Report By:

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

Report: TAB Report

Function: Test, Adjust, & Balance

Date: 10/10/2024

Completed By: National TAB

PROJECT

10-07-24 WAWA #8179 ROBESONIA, PA

10 BERNVILLE RD

ROBESONIA, PA 19551

Client

Wawa

260 West Baltimore Pike

Wawa, PA 19063

National TAB

Project: 10-07-24 WAWA #8179 ROBESONIA, PA

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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.

Ceiling Exhaust Fans

The ceiling exhaust fans were measured using a flow hood. If speed adjustment was provided, the fan speed was adjusted to within design tolerance. 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.

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AIR BALANCE SCHEDULE

UNIT	AREA SERVED	HVAC SUPPLY		HVAC RETURN		HVAC OUTDOOR		OA %		HOOD MAKE-UP		HOOD EXHAUST		GENERAL EXH.	
		DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
RTU-1	CORE	4000	4041	3500	3536	500	505	12.5%	12.5%						
RTU-2	DELI	4000	3985	3500	3466	500	519	12.5%	13.0%						
RTU-3	RETAIL	3000	3028	2500	2516	500	512	16.7%	16.9%						
EF-1	BOH													1000	1036
EF-2	RESTROOMS													200	207
EF-3	METER ROOM													60	63
TOTALS		11000	11054	9500	9518	1500	1536			0	0	0	0	1260	1306

NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	1500	1536
TOTAL EXHAUST	1260	1306
NET AIRFLOW	240	230

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H20)
FRONT	[1]
SIDE	[1]
REAR	[1]
AVERAGE	**#DIV/0!**

FINAL CHECKS

ACTUAL NET AIRFLOW COINCIDES WITH DESIGN: ✓

MEASURED PRESSURES COINCIDES WITH ACTUAL NET AIRFLOW:

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

NOTES:

[1] BUILDING PRESSURE TEST INCONCLUSIVE DUE TO HIGH WINDS

CheckList List

- 01: RTU's/AHU's
- 02: LENNOX SETUP PARAMETERS
- 03: SENSOR WIRING (LENNOX)
- 04: EF'S
- 05: CLOSEOUT CHECKS

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CheckList Information

Name :	01: RTU's/AHU's	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	10/03/2024 - Brianna Biggs - National TAB		
Completed Date :	10/10/2024 - Tyler Youells - National TAB		

CheckList Item Details

RTU's/AHU's

All diffusers and grilles are installed and match design?	Pass
Comment:	
Clean filters installed?	Pass
Comment:	
Economizers are assembled and functional?	Pass
Comment:	
Motors are all operating below the FLA rating?	Pass
Comment:	
Are belts tight?	N/A
Comment:	
If direct drive unit is the speed controller working?	Pass

Comment:

Is gas piping installed and valves turned on?	Pass

Comment:

Condensate drains are installed?	Pass

Comment:

Unit free of noticeable noise and vibration	Pass

Comment:

Final outside air damper position is marked with permanent marker?	Pass

Comment:

No alarms present?	Pass

Comment:

Any noticeable duct leakage?	Pass

Comment:

NO DUCT LEAKAGE TO NOTE

Total supply and OA flows are balanced within +/-5% and supply & return diffusers within +/-10%?	Pass

Comment:

IN TEST MODE, TEST THE FOLLOWING:

Cooling mode is operational? Record EAT/LAT for each unit:	Pass

Comment:

AC1: DAT-44.6F/60.9%RH EAT-66.5F/35.5% AC2: DAT-43.4F/64.9%RH EAT-67.7F/33.5% AC3: DAT-43.9F/61.7%RH EAT-64.6F/34.9%

Heating mode is operational? Record EAT/LAT for each unit:	Pass

Comment:

AC1: DAT-120.2F EAT-66.4 AC2: NA AC3: DAT-111.4F EAT-68.1

Dehumidification mode is operational? (Feel dehumidification coil with your hand. Is it hot?) Record EAT/LAT for each unit:	Pass

Comment:

Copper pipes are warm AC1: DAT-57.9F/40.1% EAT-66.5F/35.9% AC2: DAT-54.9F/51.3% EAT-64.7F/40.4% AC3: DAT-56.2F/43.6% EAT-63.6F/46.4%

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CheckList Information

Name :	02: LENNOX SETUP PARAMETERS	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	10/03/2024 - Brianna Biggs - National TAB		
Completed Date :	10/10/2024 - Tyler Youells - National TAB		

CheckList Item Details

UNIT ID CONFIGURATIONS	
BACNET CONFIGURATION: GO TO SETTINGS>GENERAL>CONFIGURATION ID1 POSITION 5 SET TO "N".	
Comment:	
NETWORK CONFIGURATION: GO TO SETUP>NETWORK INTEGRATION, SET TO BACNET IP	Pass
Comment:	
CONTROL MODE: SET CONTROL MODE TO ROOM SENSOR: CO2, TEMP & HUMIDITY (PER UNIT, AS NEEDED).	Pass
Comment:	
INDIVIDUAL PARAMETER CONFIGURATIONS (MECHANICAL CONTRACTOR TO DEFINE / AS APPLICABLE):	
PARAMETER 105 DEHUMID MODE: 7 NO CONDITIONS	Pass
Comment:	
PARAMETER 106 DEHUMID SETPOINT: 50, THIS IS A CENTERED SET POINT (+/-)	Yes

Comment:

PARAMETER 107 DEHUMID DEADBAND: 3 (DEFAULT) THIS IS THE ACTUAL +/- VALUE	Pass

Comment:

PARAMETER 117 CO2 DAMPER MAX OPEN: 50%	Pass

Comment:

PARAMETER 118 CO2 START OPEN PPM: 1500	Pass

Comment:

PARAMETER 119 CO2 MAX OPEN PPM: 1500	Pass

Comment:

PARAMETER 137 OCCHET SET POINT: 68 (BACK UP)	Pass

Comment:

PARAMETER 131 SET TO THE SAME % AS THE MINMIUM OA DAMPER SETPOINT	Pass

Comment:

PARAMETER 139 OCC COOLING SET POINT: 72 (BACK UP)	Pass

Comment:

PARAMETER 154 OCC BLOWER MODE: ON-CONTINUOUS 1	Pass

Comment:

CFM VALUES / MSAV FAN SPEEDS (AIR BALANCER TO DEFINE / IF APPLICABLE):

OA DAMPER SET TO SAME POSITION IN ALL FAN SPEEDS?	Pass

Comment:

AC-1: 25%, AC-2: 28%, AC-3:27%

ALL FAN SPEEDS SET TO THE SAME CFM VALUE (ENTER SETPOINTS BELOW)	Pass

Comment:

AC-1:80%, AC-2:73%, AC-3:60%

HEAT CFM VALUE: PER THE HVAC SCHEDULE	Pass

Comment:

HIGH COOL CFM VALUE: THE HIGH COOL CFM VALUE	Pass

Comment:

LOW COOL CFM VALUE: MATCH THE HIGH COOL CFM VALUE	Pass

Comment:

VENTILATION CFM VALUE: MATCH THE HIGH COOL CFM VALUE	Pass

Comment:

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CheckList Information

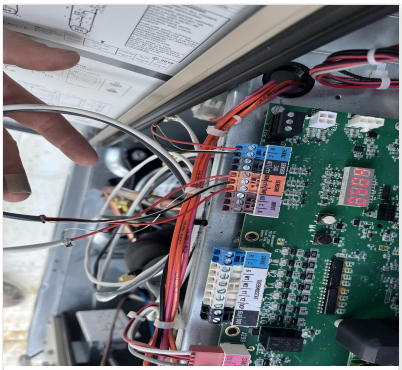
Name :	03: SENSOR WIRING (LENNOX)	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	10/03/2024 - Brianna Biggs - National TAB		
Completed Date :	10/10/2024 - Tyler Youells - National TAB		

CheckList Item Details

COMBINATION TEMPERATURE/HUMIDITY SENSOR

Sensors are installed where shown on the drawing?	Pass
Comment:	

2 conductor shielded cable has one wire landed to Vin, one to GND, and the shield wire is not connected.	Pass
Comment:	



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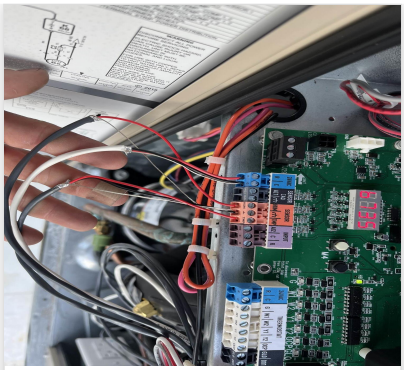

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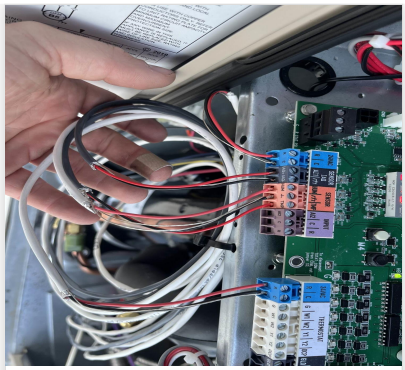

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For second shielded cable, one wire is landed to Vout and the shield wire is not connected.	Pass
Comment:	
Verify that the CORE or Prodigy controller is sensing a relative humidity (record the reading)	Pass
Comment: AC-1:30%, AC-2: 32%, AC-3:37%	

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CheckList Information

Name :	04: EF'S	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	10/03/2024 - Brianna Biggs - National TAB		
Completed Date :	10/10/2024 - Tyler Youells - National TAB		

CheckList Item Details

EF's

Rotation is correct?	Pass
Comment:	
Belts are tight (if applicable)?	N/A
Comment:	
Speed controller installed and functional (if applicable)?	Pass
Comment:	
There is no major leakage around base of fan?	Pass
Comment:	
Is the motor operating below the motor FLA rating?	Pass
Comment:	
Back draft damper installed and can it fully open?	Pass

Comment:

MC Installed the backdrafts dampers while onsite

Unit free of noticeable noise and vibration?	Pass

Comment:

Total exhaust flow balanced within +/-5% and grilles are within +/-10%?	Pass

Comment:

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CheckList Information

Name :	05: CLOSEOUT CHECKS	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	10/03/2024 - Brianna Biggs - National TAB		
Completed Date :	10/10/2024 - Tyler Youells - National TAB		

CheckList Item Details

SPACE COMFORT

Is space free of drafting?	Pass
Comment:	
Is space comfortable in all areas?	Pass
Comment:	
Is the space free of ventilation noise?	Pass
Comment:	

BUILDING PRESSURE

Do actual net building airflow, design net building airflow, and pressure coincide? If not why? (All three should either be positive or negative)	Fail
Comment:	

NOTE: Building Pressure test is inconclusive due to high winds.

National TAB

Project: 10-07-24 WAWA #8179 ROBESONIA, PA

System/Unit: AHU/RTU

Asset: RTU1 AREA:CORE

Unit Data		
	Design	**Actual**
MFG	LENNOX ENLIGHT	LENNOX ENLIGHT
Serial Num	-	5614A03764
Model Num	LGT120H4E	LGT120H4ES1Y
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	2
OA Filter Size 1	-	25X16
Num Final Filter 1	-	4
Final Filter Size 1	-	20X25X2

Motor Data		
	Design	**Actual**
Motor MFG	-	EBMPABST
Frame	-	NL
Horsepower	3.75	3300W
Motor Rpm	-	2200
Phase	3	3
Rated Voltage	208	200
Rated Amperage	-	8.7
Service Factor	-	1

Test Data		
	Design	**Actual**
SF CFM	4000	4041
SF RPM	-	1760
MOTOR RPM	-	1760
RA CFM	3500	3536
OA CFM	500	505
RL Voltage	-	212.3/211.7/210.9
RL Amperage	-	5.21/5.12/5.25
SF System SetPt	-	80%
RA Damper Position	-	MECHANICAL LINKAGE
OA Damper Position	-	25%
OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.45”
Fan Suction SP	-	-0.97”
Fan Discharge SP	-	0.64”
Total ESP	0.5"	1.09”
Fan Total SP	-	1.61”

Unit Data - PHOTO LOG

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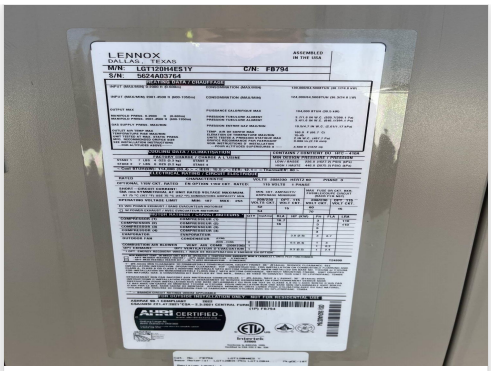

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Project:10-07-24 WAWA #8179 ROBESONIA, PA

AHU/RTU

Diffuser Supply (GRD)

RTU1/CORE

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	RETAIL	LD1	10"	425	1	393	424	452	106.4
SGRD2	RETAIL	LD1	10"	430	1	367	390	405	94.2
SGRD3	RETAIL	LD1	10"	420	1	422	452	405	96.4
SGRD4	ASSOCIATES	CD1	8"	150	1	276	147	157	104.7
SGRD5	OFFICE	CD1	8"	150	1	264	150	144	96.0
SGRD6	RETAIL	LD1	10"	400	1	375	416	410	102.5
SGRD7	RETAIL	LD1	10"	400	1	379	400	431	107.8
SGRD8	RETAIL	LD1	10"	425	1	397	422	419	98.6
SGRD9	RETAIL	LD1	10"	400	1	410	428	392	98.0
SGRD10	COFFEE	LD1	10"	400	1	417	402	421	105.3
SGRD11	COFFEE	LD1	10"	400	1	459	469	405	101.3
Total				4000		4159	4100	4041	101.02%

Diffuser Ret/Exh (GRD)

RTU1/CORE

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	RETAIL	G1	12"	585	1	596	574	564	96.4
EGRD2	RETAIL	G1	12"	585	1	527	630	618	105.6
EGRD3	RETAIL	G1	12"	585	1	474	567	557	95.2
EGRD4	RETAIL	G1	12"	585	1	870	628	616	105.3
EGRD5	RETAIL	G1	12"	580	1	645	586	575	99.1
EGRD6	RETAIL	G1	12"	580	1	505	617	606	104.5
Total				3500		3617	3602	3536	101.03%

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National TAB

Project: 10-07-24 WAWA #8179 ROBESONIA, PA

System/Unit: AHU/RTU

Asset: RTU2 AREA:DELI

Unit Data		
	Design	**Actual**
MFG	LENNOX ENLIGHT	LENNOX ENLIGHT
Serial Num	-	5624A03661
Model Num	LGT120H4E	LCT120H4EN1Y
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	2
OA Filter Size 1	-	25X16
Num Final Filter 1	-	4
Final Filter Size 1	-	20X25X2

Motor Data		
	Design	**Actual**
Motor MFG	-	EBMPABST
Frame	-	NL
Horsepower	3.75	3300W
Motor Rpm	-	2200
Phase	3	3
Rated Voltage	208	200
Rated Amperage	-	8.7
Service Factor	-	1

Test Data		
	Design	**Actual**
SF CFM	4000	3985
SF RPM	-	1606
MOTOR RPM	-	1606
RA CFM	3500	3466
OA CFM	500	519
RL Voltage	-	212.2/211.9/212.4
RL Amperage	-	3.97/4.07/4.04
SF System SetPt	-	73%
RA Damper Position	-	MECHANICAL LINKAGE
OA Damper Position	-	28%
OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.26”
Fan Suction SP	-	-0.75”
Fan Discharge SP	-	0.49”
Total ESP	0.5"	0.75”
Fan Total SP	-	1.24”

Test Data - PHOTO LOG

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Diffuser Supply (GRD)

RTU2/DELI

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	FOOD SERVICE	LD1	10"	380	1	406	395	376	98.9
SGRD2	FOOD SERVICE	LD1	10"	380	1	461	428	391	102.9
SGRD3	FOOD SERVICE	LD1	10"	380	1	493	481	386	101.6
SGRD4	FOOD SERVICE	LD1	10"	390	1	421	408	406	104.1
SGRD5	FOOD SERVICE	LD1	10"	390	1	424	405	360	92.3
SGRD6	HALLWAY	LD1	10"	365	1	367	367	350	95.9
SGRD7	ELECTRICAL RM	CD1	12"	550	1	670	530	562	102.2
SGRD8	BACKROOM	CD1	10"	420	1	373	360	408	97.1
SGRD9	BACKROOM	CD1	10"	420	1	376	368	407	96.9
SGRD10	WASHROOM	LD1	10"	325	1	421	421	339	104.3
Total				4000		4412	4163	3985	99.62%

Diffuser Ret/Exh (GRD)

RTU2/DELI

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	FOOD SERVICE	G1	14"	700	1	750	788	765	109.3
EGRD2	FOOD SERVICE	G1	14"	700	1	871	697	676	96.6
EGRD3	FOOD SERVICE	G1	14"	700	1	548	676	656	93.7
EGRD4	FOOD SERVICE	G1	14"	700	1	829	711	690	98.6
EGRD5	FOOD SERVICE	G1	14"	700	1	728	699	679	97.0
Total				3500		3726	3571	3466	99.03%

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Project: 10-07-24 WAWA #8179 ROBESONIA, PA

System/Unit: AHU/RTU

Asset: RTU3 AREA:RETAIL

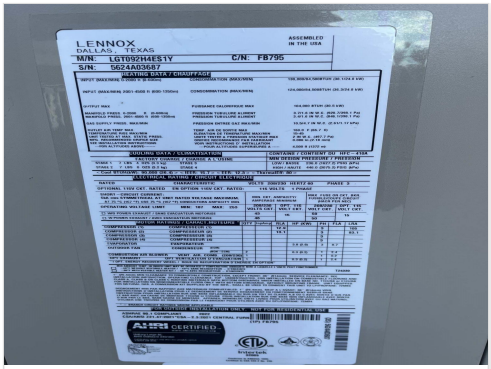
Unit Data		
	Design	**Actual**
MFG	LENNOX ENLIGHT	LENNOX ENLIGHT
Serial Num	-	5624A03687
Model Num	LGT092H4E	LGT092H4ES1Y
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	2
OA Filter Size 1	-	25X16
Num Final Filter 1	-	4
Final Filter Size 1	-	20X25X2

Motor Data		
	Design	**Actual**
Motor MFG	-	EBMPABST
Frame	-	NL
Horsepower	3.75	3300W
Motor Rpm	-	2200
Phase	3	3
Rated Voltage	208	200
Rated Amperage	-	8.7
Service Factor	-	1

Test Data		
	Design	**Actual**
SF CFM	3000	3028
SF RPM	-	1320
MOTOR RPM	-	1320
RA CFM	2500	2516
OA CFM	500	512
RL Voltage	-	212.8/212.3/211.7
RL Amperage	-	2.55/2.58/2.58
SF System SetPt	-	60%
RA Damper Position	-	MECHANICAL LINKAGE
OA Damper Position	-	27%
OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.33”
Fan Suction SP	-	-0.63”
Fan Discharge SP	-	0.43”
Total ESP	0.5"	0.76”
Fan Total SP	-	1.09”

Unit Data - PHOTO LOG



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Diffuser Supply (GRD)

RTU3/RETAIL

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	FRONT VESTIBULE	CD2	10"	300	1	511	324	324	108.0
SGRD2	RETAIL	LD1	10"	350	1	441	362	362	103.4
SGRD3	SEATING AREA	CD1	10"	450	1	491	447	447	99.3
SGRD4	SEATING AREA	CD1	10"	450	1	422	433	433	96.2
SGRD5	RETAIL	LD1	10"	350	1	355	375	375	107.1
SGRD6	RETAIL	LD1	10"	350	1	341	351	351	100.3
SGRD7	RETAIL	LD1	10"	350	1	330	331	331	94.6
SGRD8	HALLWAY	CD1	8"	150	1	245	145	145	96.7
SGRD9	RESTROOM	CD3	6"	75	1	69	77	77	102.7
SGRD10	RESTROOM	CD3	6"	75	1	75	76	76	101.3
SGRD11	REAR VESTIBULE	CD3	6"	100	1	126	107	107	107.0
Total				3000		3406	3028	3028	100.93%

Diffuser Ret/Exh (GRD)

RTU3/RETAIL

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	RETAIL	G1	12"	625	1	741	609	648	103.7
EGRD2	RETAIL	G1	12"	625	1	518	540	574	91.8
EGRD3	RETAIL	G1	12"	625	1	780	622	660	105.6
EGRD4	RETAIL	G1	12"	625	1	544	596	634	101.4
Total				2500		2583	2367	2516	100.64%

Completed By: Tyler Youells on 10/10/2024

National TAB

Project: 10-07-24 WAWA #8179 ROBESONIA, PA

System/Unit: FAN - Exhaust

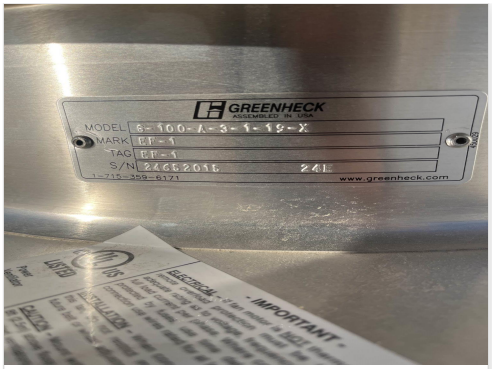
Asset: EF1 AREA:

Unit Data		
	Design	**Actual**
MFG	PENNBARRY	GREENHECK
Model Num	DX16S	G-100-A-3-1-19-X
Serial Num	-	24652015
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	MARATHON
Frame	-	56
Horsepower	1/3	0.33
Motor Rpm	-	1725
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	3.5
Service Factor	-	1

Test Data		
	Design	**Actual**
CFM	1000	1036
Fan RPM	1300	NA
Fan Rotation	-	CW
Motor RPM	-	NA
System SetPt	-	MARKED ON DIAL
RL Voltage	-	67.7
RL Amperage	-	5.4
Total ESP	0.25"	0.44"
Fan Inlet SP	-	-0.44"
Fan Discharge SP	-	ATM

Unit Data - PHOTO LOG



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Completed By: Tyler Youells on 10/10/2024

National TAB

Project:10-07-24 WAWA #8179 ROBESONIA, PA

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF1/

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	BOH	G1	10"	300	1	305	241	299	99.7
EGRD2	BOH	G1	12"	500	1	660	541	527	105.4
EGRD3	STAGING RM	G1	8"	200	1	287	216	210	105.0
Total				1000		1252	998	1036	103.6%

Completed By: Tyler Youells on 10/09/2024

National TAB

Project: 10-07-24 WAWA #8179 ROBESONIA, PA

System/Unit: FAN - Exhaust

Asset: EF2 AREA:

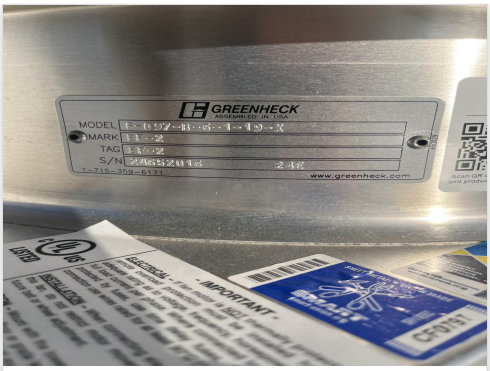
Unit Data		
	Design	**Actual**
MFG	PENNBARRY	GREENHECK
Model Num	DX08Q	G-097-B-6-1-19-X
Serial Num	-	24652016
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	NL
Frame	-	48Y
Horsepower	1/6	1/6
Motor Rpm	-	1140
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	2.2
Service Factor	-	1

Test Data		
	Design	**Actual**
CFM	200	207
Fan RPM	1725	1140
Fan Rotation	-	CW
Motor RPM	-	1140
System SetPt	-	MARKED ON DIAL/FULL
RL Voltage	-	108.7
RL Amperage	-	1.38
Total ESP	0.13"	0.45"
Fan Inlet SP	-	-0.45"
Fan Discharge SP	-	ATM

Unit Data - PHOTO LOG

image_252993920



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National TAB

Project:10-07-24 WAWA #8179 ROBESONIA, PA

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF2/

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	RESTROOM	G3	6"	100	1	75	121	104	104.0
EGRD2	RESTROOM	G3	6"	100	1	63	89	103	103.0
Total				200		138	210	207	103.5%

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National TAB

Project: 10-07-24 WAWA #8179 ROBESONIA, PA

System/Unit: FAN - Exhaust

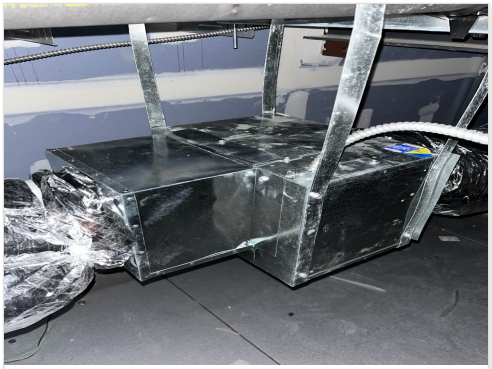
Asset: EF3 AREA:

Unit Data		
	Design	**Actual**
MFG	PENNBARRY	GREENHECK
Model Num	Z3H	SP-A200
Serial Num	-	NA
Type	INLINE	INLINE

Motor Data		
	Design	**Actual**
Motor MFG	-	NO ACCESS
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	NL

Test Data		
	Design	**Actual**
CFM	60	63
Fan RPM	1550	NA
Fan Rotation	-	CORRECT
Motor RPM	-	NA
System SetPt	-	MARKED ON DIAL

Unit Data - PHOTO LOG



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