

Report By:
Aero Building Solution
11100 Belmont Avenue,
Franklin Park IL 60131.



Comfort. Under control.

For:
National TAB
1329 E. Kemper Road
Suite 4210
Cincinnati, OH 45246

Report: TAB REPORT
Function: Test, Adjust, & Balance
Date: 11/17/2022

PROJECT

Fresenius Kidney Care (Grand Chute, WI)

325 North Bluemound Dr.

Grand Chute, WI

Client

MEP Mechanical Services

Project Summary

The summary below provides a quick understanding of our scope of work and general testing procedures. Enclosed in the report is further detail about your building performance including recommendations, asset data, and pictures. Our focus is to work with the trades to remedy any issues or deficiencies during the actual field balancing and not after the balancing has occurred to achieve a positive environment and outcome. The level of success is determined by the availability of the trades, possible parts needed, or time constraints.

RTU's (Roof Top Units) w/ Diffusers

Each of the RTU's were measured at their terminal devices or via traverse to establish a total flow for that unit. Each RTU was adjusted to within tolerance of the engineer's design flow. Each outlet was then adjusted to within tolerance of the design flow. Outside air was measured by reading the intake air opening with a velocity grid and multiplying by the free area. The outside air damper was adjusted until the airflow was within the design requirements. Any equipment that fell outside of that tolerance is noted throughout the report.

General Exhaust Fans w/ Grilles

The general exhaust fans were measured by reading each air device with a flow hood. The total airflow for each fan is equivalent to the sum of these readings. Fan speed was then adjusted so that the airflow was within tolerance of design. Each terminal device was balanced to within tolerance of the design volume using the installed volume dampers. Any equipment that fell outside of this tolerance is noted throughout the report.

Final Building Tests

After completing the test and balance the final building pressure was measured. It was confirmed that the building pressure fell within acceptable tolerances and that the pressure measurement coincides with the actual and design net airflow. Any deviations from these standards are noted throughout the report.

DATE: 11/17/2022
CONTACT: Joe Levy
AUTHOR: Brian Smith

SYSTEM/UNIT: RTU-01

Unit Nameplate Information	
Manufacturer	Carrier
Model Number	48HCEE08J3A5A6W0M0
Serial Number	5221P93680
Location	Roof
Area Served	Med Space
Fan Rotation	CCW
Number of Fans	1

Air Test Data	
System Design CFM	2830 CFM
System Actual CFM	2943 CFM
Outlet Design CFM	2825 CFM
Outlet Actual CFM	2943 CFM
O/A Design CFM	425 CFM
O/A Actual CFM	434 CFM
R/A Design CFM	2405 CFM
R/A Actual CFM	2509 CFM

Test Data	
System Condition	100 % Return / Minimum OA
Filter SP In	-0.31 " w.c.
Fan SP In	-0.54 " w.c.
Fan SP Out	0.42 " w.c.
Design Total SP	1 " w.c.
Actual Total SP	0.96 " w.c.

Motor Nameplate Information	
Motor Manufacturer	Marathon
Motor Frame	56HZ
Motor Service Factor	1.15
Break Horse Power	3.7 BHP

Motor Performance	
Nameplate Voltage	230/460 V
TAB Volts T1	234 V
TAB Volts T2	231 V
TAB Volts T3	232 V
Nameplate Amperage	9.2/4.6 A
TAB Amps T1	6.1 A
TAB Amps T2	5.3 A
TAB Amp T3	6 A

Drive System	
Motor Rated RPM	1750 RPM
Motor Actual RPM	1757 RPM
Fan Design RPM	949 RPM
Fan Actual RPM	899 RPM
Drive Type	Belt
Fan Sheave Part Number	AFD84x1"
Motor Sheave Part Number	VP50x7/8"
Belt Part Number	AX49
Number Of Belts	1
Centerline	16.75 in.
Motor Adjustment - Together	8.5 in.
Motor Adjustment - Apart	3.5 in.

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RTU-01 GRD - Supply Outlet Summary

System/Unit	Area Served	Size	AK Factor	Design Velocity	Design CFM	Final Velocity	Final CFM
Outlet-01	Reception 106	8	Hood	Hood	210	Hood	206
Outlet-02	Med Records 107	6	Hood	Hood	50	Hood	53
Outlet-03	Waiting Room 101	10	Hood	Hood	280	Hood	289
Outlet-04	Waiting Room 101	10	Hood	Hood	280	Hood	301
Outlet-05	Waiting Room 101	8	Hood	Hood	170	Hood	182
Outlet-06	Waiting Room 101	8	Hood	Hood	170	Hood	186
Outlet-07	Vestibule 100	10	Hood	Hood	320	Hood	341
Outlet-08	Capped Waiting Room 103	10	Hood	Hood	230	Hood	248
Outlet-09	Capped Waiting Room 103	10	Hood	Hood	230	Hood	252
Outlet-10	Capped Waiting Room 103	8	Hood	Hood	135	Hood	139
Outlet-11	Capped Reception 157	8	Hood	Hood	185	Hood	182
Outlet-12	CAPD/Home Hemo 156	10	Hood	Hood	245	Hood	258
Outlet-13	CAPD Med Records 158	6	Hood	Hood	20	Hood	22
Outlet-14	CAPD/Home Hemo 155	10	Hood	Hood	300	Hood	284
Totals:	-	-	-	-	2825	-	2943

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SYSTEM/UNIT: RTU-02

Unit Nameplate Information	
Manufacturer	Carrier
Model Number	48HCEE12J2A5A6W0M0
Serial Number	5221P93662
Location	Roof
Area Served	Med Space
Fan Rotation	CCW
Number of Fans	1

Air Test Data	
System Design CFM	3830 CFM
System Actual CFM	3949 CFM
Outlet Design CFM	3830 CFM
Outlet Actual CFM	3949 CFM
O/A Design CFM	575 CFM
O/A Actual CFM	602 CFM
R/A Design CFM	3255 CFM
R/A Actual CFM	3347 CFM

Test Data	
System Condition	100 % Return / Minimum OA
Filter SP In	-0.37 " w.c.
Fan SP In	-0.66 " w.c.
Fan SP Out	0.41 " w.c.
Design Total SP	1 " w.c.
Actual Total SP	1.07 " w.c.

Motor Nameplate Information	
Motor Manufacturer	Marathon
Motor Frame	56HZ
Motor Service Factor	1.15
Break Horse Power	3.7 BHP

Motor Performance	
Nameplate Voltage	230/460 V
TAB Volts T1	234 V
TAB Volts T2	231 V
TAB Volts T3	237 V
Nameplate Amperage	9.2/4.6 A
TAB Amps T1	5.8 A
TAB Amps T2	5 A
TAB Amp T3	5.9 A

Drive System	
Motor Rated RPM	1750 RPM
Motor Actual RPM	1759 RPM
Fan Design RPM	1068 RPM
Fan Actual RPM	996 RPM
Drive Type	Belt
Fan Sheave Part Number	AFD74x1"
Motor Sheave Part Number	VP50x7/8"
Belt Part Number	1
Number Of Belts	AX49
Centerline	17 in.
Motor Adjustment - Together	8.5 in.
Motor Adjustment - Apart	3.5 in.

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RTU-02 GRD - Supply Outlet Summary

System/Unit	Area Served	Size	AK Factor	Design Velocity	Design CFM	Final Velocity	Final CFM
Outlet-01	Patient Support Island 114	8	Hood	Hood	230	Hood	219
Outlet-02	Patient Support Island 114	8	Hood	Hood	230	Hood	245
Outlet-03	Patient Support Island 114	8	Hood	Hood	265	Hood	241
Outlet-04	Patient Support Island 114	8	Hood	Hood	200	Hood	217
Outlet-05	Patient Support Island 114	8	Hood	Hood	200	Hood	208
Outlet-06	Patient Support Island 114	8	Hood	Hood	200	Hood	204
Outlet-07	Patient Support Island 114	8	Hood	Hood	200	Hood	215
Outlet-08	Patient Support Island 115	8	Hood	Hood	200	Hood	210
Outlet-09	Patient Support Island 115	8	Hood	Hood	200	Hood	201
Outlet-10	Patient Support Island 115	8	Hood	Hood	200	Hood	215
Outlet-11	Patient Support Island 115	8	Hood	Hood	200	Hood	193
Outlet-12	Patient Support Island 115	8	Hood	Hood	200	Hood	197
Outlet-13	Patient Support Island 115	8	Hood	Hood	200	Hood	203
Outlet-14	Patient Support Island 115	8	Hood	Hood	200	Hood	218
Outlet-15	Patient Support Island 115	8	Hood	Hood	200	Hood	210
Outlet-16	Transitional Care Suite 118	8	Hood	Hood	150	Hood	164
Outlet-17	Transitional Care Suite 118	8	Hood	Hood	150	Hood	161
Outlet-18	Transitional Care Suite 118	8	Hood	Hood	145	Hood	153
Outlet-19	Transitional Care Suite 118	8	Hood	Hood	130	Hood	136
Outlet-20	Transitional Care Suite 118	8	Hood	Hood	130	Hood	139
Totals:	-	-	-	-	3830	-	3949

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SYSTEM/UNIT: RTU-03

Unit Nameplate Information	
Manufacturer	Carrier
Model Number	48HCEE07J2A5A6W0M0
Serial Number	5121P93416
Location	Roof
Area Served	Med Space
Fan Rotation	CCW
Number of Fans	1

Air Test Data	
System Design CFM	2100 CFM
System Actual CFM	2124 CFM
Outlet Design CFM	2100 CFM
Outlet Actual CFM	2124 CFM
O/A Design CFM	350 CFM
O/A Actual CFM	367 CFM
R/A Design CFM	1750 CFM
R/A Actual CFM	1757 CFM

Test Data	
System Condition	100 % Return / Minimum OA
Filter SP In	-0.31 " w.c.
Fan SP In	-0.65 " w.c.
Fan SP Out	0.32 " w.c.
Design Total SP	1 " w.c.
Actual Total SP	0.97 " w.c.

Motor Nameplate Information	
Motor Manufacturer	Marathon
Motor Frame	56HZ
Motor Service Factor	1.15
Break Horse Power	2.9 BHP

Motor Performance	
Nameplate Voltage	208/230 V
TAB Volts T1	235 V
TAB Volts T2	231 V
TAB Volts T3	233 V
Nameplate Amperage	8.1-7.6/3.8 A
TAB Amps T1	5 A
TAB Amps T2	4.4 A
TAB Amp T3	4.8 A

Drive System	
Motor Rated RPM	1735 RPM
Motor Actual RPM	1738 RPM
Fan Design RPM	835 RPM
Fan Actual RPM	822 RPM
Drive Type	Belt
Fan Sheave Part Number	AK84x1"
Motor Sheave Part Number	VP50x7/8"
Belt Part Number	AX52
Number Of Belts	1
Centerline	17.5 in.
Motor Adjustment - Together	2 in.
Motor Adjustment - Apart	2 in.

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RTU-03 GRD - Supply Outlet Summary

System/Unit	Area Served	Size	AK Factor	Design Velocity	Design CFM	Final Velocity	Final CFM
Outlet-01	Patient Support Island 114	8	Hood	Hood	130	Hood	130
Outlet-02	Patient Support Island 114	8	Hood	Hood	130	Hood	135
Outlet-03	Patient Support Island 114	8	Hood	Hood	130	Hood	142
Outlet-04	Patient Support Island 114	8	Hood	Hood	130	Hood	135
Outlet-05	Patient Support Island 114	8	Hood	Hood	200	Hood	192
Outlet-06	Clean Supplies 111	6	Hood	Hood	50	Hood	52
Outlet-07	Med Prep 113	8	Hood	Hood	140	Hood	143
Outlet-08	Patient Support Island 115	8	Hood	Hood	130	Hood	137
Outlet-09	Patient Support Island 115	8	Hood	Hood	130	Hood	142
Outlet-10	Patient Support Island 115	8	Hood	Hood	130	Hood	140
Outlet-11	Patient Support Island 115	8	Hood	Hood	215	Hood	197
Outlet-12	Patient Support Island 116	8	Hood	Hood	200	Hood	189
Outlet-13	Separation Room 117	8	Hood	Hood	125	Hood	129
Outlet-14	Pureflow Storage 120	6	Hood	Hood	40	Hood	43
Outlet-15	Staff Corridor	8	Hood	Hood	130	Hood	117
Outlet-16	Lab Prep 119	6	Hood	Hood	90	Hood	101
Totals:	-	-	-	-	2100	-	2124

DATE: 11/17/2022
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SYSTEM/UNIT: RTU-04

Unit Nameplate Information	
Manufacturer	Carrier
Model Number	48HCEE07J2A5A6W0M0
Serial Number	5121P93415
Location	Roof
Area Served	Mech/Storage
Fan Rotation	CCW
Number of Fans	1

Air Test Data	
System Design CFM	2400 CFM
System Actual CFM	2534 CFM
Outlet Design CFM	2400 CFM
Outlet Actual CFM	2534 CFM
O/A Design CFM	360 CFM
O/A Actual CFM	378 CFM
R/A Design CFM	2040 CFM
R/A Actual CFM	2156 CFM

Test Data	
System Condition	100 % Return / Minimum OA
Filter SP In	-0.21 " w.c.
Fan SP In	-0.47 " w.c.
Fan SP Out	0.29 " w.c.
Design Total SP	1 " w.c.
Actual Total SP	0.76 " w.c.

Motor Nameplate Information	
Motor Manufacturer	Marathon
Motor Frame	56HZ
Motor Service Factor	1.15
Break Horse Power	2.9 BHP

Motor Performance	
Nameplate Voltage	208/230 V
TAB Volts T1	232 V
TAB Volts T2	230 V
TAB Volts T3	231 V
Nameplate Amperage	8.1-7.6/3.8 A
TAB Amps T1	4.9 A
TAB Amps T2	4.5 A
TAB Amp T3	4.9 A

Drive System	
Motor Rated RPM	1735 RPM
Motor Actual RPM	1737 RPM
Fan Design RPM	862 RPM
Fan Actual RPM	831 RPM
Drive Type	Belt
Fan Sheave Part Number	AK84x1"
Motor Sheave Part Number	VP50x7/8"
Belt Part Number	AX52
Number Of Belts	1
Centerline	17.5 in.
Motor Adjustment - Together	2 in.
Motor Adjustment - Apart	2 in.

RTU-04 GRD - Supply Outlet Summary

System/Unit	Area Served	Size	AK Factor	Design Velocity	Design CFM	Final Velocity	Final CFM
Outlet-01	Mechanical/Storage 122	15x3.5	.36	875	315	899	324
Outlet-02	Mechanical/Storage 122	15x3.5	.36	875	315	904	325
Outlet-03	Mechanical/Storage 122	15x3.5	.36	875	315	912	328
Outlet-04	Mechanical/Storage 122	15x3.5	.36	1111	400	1196	431
Outlet-05	SDS/Water Treatment 123	11.25x5.25	.41	731	300	793	325
Outlet-06	SDS/Water Treatment 123	11.25x5.25	.41	731	300	801	328
Outlet-07	SDS/Water Treatment 123	11.25x5.25	.41	731	300	783	321
Outlet-08	Tech Repair/Supervisor 121	8	Hood	Hood	155	Hood	152
Totals:	-	-	-	-	2400	-	2534

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SYSTEM/UNIT: RTU-05

Unit Nameplate Information	
Manufacturer	Carrier
Model Number	48HCEE07J2A5A6W0M0
Serial Number	5121P93414
Location	Roof
Area Served	Med Space
Fan Rotation	CCW
Number of Fans	1

Air Test Data	
System Design CFM	2500 CFM
System Actual CFM	2381 CFM
Outlet Design CFM	2420 CFM
Outlet Actual CFM	2381 CFM
O/A Design CFM	445 CFM
O/A Actual CFM	431 CFM
R/A Design CFM	1975 CFM
R/A Actual CFM	1950 CFM

Test Data	
System Condition	100 % Return / Minimum OA
Filter SP In	-0.21 " w.c.
Fan SP In	-0.58 " w.c.
Fan SP Out	0.39 " w.c.
Design Total SP	1 " w.c.
Actual Total SP	0.97 " w.c.

Motor Nameplate Information	
Motor Manufacturer	Marathon
Motor Frame	56HZ
Motor Service Factor	1.15
Break Horse Power	2.9 BHP

Motor Performance	
Nameplate Voltage	208-230/460 V
TAB Volts T1	233 V
TAB Volts T2	231 V
TAB Volts T3	234 V
Nameplate Amperage	8.1-7.6/3.8 A
TAB Amps T1	4.7 A
TAB Amps T2	4.3 A
TAB Amp T3	4.5 A

Drive System	
Motor Rated RPM	1735 RPM
Motor Actual RPM	1726 RPM
Fan Design RPM	876 RPM
Fan Actual RPM	812 RPM
Drive Type	Belt
Fan Sheave Part Number	AK84x1"
Motor Sheave Part Number	VP50x7/8"
Belt Part Number	AX52
Number Of Belts	1
Centerline	17.5 in.
Motor Adjustment - Together	2 in.
Motor Adjustment - Apart	2 in.

DATE: 11/17/2022
CONTACT: Joe Levy
AUTHOR: Brian Smith

RTU-05 GRD - Supply Outlet Summary

System/Unit	Area Served	Size	AK Factor	Design Velocity	Design CFM	Final Velocity	Final CFM
Outlet-01	CAPD Nurse 159	8	Hood	Hood	210	Hood	197
Outlet-02	CAPD Nurse 159	8	Hood	Hood	210	Hood	189
Outlet-03	Lab Prep 141	6	Hood	Hood	75	Hood	81
Outlet-04	Med Prep 142	6	Hood	Hood	125	Hood	137
Outlet-05	Patient Consult 143	6	Hood	Hood	85	Hood	87
Outlet-06	Corridor	8	Hood	Hood	100	Hood	109
Outlet-07	Social Worker 138	6	Hood	Hood	75	Hood	70
Outlet-08	CAPD Storage 140	6	Hood	Hood	60	Hood	65
Outlet-09	Dietitian 137	6	Hood	Hood	75	Hood	68
Outlet-10	Corridor	6	Hood	Hood	100	Hood	95
Outlet-11	CAPD/Home Hemo 144	8	Hood	Hood	135	Hood	142
Outlet-12	CAPD/Home Hemo 145	8	Hood	Hood	135	Hood	141
Outlet-13	Staff Lounge 127	8	Hood	Hood	200	Hood	197
Outlet-14	Conference Room 136	8	Hood	Hood	120	Hood	131
Outlet-15	Conference Room 136	8	Hood	Hood	120	Hood	109
Outlet-16	Clinic Manager 134	6	Hood	Hood	80	Hood	72
Outlet-17	Charge Nurse 133	6	Hood	Hood	80	Hood	75
Outlet-18	Staff Lounge 127	8	Hood	Hood	200	Hood	182
Outlet-19	Doctor/Exam 146	6	Hood	Hood	105	Hood	107
Outlet-20	Corridor	8	Hood	Hood	50	Hood	53
Outlet-21	Corridor	8	Hood	Hood	80	Hood	74
Totals:	-	-	-	-	2420	-	2381

DATE: 11/17/2022
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SYSTEM/UNIT: RTU-06

Unit Nameplate Information	
Manufacturer	Carrier
Model Number	48GCEN06J3A5A6W0F0
Serial Number	5121C08838
Location	Roof
Area Served	Med Space
Fan Rotation	CW
Number of Fans	1

Air Test Data	
System Design CFM	2100 CFM
System Actual CFM	2030 CFM
Outlet Design CFM	2100 CFM
Outlet Actual CFM	2030 CFM
O/A Design CFM	315 CFM
O/A Actual CFM	338 CFM
R/A Design CFM	1785 CFM
R/A Actual CFM	1692 CFM

Test Data	
System Condition	100 % Return / Minimum OA
Filter SP In	-0.19 " w.c.
Fan SP In	-0.39 " w.c.
Fan SP Out	0.44 " w.c.
Design Total SP	1 " w.c.
Actual Total SP	0.83 " w.c.

Motor Nameplate Information	
Motor Manufacturer	Not Listed
Motor Horsepower	Not Listed HP
Motor Frame	Not Listed
Motor Service Factor	Not Listed

Motor Performance	
Nameplate Voltage	208/230 V
TAB Volts T1	234 V
TAB Volts T2	236 V
TAB Volts T3	231 V
Nameplate Amperage	6.4 A
TAB Amps T1	4.8 A
TAB Amps T2	4.3 A
TAB Amp T3	4.6 A

Drive System	
Motor Rated RPM	Not Listed
Motor Actual RPM	Not Listed
Fan Design RPM	2394 RPM
Fan Actual RPM	2279 RPM
Drive Type	Direct Drive

RTU-06 GRD - Supply Outlet Summary

System/Unit	Area Served	Size	AK Factor	Design Velocity	Design CFM	Final Velocity	Final CFM
Outlet-01	Patient Prep 154	6	Hood	Hood	60	Hood	66
Outlet-02	Patient Corridor 135	6	Hood	Hood	100	Hood	108
Outlet-03	CAPD/Home Hemo 153	10	Hood	Hood	330	Hood	301
Outlet-04	CAPD/Home Hemo 152	10	Hood	Hood	330	Hood	313
Outlet-05	CAPD/Home Hemo 151	10	Hood	Hood	330	Hood	307
Outlet-06	CAPD/Home Hemo 150	10	Hood	Hood	330	Hood	317
Outlet-07	HT MGR/HT Charge Nurse 149	8	Hood	Hood	130	Hood	142
Outlet-08	Admin Secretary 148	10	Hood	Hood	250	Hood	247
Outlet-09	Director of Operations 147	10	Hood	Hood	240	Hood	229
Totals:	-	-	-	-	2100	-	2030

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SYSTEM/UNIT: EF-1

Unit Nameplate Information	
Manufacturer	Greenheck
Fan Model Number	CUE-080-VG-1-19-X
Fan Serial Number	19226546
Fan Type	Upblast
Fan Rotation	CCW
Location	Roof
Number of Fans	1

Fan Performance	
System Operating Hz	Speed Setting 10
Design Fan CFM	280 CFM
Actual Fan CFM	269 CFM
Design Outlet CFM	280 CFM
Actual Outlet CFM	269 CFM

Motor Nameplate Information	
Motor Manufacturer	Vari-Green
Motor Horsepower	1/10 HP

Motor Performance	
Nameplate Voltage	115-208/230 V
TAB Volts T1	121 V
Nameplate Amperage	1.38/.84-.73 A
TAB Amps T1	0.81 A

Drive System	
Motor Rated RPM	300-1750 RPM
Motor Actual RPM	1750 RPM
Fan Design RPM	Not Listed
Fan Actual RPM	1750 RPM
Drive Type	Direct Drive

EF-1 GRD - Exhaust Inlet Summary

System/Unit	Area Served	Size	AK Factor	Design Velocity	Design CFM	Final Velocity	Final CFM
Inlet-01	Patient Toilet 139	6	Hood	Hood	80	Hood	82
Inlet-02	Women's Visitor Toilet 105	6	Hood	Hood	100	Hood	92
Inlet-03	Men's Visitor Toilet 104	6	Hood	Hood	100	Hood	95
Totals:	-	-	-	-	280	-	269

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SYSTEM/UNIT: EF-2

Unit Nameplate Information	
Manufacturer	Greenheck
Fan Model Number	CUE-080-VG-1-19-X
Fan Serial Number	19226545
Fan Rotation	CCW
Location	Roof
Number of Fans	1

Fan Performance	
System Operating Hz	Speed Setting 8 Hz
Design Fan CFM	225 CFM
Actual Fan CFM	245 CFM
Design Outlet CFM	225 CFM
Actual Outlet CFM	245 CFM

Motor Nameplate Information	
Motor Manufacturer	Vari-Green
Motor Horsepower	1/10 HP

Motor Performance	
Nameplate Voltage	115-208/230 V
TAB Volts T1	120 V
Nameplate Amperage	1.38-.84/.73 A
TAB Amps T1	0.69 A

Drive System	
Motor Rated RPM	300-1750 RPM
Motor Actual RPM	1402 RPM
Fan Design RPM	Not Listed
Fan Actual RPM	1402 RPM
Drive Type	Direct Drive

EF-2 GRD - Exhaust Inlet Summary

System/Unit	Area Served	Size	AK Factor	Design Velocity	Design CFM	Final Velocity	Final CFM
Inlet-01	Med Waste 124	8	Hood	Hood	135	Hood	148
Inlet-02	Janitor 128	6	Hood	Hood	90	Hood	97
Totals:	-	-	-	-	225	-	245

DATE: 11/17/2022
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AUTHOR: Brian Smith

SYSTEM/UNIT: EF-3

Unit Nameplate Information	
Manufacturer	Greenheck
Fan Model Number	CUE-090-VG-1-19-X
Fan Serial Number	19226547
Fan Rotation	CCW
Location	Roof
Number of Fans	1

Fan Performance	
System Operating Hz	Speed Setting 10
Design Fan CFM	485 CFM
Actual Fan CFM	488 CFM
Design Outlet CFM	485 CFM
Actual Outlet CFM	488 CFM

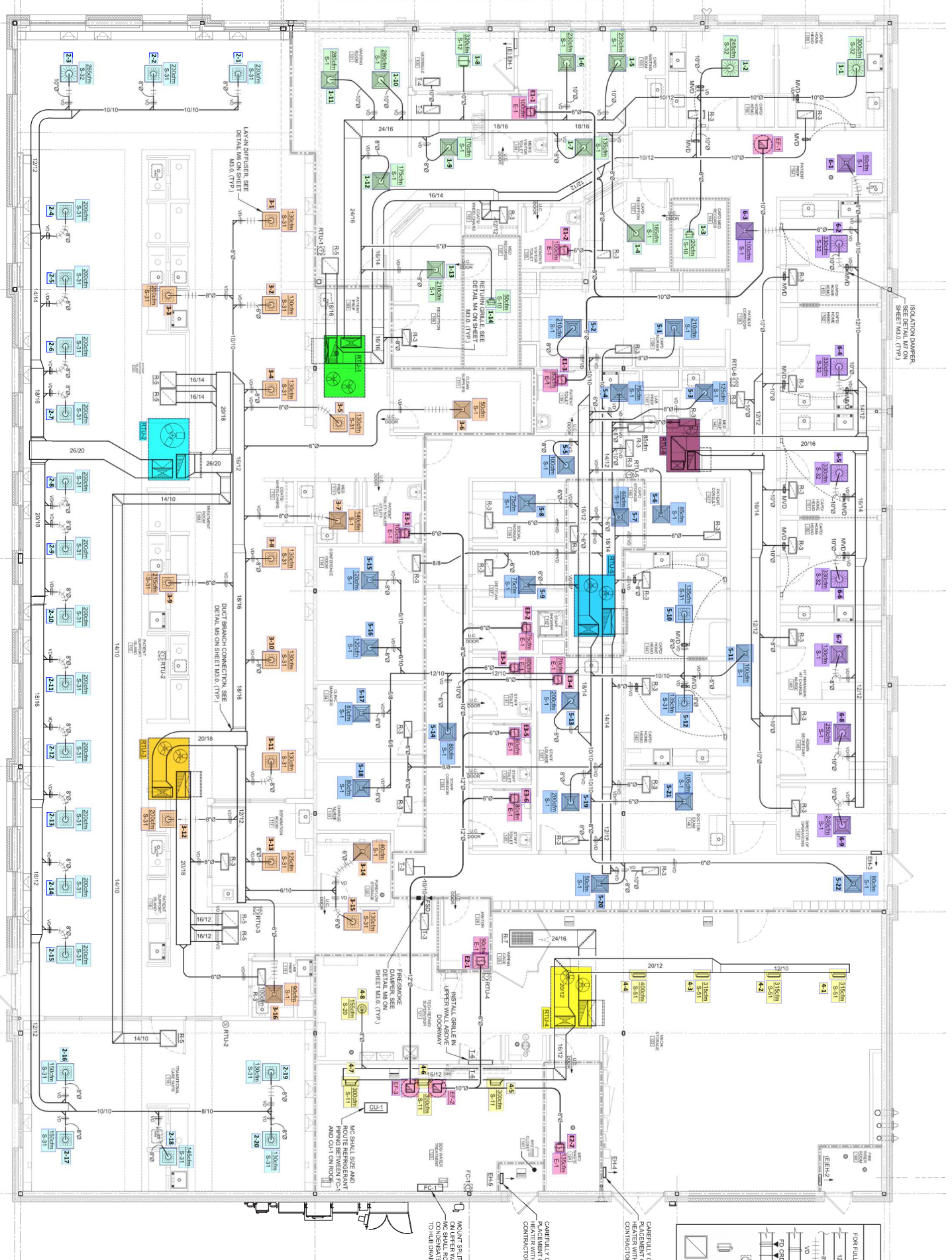
Motor Nameplate Information	
Motor Manufacturer	Vari-Grren
Motor Horsepower	1/10 HP

Motor Performance	
Nameplate Voltage	115-208/230 V
TAB Volts T1	122 V
Nameplate Amperage	1.38-.84/.73 A
TAB Amps T1	0.99 A

Drive System	
Motor Rated RPM	300-1750 RPM
Motor Actual RPM	1750 RPM
Fan Design RPM	Not Listed
Fan Actual RPM	1750 RPM
Drive Type	Direct Drive

EF-3 GRD - Exhaust Inlet Summary

System/Unit	Area Served	Size	AK Factor	Design Velocity	Design CFM	Final Velocity	Final CFM
Inlet-01	Patient Toilet/Soiled Utility 112	6	Hood	Hood	100	Hood	98
Inlet-02	Staff Shower 132	6	Hood	Hood	75	Hood	79
Inlet-03	Staff Toilet 131	6	Hood	Hood	80	Hood	84
Inlet-04	Staff Lounge 127	6	Hood	Hood	70	Hood	76
Inlet-05	Staff Toilet 130	6	Hood	Hood	80	Hood	74
Inlet-06	Staff Toilet 129	6	Hood	Hood	80	Hood	77
Totals:	-	-	-	-	485	-	488



ISOLATION DAMPER - SEE DETAIL W/ ON SHEET M.O. (TYP)

LIV. AIR DIFFUSER SEE DETAIL W/ ON SHEET M.O. (TYP)

RETURN GRILLE SEE DETAIL W/ ON SHEET M.O. (TYP)

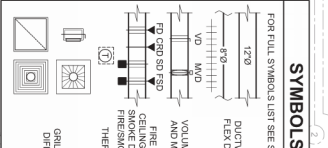
FRESH AIR INTAKE SEE DETAIL W/ ON SHEET M.O. (TYP)

MC SHALL SIZE AND ROUTE REGENERATIVE AND OUTLINE ROOM

ON UPPER WALL AREA, CONDENSATE FROM FC-1 TO DRAIN IN ROOM

CAREFULLY COORDINATE MOUNTING WITH PLUMBING CONTRACTOR

CAREFULLY COORDINATE PLACEMENT OF WALL CONTRIBUTOR



LIFE SAFETY DAMPER NOTE

DAMPERS SYSTEMS WHERE THE CONTRACTOR INSTALLED A RATED W/ CONTAIN ANY FLEX DUCT CONNECTORS OR FLEXIBLE DUCTWORK