





























### AIR DEVICE SCHEDULE

MARK	MANUF.	MODEL	DUTY	DESCRIPTION	COMMENTS
A	TITUS	PA3	Supply Air	24"x24" PERFORATED LAY-IN, STEEL, WHITE	ROUND NECK SIZE AND CFM AS INDICATED ON DRAWINGS
B	TITUS	TBD180	Supply Air	48"x24" INSULATED PLENUM SLOT WITH (1) - 1.5" SLOT	INSTALL HORIZONTAL IN LIGHT COVE WITH ROUND NECK FACING UP. ROUND NECK SIZE AND CFM AS INDICATED ON DRAWINGS.
C	TITUS	300RS	Supply Air	DOUBLE DEFLECTION SIDEWALL GRILLE, SURFACE MOUNTED, STEEL, WHITE	RECTANGULAR NECK SIZE AND CFM AS INDICATED ON DRAWINGS.
D	TITUS	FL-20	Supply Air	EXTRUDED ALUMINUM LINEAR DIFFUSER WITH "MUD-IN" PROFILE (BORDER TYPE 55) (1) - 2" SLOT	LENGTH OF CONTINUOUS SECTIONS AS INDICATED ON DRAWINGS. INACTIVE SECTIONS TO BE USED AS RETURN.
D[PL]	TITUS	FBR-20	Supply Air	48" LONG INSULATED SUPPLY PLENUM FOR FL-20 BORDER TYPE 55	ROUND NECK SIZE AND CFM AS INDICATED ON DRAWINGS.
E	SHOP FABRICATED	NA	Exhaust Air	24"x24" (LxW) WITH ROUND DUCT TAP	INSTALL HORIZONTAL IN LIGHT COVE WITH ROUND NECK FACING UP. ROUND NECK SIZE AND CFM AS INDICATED ON DRAWINGS.
F	TITUS	PAR	Return Air	24"x24" PERFORATED LAY-IN, STEEL, WHITE	PROVIDE ROUND NECK ADAPTOR. ROUND NECK SIZE AS INDICATED ON DRAWINGS.
G	TITUS	350RL	Return Air	FIXED-BLADE SIDEWALL GRILLE, SURFACE MOUNTED, STEEL, WHITE	RECTANGULAR NECK SIZE AS INDICATED ON DRAWINGS.
H	TITUS	350RL	Exhaust Air	FIXED-BLADE SIDEWALL GRILLE, SURFACE MOUNTED, STEEL, WHITE	RECTANGULAR NECK SIZE AND CFM AS INDICATED ON DRAWINGS.

### ELECTRIC UNIT HEATER SCHEDULE

MARK	MANUF.	MODEL	HEATING CAPACITY	Air Flow	VOLT.	PH.	HZ.	AMPS
EUH-1	OMARK	MUH541	5 KW	350 CFM	480 V	3	60 HZ.	6.0 A

### INDOOR DUCTED FAN-COIL UNITS

MARK	MANUFACTURER	MODEL	LEVEL	COOLING CAP	HEATING CAP	SUPPLY CFM	E.S.P.	VOLTAGE	PHASE	FREQ.	MCA/MOCP
FCU-1	Mitsubishi Electric	TP6AD0181A70A	LEVEL 1	18000.0 Btu/h	19000.0 Btu/h	600 CFM	0.20 in-wg	208 V	1	60 Hz	INDOOR UNIT POWERED FROM OUTDOOR UNIT

### INDOOR DUCTLESS FAN-COIL UNIT

MARK	MANUFACTURER	MODEL	DESCRIPTION	LEVEL	COOLING CAP (BTUH)	HEATING CAP (BTUH)	VOLTAGE	PHASE	FREQ.	MCA	MOCP	NOTES
FCU-2A	Mitsubishi Electric	TRKFPY2K0M142A	WALL MOUNTED HEAT PUMP FAN COIL UNIT	LEVEL 3	24000.0 Btu/h	27000.0 Btu/h	208 V	1	60 Hz	0.83 A	15 A	1
FCU-2B	Mitsubishi Electric	TRKFPY2K0M142A	WALL MOUNTED HEAT PUMP FAN COIL UNIT	LEVEL 5	24000.0 Btu/h	27000.0 Btu/h	208 V	1	60 Hz	0.83 A	15 A	1

- NOTES:  
 1. FCU-2A AND 2B TO BE CONNECTED TO HP-2 USING BRANCH JOINT PART NUMBER "CMY-Y82-G"  
 2. FURNISH WITH CONDENSATE PUMPS, PART NUMBER "X87-721"  
 3. FURNISH WITH REMOTE CONTROLLER, PART NUMBER "FAR-49MAAU"

### HEAT PUMP SYSTEM OUTDOOR UNITS

MARK	MANUFACTURER	MODEL	LOCATION	NOM. CAP. (TONS)	HSPF	SEER	COOLING CAPACITY	HEATING CAPACITY	VOLTAGE	PHASE	FREQUENCY	MCA	MOCP	WEIGHT (LBS.)	NOTES	ACCESSORIES
HP-1	Mitsubishi Electric	TRUZAR181KA70NA	ROOF	1.5	10.2	19.9	18000.0 Btu/h	19000.0 Btu/h	208 V	1	60 Hz	11.0 A	28.0 A	120	2.3	1
HP-2	Mitsubishi Electric	TUMYPR4814K43NA	ROOF	4	11.5	19.55	48000.0 Btu/h	54000.0 Btu/h	208 V	1	60 Hz	29.0 A	44.0 A	300	1.2, 4.5	

- NOTES:  
 1. FCU-2A AND 2B TO BE CONNECTED TO HP-2 USING BRANCH JOINT PART NUMBER "CMY-Y82-G"  
 2. MOUNT ON CURB RAILS, MIN 16" HIGH  
 3. APPROXIMATELY 65' VERTICAL PIPING, AND 20' HORIZONTAL PIPING (HP-1 ABOVE, FCU-1 BELOW)  
 4. TO FCU-2B: APPROXIMATELY 11' VERTICAL PIPING, AND 21' HORIZONTAL PIPING (HP-2 LOCATED ABOVE)  
 5. TO FCU-2A: APPROXIMATELY 45' VERTICAL PIPING, AND 21' HORIZONTAL PIPING (HP-2 LOCATED ABOVE)

ACCESSORIES:  
 1. HALL GUARDS

### SINGLE DUCT VAV BOX COOLING-ONLY

MARK	MANUF.	MODEL	INLET DIAMETER	LEVEL	SERVES	PRIMARY AIRFLOW		VOLTAGE	PH.	FREQ.	NOTES	ACCESSORIES
						MAX AIRFLOW	MIN AIRFLOW					
VAV-1N-1	METALARE	TH508	8"	LEVEL 1	DATA ELEC. - NORTH	650 CFM	100 CFM	115 V	1	60 Hz		
VAV-1S-1	METALARE	TH508	8"	LEVEL 1	DATA ELEC. - SOUTH	650 CFM	100 CFM	115 V	1	60 Hz		
VAV-1S-2	METALARE	TH510	10"	LEVEL 1	DMARKMAIN ELEC.	1150 CFM	100 CFM	115 V	1	60 Hz		
VAV-2N-1	METALARE	TH508	8"	LEVEL 2	DATA ELEC. - NORTH	650 CFM	100 CFM	115 V	1	60 Hz		
VAV-2S-1	METALARE	TH508	8"	LEVEL 2	DATA ELEC. - SOUTH	650 CFM	100 CFM	115 V	1	60 Hz		
VAV-3N-1	METALARE	TH508	8"	LEVEL 3	DATA ELEC. - NORTH	650 CFM	100 CFM	115 V	1	60 Hz		
VAV-3S-1	METALARE	TH508	8"	LEVEL 3	DATA ELEC. - SOUTH	650 CFM	100 CFM	115 V	1	60 Hz		
VAV-4N-1	METALARE	TH508	8"	LEVEL 4	DATA ELEC. - NORTH	650 CFM	100 CFM	115 V	1	60 Hz		
VAV-4S-1	METALARE	TH508	8"	LEVEL 4	DATA ELEC. - SOUTH	650 CFM	100 CFM	115 V	1	60 Hz		

### SINGLE DUCT VAV BOX WITH ELECTRIC REHEAT

MARK	MANUF.	MODEL	INLET DIAMETER	LEVEL	SERVES	PRIMARY AIRFLOW		HEATING		STAGES	VOLTAGE	PH.	FREQ.	MCA	MOCP	NOTES	ACCESSORIES
						MAX AIRFLOW	MIN AIRFLOW	HEATING AIRFLOW	HEATING KW								
VRH-1N-1	METALARE	TH508	8"	LEVEL 1	LOBBY INTERIOR	700 CFM	210 CFM	210 CFM	1.5 kW	1	277 V	1	60 Hz	6.77 A	15.0 A		
VRH-2S-1	METALARE	TH508	6"	LEVEL 2	ELEV. LOBBY	300 CFM	100 CFM	100 CFM	1.0 kW	1	277 V	1	60 Hz	4.51 A	15.0 A		
VRH-5N-1	METALARE	TH508	8"	LEVEL 5	DATA ELEC. - NORTH	650 CFM	100 CFM	200 CFM	1.5 kW	1	277 V	1	60 Hz	6.77 A	15.0 A		
VRH-5S-1	METALARE	TH508	8"	LEVEL 5	DATA ELEC. - SOUTH	650 CFM	100 CFM	200 CFM	1.5 kW	1	277 V	1	60 Hz	6.77 A	15.0 A		

### PARALLEL FAN-POWERED BOX WITH ELECTRIC REHEAT

MARK	MANUF.	MODEL	INLET DIAMETER	LEVEL	SERVES	PRIMARY AIR		FAN AIRFLOW	HEATING		STAGES	VOLTAGE	PH.	FREQ.	MCA	MOCP	VOLT.	PH.	FREQ.	FAN MOTOR HP	FLA	NOTES	ACCESSORIES
						MAX AIRFLOW	MIN AIRFLOW		HEATING AIRFLOW	KW													
FPB-1S-1	METALARE	FV500-C2	8"	LEVEL 1	FCS, FARIS	500 CFM	50 CFM	350 CFM	400 CFM	2.5 kW	1	480 V	3	60 Hz	5.13 A	15.0 A	277 V	1	60 Hz	0.167 hp	1.10 A		
FPB-2N-1	METALARE	FV500-C5	14"	LEVEL 2	WEST LOBBY EXTERIOR	2400 CFM	240 CFM	2400 CFM	1850 CFM	18.0 kW	2	480 V	3	60 Hz	31.56 A	35.0 A	277 V	1	60 Hz	0.333 hp	3.60 A		
FPB-2N-2	METALARE	FV500-C2	10"	LEVEL 2	WEST LOBBY INTERIOR	1000 CFM	100 CFM	500 CFM	600 CFM	6.0 kW	1	480 V	3	60 Hz	10.40 A	15.0 A	277 V	1	60 Hz	0.167 hp	1.10 A		
FPB-2S-1	METALARE	FV500-C5	12"	LEVEL 2	EAST LOBBY	2000 CFM	200 CFM	1340 CFM	1540 CFM	15.0 kW	2	480 V	3	60 Hz	27.05 A	30.0 A	277 V	1	60 Hz	0.333 hp	3.60 A		
FPB-2S-2	METALARE	FV500-C2	8"	LEVEL 2	EAST VEST.	600 CFM	60 CFM	400 CFM	480 CFM	4.5 kW	1	480 V	3	60 Hz	6.14 A	15.0 A	277 V	1	60 Hz	0.167 hp	1.10 A		

### SERIES FAN-POWERED BOX WITH ELECTRIC REHEAT

MARK	MANUF.	MODEL	INLET DIAMETER	LEVEL	SERVES	PRIMARY AIR		FAN AIRFLOW	DISCHARGE AIRFLOW		ELECTRIC HEATING		STAGES	VOLTAGE	PH.	FREQ.	MCA	MOCP	VOLT.	PH.	FREQ.	FAN MOTOR HP	FLA	NOTES	ACCESSORIES
						MAX AIRFLOW	MIN AIRFLOW		DISCHARGE AIRFLOW	KW															
CV-1N-1	METALARE	FC090-C2	8"	LEVEL 1	RESTROOMS - NORTH	420 CFM	100 CFM	420 CFM	420 CFM	4.0 kW	1	480 V	3	60 Hz	7.39 A	15.0 A	277 V	1	60 Hz	0.125 hp	1.10 A				
CV-1S-1	METALARE	FC090-C2	8"	LEVEL 1	RESTROOMS - SOUTH	300 CFM	100 CFM	300 CFM	300 CFM	3.0 kW	1	480 V	3	60 Hz	5.89 A	15.0 A	277 V	1	60 Hz	0.125 hp	1.10 A				
CV-2N-1	METALARE	FC090-C2	8"	LEVEL 2	RESTROOMS - NORTH	420 CFM	100 CFM	420 CFM	420 CFM	4.0 kW	1	480 V	3	60 Hz	7.39 A	15.0 A	277 V	1	60 Hz	0.125 hp	1.10 A				
CV-2S-1	METALARE	FC090-C2	6"	LEVEL 2	RESTROOMS - SOUTH	300 CFM	100 CFM	300 CFM	300 CFM	3.0 kW	1	480 V	3	60 Hz	5.89 A	15.0 A	277 V	1	60 Hz	0.125 hp	1.10 A				
CV-3N-1	METALARE	FC090-C2	8"	LEVEL 3	RESTROOMS - NORTH	420 CFM	100 CFM	420 CFM	420 CFM	4.0 kW	1	480 V	3	60 Hz	7.39 A	15.0 A	277 V	1	60 Hz	0.125 hp	1.10 A				
CV-3S-1	METALARE	FC090-C2	6"	LEVEL 3	RESTROOMS - SOUTH	300 CFM	100 CFM	300 CFM	300 CFM	3.0 kW	1	480 V	3	60 Hz	5.89 A	15.0 A	277 V	1	60 Hz	0.125 hp	1.10 A				
CV-4N-1	METALARE	FC090-C2	8"	LEVEL 4	RESTROOMS - NORTH	420 CFM	100 CFM	420 CFM	420 CFM	4.0 kW	1	480 V	3	60 Hz	7.39 A	15.0 A	277 V	1	60 Hz	0.125 hp	1.10 A				
CV-4S-1	METALARE	FC090-C2	6"	LEVEL 4	RESTROOMS - SOUTH	300 CFM	100 CFM	300 CFM	300 CFM	3.0 kW	1	480 V	3	60 Hz	5.89 A	15.0 A	277 V	1	60 Hz	0.125 hp	1.10 A				
CV-5N-1	METALARE	FC090-C2	8"	LEVEL 5	RESTROOMS - NORTH	420 CFM	100 CFM	420 CFM	420 CFM	4.0 kW	1	480 V	3	60 Hz	7.39 A	15.0 A	277 V	1	60 Hz	0.125 hp	1.10 A				
CV-5S-1	METALARE	FC090-C2	6"	LEVEL 5	RESTROOMS - SOUTH	300 CFM	100 CFM	300 CFM	300 CFM	3.0 kW	1	480 V	3	60 Hz	5.89 A	15.0 A	277 V	1	60 Hz	0.125 hp	1.10 A				

### FAN SCHEDULE

MARK	MANUF.	Model	SERVES	TYPE	DESCRIPTION	DISCHARGE POSITION	WHEEL ROTATION	DRIVE TYPE	LOCATION	WEIGHT	FAN PERFORMANCE				ELECTRICAL				ACCESSORIES	NOTES	
											AIRFLOW	E.S.P.	FAN BRAKE HP	FAN RPM	VOLT.	PH.	HZ.	MOTOR NOMINAL HP			
EF-1	Greenheck	USF-20	CORE NORTH RESTROOM/ JAN.	Utility Blower	Universal Single Width Fan	UB	CW	Belt	ROOF	342 lb	3050 CFM	1.00 in-wg	0.9 hp	1004	480 V	3	60 Hz	2.00 hp		342 lb	
EF-2	Greenheck	USF-20	CORE SOUTH RESTROOM/ JAN.	Utility Blower	Universal Single Width Fan	UB	CW	Belt	ROOF	340 lb	2350 CFM	1.00 in-wg	0.6 hp	902	480 V	3	60 Hz	1.50 hp		342 lb	
EPF-1	Greenheck	USF-36	ELEVATOR HOISTWAY PRESSURIZATION	Utility Blower	Universal Single Width Fan	TH	CW	Belt	ROOF	1755 lb	22500 CFM	1.50 in-wg	17.3 hp	971	480 V	3	60 Hz	25.00 hp		1755 lb	
SEF-1	Greenheck	USF-44	POST-FIRE SALVAGE SMOKE REMOVAL - NORTH	Utility Blower	Universal Single Width Fan	UB	CW	Belt	ROOF	2098 lb	26000 CFM	1.50 in-wg	14.4 hp	659	480 V	3	60 Hz	20.00 hp		2,048 lb	
SEF-2	Greenheck	USF-44	POST-FIRE SALVAGE SMOKE REMOVAL - SOUTH	Utility Blower	Universal Single Width Fan	UB	CW	Belt	ROOF	2098 lb	26000 CFM	1.50 in-wg	14.4 hp	659	480 V	3	60 Hz	20.00 hp		2,048 lb	
SPF-1	Greenheck	USF-18	STARWELL PRESSURIZATION - STAR 3	Utility Blower	Universal Single Width Fan	TH	CW	Belt	ROOF	336 lb	2750 CFM	1.00 in-wg	0.9 hp	1160	480 V	3	60 Hz	2.00 hp		336 lb	
SPF-2	Greenheck	USF-18	STARWELL PRESSURIZATION - STAR 2	Utility Blower	Universal Single Width Fan	TH	CW	Belt	ROOF	336 lb	2750 CFM	1.00 in-wg	0.9 hp	1160	480 V	3	60 Hz	2.00 hp		336 lb	
SPF-3	Greenheck	USF-18	STARWELL PRESSURIZATION - STAR 1	Utility Blower	Universal Single Width Fan	TH	CW	Belt	ROOF	336 lb	2750 CFM	1.00 in-wg	0.9 hp	1160	480 V	3	60 Hz	2.00 hp		336 lb	

### VAV ROOF TOP UNIT - COOLING ONLY

MARK	MANUF.	MODEL	NOMINAL CAP. (TONS)	EER	IEER	SUPPLY FAN PERFORMANCE				COOLING PERFORMANCE										OUTSIDE AIR DATA				ELECTRICAL DATA			
						SUPPLY AIRFLOW @ MAX COIL LOAD	E.S.P.	MOTOR QTY.	COMBINED SUPPLY FAN MOTOR BRAKE HP	AMBIENT AIR TEMP.	ENTERING AIR TEMP. DB	ENTERING AIR TEMP. WB	LEAVING AIR TEMP. DB	LEAVING AIR TEMP. WB	SENSIBLE COIL CAP												

