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OUTSIDE AIR SCHEDULE		
ROOM	REQUIRED OUTSIDE AIR VENTILATION (CFM/FT2)	ACTUAL OUTSIDE AIR VENTILATION (CFM/FT2)
COPY 034	1.68	20.52
STERILE CORRIDOR 013	18.1	28.55
STERILE CORRIDOR 013A	27.15	35.82
ELECTRICAL 016	3.85	45.69
JANITOR 023	1.7	24.54
CORRIDOR 030	12.1	16.42
HALLWAY 040	0	17.91
UNKNOWN HALLWAY	6.05	35.56
VESTIBULE 001	3.7	8.21
GENERAL STORAGE 033	4.8	24.63
JANITOR/STORAGE 028	4.2	40.84
EQUIPMENT STORAGE 021	10.6	17.13
CLEAN WORKROOM 020	3.45	34.26
SOIL WORKROOM 019	3.35	59.70
SOIL HOLDING 010	3.95	19.63
WOMEN LOCKER ROOM 024	24.8	25.1
MEN LOCKER ROOM 027	24.8	25.1
WAITING 002/039	180	0.00
RECEPTION 036	19.8	26.67
ADMIN 032	8.64	20.52
OFFICE 031	14.32	20.52
OFFICE 035	11.44	28.73
CONSULT 037	7.28	16.42
DON 038	7.92	16.42
NURSE STATION 012	13.44	53.73
OR #1	175.8	283.25
OR #2	175.8	283.25
OR #3	196.8	267.02
PRE-OP #1	28.25	23.88
PRE-OP #2	28.25	23.88
PRE-OP #3	31.5	32.0
PACU	251.37	252.1
MEN'S TOILET 003	35 CFM/ROOM	35
WOMEN'S TOILET 004	35 CFM/ROOM	35
MEN'S TOILET 025	35 CFM/ROOM	35
WOMEN'S TOILET 026	35 CFM/ROOM	35
PATIENT'S TOILET 009	35 CFM/ROOM	35
BREAK 029	73.8	114.93

AIR FILTER SCHEDULE						
MARK	PRE FILTER	CLEAN PRE-FILTER PRESSURE DROP	DIRTY PRE-FILTER PRESSURE DROP	FINAL FILTER	CLEAN FINAL FILTER PRESSURE DROP	DIRTY FINAL FILTER PRESSURE DROP
RTU-1	MERV 8	0.25"	0.75"	MERV 14	0.4"	1.0"
RTU-2	MERV 8	0.25"	0.75"	MERV 14	0.4"	1.0"
RTU-3	MERV 8	0.25"	0.75"	MERV 14	0.4"	1.0"
RTU-4	MERV 8	0.25"	0.75"	MERV 14	0.4"	1.0"

NOTES:
 1. PROVIDE ALL NEW FILTERS FOR ALL RTU'S THAT MEET ALL CRITERIA.

EXISTING ROOF TOP UNIT																			
MARK	MANUFACTURER	MODEL	SUPPLY FAN				COOLING COIL				ELECTRICAL				HEATER				WEIGHT (LBS)
			SUPPLY CFM	OA CFM	ESP IN/NG	MOTOR HP	EDB/EWB °F	LDB/LWB °F	AMBIENT °F	TOTAL MBH	SENSIBLE MBH	MCA	MOCP	VOLTS/PHASE	HEATER FUEL	HEAT INPUT MBH	HEAT OUTPUT MBH	BLOWER FAN HP	
RTU-1	CARRIER	48HJE006-B5	1910	375	1.0	3	77/64	53/53	105	60	54	32.8	40	208/3	NATURAL GAS	120	96	1/15	862
RTU-2	CARRIER	48HJE008-B5	2250	400	1.0	1	77/64	53/53	105	90	81	38.2	45	208/3	NATURAL GAS	80	64	1/15	862
RTU-3	CARRIER	48HJE006-B5	1675	400	1.0	1	77/64	53/53	105	60	54	32.8	40	208/3	NATURAL GAS	80	64	1/15	862
RTU-4	CARRIER	48HJE006-B5	1675	275	1.0	3	77/64	53/53	105	60	54	-	-	208/3	ELECTRIC	-	-	-	-

NOTES:
 1. REBALANCE EXISTING ROOFTOP UNIT TO NEW DESIGN AIRFLOWS SHOWN.
 2. MOCP: MAXIMUM FUSE SIZE OR MAXIMUM CIRCUIT BREAKER SIZE. HACR BREAKER PER NEC.
 3. RETROFIT AND REPAIR EXISTING ROOFTOP UNITS SO THAT NEW DESIGN AIRFLOWS AND COOLING/HEATING CAPACITIES CAN BE ACHIEVED. CLEAN OUT COOLING COILS, HEATER COILS.
 4. PROVIDE NEW BELTS & SHEAVES TO ACHIEVE DESIGN AIRFLOWS.
 5. VERIFY THE PROPER OPERATION OF ALL CONTROL DAMPERS.
 6. PROVIDE REFRIGERANT CHARGE TO ACHIEVE PROPER COOLING.
 7. PROVIDE ALL NEW FILTERS. REFER TO FILTER SCHEDULE FOR REQUIREMENTS.
 8. PROVIDE WATER LEVEL SENSING DEVICE ON DRAIN PAN TO SHUT UNIT OFF UPON ALARM. ⚠

NEW FAN SCHEDULE															
PLAN MARK	SERVING	SELECTION BASED ON		FAN TYPE	CFM	ESP	FAN EFFICIENCY	DRIVE TYPE	MAX BONES	FAN RPM		FAN MOTOR		ACCESSORIES	
		MANUFACTURER	MODEL							RPM	HP	HP	VOLT		PHASE
EF-1	RTU-1 GEN EXHAUST	LOREN COOK	90C15DH	CENT DOWNBLAST	375	0.50'	82%	DIRECT	7.6	1511	1511	1/8	120	1	1,2,3,4,5,6,7
EF-2	RTU-2 GEN EXHAUST	LOREN COOK	90C15DH	CENT DOWNBLAST	400	0.50'	85%	DIRECT	7.9	1544	1544	1/8	120	1	1,2,3,4,5,6,7
EF-3	RTU-3 GEN EXHAUST	LOREN COOK	90C15DH	CENT DOWNBLAST	400	0.50'	85%	DIRECT	7.9	1544	1544	1/8	120	1	1,2,3,4,5,6,7
EF-4	RTU-4 GEN EXHAUST	LOREN COOK	90C15DH	CENT DOWNBLAST	275	0.40'	58%	DIRECT	5.9	1291	1291	1/8	120	1	1,2,3,4,5,6,7
EF-5	RTU-5 GEN EXHAUST	LOREN COOK	120C15D	CENT DOWNBLAST	675	0.50'	60%	DIRECT	6.7	1151	1151	1/8	120	1	1,2,3,4,5,6,7
EF-6	NOT USED														
EF-7	OXYGEN STOR	LORENCOOK	90C15DL	CENT DOWNBLAST	100	0.25'	22%	DIRECT	1.6	965	965	1/8	120	1	1,2,3,4,5,6,7
EF-8	OR EMERGENCY EXHAUST	LORENCOOK	195 ACSC	SMOKE CONTROL	3000	0.3'	44%	BELT	8.3	736	1725	1/2	120	1	1,2,3,4,5,6,7
EF-9	OR EMERGENCY EXHAUST	LORENCOOK	195 ACSC	SMOKE CONTROL	1600	0.3'	61%	BELT	4.1	537	1725	1/3	120	1	1,2,3,4,5,6,7

ACCESSORIES:
 1. BACKDRAFT DAMPER
 2. BIRDSCREEN
 3. ROOF CURB
 4. DISCONNECT SWITCH
 5. SPEED CONTROLLER
 6. VIBRATION ISOLATORS
 7. TIE DOWN EYELETS

NEW MINI-SPLIT AIR CONDITIONING UNIT																	
PLAN MARK	SERVING	INDOOR UNIT		CFM	OA CFM	ESP	MOTOR HP	EAT DB/RH	COOL MBH	HEAT MBH	OUTDOOR UNIT		SEER	HSPF	MCA	MOCP	VOLTS/PHASE
		MANUFACTURER	MODEL								MANUFACTURER	MODEL					
MS-1/CU-1	139 IT	CARRIER	40N0C036	470	0	0.25'	35 W	75/50%	21	24	CARRIER	38DF036	16.0	8.1	16.0	30	208/1

NOTES:
 1. PROVIDE A PROGRAMMABLE AND AUTOMATIC SWITCHING THERMOSTAT AND SUB-BASE, DISCONNECT SWITCH AND VIBRATION ISOLATION.
 2. PROVIDE FACTORY-MOUNTED DISCONNECT.
 3. PROVIDE ONE SINGLE POINT ELECTRICAL CONNECTION TO POWER BOTH THE MS AND CU.
 4. ROUTE REFRIGERANT LINES TO MATCHING CONDENSING UNIT ON ROOF. SIZE PIPING PER MANUFACTURER'S RECOMMENDATION.
 5. PROVIDE A CONDENSATE PUMP THAT IS POWERED INTERNALLY BY SINGLE POINT CONNECTION FROM MANUFACTURER.

NEW ELECTRIC STEAM GENERATOR SCHEDULE														
PLAN MARK	SERVING	LOCATION	SELECTION BASED ON		CAPACITY LBS/HR	DUCT SIZE	CFM	MAX DUCT VELOCITY	MAX ABSORPTION DISTANCE	INPUT KW	RATED AMPS	MOCP	VOLTS/PHASE	
			MANUFACTURER	MODEL										
ESG-1	RTU-1,3,5	SUPPLY DUCT	NORTEC	NHTC-020	19.3	SEE PLANS	6540	1100 FPM	2 FEET	6.8	18.8	30	208/3	

NOTES:
 1. PROVIDE AN ELECTRIC STEAM GENERATOR WITH DUCT-MOUNTED DISPERSION TUBES.
 2. PROVIDE INTEGRAL METERING VALVE CAPABLE OF FULL OUTPUT MODULATION FROM 0 TO 100 PERCENT.
 3. PROVIDE STEAM JACKETED STAINLESS STEEL DISPERSION TUBES.
 4. PROVIDE HIGH LIMIT HUMIDISTAT WITH VISIBLE GRADUATIONS BETWEEN 50 AND 100 PERCENT RELATIVE HUMIDITY CONDENSING.
 5. PROVIDE TEMP SENSOR AND INTERLOCK TO PREVENT THE HUMIDIFIER FROM OPERATING BEFORE START-UP CONDENSATE IS DRAINED.
 6. PROVIDE A STEEL CABINET WITH KEY-LOCKED, HINGED DOOR.
 7. PROVIDE DISPOSABLE EVAPORATING CHAMBER OR CLEANABLE MADE OF STAINLESS STEEL.
 8. PROVIDE MAKEUP WATER SOLENOID VALVE AND LOW WATER CUT OFF.
 9. CONTROL MODULE FROM MANUFACTURER SHALL BE UL LISTED WITH CONTROL PANEL AS AN ASSEMBLY.
 10. PROVIDE TERMINAL STRIP FOR CONTROLS.

NEW TERMINAL UNIT SCHEDULE														
PLAN MARK	TYPE	INLET SIZE	MAX NC	DESIGN CFM	HEATER COIL DATA				MIN KW	MIN STAGES				
					EAT DEG. F	LAT DEG. F	MIN DEG. F	MIN STAGES						
CTU-1-1	SINGLE DUCT CAV	12"	25	1360	55	80	11.0	3	SCR					
CTU-1-2	SINGLE DUCT VAV	5"	25	250	55	70	1.2	3						
CTU-1-3	SINGLE DUCT VAV	6"	25	300	55	70	1.5	3						
CTU-2-1	SINGLE DUCT VAV	14"	25	1700	55	70	8.1	3						
CTU-2-2	SINGLE DUCT VAV	8"	25	550	55	70	2.7	3						
CTU-3-1	SINGLE DUCT VAV	10"	25	925	55	70	4.4	3						
CTU-3-2	SINGLE DUCT VAV	8"	25	525	55	70	2.5	3						
CTU-3-3	SINGLE DUCT VAV	5"	25	225	55	70	1.1	3						
CTU-4-1	SINGLE DUCT VAV	10"	25	775	55	70	3.7	3						
CTU-4-2	SINGLE DUCT VAV	6"	25	250	55	70	1.2	3						
CTU-4-3	SINGLE DUCT VAV	6"	25	300	55	70	1.5	3						
CTU-4-4	SINGLE DUCT VAV	6"	25	350	55	70	1.7	3						
CTU-5-1	SINGLE DUCT VAV	12"	25	1240	55	80	10.0	3	SCR					
CTU-5-2	SINGLE DUCT VAV	12"	25	1240	55	80	10.0	3	SCR					
CTU-5-3	SINGLE DUCT VAV	6"	25	275	55	70	1.4	3						
CTU-5-4	SINGLE DUCT VAV	5"	25	200					NO HEAT					

NOTES:
 1. BASIS OF DESIGN: TITUS DESV-EH
 2. NC RATING IS AT 1" WC STATIC.
 3. PROVIDE WITH INTEGRAL DISCONNECT.
 4. PROVIDE HEATERS WITH SINGLE POINT CONNECTION TO DIVISION 26.
 5. PROVIDE WITH INDUCED AIR VELOCITY SENSOR.
 6. ALL CONTROLLERS SHALL BE FACTORY MOUNTED.
 7. REFER TO SHOP DRAWINGS FOR LEFT-HANDED OR RIGHT-HANDED CONFIGURATION.
 8. PROVIDE WITH 24V MAGNETIC CONTACTORS.
 9. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
 10. ALL ELECTRIC HEATERS LESS THAN 1.8KW SHALL BE 120V/1. HEATERS 1.8 KW AND GREATER SHALL BE 208V/3.

NEW AIR DISTRIBUTION SCHEDULE									
MARK	CFM	NECK SIZE (IN)	FACE SIZE	DESCRIPTION					
A	000-100	60	12x12	LAY-IN CEILING SUPPLY DIFFUSER					
	000-100	60	12x24	BASIS OF DESIGN: TITUS TMSI-AA					
	000-100	60	24x24	COLOR: WHITE					
	101-200	80	24x24	MATERIAL: ALUMINUM					
	201-375	100	24x24	OPPOSED BLADE DAMPERS: NO					
	376-550	120	24x24	INSULATED BACKPAN FROM MANUFACTURER					
550-700	140	24x24							
700-850	150	24x24							
B	000-100	60	12x12	LAY-IN CEILING RETURN/EXHAUST GRILLE					
	000-100	60	12x24	BASIS OF DESIGN: TITUS 50F					
	000-100	60	24x24	COLOR: WHITE					
	101-200	80	24x24	MATERIAL: ALUMINUM					
	201-400	100	24x24	OPPOSED BLADE DAMPERS: NO					
	401-600	120	24x24	1/2"x1/2"x1/2" GRID					
601-750	140	24x24	PAINT VISIBLE METAL INSIDE FLAT BLACK						
1500	22x22	24x24							
C	000-90	6x6	8.5x8.5	SIDEWALL SUPPLY DIFFUSER					
	91-180	8x8	10.5x10.5	TITUS 300FL					
	181-290	10x10	12.5x12.5	MATERIAL: ALUMINUM					
	291-440	12x12	14.5x14.5	OPPOSED BLADE DAMPERS: NO					
				DOUBLE DEFLECTION DIFFUSER					
				22.5 DEGREE BLADES					
D	000-100	6x6	8.5x8.5	SIDEWALL RETURN/EXHAUST GRILLE					
	101-200	8x8	10.5x10.5	TITUS 56FL					
	201-350	10x10	12.5x12.5	MATERIAL: ALUMINUM					
	351-500	12x12	14.5x14.5	OPPOSED BLADE DAMPERS: NO					
				22.5 DEGREE DEFLECTION					
				3/4" BLADE SPACING					
E	000-100	6x6	8.5x8.5	SIDEWALL RETURN/EXHAUST GRILLE					
	101-200	8x8	10.5x10.5	TITUS TLF					
	201-350	10x10	12.5x12.5	MATERIAL: ALUMINUM					
	351-500	12x12	14.5x14.5	PLENUM ACCESSORY					
F	540	12x24	14.5x26.5	LOW WALL RETURN GRILLE					
	540-630	18x18	20.5x20.5	TITUS 3FL					
				MATERIAL: STEEL					
				OPPOSED BLADE DAMPERS: NO					
				45 DEGREE DEFLECTION					
				3/4" BLADE SPACING					

NOTES:
 1. AIR DISTRIBUTION DEVICES LOCATED WITHIN ACOUSTICAL TILE. CEILINGS SHALL BE PROVIDED WITH BORDER TYPE 3 FOR LAY-IN MOUNTING. AIR DISTRIBUTION DEVICES LOCATED WITHIN GYPSUM BOARD CEILINGS OR WALLS SHALL BE PROVIDED WITH BORDER TYPE 1 FOR SURFACE MOUNTING. REFER TO ARCHITECTURAL DOCUMENTS FOR CEILING TYPES.
 2. AIR DISTRIBUTION DEVICES LOCATED IN SMALL ROOMS WHERE FULL 24"x24" GRID ARE NOT AVAILABLE SHALL BE PROVIDED WITH SURFACE MOUNTING BORDERS IN LIEU OF LAY-IN. SECURE EACH DEVICE TO CEILING GRID WITH FIELD-FABRICATED SUPPORTS.
 3. PROVIDE REMOTE ACTUATORS FOR DIFFUSERS INSTALLED ABOVE A HARD CEILING. REFER TO DETAIL.

NEW INTAKE LOUVER SCHEDULE							
PLAN MARK	SERVING	SELECTION BASED ON	TYPE	CFM	STATIC PRESSURE	DESIGN VELOCITY	LOUVER SIZE
IL-1	VAC	RUSKIN ELFDXD	LOUVER INTAKE	50	0.05"	400 FPM	18"x18"
IL-2	OXY	RUSKIN ELFDXD	LOUVER INTAKE	75	0.05"	400 FPM	18"x18"

NOTES:
 1. PROVIDE A BIRDSCREEN.
 2. REFER TO DETAIL FOR DUCTWORK CONFIGURATIONS.

NEW ROOF TOP UNIT WITH GAS HEAT SCHEDULE																													
MARK	MANUFACTURER	MODEL	SERVES	SUPPLY FAN				COOLING COIL				ELECTRICAL CIRCUIT				GAS HEATER				WEIGHT (LBS)									
				SUPPLY CFM	OA CFM	ESP	MOTOR HP	EDB/EWB °F	LDB/LWB °F	AMBIENT °F	TOTAL MBH	SENSIBLE MBH	SYSTEM EER	CONDENSER FANS	COMPRESSORS	SUPPLY FAN	COMBUSTION FAN	MCA	MOCP		VOLTS/PHASE	HEATER FUEL	INPUT HEAT MBH	OUTPUT HEAT MBH	MIN TEMP RISE	BLOWER FAN HP			
RTU-5	AAON	RN010	OR'S	2955	675	1.5	5	1780	2955	77/64	52/52	105	120	96	12.0	14.0	1 @ 5.4A	1 @ 30.1A	1 @ 10.6A	1 @ 1.3A	54	80	208/3	NATURAL GAS	90	72	20	1/20	2500

NOTES:
 1. PROVIDE WITH FACTORY DOWNFLOW FILTER CURB.
 2. MOCP: MAXIMUM FUSE SIZE OR MAXIMUM CIRCUIT BREAKER SIZE. HACR BREAKER PER NEC. COORDINATE MOCP AND MCA REQUIREMENTS WITH MANUFACTURER LATEST DATA AND ELECTRICAL CONTRACTOR.
 3. PROVIDE UNIT SHUT DOWN INTERLOCK WITH SUPPLY AND RETURN AIR, DUCT MOUNTED SMOKE DETECTORS. LOCATE SMOKE