Report By:

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

Report: TAB

Function: Test, Adjust, & Balance

Date: 06/02/2025

Completed By: National TAB

PROJECT

05-26-25 SWEETGREEN LAGUNA NIGUEL, CA (TAB, IAQ)

27221 LA PAZ RD

LAGUNA NIGUEL, CA 92677

Client

Palm Construction Group

1040 Calle Cordillera

San Clemente, CA 92672

National TAB

Project: 05-26-25 SWEETGREEN LAGUNA NIGUEL, CA (TAB, IAQ)

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.

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.

- Open BALANCE_SCHEDULE_LAGUNA.xlsx

CheckList List

- STEP 2: UNIT DATA AND EVAL
- STEP 3: TEST, ADJUST AND BALANCE
- STEP 4: FINAL TESTS
- STEP 1: INITIAL WALKTHROUGH
- STEP 4B: HOOD AND OVEN EVALUATION

05-26-25 SWEETGREEN LAGUNA NIGUEL, CA (TAB, IAQ)

CheckList Information

Name :	STEP 2: UNIT DATA AND EVAL	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	04/22/2025 - Tara Metcalf - 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?

Comment:

DCV Max damper opening position is set to minimum?

Comment:

Free cooling enthalpy set point set for lowest setting (Typically "D")

Comment:

Motors are all operating below the FLA rating?

Comment:

Are belts tight?

Comment:

If direct drive unit is the speed controller working.

Comment:

Is gas piping installed and valves turned on?

Comment:

Unit free of noticeable noise and vibrat

Comment:

EF's

Rotation is correct?

Comment:

Belts are tight?

Comment:

Grease cup installed on hood fan?

Comment:

Hinge kit installed installed on hood fan?

Comment:

Lean fan back. Is grease duct installation adequate and is duct ran all the way to the base of the fan?

Comment:

Flex conduit is long enough so that fan can be completely tilted back?

Comment:

There is no major leakage around base of fan?

Comment:

Is the motor operating below the motor FLA rating?

Comment:

For restroom fan(s) is the back draft damper installed and can it fully open?

Comment:

Unit free of noticeable noise and vibration?

Comment:

MUA

Rotation is correct?

Comment:

Gas piping is installed and valves are in on position?

Comment:

Heater tested and is functional?

Comment:

Internal motorized damper is fully opening?

Comment:

Motor is operating below the FLA rating?

Comment:

Unit free of noticeable noise and vibration?

Comment:

HOODS

Kitchen equipment installed in proper places?

Comment:

Can kitchen equipment be turned on for final smoke test?

Comment:

DOCUMENTATION

Have trades/general contractor been notified about any issues and are they created on FaciliBuild?

Comment:

AIR PURIFICATION INSPECTION

Comment:

PHI Air purifiers are installed?

Comment:

Are they installed after the evaporator coil or in the supply duct?

Comment:

Are they powered?

Comment:

If PKG installed inside of the blower compartment, is the wiring exposed to UV light protected with split loom or conduit?

Comment:

If Reme Halo, is it installed so that the air flow arrow is pointing correct direction?

Comment:

Is a UV warning sticker installed?

Comment:

Take picture of each air purifier and include in the report

Comment:

05-26-25 SWEETGREEN LAGUNA NIGUEL, CA (TAB, IAQ)

CheckList Information

Name :	STEP 3: TEST, ADJUST AND BALANCE	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	04/22/2025 - Tara Metcalf - National TAB		

CheckList Item Details

TEST, ADJUST, AND BALANCE ALL EQUIPMENT:

DURING TESTING MAKE NOTE OF THE FOLLOWING:

Is space free of drafting?

Comment:

Is space comfortable in all areas?

Comment:

Is the space free of ventilation noise?

Comment:

If deviations from design were necessary to resolve 1-3 what were they? Otherwise put "NA".

Comment:

05-26-25 SWEETGREEN LAGUNA NIGUEL, CA (TAB, IAQ)

CheckList Information

Name :	STEP 4: FINAL TESTS	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	04/22/2025 - Tara Metcalf - National TAB		

CheckList Item Details

FINAL TESTS

HOOD CAPTURE TEST

List equipment turned on for testing

Comment:

List smoke candle type used

Comment:

Smoke test capture - Perimeter of hood

Comment:

Smoke test capture - Top of cooking surface

Comment:

WITNESS

Date test was completed

Comment:

TAB tech name / Firm

Comment:

Site super name / Firm

Comment:

Owner representative name / Firm (if Applicable)

Comment:

Building pressure at front & back doors (All Systems On)

Comment:

ADDITIONAL

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

Comment:

Thermostats are programmed?

Comment:

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CheckList Information

Name :	STEP 1: INITIAL WALKTHROUGH	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	04/22/2025 - Tara Metcalf - National TAB		

CheckList Item Details

INITIAL SITE WALKTHROUGH

Review Plan Review Checklist, has it been signed off and meets our standards to start balancing? If not contact processor to ensure job is ready.

Comment:

All diffusers and grilles are installed and match design?

Comment:

All hood filters installed and accounted for?

Comment:

Hoods are wired and have power?

Comment:

Hood is free of alarms?

Comment:

Thermostats have power?

Comment:

Have trades/general contractor been notified about any issues and are they created on FaciliBuild?

Comment:

05-26-25 SWEETGREEN LAGUNA NIGUEL, CA (TAB, IAQ)

CheckList Information

Name :	STEP 4B: HOOD AND OVEN EVALUATION	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	04/22/2025 - Tara Metcalf - National TAB		

CheckList Item Details

HOOD AND OVEN EVALUATION

Is the oven covered by a hood?

Comment:

What is the hood overhang over the front of the hood?

Comment:

What is hood overhang over the left and right sides of the oven?

Comment:

If vertical end panels are specified, are they installed?

Comment:

SMOKE TEST AT HOOD

Comment:

If oven is capable of turning on, it is required to be turned on for smoke test. Was oven on for smoke test?

Comment:

Smoke test the oven at the flue on the top of the hood - Capture %?

Comment:

Smoke test the oven at perimeter of the oven - capture %?

Comment:

Smoke test the oven at the perimeter of the hood - capture %?

Comment:

IF NO HOOD IS INSTALLED ABOVE THE OVEN

If no hood is installed above the oven, and it is only a grille, smoke test at the top of the oven at the flue and note the capture %. If smoke capture is very poor, hold the candle up by the grille after a few seconds so that the smoke alarms don't get set off.

Comment:

SMOKE TEST AT OVEN

Confirm that the internal fan turns on as you open the oven door?

Comment:

Smoke test at the oven doors as you are opening the door - capture %?

Comment:

Smoke test at the oven doors when the doors are shut - capture %?

Comment:

EXHAUST DISCHARGE AND OA INTAKES

Identify where the exhaust air is discharged and take pictures

Comment:

Are there are any outside air intakes nearby that would be able to re-entrain the exhaust smoke? Take pictures

Comment:

Are there any building entrances or windows near the exhaust discharge where smoke that will cause smoke to enter unwanted spaces?

Comment:

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Project: 05-26-25 SWEETGREEN LAGUNA NIGUEL, CA (TAB, IAQ)

System/Unit: AHU/RTU

Asset: RTU1 AREA:KITCHEN

Unit Data		
	Design	**Actual**
MFG	TRANE	DAIKIN
Serial Num	-	2412364584
Model Num	YSJ-120	DRG1203LH00137CAB
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	41X23”
Num Final Filter 1	-	2
Final Filter Size 1	-	25X25X2
Num Final Filter 2	-	2
Final Filter Size 2	-	20X25X2

Motor Data		
	Design	**Actual**
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	3.5
Motor Rpm	-	NL
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	10.9

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
Belt Alignment	DD

Test Data		
	Design	**Actual**
SF CFM	4000	4071
SF RPM	-	DD
RA CFM	3600	3653
OA CFM	400	418
RL Voltage	-	204/204/204
RL Amperage	-	9.12/9.30/8.85
SF Rotation	-	CCW
SF System SetPt	-	60%
RA Damper Position	-	95%
Min OA Damper Position	-	5%
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	24BTU

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.58”
Fan Suction SP	-	-0.90”
Fan Discharge SP	-	0.59”
Total ESP	0.80"	1.17”
Fan Total SP	-	1.49”

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

Completed By: David Nicolas Sanchez on 05/30/2025

National TAB

Project:05-26-25 SWEETGREEN LAGUNA NIGUEL, CA (TAB, IAQ)

AHU/RTU

Diffuser Supply (GRD)

RTU1/KITCHEN

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	KITCHEN	ECD	10"	300	1	420	400	328	109.3
SGRD2	KITCHEN	ECD	10"	300	1	388	355	318	106.0
SGRD3	KITCHEN	ECD	10"	300	1	183	179	271	90.3
SGRD4	KITCHEN	ECD	10"	300	1	350	360	316	105.3
SGRD5	KITCHEN	ECD	10"	300	1	365	335	315	105.0
SGRD6	KITCHEN	ECD	10"	400	1	403	392	399	99.8
SGRD7	KITCHEN	CD1	10"	300	1	460	435	301	100.3
SGRD8	KITCHEN	CD1	12"	400	1	489	469	425	106.3
SGRD9	KITCHEN	CD1	12"	400	1	478	459	413	103.3
SGRD10	KITCHEN	CD1	12"	400	1	407	370	384	96.0
SGRD11	KITCHEN	CD1	10"	300	1	238	223	297	99.0
SGRD12	KITCHEN	CD1	10"	300	1	294	266	304	101.3
Total				4000		4475	4243	4071	101.78%

Completed By: David Nicolas Sanchez on 05/30/2025

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Project: 05-26-25 SWEETGREEN LAGUNA NIGUEL, CA (TAB, IAQ)

System/Unit: AHU/RTU

Asset: RTU2 AREA:DINING

Unit Data		
	Design	**Actual**
MFG	TRANE	DAIKIN
Serial Num	-	2412336518
Model Num	YSJ-072	DRG0723DM00055CAB
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	29X17
Num Final Filter 1	-	4
Final Filter Size 1	-	20X20X2

Motor Data		
	Design	**Actual**
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	1.2
Motor Rpm	-	NL
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	5.0

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
Belt Alignment	DD

Test Data		
	Design	**Actual**
SF CFM	2400	2253
SF RPM	-	DD
RA CFM	1855	1663
OA CFM	545	590
RL Voltage	-	203/203/203
RL Amperage	-	2.56/2.66/2.71
SF Rotation	-	CCW
SF System SetPt	-	65%
RA Damper Position	-	65%
Min OA Damper Position	-	35%
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	24BTU

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.46”
Fan Suction SP	-	0.62”
Fan Discharge SP	-	0.43”
Total ESP	.80"	0.89”
Fan Total SP	-	1.05”

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

Completed By: David Nicolas Sanchez on 05/30/2025

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Project:05-26-25 SWEETGREEN LAGUNA NIGUEL, CA (TAB, IAQ)

AHU/RTU

Diffuser Supply (GRD)

RTU2/DINING

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	DINING	ESG1	10"	100	1.09	0	0	0	0.0
SGRD2	DINING	ESG1	10"	300	1.09	567	567	321	107.0
SGRD3	DINING	ESG1	10"	100	1.09	207	207	104	104.0
SGRD4	DINING	ESG1	10"	300	1.09	248	248	316	105.3
SGRD5	DINING	ESG1	10"	100	1.09	38	38	103	103.0
SGRD6	DINING	ESG1	10"	200	1.09	167	167	212	106.0
SGRD7	DINING	ESG1	10"	250	1.09	584	584	258	103.2
SGRD8	DINING	ESG1	10"	225	1.09	190	190	234	104.0
SGRD9	DINING	ESG1	10"	250	1.09	358	358	263	105.2
SGRD10	DINING	ESG1	8"	50	1	45	45	48	96.0
SGRD11	DINING	ESG1	8"	100	1	54	54	98	98.0
SGRD12	DINING	ESG1	8"	100	1	48	48	93	93.0
SGRD13	DINING	ESG1	8"	225	1	157	157	203	90.2
Total				2300		2663	2663	2253	97.96%

Completed By: David Nicolas Sanchez on 05/30/2025

National TAB

Project: 05-26-25 SWEETGREEN LAGUNA NIGUEL, CA (TAB, IAQ)

System/Unit: AHU/RTU

Asset: RTU3 AREA:DINING

Unit Data		
	Design	**Actual**
MFG	TRANE	DAIKIN
Serial Num	-	2412337092
Model Num	YSJ-072	DRG0723DM00055CAB
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	29X17.5
Num Final Filter 1	-	4
Final Filter Size 1	-	20X20X2

Motor Data		
	Design	**Actual**
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	1.2
Motor Rpm	-	NL
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	5.0

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
Belt Alignment	DD

Test Data		
	Design	**Actual**
SF CFM	2400	2462
SF RPM	-	DD
RA CFM	1855	1799
OA CFM	545	562
RL Voltage	-	204/204/204
RL Amperage	-	3.05/2.93/2.93
SF Rotation	-	CCW
SF System SetPt	-	70%
RA Damper Position	-	55%
Min OA Damper Position	-	45%
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	24BTU

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.56”
Fan Suction SP	-	-0.76”
Fan Discharge SP	-	0.39”
Total ESP	0.80"	0.95”
Fan Total SP	-	1.15”

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

Completed By: David Nicolas Sanchez on 05/30/2025

National TAB

Project:05-26-25 SWEETGREEN LAGUNA NIGUEL, CA (TAB, IAQ)

AHU/RTU

Diffuser Supply (GRD)

RTU3/DINING

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	DINING	ESG	10"	300	1.09	586	369	369	123.0
SGRD2	DINING	ESG	10"	225		178	265	265	117.8
SGRD3	DINING	ESG	10"	300		475	349	349	116.3
SGRD4	DINING	ESG	10"	225		492	351	351	156.0
SGRD5	DINING	ESG	10"	225		109	254	254	112.9
SGRD6	DINING	ESG	10"	300		85	342	342	114.0
SGRD7	DINING	ESG	10"	225		74	278	278	123.6
SGRD8	DINING	ESG	10"	100		112	129	129	129.0
SGRD9	DINING	ESG	10"	100	1.09	112	125	125	125.0
SGRD10	DINING	ESG	10"	225	1.09	0	0	0	0.0
SGRD11	DINING	ESG	10"	100	1.09	0	0	0	0.0
Total				2325		2223	2462	2462	105.89%

Completed By: David Nicolas Sanchez on 05/30/2025

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Project: 05-26-25 SWEETGREEN LAGUNA NIGUEL, CA (TAB, IAQ)

System/Unit: FAN - Exhaust

Asset: EF1 AREA:

Unit Data		
	Design	**Actual**
MFG	CAPTIVE AIRE	CAPTIVE AIRE
Model Num	NA	DU50HFA
Serial Num	-	7354715
Type	-	UPBLAST
Configuration	-	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	HSSA
Frame	-	NL
Horsepower	-	1/2
Motor Rpm	-	1380
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	8.4
Service Factor	-	NL

Test Data		
	Design	**Actual**
CFM	1090	1011
Fan RPM	-	DD
Fan Rotation	-	CCW
Motor RPM	-	DD
System SetPt	-	SPEED CONTROLLER
RL Voltage	-	114
RL Amperage	-	7.63
Total ESP	0.6"	0.15”
Fan Inlet SP	-	-0.15”
Fan Discharge SP	-	ATMS

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Project: 05-26-25 SWEETGREEN LAGUNA NIGUEL, CA (TAB, IAQ)

System/Unit: FAN - Exhaust

Asset: EF2 AREA:RESTROOMS

Unit Data		
	Design	**Actual**
MFG	CAPTIVAIRE	CAPTIVAIRE
Model Num	DR12HFA	DU12HFA
Serial Num	-	7249490
Type	DOWNBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	NEMA
Frame	-	NL
Horsepower	-	1/4
Motor Rpm	0.50	1800
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	3.7
Service Factor	-	NL

Test Data		
	Design	**Actual**
CFM	300	303
Fan RPM	-	1048
Fan Rotation	-	CCW
Motor RPM	-	1048
System SetPt	-	55P
RL Voltage	-	117
RL Amperage	-	0.70
Total ESP	0.60"	0.38”
Fan Inlet SP	-	-0.38”
Fan Discharge SP	-	ATMS

Completed By: David Nicolas Sanchez on 05/30/2025

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	RESTROOMS	EED	8"	150	1	298	157	157	104.7
EGRD2	RESTROOMS	EED	8"	150	1	270	146	146	97.3
Total				300		568	303	303	101%