

Report By:

National TAB  
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SUITE 4210  
CINCINNATI, OH 45246

**NATIONAL**

**TAB**

Comfort. Under control.

**Report: TAB REPORT**  
**Function: Test, Adjust, & Balance**  
**Date: 01/05/2023**

# PROJECT

## 01-02-23 APPLEBEES - ALTOONA, PA

317 W Plank Rd

ALTOONA, PA 16602

### Client

Flynn Restaurant Group  
6200 Oak Tree Boulevard  
Suite 250  
Independence, OH 44131

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Project: 01-02-23 APPLEBEES - ALTOONA, 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.

### Kitchen Exhaust Hood & Associated Fans

Each kitchen exhaust fan was measured at the hood filter bay utilizing a velocity matrix and a manufacturer's correction factor. Each filter velocity is multiplied by the manufacturer's corrected area. The sum of these readings equals the total flow of the exhaust fans. The total flow of the exhaust was then adjusted to within tolerance of the design flow. . Any EF's that fell outside of this 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.

### 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 of  $-0.02''$  wc to  $+0.02''$  wc and that the pressure measurement coincides with the actual and design net airflow. Any deviations from these standards are noted throughout the report.

The hood capture was tested at the perimeter of the hood and the cook top level with the equipment heat on to ensure satisfactory hood capture and containment.

### 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	KITCHEN	4200	4316	3150	3189	1050	1127	25.0%	26.1%						
RTU-2	DINING	5250	5315	0	0	5250	5315	100.0%	100.0%						
EF-1	HD1											1200	1293		
EF-2	HD2											1750	1804		
EF-3	HD3											1750	1919		
EF-4	HD4											800	779		
EF-5	RESTROOMS													300	305
<b>TOTALS</b>		9450	9631	3150	3189	6300	6442			0	0	5500	5795	300	305

#### NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	6300	6442
TOTAL EXHAUST	5800	6100
<b>NET AIRFLOW</b>	<b>500</b>	<b>342</b>

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H2O)
FRONT	0.0091
SIDE	0.0171
REAR	0.0116
<b>AVERAGE</b>	<b>0.0126</b>

#### FINAL CHECKS

- ACTUAL NET AIRFLOW COINCIDES WITH DESIGN: ✓

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- MEASURED PRESSURES COINCIDES WITH ACTUAL NET AIRFLOW: ✓

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

NOTES:



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## 01-02-23 APPLEBEES - ALTOONA, PA

### CheckList Information

**Name :** SITE PICTURES **Status :** NotSubmitted  
**Assigned Organization :** National TAB **Asset :**  
**Requesting Organization :** National TAB

### CheckList Item Details

#### STORE FRONT



STORE\_FRONT.jpeg

#### RTU-1



RTU\_1.jpeg

RTU-2



RTU\_2.jpeg

EF-1



EF\_1.jpeg

EF-2



EF\_2.jpeg

EF-3



EF\_3.jpeg

EF-4



EF\_4.jpeg

EF-5



EF\_5.jpeg

HOOD-1



**HOOD\_1.jpeg**

HOOD-2



**HOOD\_2.jpeg**

HOOD-3



**HOOD\_3.jpeg**

HOOD-4



HOOD\_4.jpeg

Notes/Comments :



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### 01-02-23 APPLEBEES - ALTOONA, PA

#### CheckList Information

**Name :** TECH - STEP 1: INITIAL WALKTHROUGH **Status :** NotSubmitted  
**Assigned Organization :** National TAB **Asset :**  
**Requesting Organization :** National TAB

#### CheckList Item Details

##### INITIAL SITE WALKTHROUGH

All diffusers and grilles are installed and match design?	YES
All hood filters installed and accounted for?	YES
Hoods are wired and have power?	YES
Hood is free of alarms?	YES
Thermostats have power?	YES
Have trades/general contractor been notified about any issues and are they created on FaciliBuild?	N/A

#### Notes/Comments :



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### 01-02-23 APPLEBEES - ALTOONA, PA

#### CheckList Information

**Name :** TECH - STEP 2: UNIT DATA AND EVAL **Status :** NotSubmitted

**Assigned Organization :** National TAB **Asset :**

**Requesting Organization :** National TAB

#### CheckList Item Details

##### UNIT DATA AND EVALUATION WHILE GATHERING UNIT DATA CHECK THE FOLLOWING:

##### RTU's/AHU's

Economizers are assembled and functional?	YES
DCV Max damper opening position is set to minimum?	YES
Free cooling enthalpy set point set for lowest setting (Typically "D")	YES
Motors are all operating below the FLA rating?	YES
Are belts tight?	YES
If direct drive unit is the speed controller working.	YES
Is gas piping installed and valves turned on?	YES
Unit free of noticeable noise and vibration	YES

##### EF's

Rotation is correct?	YES
Belts are tight?	N/A
Grease cup installed on hood fan?	YES
Hinge kit installed installed on hood fan?	YES
Lean fan back. Is grease duct installation adequate and is duct ran all the way to the base of the fan?	YES

Flex conduit is long enough so that fan can be completely tilted back?	YES
There is no major leakage around base of fan?	NO LEAKAGE
Is the motor operating below the motor FLA rating?	YES
For restroom fan(s) is the back draft damper installed and can it fully open?	YES
Unit free of noticeable noise and vibration?	YES

**MUA**

Rotation is correct?	N/A
Gas piping is installed and valves are in on position?	N/A
Heater tested and is functional?	N/A
Internal motorized damper is fully opening?	N/A
Motor is operating below the FLA rating?	N/A
Unit free of noticeable noise and vibration?	N/A

**HOODS**

Kitchen equipment installed in proper places?	YES
Can kitchen equipment be turned on for final smoke test?	YES

**DOCUMENTATION**

Have trades/general contractor been notified about any issues and are they created on FaciliBuild?	N/A
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**Notes/Comments :**

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### 01-02-23 APPLEBEES - ALTOONA, PA

#### CheckList Information

**Name :** TECH - STEP 3: TEST, ADJUST AND BALANCE **Status :** NotSubmitted

**Assigned Organization :** National TAB **Asset :**

**Requesting Organization :** National TAB

#### CheckList Item Details

**TEST, ADJUST, AND BALANCE ALL EQUIPMENT:**

**DURING TESTING MAKE NOTE OF THE FOLLOWING:**

Is space free of drafting?	YES
Is space comfortable in all areas?	YES
Is the space free of ventilation noise?	YES
If deviations from design were necessary to resolve 1-3 what were they? Otherwise put "NA".	N/A

**Notes/Comments :**



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### 01-02-23 APPLEBEES - ALTOONA, PA

#### CheckList Information

<b>Name :</b>	TECH - STEP 4: FINAL TESTS	<b>Status :</b>	NotSubmitted
<b>Assigned Organization :</b>	National TAB	<b>Asset :</b>	
<b>Requesting Organization :</b>	National TAB		

#### CheckList Item Details

##### FINAL TESTS

##### HOOD CAPTURE TEST

List equipment turned on for testing	FRYER, GRILL, OVEN
List smoke candle type used	SMOKE EMITTER
Smoke test capture - Perimeter of hood	100%
Smoke test capture - Top of cooking surface	100%

##### WITNESS

Date test was completed	01/05/2023
TAB tech name / Firm	ANDREW LOIGNON / NATIONAL TAB
Site super name / Firm	SCOTT PRICE / APPLEBEES STORE MANAGER
Owner representative name / Firm (if Applicable)	N/A
Building pressure at front & back doors (All Systems On)	FRONT 0.0091 SIDE 0.0171 REAR 0.0116

##### ADDITIONAL

Do actual net building airflow, design net building airflow, and pressure coincide? If not why? (All three should either be positive or negative)	YES
Thermostats are programmed?	YES

##### Notes/Comments :



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System/Unit: AHU/RTU



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Asset: RTU1

AREA:KITCHEN

Unit Data		
	Design	Actual
MFG	GOODMAN	GOODMAN
Serial Num	-	1306125271
Model Num	CPG1502103BXXXAB	CPG1502103BXXXAB
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	2
OA Filter Size 1	-	20X25
Num Final Filter 1	-	4
Num Final Filter 2	-	20X25X2

Test Data		
	Design	Actual
SF CFM	4200	4316
SF RPM	-	1071
RA CFM	3150	3189
OA CFM	1050	1127
RL Voltage	-	208/207/208
RL Amperage	-	9.8/9.9/10.3
SF Rotation	-	CCW
RA Damper Position	-	5.0V
Min OA Damper Position	-	2"

Motor Data		
	Design	Actual
Motor MFG	-	NIDEC
Frame	-	184T
Horsepower	3.0	5
Motor Rpm	1800	1760
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	13.8

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.61
Fan Suction SP	-	-0.63"
Fan Discharge SP	-	0.52"
Total ESP	1.2"	1.13"
Fan Total SP	-	1.15"

Drive Data		
	Design	Actual
Motor Sheave Size	-	4"
Motor Bore Size	-	7/8"
Motor Sheave SetPt	-	3 TURNS OUT
Fan Sheave Size	-	AFD74
Fan Sheave Bore	-	1"
Belt CL Distance	-	15.5"
Num of Belts	-	1
Belt Size	-	AX51
Belt Alignment	-	GOOD

General		
	Design	Actual
Fan Rotation Correct	-	YES
Unit Filters Clean	-	YES
Condensate Drain Installed	-	YES

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Project:01-02-23 APPLEBEES - ALTOONA, PA

## AHU/RTU



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### Diffuser Supply (GRD)

#### RTU1/KITCHEN

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	TOGO	S1	10"	300	1	402	463	289	96.3
SGRD2	KITCHEN	S	14"	600	1	647	701	632	105.3
SGRD3	KITCHEN	S	14"	600	1	673	712	628	104.7
SGRD4	KITCHEN	S	14"	600	1	565	622	621	103.5
SGRD5	KITCHEN	S	14"	600	1	457	504	632	105.3
SGRD6	DRY STORAGE	S	14"	250	1	123	156	248	99.2
SGRD7	KITCHEN	S	14"	600	1	564	618	598	99.7
SGRD8	MECHANICAL	S	8"	200	1	129	144	207	103.5
SGRD9	OFFICE	S	8"	200	1	98	137	211	105.5
SGRD10	WOMENS RR	S	8"	125	1	93	142	128	102.4
SGRD11	MENS RR	S	8"	125	1	105	128	122	97.6

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## System/Unit: AHU/RTU



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Asset: RTU2

AREA:DINING

Unit Data		
	Design	Actual
MFG	VALENT	VALENT
Serial Num	-	6781158/20
Model Num	VPR-210-25C-40J-A-1DX	VPR-210-25C-40J-A-1DX
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	3
OA Filter Size 1	-	20X25
Num Final Filter 1	-	6
Final Filter Size 1	-	16X25X2

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR
Frame	-	184T
Horsepower	5.0	5
Motor Rpm	1800	1750
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	14

Drive Data		
	Design	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
Belt Alignment	-	DD

Test Data		
	Design	Actual
SF CFM	5250	5315
SF RPM	-	1364
RA CFM	0	0
OA CFM	5250	5315
RL Voltage	-	208/207/207
RL Amperage	-	10.3/10.4/11.0
SF Rotation	-	CCW
RA Damper Position	-	SHUT
Min OA Damper Position	-	FULL OPEN

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.56"
Fan Suction SP	-	-0.61"
Fan Discharge SP	-	0.54"
Total ESP	1.2"	1.10"
Fan Total SP	-	1.15"

General		
	Design	Actual
Fan Rotation Correct	-	YES
Unit Filters Clean	-	YES
Condensate Drain Installed	-	YES

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Project:01-02-23 APPLEBEES - ALTOONA, PA

## AHU/RTU



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### Diffuser Supply (GRD)

#### RTU2/DINING

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	VESTIBUL E	S2	10X4	100	1	109	74	98	98.0
SGRD2	WAITING	S2	10X4	100	1	158	128	102	102.0
SGRD3	WAITING	S2	10X4	100	1	196	127	107	107.0
SGRD4	BAR DINING 2	S2	10X4	125	1	108	87	124	99.2
SGRD5	BAR DINING 2	S2	10X4	125	1	98	77	128	102.4
SGRD6	BAR DINING 1	S	8"	150	1	387	325	147	98.0
SGRD7	BAR DINING 1	S	8"	150	1	246	216	161	107.3
SGRD8	BAR DINING 1	S	12"	100	1	84	68	103	103.0
SGRD9	BAR DINING 1	S1	8"	150	1	99	76	159	106.0
SGRD10	DINING 2	S	12"	300	1	584	439	297	99.0
SGRD11	DINING 2	S	12"	300	1	587	444	302	100.7
SGRD12	DINING 1	S1	8"	150	1	78	67	150	100.0
SGRD13	DINING 1	S1	8"	150	1	97	78	149	99.3
SGRD14	DINING 1	S1	8"	150	1	104	89	147	98.0
SGRD15	DINING 2	S	12"	300	1	372	353	299	99.7
SGRD16	BAR	S	8"	150	1	167	142	153	102.0
SGRD17	BAR	S	12"	100	1	282	226	107	107.0
SGRD18	BAR	S	8"	150	1	173	158	160	106.7
SGRD19	BAR	S	10"	100	1	138	103	102	102.0
SGRD20	EXPO	S	10"	250	1	247	216	253	101.2
SGRD21	EXPO	S	10"	250	1	284	257	250	100.0
SGRD22	DINING 3	S	12"	300	1	386	359	290	96.7
SGRD23	DINING 3	S	12"	300	1	482	423	295	98.3
SGRD24	DINING 3	S	12"	300	1	354	305	301	100.3
SGRD25	DINING 3	S	12"	300	1	126	100	309	103.0
SGRD26	DINING 4	S	12"	300	1	378	311	306	102.0
SGRD27	DINING 4	S	12"	300	1	154	103	316	105.3

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System/Unit: FAN - Exhaust



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Asset: EF1

AREA:

Unit Data		
	Design	Actual
<b>MFG</b>	ACCUREX	CAPTIVEAIRE
<b>Model Num</b>	XRUD-101-VG	DU50HFA
<b>Serial Num</b>	-	5408196
<b>Type</b>	UPBLAST	UPBLAST
<b>Configuration</b>	CENTRIFUGAL	VERTICAL

Motor Data		
	Design	Actual
<b>Motor MFG</b>	-	NEMA
<b>Frame</b>	-	NL
<b>Horsepower</b>	1/2	0.5
<b>Motor Rpm</b>	-	1800
<b>Phase</b>	1	1
<b>Voltage (rated)</b>	120	115
<b>Amperage (rated)</b>	-	6.3
<b>Service Factor</b>	-	NL

Test Data		
	Design	Actual
<b>CFM</b>	1200	1293
<b>Fan RPM</b>	1255	1468
<b>Fan Rotation</b>	-	CCW
<b>Motor RPM</b>	-	1468
<b>System SetPt</b>	-	76P
<b>RL Voltage</b>	-	115
<b>RL Amperage</b>	-	4.7
<b>Total ESP</b>	0.63"	0.56"
<b>Fan Inlet SP</b>	-	-0.56"
<b>Fan Discharge SP</b>	-	ATM

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Project: 01-02-23 APPLEBEES - ALTOONA, PA

System/Unit: FAN - Exhaust



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Asset: EF2

AREA:

Unit Data		
	Design	Actual
MFG	ACCUREX	CAPTIVEAIRE
Model Num	XRUD-131-VG	DU85HFA
Serial Num	-	5408196
Type	UPBLAST	UPBLAST
Configuration	CENTRIFUGAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	NEMA
Frame	-	NL
Horsepower	3/4	0.75
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	8.9
Service Factor	-	NL

Test Data		
	Design	Actual
CFM	1750	1804
Fan RPM	1597	1211
Fan Rotation	-	CCW
Motor RPM	-	1211
System SetPt	-	64P
RL Voltage	-	115
RL Amperage	-	5.6
Total ESP	0.75"	0.67"
Fan Inlet SP	-	-0.67"
Fan Discharge SP	-	ATM

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Project: 01-02-23 APPLEBEES - ALTOONA, PA

System/Unit: FAN - Exhaust



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Asset: EF3

AREA:

Unit Data		
	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XRUD-131-VG	XRUD-131-VG-7-G
Serial Num	-	13372476
Type	UPBLAST	UPBLAST
Configuration	CENTRIFUGAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	GREENHECK
Frame	-	NL
Horsepower	3/4	0.75
Motor Rpm	-	1725
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	10.1
Service Factor	-	NL

Test Data		
	Design	Actual
CFM	1750	1919
Fan RPM	1597	1458
Fan Rotation	-	CCW
Motor RPM	-	1458
RL Voltage	-	115
RL Amperage	-	7.6
Total ESP	0.75	0.65"
Fan Inlet SP	-	-0.65"
Fan Discharge SP	-	ATM

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Project: 01-02-23 APPLEBEES - ALTOONA, PA

System/Unit: FAN - Exhaust



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Asset: EF4

AREA:

Unit Data		
	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XRED-095-VG	XRED-095-VG-6-X
Serial Num	-	13372478
Type	DOWNBLAST	DOWNBLAST
Configuration	CENTRIFUGAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	GREENHECK
Frame	-	NL
Horsepower	1/6	0.17
Motor Rpm	-	1750
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	3.1
Service Factor	-	NL

Test Data		
	Design	Actual
CFM	800	779
Fan RPM	1495	1339
Fan Rotation	-	CCW
Motor RPM	-	1339
RL Voltage	-	115
RL Amperage	-	1.2
Total ESP	0.25"	0.16"
Fan Inlet SP	-	-0.16"
Fan Discharge SP	-	ATM

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Project: 01-02-23 APPLEBEES - ALTOONA, PA

System/Unit: FAN - Exhaust



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Asset: EF5

AREA:

Unit Data		
	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XRED-080-VG	XRED-080-VG-6-X
Serial Num	-	13372479
Type	DOWNBLAST	DOWNBLAST
Configuration	CENTRIFUGAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	GREENHECK
Frame	-	NL
Horsepower	1/6	0.17
Motor Rpm	-	1750
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	3.1
Service Factor	-	NL

Test Data		
	Design	Actual
CFM	300	305
Fan RPM	1663	1674
Fan Rotation	-	CCW
Motor RPM	-	1674
RL Voltage	-	115
RL Amperage	-	1.7
Total ESP	0.5"	0.37"
Fan Inlet SP	-	-0.37"
Fan Discharge SP	-	ATM

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Project:01-02-23 APPLEBEES - ALTOONA, PA

## FAN - Exhaust



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**Diffuser Ret/Exh (GRD)**

**EF5/**

<b>Asset</b>									
<b>Asset Name</b>	<b>Location</b>	<b>Type</b>	<b>Size</b>	<b>DESIGN CFM</b>	<b>AK</b>	<b>CFM(1)</b>	<b>CFM(2)</b>	<b>FINAL CFM</b>	<b>% to design</b>
EF5-EGRD1	MENS RR	E	8X8	150	1	124	133	146	97.3
EF5-EGRD2	WOMENS RR	E	8X8	150	1	180	172	159	106.0

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Project: 01-02-23 APPLEBEES - ALTOONA, PA  
System/Unit: Kitchen Hood Type I



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Asset: HD1

AREA:

Unit Data		
	Design	Actual
<b>MFG</b>	ACCUREX	ACCUREX
<b>Model Num</b>	XBEW	XBEW-86.00-S
<b>Job / Serial Num</b>	-	13391092
<b>Type</b>	TYPE I	TYPE I CANOPY
<b>Hood length</b>	96"	86
<b>Hood Width</b>	54"	54"

Test Data Exhaust		
	Design	Actual
<b>Filter Type</b>	-	BAFFLE
<b>Filter Size 1</b>	-	20X20
<b>Filter Size 2</b>	-	20X16
<b>Filter Qty 1</b>	-	1
<b>Filter Qty 2</b>	-	4
<b>Filter AK factor size 1</b>	-	2.10
<b>Filters AK factor size 2</b>	-	1.66
<b>Filter Total AK Area</b>	-	8.74
<b>Filter1 FPM</b>	-	154
<b>Filter2 FPM</b>	-	155
<b>Filter3 FPM</b>	-	164
<b>Filter4 FPM</b>	-	135
<b>Filter5 FPM</b>	-	131
<b>Filter Ave FPM(corr)</b>	-	148
<b>CFM</b>	1200	1293

Cooking Equipment		
	Design	Actual

Completed By: Andrew Loignon

Notes:

# National TAB

Project: 01-02-23 APPLEBEES - ALTOONA, PA

## System/Unit: Kitchen Hood Type I



Comfort. Under control.

Asset: HD2

AREA:

Unit Data		
	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XKEW	XKEW-131.00-S
Job / Serial Num	-	13391091
Type	TYPE I	TYPE I CANOPY
Hood length	131"	131"
Hood Width	54"	54"

Test Data Exhaust		
	Design	Actual
Filter Type	-	EXTRACTOR
Filter Size 1	-	20X20
Filter Size 2	-	20X16
Filter Qty 1	-	1
Filter Qty 2	-	7
Filter AK factor size 1	-	2.00
Filters AK factor size 2	-	1.53
Filter Total AK Area	-	12.71
Filter1 FPM	-	126
Filter2 FPM	-	119
Filter3 FPM	-	136
Filter4 FPM	-	135
Filter5 FPM	-	145
Filter6 FPM	-	168
Filter7 FPM	-	154
Filter8 FPM	-	157
Filter Ave FPM(corr)	-	172
CFM	1750	1804

Cooking Equipment		
	Design	Actual
Item 1	-	GRIDDLE
Item 2	-	OVEN

Completed By: Andrew Loignon

Notes:

# National TAB

Project: 01-02-23 APPLEBEES - ALTOONA, PA

## System/Unit: Kitchen Hood Type I



Comfort. Under control.

Asset: HD3

AREA:

Unit Data		
	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XKEW	XKEW-131.00-S
Job / Serial Num	-	13391090
Type	TYPE I	TYPE I CANOPY
Hood length	131"	131"
Hood Width	54"	54"

Test Data Exhaust		
	Design	Actual
Filter Type	-	EXTRACTOR
Filter Size 1	-	20X20
Filter Size 2	-	20X16
Filter Qty 1	-	1
Filter Qty 2	-	7
Filter AK factor size 1	-	2.00
Filters AK factor size 2	-	1.53
Filter Total AK Area	-	12.71
Filter1 FPM	-	128
Filter2 FPM	-	155
Filter3 FPM	-	147
Filter4 FPM	-	200
Filter5 FPM	-	165
Filter6 FPM	-	159
Filter7 FPM	-	145
Filter8 FPM	-	133
Filter Ave FPM(corr)	-	151
CFM	1750	1919

Cooking Equipment		
	Design	Actual
Item 1	-	FRYER
Item 2	-	OVEN

Completed By: Andrew Loignon

Notes:

# National TAB

Project: 01-02-23 APPLEBEES - ALTOONA, PA

System/Unit: Kitchen Hood Type II



Comfort. Under control.

Asset: HD4

AREA:KITCHEN

Unit Data		
	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XD1	XD1
Serial Num	-	[1]
Type	TYPE II	TYPE II CANOPY
Hood length	19"	54"
Hood Width	12"	54"

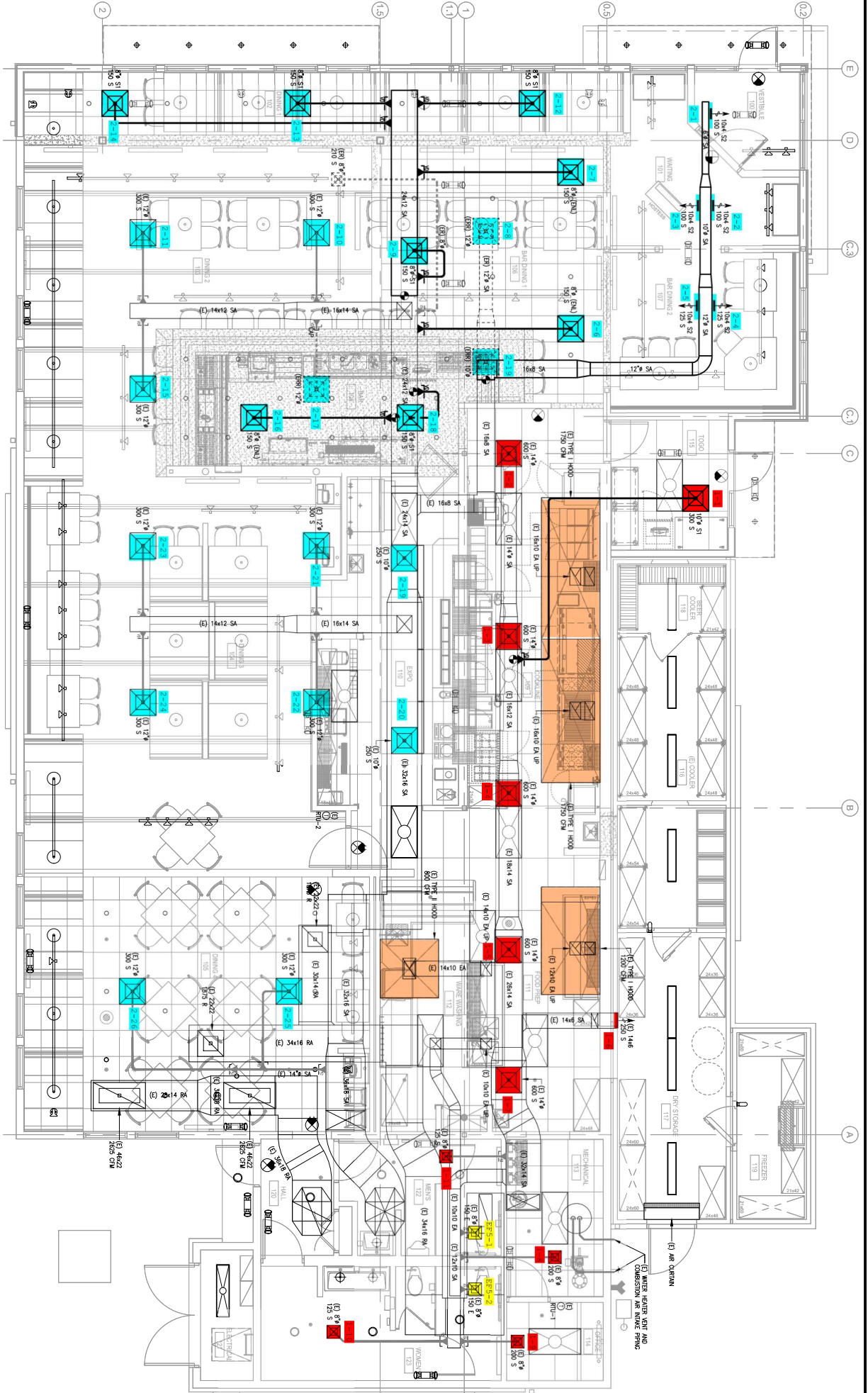
Test Data		
	Design	Actual
Exhaust CFM	800	779

Completed By: Andrew Loignon

Notes:

1 FLOOR PLAN - MECHANICAL VENTILATION

14-2-19



PLAN NOTES

1. CONTRACTOR SHALL REMOVE VENTS FROM ROOF A MINIMUM OF 12" FROM ANY OBSTACLE. THE LOCATION OF THIS EQUIPMENT SHALL BE APPROVED BY THE ARCHITECT AND LANDSCAPE ARCHITECT. TO REPAIR AND RESTORE THE MECHANICAL CONTRACTOR SHALL VERIFY FIELD CONDITIONS AND EXIST LOCATION OF THIS EQUIPMENT TO INSURE PROPER SERVICE CLEARANCE AND CLEARANCE FROM

