Report By:

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

Report: TAB Report

Function: Test, Adjust, & Balance

Date: 06/25/2025

Completed By: National TAB

PROJECT

06-23-25 WAWA #8159 NEWTOWN, PA

91 LOWER SILVER LAKE RD

NEWTOWN , PA 18940

Client

Wawa

260 West Baltimore Pike

Wawa, PA 19063

National TAB

Project: 06-23-25 WAWA #8159 NEWTOWN, PA

Table Of Contents

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.

Issue List

- EF-2 Flow
- Info- RTU-1 Heater

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Project Issue Information

Issue Name : EF-2 Flow

Description : Ef-2 is not operating at design flow. Fan is at max speed and Under FLA. At the current static pressure the fan is not capable of 1400CFM. Final flow with grilles balanced proportionally low 1121 CFM. Tried removing the backdraft damper and removing the speed control to rule out restriction and confirm max speed, there was no change In CFM.

Created By : National TAB

Assigned To : National TAB - Tyler Youells

Status : Open

Priority : High

Asset Tag :

Originated Date : 06/25/2025 - Tyler Youells - National TAB

Project Issue File Details

06/25/2025

Project Issue Information

Issue Name : Info- RTU-1 Heater

Description : RTU-1 heater is not functional, fuses found removed from the electric heat. Per Mc there is an issue that is to be warranty replaced by Lennox.

Created By : National TAB

Assigned To : National TAB - Tyler Youells

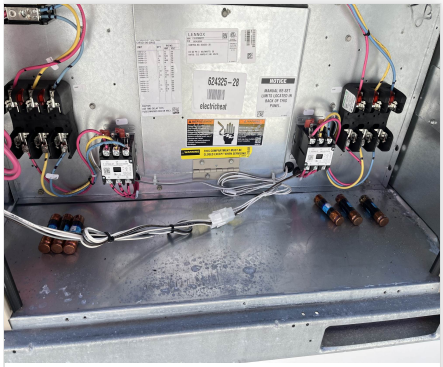
Status : Open

Priority : InfoOnly

Asset Tag :

Originated Date : 06/25/2025 - Tyler Youells - National TAB

Project Issue File Details



06/25/2025

NATIONAL TAB

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	3100	3747	2400	3030	700	717	22.6%	19.1%						
RTU-2	DELI	4800	5027	3775	3983	1025	1044	21.4%	20.8%						
RTU-3	RETAIL	2125	2100	1725	1697	400	403	18.8%	19.2%						
EF-1	RESTROOMS													350	399
EF-2	FOOD SERVICE													1400	1121
TOTALS		10025	10874	7900	8710	2125	2164			0	0	0	0	1750	1520

NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	2125	2164
TOTAL EXHAUST	1750	1520
NET AIRFLOW	375	644

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H20)
FRONT	0.007
SIDE	0.009
REAR	0.011
AVERAGE	**0.009**

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:

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 :	06/18/2025 - Tara Metcalf - National TAB		
Completed Date :	06/25/2025 - 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?	N/A

Comment:

Electric Heat

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:

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:

RTU-1: 77.4F/55.3% DAT:56.2F/86.9% RTU-2: 75.3F/60.5%/DAT:57.1F/82.6% RTU-3:74.2/60.5%/ DAT:59.9F/80.6%

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

Comment:

RTU-1: FAIL PER MC HEATER NEEDS TO BE REPAIRED BY LENNOX RTU-2: 74F/83F RTU-3: 72/85.8

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

Comment:

RTU-1: 75.4F/58.1%//68.2F/66.9% RTU-2: 76.8F/59.6%//66.1F/66.9% RTU-3:73.4F/58%//68.3F/67.3%

06-23-25 WAWA #8159 NEWTOWN, PA

CheckList Information

Name :	02: LENNOX SETUP PARAMETERS	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	06/18/2025 - Tara Metcalf - National TAB		
Completed Date :	06/25/2025 - Tyler Youells - National TAB		

CheckList Item Details

UNIT ID CONFIGURATIONS	
BACNET CONFIGURATION: GO TO SETTINGS>GENERAL>CONFIGURATION ID1 POSITION 5 SET TO "N".	Pass
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:

RTU-1:29% RTU-2: 26% RTU-3: 32%

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

Comment:

RTU-1:73% RTU-2: 92% RTU-3: 82%

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 :	06/18/2025 - Tara Metcalf - National TAB		
Completed Date :	06/25/2025 - 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:	
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:	

RTU-1: 63% RTU-2: 58% RTU-3: 57%

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CheckList Information

Name :	04: EF'S	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	06/18/2025 - Tara Metcalf - National TAB		
Completed Date :	06/25/2025 - 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: EF-2 Speed controller was removed to ensure 100% fan speed	
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:	

Unit free of noticeable noise and vibration?	Pass

Comment:

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

Comment:

EF-2 is not reaching design flow with the fan at full speed/FLA and at current static pressure. EF-1 was balanced to the connected load which was 50CFM higher than fan design.

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CheckList Information

Name :	05: CLOSEOUT CHECKS	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	06/18/2025 - Tara Metcalf - National TAB		
Completed Date :	06/25/2025 - 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)	Pass
Comment:	
+0.009" AVG	

National TAB

Project: 06-23-25 WAWA #8159 NEWTOWN, PA

System/Unit: AHU/RTU

Asset: RTU1 AREA:FOOD SERVICE

Unit Data		
	Design	**Actual**
MFG	LENNOX ENLIGHT	LENNOX ENLIGHT
Serial Num	-	5624L01989
Model Num	LCT120H4E	LCT120H4EJ2Y
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	-	2970W
Motor Rpm	-	1780
Phase	-	3
Rated Voltage	-	200
Rated Amperage	-	8.0
Service Factor	-	1

Test Data		
	Design	**Actual**
SF CFM	3100	3747
SF RPM	-	1299
MOTOR RPM	-	1299
RA CFM	2400	3030
OA CFM	700	717
RL Voltage	-	209.8/211.7/210.1
RL Amperage	-	3.5/3.6/3.5
SF System SetPt	-	73%
RA Damper Position	-	MECHANICAL LINKAGE
OA Damper Position	-	29%
OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.41”
Fan Suction SP	-	-0.85”
Fan Discharge SP	-	0.45”
Total ESP	1.0"	0.86”
Fan Total SP	-	1.30”

Completed By: Tyler Youells on 06/25/2025

Notes:
[1] UNIT SCHEDULED FOR 3100CFM/ CONNECTED LOAD IS 3700CFM. AT 3100 CFM THE UNIT WOULD BE OUT OF THE RECOMMENDED 350-400CFM/TON THEREFORE UNBIT WAS BALANCED TO THE CONNECTED LOAD

Written By: Tyler Youells on 06/25/2025

Unit Data - PHOTO LOG

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National TAB

Project:06-23-25 WAWA #8159 NEWTOWN, PA

AHU/RTU

Diffuser Supply (GRD)

RTU1/FOOD SERVICE

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	RETAIL	LD1	10	300	1	376	367	315	105.0
SGRD2	RETAIL	LD1	10	300	1	388	386	308	102.7
SGRD3	RETAIL	LD1	10	375	1	401	367	388	103.5
SGRD4	RETAIL	LD1	10	300	1	390	283	336	112.0
SGRD5	RETAIL	LD1	10	300	1	303	355	309	103.0
SGRD6	RETAIL	LD1	10	350	1	328	299	339	96.9
SGRD7	RETAIL	LD1	10	350	1	362	336	348	99.4
SGRD8	RETAIL	LD1	10		1	362	361	343	-
SGRD9	RETAIL	LD1	10		1	348	344	361	-
SGRD10	RETAIL	LD1	10		1	349	309	365	-
SGRD11	WASHROOM	CD1	10	325	1	378	327	335	103.1
Total				2600		3985	3734	3747	144.12%

Completed By: Tyler Youells on 06/25/2025

National TAB

Project: 06-23-25 WAWA #8159 NEWTOWN, PA

System/Unit: AHU/RTU

Asset: RTU2 AREA:FOOD SERVICE

Unit Data		
	Design	**Actual**
MFG	LENNOX ENLIGHT	LENNOX ENLIGHT
Serial Num	-	5624L0991
Model Num	LCT150H4E	LCT150H4EE2Y
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	-	2970W
Motor Rpm	-	1780
Phase	-	3
Rated Voltage	-	200
Rated Amperage	-	8.0
Service Factor	-	1

Test Data		
	Design	**Actual**
SF CFM	4800	5027
SF RPM	-	1638
MOTOR RPM	-	1638
RA CFM	3775	3983
OA CFM	1025	1044
RL Voltage	-	209.4/209.4/210.5
RL Amperage	-	6.6/6.6/6.7
SF System SetPt	-	92%
RA Damper Position	-	MECHANICAL LINKAGE
OA Damper Position	-	26%
OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.54”
Fan Suction SP	-	-1.36”
Fan Discharge SP	-	0.52”
Total ESP	1.0"	1.06”
Fan Total SP	-	1.88”

Completed By: Tyler Youells on 06/25/2025

Notes:
[1] UNIT IS SCHEDULED FOR 4800CFM/ CONNECTED LOAD 5000CFM. 5000 IS WITHIN 5% OF ORIGINAL INTENT SO UNIT WAS BALANCED TO THE CONNECTED LOAD.

Written By: Tyler Youells on 06/25/2025

Unit Data - PHOTO LOG

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Project:06-23-25 WAWA #8159 NEWTOWN, PA

AHU/RTU

Diffuser Supply (GRD)

RTU2/FOOD SERVICE

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	ELECTRIC	CD1	12	500	1	512	529	529	105.8
SGRD2	BOH	LD1	12	250	1	454	266	266	106.4
SGRD3	FOOD SERVICE	LD1	12	500	1	398	529	529	105.8
SGRD4	FOOD SERVICE	LD1	12	500	1	634	476	476	95.2
SGRD5	BOH	LD1	12	450	1	475	475	475	105.6
SGRD6	BOH	LD1	12	450	1	505	455	455	101.1
SGRD7	FOOD SERVICE	LD1	12	500	1	417	516	516	103.2
SGRD8	FOOD SERVICE	LD1	12	500	1	362	482	482	96.4
SGRD9	BEVERAGE	LD1	12	450	1	333	452	452	100.4
SGRD10	BEVERAGE	LD1	12	450	1	288	418	418	92.9
SGRD11	BEVERAGE	LD1	12	450	1	426	429	429	95.3
Total				5000		4804	5027	5027	100.54%

Diffuser Ret/Exh (GRD)

RTU2/FOOD SERVICE

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	FOOD SERVICE	G1	16	1100	1	912	957	1054	95.8
EGRD2	FOOD SERVICE	G1	16	1100	1	976	1029	1132	102.9
EGRD3	FOOD PREP	G1	16	975	1	930	902	992	101.7
EGRD4	SALES	G1	16	800	1	863	729	805	100.6
Total				3975		3681	3617	3983	100.2%

Completed By: Tyler Youells on 06/25/2025

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Project: 06-23-25 WAWA #8159 NEWTOWN, PA

System/Unit: AHU/RTU

Asset: RTU3 AREA:RETAIL/CHECKOUT

Unit Data		
	Design	**Actual**
MFG	LENNOX	LENNOX
Serial Num	-	5624L05195
Model Num	NA	LCT060H4EE1Y
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	30X16
Num Final Filter 1	-	4
Final Filter Size 1	-	20X20X2

Motor Data		
	Design	**Actual**
Motor MFG	-	INTERLINK
Frame	-	NL
Horsepower	-	1
Motor Rpm	-	1050
Phase	3	1
Rated Voltage	208	208
Rated Amperage	-	7.4
Service Factor	-	1

Test Data		
	Design	**Actual**
SF CFM	2150	2100
SF RPM	-	861
MOTOR RPM	-	861
RA CFM	1750	1697
OA CFM	400	403
RL Voltage	-	210.9
RL Amperage	-	7.2
SF System SetPt	-	82%
RA Damper Position	-	MECHANICAL LINKAGE
OA Damper Position	-	32%
OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.29”
Fan Suction SP	-	-0.47”
Fan Discharge SP	-	0.31”
Total ESP	1.0"	0.60”
Fan Total SP	-	0.77”

Completed By: Tyler Youells on 06/25/2025

Unit Data - PHOTO LOG

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Project:06-23-25 WAWA #8159 NEWTOWN, PA

AHU/RTU

Diffuser Supply (GRD)

RTU3/RETAIL/CHECKOUT

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	VESTIBULE	CD2	10	200	1	295	209	209	104.5
SGRD2	SALES	LD1	10	300	1	145	271	271	90.3
SGRD3	SALES	LD1	10	300	1	184	270	270	90.0
SGRD4	OFFICE	CD1	8	150	1	118	147	147	98.0
SGRD5	REGISTER	LD1	10	200	1	163	189	189	94.5
SGRD6	TEAM ROOM	CD1	10	200	1	125	209	209	104.5
SGRD7	REGISTER	LD1	10	150	1	158	145	145	96.7
SGRD8	REAR VESTIBULE	G1	8	100	1	163	102	102	102.0
SGRD9	WATER ROOM	CD3	6	100	1	87	93	93	93.0
SGRD10	DELIVERY	CD1	8	150	1	167	156	156	104.0
SGRD11	MENS RR	CD3	8	125	1	146	131	131	104.8
SGRD12	HALLWAY	CD1	8	50	1	185	53	53	106.0
SGRD13	WOMENS RR	CD3	8	125	1	207	125	125	100.0
Total				2150		2143	2100	2100	97.67%

Diffuser Ret/Exh (GRD)

RTU3/RETAIL/CHECKOUT

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	COOLER	G1	8	200	0.35	108	187	187	93.5
Total				200		108	187	187	93.5%

Completed By: Tyler Youells on 06/24/2025

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Project: 06-23-25 WAWA #8159 NEWTOWN, PA

System/Unit: FAN - Exhaust

Asset: EF1 AREA:RESTROOM

Unit Data		
	Design	**Actual**
MFG	PENNBARRY	GREENHECK
Model Num	DX10R	G-090-G--1-17-X
Serial Num	-	26231255
Type	CRE	CRE
Configuration	DOWNBLAST	DOWNBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	MCMILLAN
Frame	-	NL
Horsepower	-	1/15
Motor Rpm	-	1550
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	1.2
Service Factor	-	1

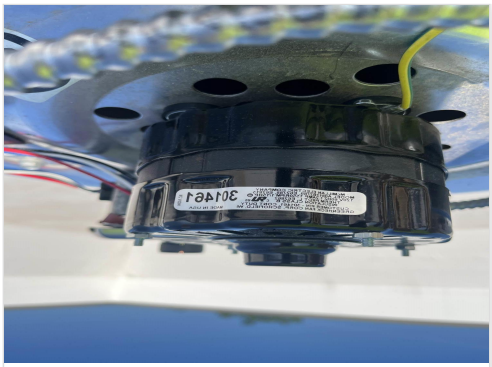
Test Data		
	Design	**Actual**
CFM	350	399
Fan RPM	-	NA
Fan Rotation	-	CW
Motor RPM	-	NA
System SetPt	-	MARKED ON DIAL
RL Voltage	-	118.1
RL Amperage	-	1.2
Total ESP	0.125"	0.29”
Fan Inlet SP	-	-0.29”
Fan Discharge SP	-	ATM

Completed By: Tyler Youells on 06/25/2025

Notes:
[1] CONNECTED LOAD 400CFM, BALANCED TO CONNECTED LOAD

Written By: Tyler Youells on 06/25/2025

Unit Data - PHOTO LOG



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Project:06-23-25 WAWA #8159 NEWTOWN, PA

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF1/RESTROOM

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	WOMENS RR	G3	8	175	1	154	150	174	99.4
EGRD2	CUSTODIANS	G1	6	50	1	98	99	52	104.0
EGRD3	MENS RR	G3	8	175	1	133	144	173	98.9
Total				400		385	393	399	99.75%

Completed By: Tyler Youells on 06/24/2025

National TAB

Project: 06-23-25 WAWA #8159 NEWTOWN, PA

System/Unit: FAN - Exhaust

Asset: EF2 AREA:BACK OF HOUSE

Unit Data		
	Design	**Actual**
MFG	PENNBARRY	GREENHECK
Model Num	DX16S	G-130-B-6-1-19-X
Serial Num	-	26231257
Type	CRE	CRE
Configuration	DOWNBLAST	DOWNBLAST

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

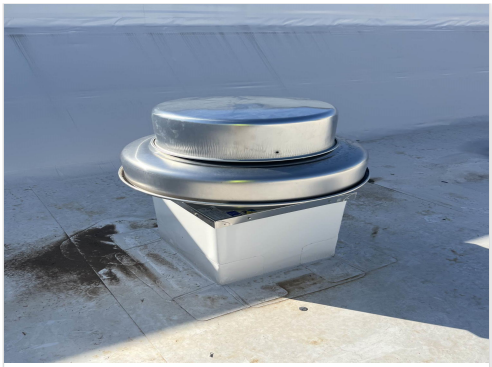
Test Data		
	Design	**Actual**
CFM	1400	1121
Fan RPM	-	1140
Fan Rotation	-	CW
Motor RPM	-	1140
System SetPt	-	FULL SPEED
RL Voltage	-	118.5
RL Amperage	-	1.9
Total ESP	0.25"	0.50”
Fan Inlet SP	-	-0.50”
Fan Discharge SP	-	ATM

Completed By: Tyler Youells on 06/25/2025

Notes:
[1] FAN IS NOT ACHEIVING DESIGN FLOW AT FULL SPEED AND CURRENT STATIC PRESSURE. CONSULT EOR IF FAN IS NEEDED TO BE UPSIZED.

Written By: Tyler Youells on 06/25/2025

Unit Data - PHOTO LOG



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06/25/2025

National TAB

Project:06-23-25 WAWA #8159 NEWTOWN, PA

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF2/BACK OF HOUSE

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	WASHROOM	G1	6	100	1	115	112	77	77.0
EGRD2	BACKROOM	G1	10	400	1	495	509	330	82.5
EGRD3	FOOD SERVICE	G1	10	400	1	223	216	292	73.0
EGRD4	FOOD SERVICE	G1	12	500	1	307	322	422	84.4
Total				1400		1140	1159	1121	80.07%

Completed By: Tyler Youells on 06/24/2025