Report By:

National TAB

Report: TAB Report

Function: Test, Adjust, & Balance

Date: 07/08/2025

Completed By: National TAB

PROJECT

07-07-25 WAWA #0888 NEWARK, DE

2645 CAPITOL TRAIL

NEWARK, DE 19711

Client

WAWA ENGINEERS

National TAB

Project: 07-07-25 WAWA #0888 NEWARK, DE

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 Low flow
- INFO: Generator power
- RTU-1/3 Gas valves off

07-07-25 WAWA #0888 NEWARK, DE

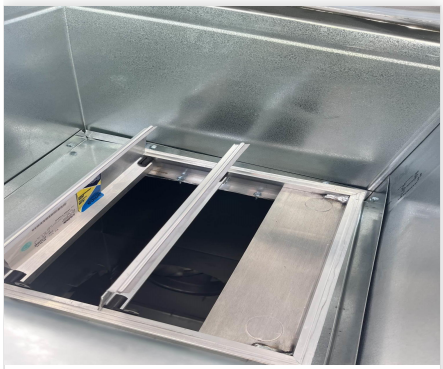
Project Issue Information

Issue Name : EF-2 Low flow

Description : Mc installed a backdraft damper into EF-2 however it was not properly sized for the correct CFM. Fan is now underperforming and can not achieve design flow (75%)

Created By :	National TAB	**Assigned To :**	National TAB - Dan Hertenstein
Status :	Open		
Priority :	Urgent	**Asset Tag :**	
Originated Date :	07/08/2025 - Tyler Youells - National TAB		

Project Issue File Details



07/08/2025

07-07-25 WAWA #0888 NEWARK, DE

Project Issue Information

Issue Name : INFO: Generator power

Description : Building is not on permanent power at time of TAB. Building is currently on generator. All phasing was correct at time of TAB. MC/EC to verify correct phasing once building is connected to permanent power

Created By :	National TAB	**Assigned To :**	National TAB - Dan Hertenstein
Status :	Open		
Priority :	InfoOnly	**Asset Tag :**	
Originated Date :	07/07/2025 - Tyler Youells - National TAB		

Project Issue File Details

07/07/2025

07-07-25 WAWA #0888 NEWARK, DE

Project Issue Information

Issue Name : RTU-1/3 Gas valves off

Description : RTU-1/3 has valves are off at time of TAB. MC to complete proper startup of heater when gas is on to the building.

Created By : National TAB

Assigned To : National TAB - Dan Hertenstein

Status : Open

Priority : Low

Asset Tag :

Originated Date : 07/07/2025 - Tyler Youells - National TAB

Project Issue File Details

07/07/2025

07/07/2025

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	RETAIL	3000	2970	2450	2427	550	543	18.3%	18.3%						
RTU-2	FOOD	5000	5032	4050	4069	950	963	19.0%	19.1%						
RTU-3	RETAIL	2000	2008	1600	1616	400	392	20.0%	19.5%						
EF-1	RESTROOMS													300	306
EF-2	BOH													1300	969
TOTALS		10000	10010	8100	8112	1900	1898			0	0	0	0	1600	1275

NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	1900	1898
TOTAL EXHAUST	1600	1275
NET AIRFLOW	300	623

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H20)
FRONT	0.0108
SIDE	0.0117
REAR	0.011
AVERAGE	**0.0112**

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

07-07-25 WAWA #0888 NEWARK, DE

CheckList Information

Name :	01: RTU's/AHU's	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	06/16/2025 - Tara Metcalf - National TAB		
Completed Date :	07/08/2025 - 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: RTU-3 was missing power exhaust relief dampers but MC installed	
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?	Fail
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:	
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: 76.6f/59.9%// RTU-2: RTU-3:	
Heating mode is operational? Record EAT/LAT for each unit:	Fail
Comment:	
Dehumidification mode is operational? (Feel dehumidification coil with your hand. Is it hot?) Record EAT/LAT for each unit:	Pass
Comment: RTU-1: 73.4f/62.8%//62.4F/68.3% RTU-2: 74.4F/65.4%//67.6F/66% RTU-3: 74.3F/60%//774.4F/54.4%	

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CheckList Information

Name :	02: LENNOX SETUP PARAMETERS	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	06/16/2025 - Tara Metcalf - National TAB		
Completed Date :	07/08/2025 - 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-1:28% RTU-2: 28% RTU-3: 10%

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

Comment:

RTU-1: 59% RTU-2: 92% RTU-3: 72%

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:	

07-07-25 WAWA #0888 NEWARK, DE

CheckList Information

Name :	03: SENSOR WIRING (LENNOX)	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	06/16/2025 - Tara Metcalf - National TAB		
Completed Date :	07/08/2025 - 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 Sensor was originally not reading but has been corrected RTU-1: 58% RTU-2: 61% RTU-3: 54%

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CheckList Information

Name :	04: EF'S	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	06/16/2025 - Tara Metcalf - National TAB		
Completed Date :	07/08/2025 - 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: EC wired in the speed controller for EF-1	
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 cannot achieve +/-5%, the backdraft damper installed is too small and is restricting flow. suction pressure was -0.89"

07-07-25 WAWA #0888 NEWARK, DE

CheckList Information

Name :	05: CLOSEOUT CHECKS	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	06/16/2025 - Tara Metcalf - National TAB		
Completed Date :	07/08/2025 - 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:	
+0.01" AVG	

National TAB

Project: 07-07-25 WAWA #0888 NEWARK, DE

System/Unit: AHU/RTU

Asset: RTU1 AREA:RETAIL

Unit Data		
	Design	**Actual**
MFG	LENNOX ENLIGHT	LENNOX ENLIGHT
Serial Num	-	5623L01660
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	-	3300W
Motor Rpm	-	2200
Phase	3	3
Rated Voltage	208	200
Rated Amperage	-	8.7
Service Factor	-	1

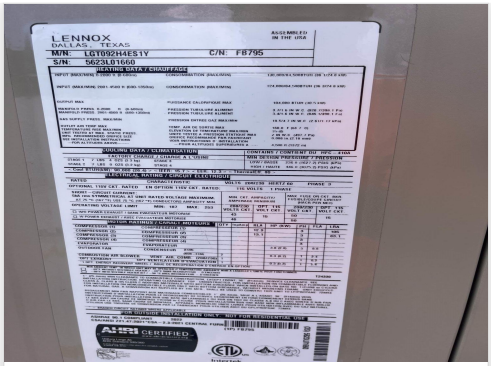
Test Data		
	Design	**Actual**
SF CFM	3000	2970
SF RPM	-	1298
MOTOR RPM	-	1298
RA CFM	2450	2427
OA CFM	550	543
RL Voltage	-	207.1/207.5/206.5
RL Amperage	-	2.5/2.5/2.5
SF System SetPt	-	59%
RA Damper Position	-	MECHANICAL LINKAGE
OA Damper Position	-	28%
OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.20”
Fan Suction SP	-	-0.54”
Fan Discharge SP	-	0.46”
Total ESP	.50"	0.66”
Fan Total SP	-	1.00”

Completed By: Tyler Youells on 07/08/2025

Unit Data - PHOTO LOG

07/07/2025



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National TAB

Project:07-07-25 WAWA #0888 NEWARK, DE

AHU/RTU

Diffuser Supply (GRD)

RTU1/RETAIL

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	SPEC/BEVERAGE	LD1	10"	300	1	634	476	305	101.7
SGRD2	COFFEE	LD1	10"	300	1	557	423	294	98.0
SGRD3	COFFES	LD1	10"	300	1	190	273	279	93.0
SGRD4	ASSOCIATES	CD1	8"	150	1	133	162	153	102.0
SGRD5	CHECKOUT	LD1	10"	300	1	273	366	284	94.7
SGRD6	RETAIL	LD1	10"	300	1	101	167	325	108.3
SGRD7	RETAIL	LD1	10"	300	1	211	355	298	99.3
SGRD8	RETAIL	LD1	10"	300	1	264	372	311	103.7
SGRD9	RETAIL	LD1	10"	300	1	240	330	292	97.3
SGRD10	RETAIL	LD1	10"	300	1	185	246	272	90.7
SGRD11	OFFICE	CD1	8"	150	1	198	268	157	104.7
Total				3000		2986	3438	2970	99%

Completed By: Tyler Youells on 07/07/2025

National TAB

Project: 07-07-25 WAWA #0888 NEWARK, DE

System/Unit: AHU/RTU

Asset: RTU2 AREA:FOOD PREP

Unit Data		
	Design	**Actual**
MFG	LENNOX ENLIGHT	LENNOX ENLIGHT
Serial Num	-	5624A03656
Model Num	LCT150H4E	LCT150H4EN1Y
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

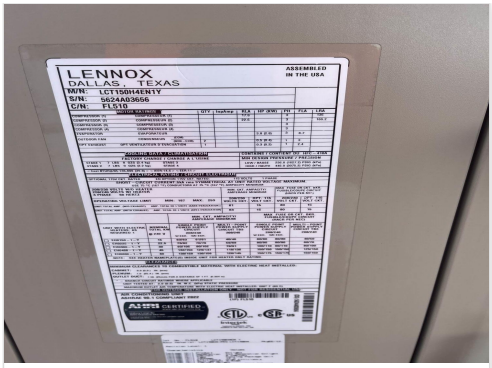
Motor Data		
	Design	**Actual**
Motor MFG	-	EBMPABST
Frame	-	NL
Horsepower	-	3300W
Motor Rpm	-	2200
Phase	3	3
Rated Voltage	208	200
Rated Amperage	-	8.7
Service Factor	-	1

Test Data		
	Design	**Actual**
SF CFM	5000	5032
SF RPM	-	2024
MOTOR RPM	-	2024
RA CFM	4050	4069
OA CFM	950	963
RL Voltage	-	206.4/206.1/206.1
RL Amperage	-	7.5/7.5/7.4
SF System SetPt	-	92%
RA Damper Position	-	MECHANICAL LINKAGE
OA Damper Position	-	28%
OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.34”
Fan Suction SP	-	-1.10”
Fan Discharge SP	-	0.77”
Total ESP	.50"	1.11”
Fan Total SP	-	1.87”

Completed By: Tyler Youells on 07/08/2025

Unit Data - PHOTO LOG



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National TAB

Project:07-07-25 WAWA #0888 NEWARK, DE

AHU/RTU

Diffuser Supply (GRD)

RTU2/FOOD PREP

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	WASHROOM	LD1		400	1	349	396	396	99.0
SGRD2	BACKROOM	CD1		300	1	386	297	297	99.0
SGRD3	FOOD SERV	LD1		400	1	240	360	360	90.0
SGRD4	FOOD SERV	LD1		450	1	484	441	441	98.0
SGRD5	FOOD SERV	LD1		550	1	606	560	560	101.8
SGRD6	FOOD SERV	LD1		400	1	402	417	417	104.3
SGRD7	FOOD SERV	LD1		450	1	367	477	477	106.0
SGRD8	FOOD SERV	LD1		450	1	405	448	448	99.6
SGRD9	FOOD SERV	LD1		400	1	496	427	427	106.8
SGRD10	FOOD SERV	LD1		400	1	441	409	409	102.3
SGRD11	FOOD SERV	LD1		400	1	375	408	408	102.0
SGRD12	FOOD SERV	LD1		400	1	393	392	392	98.0
Total				5000		4944	5032	5032	100.64%

Diffuser Ret/Exh (GRD)

RTU2/FOOD PREP

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	FOOD SERVICE	G1	14"	700	1	523	661	696	99.4
EGRD2	FOOD SERVICE	G1	14"	700	1	663	679	718	102.6
EGRD3	RETIAL	G1	14"	550	1	616	543	572	104.0
EGRD4	FOOD SERVICE	G1	14"	700	1	705	638	671	95.9
EGRD5	FOOD SERVICE	G1	14"	700	1	630	668	702	100.3
EGRD6	RETAIL	G1	14"	700	1	700	675	710	101.4
Total				4050		3837	3864	4069	100.47%

National TAB

Project: 07-07-25 WAWA #0888 NEWARK, DE

System/Unit: AHU/RTU

Asset: RTU3 AREA:RETAIL

Unit Data		
	Design	**Actual**
MFG	LENNOX ENLIGHT	LENNOX ENLIGHT
Serial Num	-	5623M06853
Model Num	LGT060H4E	LGT060H4EB1Y
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	30X16
Num OA Filters 2	-	
OA Filter Size 2	-	
Num Final Filter 1	-	4
Final Filter Size 1	-	20X20X2
Num Final Filter 2	-	
Final Filter Size 2	-	

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

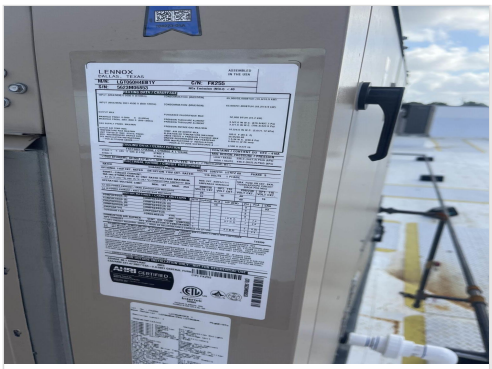
Drive Data	
	Actual
Motor Sheave Size	
Motor Bore Size	
Motor Sheave SetPt	
Fan Sheave Size	
Fan Sheave Bore	
Belt CL Distance	
Num of Belts	
Belt Size	

Test Data		
	Design	**Actual**
SF CFM	2000	2008
SF RPM	-	756
MOTOR RPM	-	756
RA CFM	1600	1616
OA CFM	400	392
RL Voltage	-	206.5
RL Amperage	-	5.7
SF System SetPt	-	72%
RA Damper Position	-	MECHANICAL LINKAGE
OA Damper Position	-	10%
OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.31”
Fan Suction SP	-	-0.49”
Fan Discharge SP	-	0.37”
Total ESP	.50"	0.68”
Fan Total SP	-	0.86”

Completed By: Tyler Youells on 07/08/2025

Unit Data - PHOTO LOG



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National TAB

Project:07-07-25 WAWA #0888 NEWARK, DE

AHU/RTU

Diffuser Supply (GRD)

RTU3/RETAIL

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	DELIVERY ROOM	CD1	8"	200	1	180	199	196	98.0
SGRD2	RETAIL	LD1	8"	225	1	234	238	233	103.6
SGRD3	REAR CEST	LD1	8"	100	1	138	97	94	94.0
SGRD4	RETAIL		8"	150	0.35	141	151	148	98.7
SGRD5	RETAIL	LD1	8"	225	1	230	233	229	101.8
SGRD6	RETAIL	LD1	8"	225	1	187	218	214	95.1
SGRD7	RETAIL	LD1	8"	275	1	290	274	268	97.5
SGRD8	RETAIL	LD1	8"	225	1	217	247	245	108.9
SGRD9	FRONT VESTIBLE	CD2	10"	250	1	269	263	261	104.4
SGRD10	WOMENS RR	CD3	6"	50	1	138	55	51	102.0
SGRD11	MENS RR	CD3	6"	75	1	10	72	69	92.0
Total				2000		2034	2047	2008	100.4%

Completed By: Tyler Youells on 07/08/2025

National TAB

Project: 07-07-25 WAWA #0888 NEWARK, DE

System/Unit: FAN - Exhaust

Asset: EF1 AREA:RESTROOMS

Unit Data		
	Design	**Actual**
MFG	PENNBARRY	PENNBARRY
Model Num	DX10R	DX10R
Serial Num	-	D25AN85720
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	FASCO
Frame	-	NL
Horsepower	1/12	1/6
Motor Rpm	-	1550
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	1.8
Service Factor	-	1

Test Data		
	Design	**Actual**
CFM	300	306
Fan RPM	1550	NA
Fan Rotation	-	CCW
System SetPt	-	MARKED ON DIAL
RL Voltage	-	113.8
RL Amperage	-	1.5
Total ESP	.250"	0.48”
Fan Inlet SP	-	-0.48”
Fan Discharge SP	-	ATM

Completed By: Tyler Youells on 07/08/2025

Unit Data - PHOTO LOG

07/07/2025

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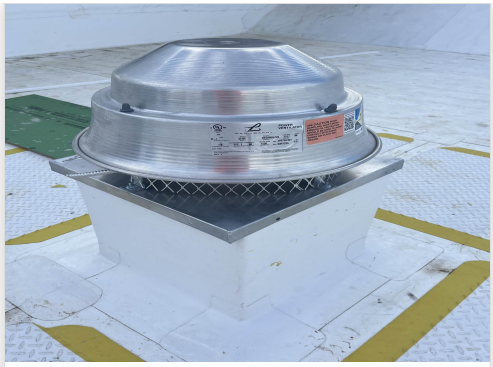

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National TAB

Project:07-07-25 WAWA #0888 NEWARK, DE

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF1/RESTROOMS

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	WOMENS RR	G3	6"	100	1	99	97	97	97.0
EGRD2	MENS RR	G1	8"	50	1	76	51	51	102.0
EGRD3	MENS RR	G3	6"	50	1	87	55	55	110.0
EGRD4	JANITORIAL	G3	6"	100	1	95	103	103	103.0
Total				300		357	306	306	102%

Completed By: Tyler Youells on 07/08/2025

National TAB

Project: 07-07-25 WAWA #0888 NEWARK, DE

System/Unit: FAN - Exhaust

Asset: EF2 AREA:BOH

Unit Data		
	Design	**Actual**
MFG	PENNBARRY	PENNBARRY
Model Num	DX16S	DX16S
Serial Num	-	D25AN85721
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	GENTEQ
Frame	-	NL
Horsepower	1/3	1/3
Motor Rpm	-	1550
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	4.5
Service Factor	-	1

Test Data		
	Design	**Actual**
CFM	1300	969
Fan Rotation	-	CCW
System SetPt	-	FULL SPEED
RL Voltage	-	116.1
RL Amperage	-	4.7
Total ESP	.250"	0.87"
Fan Inlet SP	-	-0.87"
Fan Discharge SP	-	ATM

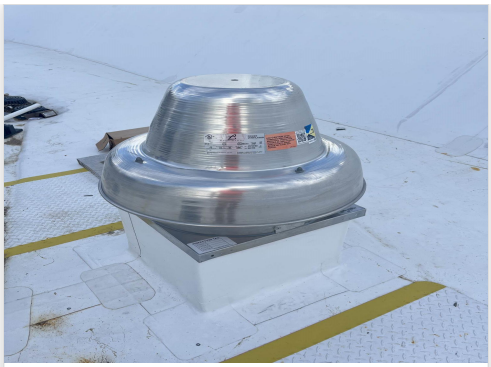
Completed By: Tyler Youells on 07/08/2025

Notes:
[1] BACKDRAFT DAMPER INSTALLED IS TOO SMALL AND IS NOW RESTRICTING FLOW. UNABLE TO BALANCE UNIT TO DESIGN

Written By: Tyler Youells on 07/08/2025

Unit Data - PHOTO LOG

07/07/2025



07/07/2025

07/07/2025

National TAB

Project:07-07-25 WAWA #0888 NEWARK, DE

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF2/BOH

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	BOH	G1	8"	100	1	168	215	92	92.0
EGRD2	BOH	G1	10"	300	1	206	308	254	84.7
EGRD3	BOH	G1	10"	400	1	150	209	200	50.0
EGRD4	BOH	G1	12"	500	1	346	526	423	84.6
Total				1300		870	1258	969	74.54%