

**Report By:**

National TAB  
1329 E. KEMPER ROAD  
SUITE 4210  
CINCINNATI, OH 45246



**Report: TAB Report**  
**Function: Test, Adjust, & Balance**  
**Date: 03/12/2025**  
**Completed By: National TAB**

**PROJECT**  
**LL Bean (Sarasota, FL)**

111 North Cattleman Rd

Sarasota, FL 34243

**Client**

Air Temp Inc  
52 Riley Road #260  
Celebration, FL 34747

# National TAB

Project: LL Bean (Sarasota, FL)

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### AIR BALANCE SCHEDULE

UNIT	AREA SERVED	HVAC SUPPLY		HVAC RETURN		HVAC OUTDOOR		OA %		GENERAL EXH.					
		DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL				
RTU-1	FRONT RETAIL	6000	6052	4500	4542	1500	1510	25.0%	25.0%						
RTU-2	MIDDLE RETAIL	6000	6120	4500	4654	1500	1466	25.0%	24.0%						
RTU-3	BACK RETAIL	6000	6087	4500	4575	1500	1512	25.0%	24.8%						
RTU-4	BACK OF HOUSE	4000	4111	3400	3501	600	610	15.0%	14.8%						
EF 1	RESTROOM									350	351				
<b>TOTALS</b>		22000	22370	16900	17272	5100	5098	90%	89%	350	351				

#### NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	5450	5449
TOTAL EXHAUST	350	351
<b>NET AIRFLOW</b>	<b>5100</b>	<b>5098</b>

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H2O)
FRONT	0.014
SIDE	0.015
REAR	0.013
<b>AVERAGE</b>	<b>0.014</b>

#### FINAL CHECKS

- ACTUAL NET AIRFLOW COINCIDES WITH DESIGN: ✓

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- MEASURED PRESSURES COINCIDES WITH ACTUAL NET AIRFLOW: ✓

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- PRESSURE FALLS WITHIN IMC TOLERANCE OF +/-0.02" W.C. ✓

NOTES:

# National TAB

Project: LL Bean (Sarasota, FL)

System/Unit: AHU/RTU



Asset: RTU-1

AREA:Front Retail

Unit Data		
	Design	Actual
MFG	NA	CARRIER
Serial Num	-	4294P15410
Model Num	NA	50GC-N17A2Q6A3U9N0
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	4
OA Filter Size 1	-	16"X25"
Num PreFilter 1	-	6
PreFilter Size 1	-	20"X25"X4"

Test Data		
	Design	Actual
SF CFM	6000	6052
RA CFM	4500	4542
OA CFM	1500	1510
RL Voltage	460	479/482/482
RL Amperage	-	.54/.71/.92, .71/.75/.57
OA Damper Position	-	48%
Brake Horse Power	2.2	2.2

Motor Data		
	Design	Actual
Motor MFG	-	ZHONGSHAN BOARD-OCEAN MOTOR COMPANY
Frame	-	10P
Horsepower	3.0	2.4
Motor Rpm	-	1800
Phase	3	3
Rated Voltage	460	460
Rated Amperage	-	3.0
Service Factor	-	NL

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.061"
Fan Suction SP	-	-0.385"
Fan Discharge SP	-	0.107
Total ESP	0.50	0.168"
Fan Total SP	0.81	0.492"
Cooling Coil P.D.	-	0.324"

Completed By: Kristopher Passley on 03/03/2025

Notes:  
FAN SETPOINT 880RPM

Written By: Kristopher Passley on 03/03/2025

## Unit Data - PHOTO LOG



02/27/2025



02/27/2025

## Motor Data - PHOTO LOG



02/27/2025

# National TAB

Project: LL Bean (Sarasota, FL)

## AHU/RTU



### Diffuser Supply (GRD)

#### RTU-1/Front Retail

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
RTU-1-SGRD1	101	SG-2	22X10	500	914	510	102.0
RTU-1-SGRD2	101	SG-2	22X10	500	940	524	104.8
RTU-1-SGRD3	101	SG-2	22X10	500	702	514	102.8
RTU-1-SGRD4	101	SG-2	22X10	500	707	502	100.4
RTU-1-SGRD5	101	SG-2	22X10	500	371	531	106.2
RTU-1-SGRD6	101	SG-2	22X10	500	333	507	101.4
RTU-1-SGRD7	101	SG-2	22X10	500	276	505	101.0
RTU-1-SGRD8	101	SG-2	22X10	500	229	498	99.6
RTU-1-SGRD9	101	SG-2	22X10	500	344	496	99.2
RTU-1-SGRD10	101	SG-2	22X10	500	327	485	97.0
RTU-1-SGRD11	101	SG-2	22X10	500	1036	490	98.0
RTU-1-SGRD12	101	SG-2	22X10	500	1088	490	98.0
Total				6000	7267	6052	100.87%

Completed By: Kristopher Passley on 03/03/2025

# National TAB

Project: LL Bean (Sarasota, FL)  
System/Unit: AHU/RTU



Asset: RTU-2

AREA: Middle Retail

Unit Data		
	Design	Actual
MFG	NA	CARRIER
Serial Num	-	4924P15409
Model Num	NA	50GC - N17A2Q6A3U9N0
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	4
OA Filter Size 1	-	16"X25"
Num PreFilter 1	-	6
PreFilter Size 1	-	20"X25"X4"

Test Data		
	Design	Actual
SF CFM	6000	6120
RA CFM	4500	4654
OA CFM	1500	1466
RL Voltage	460	479/483/483
RL Amperage	-	.52/.63/.69, .56/.61/.59
OA Damper Position	-	47%
Brake Horse Power	2.2	2.2

Motor Data		
	Design	Actual
Motor MFG	-	ZHONGSHAN BOARD-OCEAN MOTOR CO.
Frame	-	10P
Horsepower	3.0	2.4
Motor Rpm	-	1800
Phase	3	3
Rated Voltage	460	460
Rated Amperage	-	3.0
Service Factor	-	NL

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.090"
Fan Suction SP	-	-0.474"
Fan Discharge SP	-	0.05"
Total ESP	0.50	0.14"
Fan Total SP	0.81	0.524"
Cooling Coil P.D.	-	0.384"

Completed By: Kristopher Passley on 03/03/2025

Notes:  
FAN SPEED SETPOINT 900 RPM

Written By: Kristopher Passley on 03/03/2025

### Unit Data - PHOTO LOG



02/27/2025

02/27/2025

# National TAB

Project: LL Bean (Sarasota, FL)

## AHU/RTU



### Diffuser Supply (GRD)

#### RTU-2/Middle Retail

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
RTU-2-SGRD1	101	SG-2	22X10	600	76	618	103.0
RTU-2-SGRD2	101	SG-2	22X10	600	1039	607	101.2
RTU-2-SGRD3	101	SG-2	22X10	600	941	612	102.0
RTU-2-SGRD4	101	SG-2	22X10	600	920	614	102.3
RTU-2-SGRD5	101	SG-2	22X10	600	407	593	98.8
RTU-2-SGRD6	101	SG-2	22X10	600	412	591	98.5
RTU-2-SGRD7	101	SG-2	22X10	600	697	634	105.7
RTU-2-SGRD8	101	SG-2	22X10	600	642	635	105.8
RTU-2-SGRD9	101	SG-2	22X10	600	872	582	97.0
RTU-2-SGRD10	101	SG-2	22X10	600	858	634	105.7
Total				6000	6864	6120	102%

Completed By: Kristopher Passley on 03/03/2025

# National TAB

Project: LL Bean (Sarasota, FL)

System/Unit: AHU/RTU



Asset: RTU-3

AREA:Back Retail

Unit Data		
	Design	Actual
MFG	NA	CARRIER
Serial Num	-	4924P15409
Model Num	NA	50GC - N17A2Q6A3U9N0
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	4
OA Filter Size 1	-	16"X25"
Num PreFilter 1	-	6
PreFilter Size 1	-	20"X25"X4"

Test Data		
	Design	Actual
SF CFM	6000	6087
RA CFM	4500	4575
OA CFM	1500	1512
RL Voltage	460	477/482/483
RL Amperage	-	0.61/.52/.82, .51/.55/.89
OA Damper Position	-	47%
Brake Horse Power	2.2	2.2

Motor Data		
	Design	Actual
Motor MFG	-	ZHONGSHAN BOARD-OCEAN MOTOR CO.
Frame	-	10P
Horsepower	3.0	2.4
Motor Rpm	-	1440
Phase	3	3
Rated Voltage	460	460
Rated Amperage	-	3.0
Service Factor	-	NL

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.078"
Fan Suction SP	-	-0.394"
Fan Discharge SP	-	0.148"
Total ESP	0.50	0.226"
Fan Total SP	0.81	0.542"
Cooling Coil P.D.	-	0.316"

Completed By: Kristopher Passley on 03/03/2025

# National TAB

Project: LL Bean (Sarasota, FL)

## AHU/RTU



### Diffuser Supply (GRD)

#### RTU-3/Back Retail

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
RTU-3-SGRD1	111	SG-3	8X8	200	318	199	99.5
RTU-3-SGRD2	111	SG-3	8X8	200	315	201	100.5
RTU-3-SGRD3	101	SG-2	22X10	450	832	456	101.3
RTU-3-SGRD4	101	SG-2	22X10	450	827	454	100.9
RTU-3-SGRD5	101	SG-2	22X10	450	833	457	101.6
RTU-3-SGRD6	101	SG-2	22X10	450	841	461	102.4
RTU-3-SGRD7	101	SG-2	22X10	450	824	452	100.4
RTU-3-SGRD8	101	SG-2	22X10	450	831	455	101.1
RTU-3-SGRD9	101	SG-2	22X10	450	853	468	104.0
RTU-3-SGRD10	101	SG-2	22X10	450	841	461	102.4
RTU-3-SGRD11	101	SG-2	22X10	450	837	459	102.0
RTU-3-SGRD12	101	SG-2	22X10	450	840	460	102.2
RTU-3-SGRD13	101	SG-2	22X10	450	834	457	101.6
RTU-3-SGRD14	101	SG-2	22X10	450	822	451	100.2
RTU-3-SGRD15	102	SD-2	8	200	324	196	98.0
Total				6000	10972	6087	101.45%

Completed By: Kristopher Passley on 03/03/2025

# National TAB

Project: LL Bean (Sarasota, FL)

System/Unit: AHU/RTU



Asset: RTU-4

AREA:BOH

Unit Data		
	Design	Actual
MFG	NA	CARRIER
Serial Num	-	4624P67243
Model Num	NA	50GC - M12A2Q6A3U9R0
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	19.5"X35"
Num PreFilter 1	-	4
PreFilter Size 1	-	16"X20"X4"

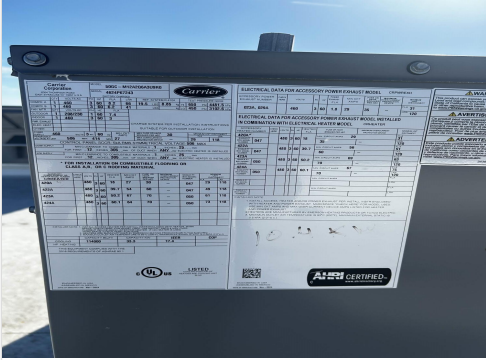
Test Data		
	Design	Actual
SF CFM	4000	4111
RA CFM	3400	3501
OA CFM	600	610
RL Voltage	460	481/484/484
RL Amperage	-	2.0/2.0/2.4
OA Damper Position	-	23%
Brake Horse Power	2.2	2.2

Motor Data		
	Design	Actual
Motor MFG	-	ZHONGSHAN BOARD-OCEAN MOTOR CO
Frame	-	10P
Horsepower	3.0	2.4
Motor Rpm	-	1800
Phase	3	3
Rated Voltage	460	460
Rated Amperage	-	3.0

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.473"
Fan Suction SP	-	-1.07"
Fan Discharge SP	-	0.271"
Total ESP	0.50	0.744"
Fan Total SP	1.01	1.341"
Cooling Coil P.D.	-	0.202"

Completed By: Kristopher Passley on 03/03/2025

## Unit Data - PHOTO LOG



03/03/2025



03/03/2025

## Motor Data - PHOTO LOG



03/03/2025

# National TAB

Project: LL Bean (Sarasota, FL)

## AHU/RTU



### Diffuser Supply (GRD)

#### RTU-4/BOH

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
RTU-4-SGRD1	109	SG-2	22X10	370	421	370	100.0
RTU-4-SGRD2	109	SG-2	22X10	370	398	349	94.3
RTU-4-SGRD3	109	SG-2	22X10	370	438	383	103.5
RTU-4-SGRD4	109	SG-2	22X10	370	411	361	97.6
RTU-4-SGRD5	109	SG-2	22X10	370	430	377	101.9
RTU-4-SGRD6	109	SG-2	22X10	370	441	386	104.3
RTU-4-SGRD7	109	SG-2	22X10	370	446	390	105.4
RTU-4-SGRD8	109	SG-2	22X10	370	410	360	97.3
RTU-4-SGRD9	109	SG-2	22X10	370	338	341	92.2
RTU-4-SGRD10	109	SG-2	22X10	370	408	358	96.8
RTU-4-SGRD11	117	SD-1	6	100	62	98	98.0
RTU-4-SGRD12	116	SD-1	6	100	68	97	97.0
RTU-4-SGRD13	116	SD-1	6	100	63	96	96.0
RTU-4-SGRD14	103	SD-1	6	150	77	145	96.7
Total				4150	4411	4111	99.06%

Completed By: Kristopher Passley on 03/03/2025

# National TAB

Project: LL Bean (Sarasota, FL)

## System/Unit: FAN - Exhaust



Asset: EF-1

AREA: Restroom/Mop Room

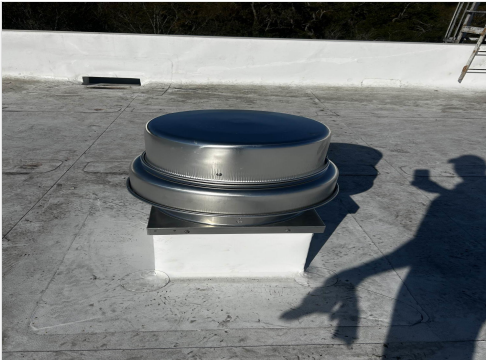
Unit Data		
	Design	Actual
MFG	NA	GREENHECK
Model Num	NA	G-098-4-VG-1-19-X
Serial Num	-	26096766 25B
Type	DOWNBLAST	DOWNBLAST

Test Data		
	Design	Actual
CFM	350	351
RL Voltage	120	121
RL Amperage	-	0.79
Discharge ESP	-	0.101"
Total ESP	0.75	0.101"

Motor Data		
	Design	Actual
Motor MFG	-	VARI-GREEN
Horsepower	0.25	0.25
Motor Rpm	-	1750
Phase	1	1
Voltage (rated)	120	115/208-230/277
Amperage (rated)	-	2.85/1.7/1.5
Service Factor	-	1.25

Completed By: Kristopher Passley on 03/12/2025

### Unit Data - PHOTO LOG



03/03/2025



03/03/2025



03/03/2025

## Motor Data - PHOTO LOG



03/03/2025

# National TAB

Project: LL Bean (Sarasota, FL)

## FAN - Exhaust



### Diffuser Ret/Exh (GRD)

#### EF-1/Restroom/Mop Room

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
EF-1-EGRD1	113	EG-1	8X8	100	1	143	75	95	95.0
EF-1-EGRD2	114	EG-1	8X8	100	1	172	117	102	102.0
EF-1-EGRD3	115	EG-1	8X8	100	1	169	112	101	101.0
EF-1-EGRD4	116	EG-1	8X8	50	1	101	63	53	106.0
Total				350		585	367	351	100.29%

Completed By: Kristopher Passley on 03/12/2025

**ROOFTOP AIR HANDLING UNIT SCHEDULE**

SUPPLY FAN												
TAG	SERVES	TONNAGE	CHM	MIN OUTSIDE AIR CFM	ESP	RSP	BHP	HP	TYPE	SEDL IN.	RPM	
RTU-1	RETAIL	15	8,000	1500	0.50	0.81	2.2	3.0	BC PLENUM	-	1,440	
RTU-2	RETAIL	15	8,000	1500	0.50	0.81	2.2	3.0	BC PLENUM	-	1,440	
RTU-3	RETAIL	15	8,000	1500	0.50	0.81	2.2	3.0	BC PLENUM	-	1,440	
RTU-4	RETAIL	15	8,000	1500	0.50	0.81	2.2	3.0	BC PLENUM	-	1,440	
DEFLECT EXPANSION COOLING CURB												
TAG	EAT 'F	LAT 'F	REFQ.	SERR	# OF COMP	TOTAL SENS MBH	AMBIENT TEMP	AIRFLOW	EAT LAT	KW	STAGES	
RTU-1	80 / 67	55 / 57	R410A	12	-	186	142	95	6000	70 / 82	23	2
RTU-2	80 / 67	55 / 57	R410A	12	-	186	142	95	6000	70 / 82	23	2
RTU-3	80 / 67	55 / 57	R410A	12	-	186	142	95	6000	70 / 82	23	2
RTU-4	80 / 67	55 / 57	R410A	11.6	-	173	91	95	4000	70 / 82	14	2
ELECTRICAL												
UNIT	POWER	SUPPLY FAN FLA	EXHL FAN FLA	COND FAN FLA	COMP. FLA	UNIT MCCA	MCCOP	UNIT MCCA	MCCOP	MODEL	WEIGHT LBS.	NOTES
RTU-1	460/360	-	-	-	-	45.0	50	4" / MERV 13	50GCA-N17	2,088	1.2	
RTU-2	460/360	-	-	-	-	45.0	50	4" / MERV 13	50GCA-N17	2,088	1.2	
RTU-3	460/360	-	-	-	-	45.0	50	4" / MERV 13	50GCA-N17	2,088	1.2	
RTU-4	460/360	-	-	-	-	27.0	30	4" / MERV 13	50GCA-N12	1,096	1.2	

1. PURCHASED AND INSTALLED BY LANDLORD.  
2. BASED ON GREENBOOK.

**FAN SCHEDULE**

TAG	SERVES	TYPE	MODEL	CFM	ESP IN-WC	FAN RPM	REQD BHP	HP	ELECTRICAL VOLT	PHASE	WEIGHT LBS.	NOTES
EF-1	GENERAL EXHAUST	ROOF MOUNTED DOWNBLAST	G-084VG	350	0.75	1491	0.1	1/4	120	1	50	1, 2, 3, 4, 5

1. BASED ON GREENBOOK.  
2. 2" HIGH INSULATED ROOF CURB WITH DAMPER TRAY. HINGED CURB CAP W/ CABLES.  
3. COUNTERBALANCED BACKDRAFT DAMPER.  
4. FINISH AS SELECTED BY ARCHITECT.  
5. ECM MOTOR WITH REMOTE SPEED KNOB.

**UNIT HEATER SCHEDULE**

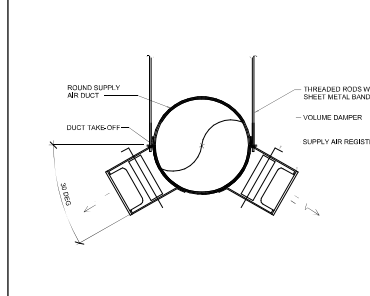
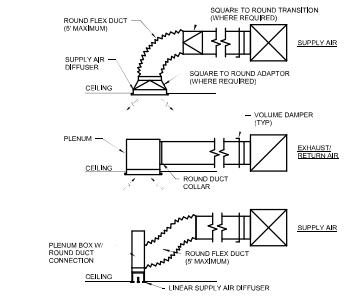
TAG	SERVES	TYPE	MODEL	KW	CFM	MBH	ELECTRICAL		NOTES	
				POWER	FLA	KW				
EUH-1	VESTIBULE	CEILING RECESSED	CDP57RENV	5.0	300	17.1	277/160	16.1	5	1, 2
EUH-2	EVS ROOM	WALL HUNG	CK 1504 PLUS	1.5	106	5.1	120/160	12.5	5.9	3

1. BASED ON QMARK.  
2. INFLOOR THERMOSTAT. CEILING RECESSED ENCLOSURE.  
3. BASED ON S'VEBEL ELTRON.

**DIFFUSER / GRILLE AND REGISTER SCHEDULE**

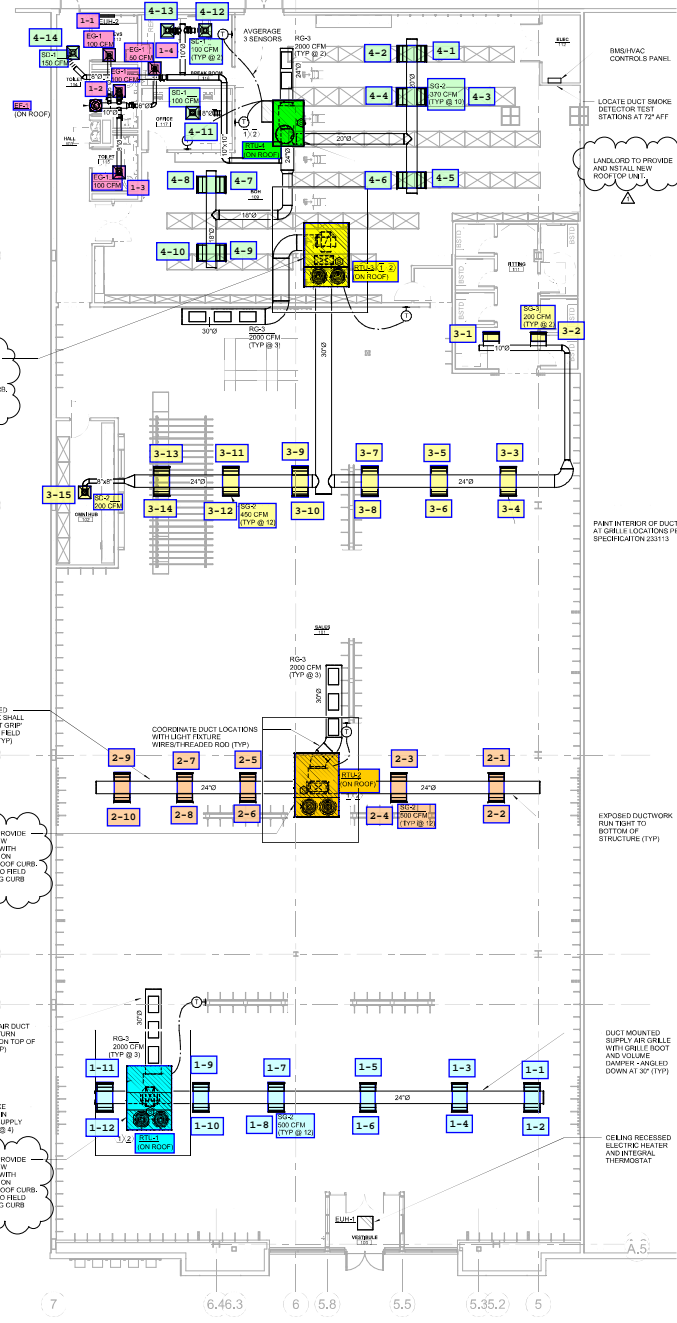
TAG	DESCRIPTION	NICK SILENT (W x H)	MAX CFM	SP (Pa/WC)	THROW FT	NC	TYPE	MODEL	MOUNTING	NOTES
SG-1	SUPPLY AIR GRILLE	16 X 10	450	0.038	17-25-39	<15	DBL DEFLECTION	5304	SURFACE	1, 3, 4
SG-2	SUPPLY AIR GRILLE	22 X 10	650	0.027	20-33-47	<15	DBL DEFLECTION	5304	SURFACE	1, 3, 4
SG-3	SUPPLY AIR GRILLE	8 X 8	200	0.030	9-13-20	<15	DBL DEFLECTION	5304	SURFACE	1, 3, 4
SD-1	SUPPLY AIR DIFFUSER	6 X 6	130	0.057	6-9-12	<15	4-WAY	SMCK-TYPE 1	SURFACE	1, 2
SD-2	SUPPLY AIR DIFFUSER	8 X 8	225	0.057	8-15-16	<15	4-WAY	SMCK-TYPE 1	SURFACE	1, 2
RG-1	RETURN AIR GRILLE	8 X 8	200	0.063	-	<15	40° DEFLECTION	530F	SURFACE	1, 2
RG-2	RETURN AIR GRILLE	14 X 14	475	0.051	-	<15	40° DEFLECTION	530F	LAY-IN	1, 2
RG-3	RETURN AIR GRILLE	30 X 15	2000	0.066	-	<20	EGG CRATE	80F	SURFACE	1, 2, 4
EG-1	EXHAUST AIR GRILLE	8 X 8	150	0.044	-	<15	45° DEFLECTION	530F	SURFACE	1, 2, 4

1. BASED ON FINEL.  
2. PROVIDE WHITE FINISH.  
3. CUSTOM COLOR AS SELECTED BY ARCHITECT.  
4. PROVIDE OPPOSED BLADE DAMPER.



A1 DIFFUSER / GRILLE DETAIL

A5 EXPOSED DUCT DETAIL



A9 FIRST FLOOR MECHANICAL PLAN

**TECHNICAL NOTES:**  
1) INSTALL CO2 SENSOR IN RETURN DUCTWORK AND COORDINATE WITH CONTROL CONTRACTOR AND ROOF OF UNIT MANUFACTURER. CO2 SENSOR BASIS OF DESIGN SHALL BE ACCORD.  
2) INSTALL ROOF CURB. PROVIDE 4" HIGH COMMERCIAL AIR PURIFICATION SYSTEM IN EXISTING RTU. INSTALL PER THE INSTALLATION MANUAL AND POWER FROM 24V SOURCE.

11 APPENDIX B 10/16/2024  
12 CONSTRUCTION DOCUMENTS 09/26/2024

REV.	DESCRIPTION	DATE
1		



**wbrc**  
WBRCC.COM  
FIRM LIC.# AN0001395 & 27389  
LLBEAN SARASOTA  
UNIVERSITY TOWN CENTER  
111 NORTH GATEMAN ROAD  
SARASOTA, FL

FIRST FLOOR MECHANICAL PLAN & SCHEDULES  
DATE: 10/16/2024  
PROJECT: 10083027 DRAWN: SCL  
SCALE: As Indicated  
SHEET: 182 OF 182  
PROJECT NO.: M-101