAL WHITE SURFACE MOUNT FRAME, MODEL # WIF-DSM-W.
3. PROVIDE AND INSTALL DISCONNECT.

ELECTRIC HEATER SCHEDULE						
TAG	MOUNTING	ELECTRICAL DATA			MANUFACTURER / MODEL	NOTES
		VOLT / PH	WATTS	AMPS		
H-1.1 THRU H-1.9	CEILING	208 / 1	2,900	11.8	BROMIC / BH0920001-1	ALL