Report By:

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

Report: TAB Report

Function: Test, Adjust, & Balance

Date: 06/07/2024

PROJECT

06-03-24 WAWA #8187 TANNERSVILLE, PA

2977 ROUTE 611

TANNERSVILLE, PA 18372

Client

Wawa

260 West Baltimore Pike

Wawa, PA 19063

National TAB

Project: 06-03-24 WAWA #8187 TANNERSVILLE, 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 Securement
- RTU Sensor Wiring
- RTU- Alarms
- RTU-3 Power exhaust Kit

06-03-24 WAWA #8187 TANNERSVILLE, PA

Project Issue Information

Issue Name : EF Securement

Description : The EFs are not secured to the curbs. Recommend securing to the curbs with proper fasteners. (Applies to all Exhaust fans)

Created By : National TAB **Assigned To :** National TAB - Tyler Youells

Status : Open

Priority : Medium **Asset Tag :**

Originated Date : 06/05/2024 - Tyler Youells - National TAB

Project Issue File Details

image
06/05/2024

06-03-24 WAWA #8187 TANNERSVILLE, PA

Project Issue Information

Issue Name : RTU Sensor Wiring

Description : RTU sensor wiiring is not run per manufacturers specifications. Typical thermostat wiring was used. Spec calls for separate sets of two wire shielded for the humidity sensor and temperature sensor. Recommend replacing wire to ensure sensor will read correctly preventing any space comfort issues.

Created By : National TAB

Assigned To : National TAB - Tyler Youells

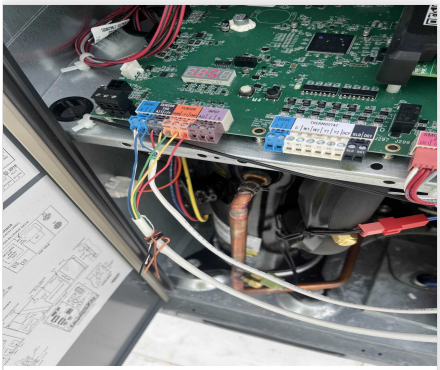
Status : Open

Priority : High

Asset Tag :

Originated Date : 06/05/2024 - Tyler Youells - National TAB

Project Issue File Details



IMG_6803
06/05/2024

06-03-24 WAWA #8187 TANNERSVILLE, PA

Project Issue Information

Issue Name : RTU- Alarms

Description : RTU-1 has an alarm for compressor 1 low pressure causing compressor one to not run and subsequently dehumidification is disabled. Rtu-2 was running normally during the second day until it had a few alarms for cooling causing the unit to complete shut down. Recommend MC go through cooling systems of all RTUs to ensure proper health

Created By : National TAB

Assigned To : National TAB - Tyler Youells

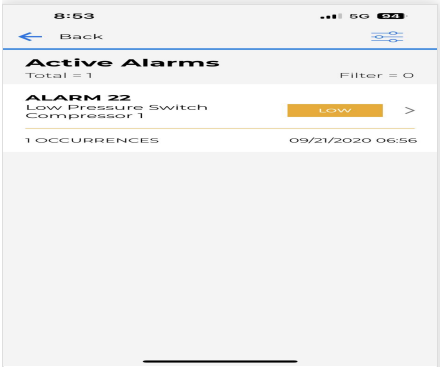
Status : Open

Priority : High

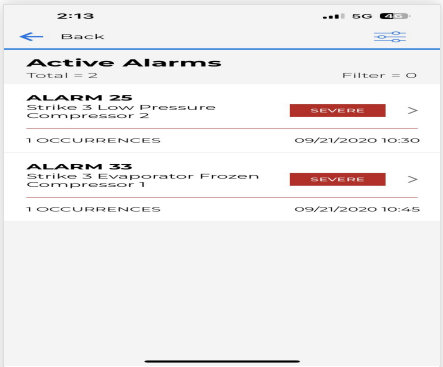
Asset Tag :

Originated Date : 06/06/2024 - Tyler Youells - National TAB

Project Issue File Details



IMG_6836
06/06/2024



IMG_6849
06/06/2024

Project Issue Response Details

- **06/07/2024 National TAB - Tyler Youells**
  - Note: RTU-1 Fails Cooling and Dehumidification temperature tests

06-03-24 WAWA #8187 TANNERSVILLE, PA

Project Issue Information

Issue Name : RTU-3 Power exhaust Kit

Description : The factory shipping cover is installed on RTU-3 power exhaust. Cover needs to be removed and backdraft louvers installed for proper function and operation of the power exhaust. Recommend contacting Lennox if Backdraft louvers cannot be located. Not TAB Critical

Created By : National TAB

Assigned To : National TAB - Tyler Youells

Status : Open

Priority : High

Asset Tag :

Originated Date : 06/05/2024 - Tyler Youells - National TAB

Project Issue File Details

IMG_6802
06/05/2024

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	3400	3385	2860	2821	540	564	15.9%	16.7%						
RTU-2	FOOD SERVICI	5000	5074	4250	4301	750	773	15.0%	15.2%						
RTU-3	RETAIL	2000	1966	1640	1595	360	371	18.0%	18.9%						
EF-1	RESTROOMS													1000	981
EF-2	BACKROOM													250	244
EF-3	WATER METER ROOM													100	102
TOTALS		10400	10425	8750	8717	1650	1708			0	0	0	0	1350	1327

NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	1650	1708
TOTAL EXHAUST	1350	1327
NET AIRFLOW	300	381

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H20)
FRONT	0.0042
SIDE	
REAR	0.005
AVERAGE	**0.0046**

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

- TECH - SITE PICTURES
- TECH - STEP 1: RTU's/AHU's
- TECH - STEP 2: LENNOX SETUP PARAMETERS
- TECH - STEP 3: SENSOR WIRING (LENNOX)
- TECH - STEP 4: EF'S
- TECH - STEP 5: CLOSEOUT CHECKS

06-03-24 WAWA #8187 TANNERSVILLE, PA

CheckList Information

Name :	TECH - SITE PICTURES	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	06/04/2024 - Brianna Biggs - National TAB		

CheckList Item Details

STORE FRONT

Comment:

IMG_6794
06/06/2024

RTU-1

Comment:

IMG_6844
06/06/2024

RTU-2

Comment:

IMG_6845
06/06/2024

RTU-3

Comment:

The

IMG_6847
06/06/2024

EF-1

Comment:

IMG_6843
06/06/2024

EF-2

Comment:

IMG_6846
06/06/2024

EF-3

Comment:

IMG_6848
06/06/2024

06-03-24 WAWA #8187 TANNERSVILLE, PA

CheckList Information

Name :	TECH - STEP 1: RTU's/AHU's	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	06/04/2024 - Brianna Biggs - 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:

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?	Fail

Comment:

RTU-1 HAS COMPRESSOR 1 LOW PRESSURE SWITCH ALARM RTU-2 HAS ALARM 25 AND ALARM 33 RELATING TO COMPRESSORS 1 AND 2 (SEVERE ALARM CAUSING UNIT SHUTDOWN.)

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:	N/A

Comment:

RTU-1: FAIL EAT:72.2 /LAT:65.9 RTU-2:PASS EAT:73.1/LAT 58.8 RTU-3: PASS EAT:70.4/LAT 55.7

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

Comment:

RTU-1(EAT:73/LAT:90) RTU-2: N/A RTU-3:(EAT:73.1/LAT:86.1)

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

Comment:

RTU-1 FAIL RTU-2 PASS (EAT:72.5/LAT:68.4) RTU-3 PASS (EAT 72.3/LAT:71.2)

06-03-24 WAWA #8187 TANNERSVILLE, PA

CheckList Information

Name :	TECH - STEP 2: LENNOX SETUP PARAMETERS	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	06/04/2024 - Brianna Biggs - 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	Pass
Comment: SET TO BACNET IP	
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 START OPEN PPM: 1200	Pass

Comment:

PARAMETER 118 CO2 START OPEN PPM: 1500	Pass

Comment:

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

Comment:

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

Comment:

PARAMETER 154 OCC BLOWER MODE: ON-CONTINUOUS 1	Pass

Comment:

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

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

Comment:

RTU-1:64% RTU-2: 90% RTU-3: 68%

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:	

06-03-24 WAWA #8187 TANNERSVILLE, PA

CheckList Information

Name :	TECH - STEP 3: SENSOR WIRING (LENNOX)	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	06/04/2024 - Brianna Biggs - 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.	Fail
Comment:	
For second shielded cable, one wire is landed to Vout and the shield wire is not connected.	Fail
Comment:	
Verify that the CORE or Prodigy controller is sensing a relative humidity (record the reading)	Pass
Comment: RTU-1: 68% RTU-2: 64% RTU-3: 61%	

06-03-24 WAWA #8187 TANNERSVILLE, PA

CheckList Information

Name :	TECH - STEP 4: EF'S	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	06/04/2024 - Brianna Biggs - 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: Electrician installed speed controllers during TAB	
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%?	Pass

Comment:

06-03-24 WAWA #8187 TANNERSVILLE, PA

CheckList Information

Name : TECH - STEP 5: CLOSEOUT CHECKS **Status :** Not Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 06/04/2024 - Brianna Biggs - 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:	

National TAB

Project: 06-03-24 WAWA #8187 TANNERSVILLE, PA

System/Unit: AHU/RTU

Asset: RTU1 AREA:RETAIL

Unit Data		
	Design	**Actual**
MFG	LENNOX ENLIGHT	LENNOX ENLIGHT
Serial Num	-	5623L02208
Model Num	LCT102H4E	LCT102H4EE1Y
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	2
OA Filter Size 1	-	16X25
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	3400	3385
SF RPM	-	1408
RA CFM	2860	2821
OA CFM	540	564
RL Voltage	-	213.4/213.4/215
RL Amperage	-	2.82/2.75/2.82
SF System SetPt	-	64%
RA Damper Position	-	MECHANICAL LINKAGE
OA Damper Position	-	31%
OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.24"
Fan Suction SP	-	-0.57"
Fan Discharge SP	-	0.39"
Total ESP	0.5"	0.63"
Fan Total SP	-	0.96"

Completed By: Tyler Youells on 06/06/2024

National TAB

Project:06-03-24 WAWA #8187 TANNERSVILLE, PA

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	RETAIL	LD1	10"	330	1	484	298	298	90.3
SGRD2	RETAIL	LD1	10"	330	1	441	319	319	96.7
SGRD3	RETAIL	LD1	10"	330	1	303	350	350	106.1
SGRD4	OFFICE	CD1	8"	150	1	251	147	147	98.0
SGRD5	ASSOCIATES RM	CD1	8"	150	1	243	145	145	96.7
SGRD6	RETAIL	LD1	10"	330	1	354	326	326	98.8
SGRD7	RETAIL	LD1	10"	330	1	414	334	334	101.2
SGRD8	COFFEE	LD1	10"	355	1	408	372	372	104.8
SGRD9	COFFEE	LD1	10"	365	1	389	354	354	97.0
SGRD10	RETAIL	LD1	10"	365	1	380	350	350	95.9
SGRD11	RETAIL	LD1	10"	365	1	444	390	390	106.8
Total				3400		4111	3385	3385	99.56%

National TAB

Project: 06-03-24 WAWA #8187 TANNERSVILLE, PA

System/Unit: AHU/RTU

Asset: RTU2 AREA:FOOD SERVICE

Unit Data		
	Design	**Actual**
MFG	LENNOX ENLIGHT	LENNOX ENLIGHT
Serial Num	-	5623L04760
Model Num	LCT150H4E	LCT150H4EN1Y
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	2
OA Filter Size 1	-	16X25
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	5000	5074
SF RPM	-	1980
RA CFM	4250	4301
OA CFM	750	773
RL Voltage	-	213/211.9/212.1
RL Amperage	-	6.72/6.78/6.8
SF System SetPt	-	90%
RA Damper Position	-	MECHANICAL LINKAGE
OA Damper Position	-	29%
OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.27"
Fan Suction SP	-	-1.07"
Fan Discharge SP	-	0.87"
Total ESP	0.5"	1.14"
Fan Total SP	-	1.94"

Completed By: Tyler Youells on 06/06/2024

National TAB

Project:06-03-24 WAWA #8187 TANNERSVILLE, 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	FOOD SERVICE	LD1	12"	485	1	243	475	475	97.9
SGRD2	FOOD SERVICE	LD1	12"	485	1	501	495	495	102.1
SGRD3	FOOD SERVICE	LD1	12"	480	1	449	479	479	99.8
SGRD4	FOOD SERVICE	LD1	12"	500	1	448	512	512	102.4
SGRD5	FOOD SERVICE	LD1	12"	500	1	549	534	534	106.8
SGRD6	FOOD SERVICE	LD1	12"	500	1	491	549	549	109.8
SGRD7	FOOD SERVICE	LD1	12"	500	1	324	484	484	96.8
SGRD8	FOOD SERVICE	CD1	12"	500	1	432	497	497	99.4
SGRD9	WASHROOM	LD1	16"	350	1	392	340	340	97.1
SGRD10	WATER METER ROOM	CD1	6"	100	1	92	98	98	98.0
SGRD11	DELIVERY RM	CD1	6"	50	1	113	45	45	90.0
SGRD12	ELECTRICAL RM	CD1	12"	550	1	604	566	566	102.9
Total				5000		4638	5074	5074	101.48%

National TAB

Project: 06-03-24 WAWA #8187 TANNERSVILLE, PA

System/Unit: AHU/RTU

Asset: RTU3 AREA:RETAIL

Unit Data		
	Design	**Actual**
MFG	LENNOX ENLIGHT	LENNOX ENLIGHT
Serial Num	-	5623J04080
Model Num	LCT060H4E	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	-	GENTEQ
Frame	-	NL
Horsepower	1	1
Motor Rpm	-	NOT ACCESSIBLE
Phase	1	1
Rated Voltage	208	208
Rated Amperage	-	7.4
Service Factor	-	1

Test Data		
	Design	**Actual**
SF CFM	2000	1966
SF RPM	-	68%
RA CFM	1640	1595
OA CFM	360	371
RL Voltage	-	210.9
RL Amperage	-	6.14
SF System SetPt	-	68%
RA Damper Position	-	MECHANICAL LINKAGE
OA Damper Position	-	31%
OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.26"
Fan Suction SP	-	-0.40"
Fan Discharge SP	-	0.25"
Total ESP	0.5"	0.51"
Fan Total SP	-	0.65"

Completed By: Tyler Youells on 06/06/2024

National TAB

Project:06-03-24 WAWA #8187 TANNERSVILLE, PA

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	FRONT VESTIBULE	CD2	10"	300	1	314	298	298	99.3
SGRD2	RETAIL	LD1	8"	250	1	228	250	250	100.0
SGRD3	RETAIL	LD1	8"	250	1	177	229	229	91.6
SGRD4	RETAIL	LD1	8"	250	1	182	242	242	96.8
SGRD5	WOMENS RR	CD3	6"	75	1	60	72	72	96.0
SGRD6	MENS RR	CD3	6"	75	1	74	75	75	100.0
SGRD7	RETAIL	CD1	8"	250	1	231	251	251	100.4
SGRD8	RETAIL	LD1	8"	250	1	214	252	252	100.8
SGRD9	RETAIL	LD1	8"	200	1	197	201	201	100.5
SGRD10	REAR VESTIBULE	CD3	6"	100	1	82	96	96	96.0
Total				2000		1759	1966	1966	98.3%

Completed By: Tyler Youells on 06/05/2024

National TAB

Project: 06-03-24 WAWA #8187 TANNERSVILLE, PA

System/Unit: FAN - Exhaust

Asset: EF1 AREA:BACK OF HOUSE

Unit Data		
	Design	**Actual**
MFG	PENNBARRY	PENNBARRY
Model Num	DX13Q	DX13Q
Serial Num	-	B24AQ24036
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	GENTEQ
Frame	-	48Y
Horsepower	1/4	0.25
Motor Rpm	-	1725
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	3.8
Service Factor	-	1

Test Data		
	Design	**Actual**
CFM	1000	981
Fan RPM	1725	NO ACCESS
Fan Rotation	-	CCW
Motor RPM	-	NO ACCESS
System SetPt	-	MARKED ON DIAL
RL Voltage	-	120.1
RL Amperage	-	3.26
Total ESP	0.25"	0.92”
Fan Inlet SP	-	-0.92”
Fan Discharge SP	-	ATM

Completed By: Tyler Youells on 06/07/2024

National TAB

Project:06-03-24 WAWA #8187 TANNERSVILLE, PA

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF1/BACK OF HOUSE

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	FOOD SERVICE	G1	12"	300	1	227	279	279	93.0
EGRD2	FOOD SERVICE	G1	12"	500	1	488	505	505	101.0
EGRD3	STAGING ROOM	G1	8"	200	1	190	197	197	98.5
Total				1000		905	981	981	98.1%

National TAB

Project: 06-03-24 WAWA #8187 TANNERSVILLE, PA

System/Unit: FAN - Exhaust

Asset: EF2 AREA:RESTROOMS

Unit Data		
	Design	**Actual**
MFG	PENNBARRY	PENNBARRY
Model Num	DX10R	DX10R
Serial Num	-	B24AQ24037
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	250	244
Fan RPM	1725	NO ACCESS
Fan Rotation	-	CCW
Motor RPM	-	NO ACCESS
System SetPt	-	MARKED ON DIAL
RL Voltage	-	118.2
RL Amperage	-	1.52
Total ESP	0.25"	0.50”
Fan Inlet SP	-	-0.50”
Fan Discharge SP	-	ATM

Completed By: Tyler Youells on 06/07/2024

National TAB

Project:06-03-24 WAWA #8187 TANNERSVILLE, PA

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF2/RESTROOMS

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	WOMENS RR	G3	8"	100	1	124	108	108	108.0
EGRD2	MENS RR	G3	8"	150	1	153	136	136	90.7
Total				250		277	244	244	97.6%

National TAB

Project: 06-03-24 WAWA #8187 TANNERSVILLE, PA

System/Unit: FAN - Exhaust

Asset: EF3 AREA:WATER METER ROOM

Unit Data		
	Design	**Actual**
MFG	PENNBARRY	PENNBARRY
Model Num	DX08Q	DX08Q
Serial Num	-	B24A024038
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	FASCO
Frame	-	NL
Horsepower	1/50	1/30
Motor Rpm	-	1550
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	5.4
Service Factor	-	1

Test Data		
	Design	**Actual**
CFM	100	102
Fan RPM	-	NA
Fan Rotation	-	CCW
Motor RPM	-	NA
System SetPt	-	MARKED ON DIAL
RL Voltage	-	120.5
RL Amperage	-	0.58
Total ESP	-	0.27"
Fan Inlet SP	-	-0.27"
Fan Discharge SP	-	ATM

Completed By: Tyler Youells on 06/07/2024