

Report By:

National TAB
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Report: TAB REPORT
Function: Test, Adjust, & Balance
Date: 10/25/2024
Completed By: National TAB

PROJECT

10-14-24 WAWA #6303 BRUNSWICK, GA

4330 NEW JESUP HWY

BRUNSWICK, GA 31520

Client

Wawa

260 West Baltimore Pike

Wawa, PA 19063

National TAB

Project: 10-14-24 WAWA #6303 BRUNSWICK, GA

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10-14-24 WAWA #6303 BRUNSWICK, GA

CheckList Information

Name : 00: PICTURES **Status :** Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 09/23/2024 - Brianna Biggs - National TAB
Completed Date : 10/22/2024 - JOASH ALBIN - National TAB

CheckList Item Details

STORE FRONT

Comment:



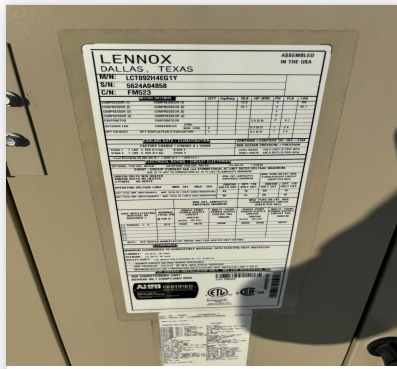
10/22/2024

RTU-1

Comment:



10/22/2024



10/22/2024



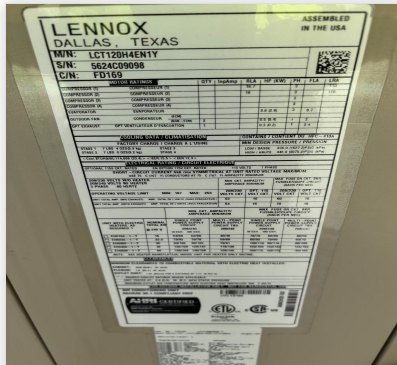
10/22/2024

RTU-2

Comment:



10/22/2024



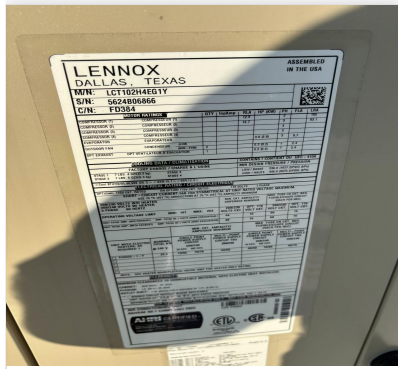
10/22/2024



10/22/2024

RTU-3

Comment:



10/22/2024



10/22/2024



10/22/2024

EF-1

Comment:



10/22/2024



10/22/2024



10/22/2024

EF-2

Comment:



10/22/2024



10/22/2024



10/22/2024



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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 : 09/23/2024 - Brianna Biggs - National TAB

Completed Date : 10/22/2024 - JOASH ALBIN - 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?

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:

EAT: 75/51. LAT:55/40 EAT: 73/50. LAT:54/40 EAT: 74/53 LAT: 52/41

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

Pass

Comment:

EAT:74/55 LAT 81/58 EAT: 73/54 LAT 85/60 EAT: 77/60 LAT 89/59

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

Pass

Comment:

EAT 75/50 LAT 65/48 EAT 74/49 LAT 64/43 EAT 75/52 LAT 70/45 Second coil is warm. Temperatures didn't really show much change.



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CheckList Information

Name : 02: LENNOX SETUP PARAMETERS **Status :** Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 09/23/2024 - Brianna Biggs - National TAB

Completed Date : 10/22/2024 - JOASH ALBIN - 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:

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

Comment:

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:



10-14-24 WAWA #6303 BRUNSWICK, GA

CheckList Information

Name : 03: SENSOR WIRING (LENNOX) **Status :** Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 09/23/2024 - Brianna Biggs - National TAB

Completed Date : 10/22/2024 - JOASH ALBIN - 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:



10-14-24 WAWA #6303 BRUNSWICK, GA

CheckList Information

Name : 04: EF'S **Status :** Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 09/23/2024 - Brianna Biggs - National TAB

Completed Date : 10/22/2024 - JOASH ALBIN - National TAB

CheckList Item Details

EF's

Rotation is correct?	Fail
----------------------	------

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:

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 : 09/23/2024 - Brianna Biggs - National TAB

Completed Date : 10/22/2024 - JOASH ALBIN - 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:



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Project: 10-14-24 WAWA #6303 BRUNSWICK, GA

System/Unit: AHU/RTU



Asset: RTU1

AREA:

Unit Data		
	Design	Actual
MFG	LENNOX ENLIGHT	LENNOX ENLIGHT
Serial Num	-	5624B06866
Model Num	LCT102H4E	LCT102H4EG1Y
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	23.25X14.25
Num Final Filter 1	-	4
Final Filter Size 1	-	20X25X2

Motor Data		
	Design	Actual
Motor MFG	-	EDMPAPST
Frame	-	NL
Horsepower	3.75	3.75
Motor Rpm	-	NL
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	8.7
Service Factor	-	1

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

Test Data		
	Design	Actual
SF CFM	3400	3522
SF RPM	-	DD
MOTOR RPM	-	DD
RA CFM	2900	2922
OA CFM	500	525
RL Voltage	-	210/212/208
RL Amperage	-	4.5/4.6/4.3
SF System SetPt	-	67%
RA Damper Position	-	NA
RA Damper Type	-	NA
OA Damper Position	-	35%
OA Damper Type	-	ODB

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.39"
Fan Suction SP	-	-0.61"
Fan Discharge SP	-	0.41"
Total ESP	0.5"	0.80"
Fan Total SP	-	1.02"

Completed By: JOASH ALBIN on 10/22/2024



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Project:10-14-24 WAWA #6303 BRUNSWICK, GA

AHU/RTU



Diffuser Supply (GRD)

RTU1/

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	RETAIL	LD1	10"	300	1	411	314	318	106.0
SGRD2	RETAIL	LD1	10"	300	1	425	332	307	102.3
SGRD3	RETAIL	LD1	8"	250	1	315	268	258	103.2
SGRD4	RETAIL	LD1	10"	275	1	305	281	275	100.0
SGRD5	RETAIL	LD1	10"	275	1	300	270	277	100.7
SGRD6	OFFICE	CD1	8"	150	1	105	185	156	104.0
SGRD7	RETAIL	LD1	8"	250	1	289	218	260	104.0
SGRD8	RETAIL	LD1	8"	250	1	268	265	252	100.8
SGRD9	RETAIL	LD1	8"	250	1	290	314	250	100.0
SGRD10	RESTROOM HALLWAY	CD1	6"	75	1	67	75	77	102.7
SGRD11	MENS RR	CD4	6"	75	1	84	71	75	100.0
SGRD12	WOMENS RR	CD4	6"	50	1	61	54	50	100.0
SGRD13	RETAIL	LD1	10"	300	1	189	310	320	106.7
SGRD14	RETAIL	LD1	10"	300	1	425	338	325	108.3
SGRD15	RETAIL	LD1	8"	200	1	410	290	218	109.0
SGRD16	DELIVERY VESTIBULE	CD1	6"	100	1	40	115	104	104.0
Total				3400		3984	3700	3522	103.59%

Diffuser Ret/Exh (GRD)

RTU1/

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
EGRD1	RETAIL	G1	14"	725	1	921	918	713	98.3
EGRD2	RETAIL	G1	14"	725	1	986	937	734	101.2
EGRD3	RETAIL	G1	14"	725	1	813	931	735	101.4
EGRD4	RETAIL	G1	14"	725	1	1167	952	740	102.1
Total				2900		3887	3738	2922	100.76%

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Project: 10-14-24 WAWA #6303 BRUNSWICK, GA

System/Unit: AHU/RTU



Asset: RTU2

AREA:

Unit Data		
	Design	Actual
MFG	LENNOX ENLIGHT	LENNOX ENLIGHT
Serial Num	-	5624C09098
Model Num	LCT120H4E	LCT120H4EN1Y
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	23.25X14.25
Num Final Filter 1	-	4
Final Filter Size 1	-	20X25X2

Motor Data		
	Design	Actual
Motor MFG	-	EDMPAPST
Frame	-	NL
Horsepower	3.75	3.75
Motor Rpm	-	2200
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	8.7
Service Factor	-	1

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

Test Data		
	Design	Actual
SF CFM	4000	3967
SF RPM	-	DD
MOTOR RPM	-	DD
RA CFM	3525	3535
OA CFM	475	470
RL Voltage	-	208/210/211
RL Amperage	-	5.3/5.1/5.2
SF System SetPt	-	77%
RA Damper Position	-	NA
RA Damper Type	-	NA
OA Damper Position	-	43%
OA Damper Type	-	ODB

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.31"
Fan Suction SP	-	-0.73"
Fan Discharge SP	-	0.44"
Total ESP	0.5"	0.75"
Fan Total SP	-	1.17"

Completed By: JOASH ALBIN on 10/22/2024



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Project:10-14-24 WAWA #6303 BRUNSWICK, GA

AHU/RTU



Diffuser Supply (GRD)

RTU2/

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	RETAIL	LD1	10"	410	1	435	406	406	99.0
SGRD2	RETAIL	LD1	10"	410	1	439	415	415	101.2
SGRD3	FOOD SERVICE	LD1	10"	400	1	420	400	400	100.0
SGRD4	FOOD SERVICE	LD1	10"	410	1	400	415	415	101.2
SGRD5	WASHROOM	LD1	10"	410	1	407	410	410	100.0
SGRD6	WASHROOM	LD1	14"	410	1	448	415	415	101.2
SGRD7	FOOD SERVICE	LD1	10"	400	1	511	391	391	97.8
SGRD8	BACKROOM	CD1	12"	600	1	432	581	581	96.8
SGRD9	ELECTRICAL	CD1	12"	550	1	582	534	534	97.1
Total				4000		4074	3967	3967	99.18%

Diffuser Ret/Exh (GRD)

RTU2/

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
EGRD1	FOOD SERVICE	G1	14"	705	1	756	705	705	100.0
EGRD2	FOOD SERVICE	G1	14"	705	1	781	711	718	101.8
EGRD3	FOOD SERVICE	G1	14"	705	1	735	702	702	99.6
EGRD4	WASHROOM	G1	14"	705	1	680	710	710	100.7
EGRD5	WASHROOM	G1	14"	705	1	715	700	700	99.3
Total				3525		3667	3528	3535	100.28%

Completed By: JOASH ALBIN on 10/22/2024



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Project: 10-14-24 WAWA #6303 BRUNSWICK, GA

System/Unit: AHU/RTU



Asset: RTU3

AREA:

Unit Data		
	Design	Actual
MFG	LENNOX ENLIGHT	LENNOX ENLIGHT
Serial Num	-	
Model Num	LCT092H4E	LCT092H4E
Type	RTU	
Configuration	VERTICAL	
Num OA Filters 1	-	
OA Filter Size 1	-	
Num OA Filters 2	-	
OA Filter Size 2	-	
Num Final Filter 1	-	
Final Filter Size 1	-	
Num Final Filter 2	-	
Final Filter Size 2	-	

Motor Data		
	Design	Actual
Motor MFG	-	
Frame	-	
Horsepower	3.75	
Motor Rpm	-	
Phase	3	
Rated Voltage	208	
Rated Amperage	-	
Service Factor	-	

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	3000	
SF RPM	-	
MOTOR RPM	-	
RA CFM	2750	
OA CFM	250	
RL Voltage	-	
RL Amperage	-	
SF System SetPt	-	
RA Damper Position	-	
RA Damper Type	-	
OA Damper Position	-	
OA Damper Type	-	

Performance Data		
	Design	Actual
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Total ESP	0.5"	
Fan Total SP	-	



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AHU/RTU



Diffuser Supply (GRD)

RTU3/

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	VESTIBULE	CD2	12"	500	1	654	505	490	98.0
SGRD2	RETAIL	LD1	10"	425	1	375	403	430	101.2
SGRD3	RETAIL	LD1	10"	430	1	345	395	429	99.8
SGRD4	RETAIL	LD1	10"	430	1	333	436	425	98.8
SGRD5	COFFEE / SPEC. BEV	LD1	10"	430	1	448	415	417	97.0
SGRD6	COFFEE / SPEC. BEV	LD1	10"	450	1	445	437	437	97.1
SGRD7	ASSOCIATE	CD1	8"	150	1	145	150	149	99.3
SGRD8	STAGING	CD3	12"	185	1	300	177	175	94.6
Total				3000		3045	2918	2952	98.4%

Diffuser Ret/Exh (GRD)

RTU3/

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
EGRD1	RETAIL	G1	14"	920	1	129	945	920	100.0
EGRD2	RETAIL	G1	14"	915	1	1167	909	919	100.4
EGRD3	RETAIL	G1	14"	915	1	1742	901	911	99.6
Total				2750		3038	2755	2750	100%

Completed By: JOASH ALBIN on 10/15/2024



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Project: 10-14-24 WAWA #6303 BRUNSWICK, GA

System/Unit: FAN - Exhaust



Asset: EF1

AREA:

Unit Data		
	Design	Actual
MFG	GREENHECK	GREENHECK
Model Num	G-080	G-080-D-1-17-X
Serial Num	-	25051342
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	MCMILLIAN
Frame	-	NL
Horsepower	1/10	1/10
Motor Rpm	-	1550
Phase	1	1
Voltage (rated)	120	120
Amperage (rated)	-	1.8
Service Factor	-	1

Test Data		
	Design	Actual
CFM	325	335
Fan RPM	1576	DD
Fan Rotation	-	CCW
Motor RPM	-	DD
System SetPt	-	HIGH
RL Voltage	-	120
RL Amperage	-	1.7
Total ESP	0.250"	0.22"
Fan Inlet SP	-	-0.22"
Fan Discharge SP	-	ATM

Completed By: JOASH ALBIN on 10/22/2024



National TAB

Project:10-14-24 WAWA #6303 BRUNSWICK, GA

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	WOMENS RR	G3	6"	100	1	125	111	105	105.0
EGRD2	MENS RR	G3	6"	100	1	122	116	101	101.0
EGRD3	MENS RR	G3	6"	50	1	65	55	51	102.0
EGRD4	JANITOR	G4	6"	75	1	80	77	78	104.0
Total				325		392	359	335	103.08%

Completed By: JOASH ALBIN on 10/22/2024



National TAB

Project: 10-14-24 WAWA #6303 BRUNSWICK, GA

System/Unit: FAN - Exhaust



Asset: EF2

AREA:

Unit Data		
	Design	Actual
MFG	GREENHECK	GREENHECK
Model Num	G-090	G-090-D-1-17-X
Serial Num	-	25051343
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	MCMILLAN
Frame	-	NL
Horsepower	1/10	1/10
Motor Rpm	-	1550
Phase	1	1
Voltage (rated)	120	120
Amperage (rated)	-	1.8
Service Factor	-	1

Test Data		
	Design	Actual
CFM	400	402
Fan RPM	1185	DD
Fan Rotation	-	CCW
Motor RPM	-	DD
System SetPt	-	HIGH
RL Voltage	-	120
RL Amperage	-	1.7
Total ESP	0.250"	0.18"
Fan Inlet SP	-	-0.18"
Fan Discharge SP	-	ATM

Completed By: JOASH ALBIN on 10/22/2024



National TAB

Project:10-14-24 WAWA #6303 BRUNSWICK, GA

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	FOOD SERVICE	G1	8"	200	1	255	230	200	100.0
EGRD2	BACKROOM	G1	8"	200	1	225	235	202	101.0
Total				400		480	465	402	100.5%

Completed By: JOASH ALBIN on 10/22/2024