

Report By:

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



Report: TAB Report
Function: Test, Adjust, & Balance
Date: 02/04/2025
Completed By: National TAB

PROJECT

02-03-25 CHIPOTLE #5377 WESTLAKE, FL

4951 SEMINOLE PRATT WHITNEY

WESTLAKE, FL 33470

Client

Chipotle Mexican Grill
610 Newport Center Drive, Suite 1100
Newport Beach, CA 92660

National TAB

Project: 02-03-25 CHIPOTLE #5377 WESTLAKE, FL

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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.

MUA (Make Up Air Unit) w/ PSP

Total flow for the MAU (Make-up Air Unit) unit was measured by readings taken at the discharge of the hood's perforated supply plenum. Readings taken with a velocity matrix were averaged and multiplied by a manufacturer's corrected area. Adjustments to the fan speed were made in order to bring the unit to within design tolerance. Any MUA'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		4000	4071	3500	3576	500	495	12.5%	12.2%						
RTU-2		4400	4411	3400	3399	1000	1012	22.7%	22.9%						
MUA-1										1300	1313				
EF-1												2550	2508		
EF-2														150	152
TOTALS		8400	8482	6900	6975	1500	1507			1300	1313	2550	2508	150	152

NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	2800	2820
TOTAL EXHAUST	2700	2660
NET AIRFLOW	100	160

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H2O)
FRONT	0.008
SIDE	
REAR	0.009
AVERAGE	0.0085

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:

Building pressure with all equipment off is +0.005"

CheckList List

- 01: RTU's/AHU's
- 02: EF's
- 03: MUA
- 04: HOODS
- 05: FINAL CHECKS



02-03-25 CHIPOTLE #5377 WESTLAKE, FL

CheckList Information

Name : 01: RTU's/AHU's **Status :** Not Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 02/04/2025 - Stephen Tassinaro - National TAB

CheckList Item Details

RTU's/AHU's

Thermostats installed and have power? Yes

Comment:

All diffusers and grilles are installed and match design? Yes

Comment:

Deflector plates are removed from 1x1 diffusers on the serve line (double check that this is specified on the diffuser schedule first) Yes

Comment:

Economizer blank plate is installed below the outside air intake (Trane only) (N/A = not applicable) N/A

Comment:

Economizers are assembled and functional? Yes

Comment:

DCV Max damper opening position is set to minimum? Yes

Comment:

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

Comment:

Motors are all operating below the FLA rating?

Yes

Comment:

Are belts tight?

N/A

Comment:

N/A - Direct Drive

If direct drive unit is the speed controller working?

Yes

Comment:

Is gas piping installed and valves turned on?

Yes

Comment:

Unit free of noticeable noise and vibration

Yes

Comment:

Final outside air damper position is marked with permanent marker?

Yes

Comment:



02-03-25 CHIPOTLE #5377 WESTLAKE, FL

CheckList Information

Name : 02: EF's **Status :** Not Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 02/04/2025 - Stephen Tassinaro - National TAB

CheckList Item Details

EF's

Rotation is correct?	Yes
-----------------------------	-----

Comment:

Belts are tight?	N/A
-------------------------	-----

Comment:

N/A - Direct Drive

Viroguard installed on hood fan(s)?	Yes
--	-----

Comment:

Hinge kit installed installed on hood fan?	Yes
---	-----

Comment:

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

Comment:

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

Comment:

There is no major leakage around base of fan?	No
--	----

Comment:

No leakage found

Is the motor operating below the motor FLA rating?

Yes

Comment:

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

Yes

Comment:

Unit free of noticeable noise and vibration?

Yes

Comment:



02-03-25 CHIPOTLE #5377 WESTLAKE, FL

CheckList Information

Name : 04: HOODS **Status :** Not Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 02/04/2025 - Stephen Tassinaro - National TAB

CheckList Item Details

HOODS

All hood filters installed and accounted for?	Yes
---	-----

Comment:

Hoods are wired and have power?	Yes
---------------------------------	-----

Comment:

Hood is free of alarms?	Yes
-------------------------	-----

Comment:

Hood is free of damage?	Yes
-------------------------	-----

Comment:

Quarter or full vertical end panels are installed if specified?	Yes
---	-----

Comment:



02-03-25 CHIPOTLE #5377 WESTLAKE, FL

CheckList Information

Name : 05: FINAL CHECKS **Status :** Not Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 02/04/2025 - Stephen Tassinaro - National TAB

CheckList Item Details

FINAL CHECKS

Is space free of drafting? Yes

Comment:

Is space comfortable in all areas? Yes

Comment:

Is the space free of ventilation noise? Yes

Comment:

List kitchen equipment turned on for testing N/A

Comment:

None

List smoke candle type used

Comment:

45s Smoke Emitter

HOOD CAPTURE TEST

Smoke test capture % - Perimeter of hood

Comment:

100%

Smoke test capture % - Top of cooking surface

Comment:

100%

WITNESS

Date test was completed

02/03/2025

Comment:

TAB tech name / Firm

Comment:

Stephen Tassinaro / NTi

Site super name / Firm

Comment:

Test Recorded

Owner representative name / Firm (if Applicable)

Comment:

Test Recorded

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: 02-03-25 CHIPOTLE #5377 WESTLAKE, FL

System/Unit: AHU/RTU



Asset: RTU1

AREA: KITCHEN

Unit Data		
	Design	Actual
MFG	CARRIER	CARRIER
Serial Num	-	0424P62815
Model Num	48FC_M11	48FCFN12D3M5A6W4F0
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	34.75X19.5
Num Final Filter 1	-	4
Final Filter Size 1	-	20X20X2

Motor Data		
	Design	Actual
Phase	3	3
Rated Voltage	208	208/230
Rated Amperage	-	12.6

Drive Data	
	Actual
Motor Sheave SetPt	DD

Test Data		
	Design	Actual
SF CFM	4000	4071
SF RPM	-	1991
RA CFM	3500	3576
OA CFM	500	495
RL Voltage	-	213/213/213
RL Amperage	-	7.3/7.3/7.3
SF Rotation	-	CORRECT
SF System SetPt	-	8.65VDC
RA Damper Position	-	6.80V
Min OA Damper Position	-	3.20V
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	ES5

Performance Data		
	Design	Actual
MA Plenum SP	-	-1.14"
Fan Suction SP	-	-1.69"
Fan Discharge SP	-	0.65"
Total ESP	-	1.79"
Fan Total SP	-	2.34"

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

Completed By: Stephen Tassinaro on 02/04/2025

Notes:
Recommend replacing final filters before turnover with a MERV 8 or greater replacement.

Written By: Stephen Tassinaro on 02/04/2025

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Project:02-03-25 CHIPOTLE #5377 WESTLAKE, FL

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	OFFICE	CD1	8"	150	1	194	148	148	98.7
SGRD2	KITCHEN	CD1	12"	375	1	492	395	395	105.3
SGRD3	KITCHEN	CD1	12"	375	1	581	390	390	104.0
SGRD4	KITCHEN	CD1	12"	400	1	612	413	413	103.3
SGRD5	KITCHEN	CD1	12"	350	1	177	369	369	105.4
SGRD6	KITCHEN	CD1	12"	400	1	417	438	438	109.5
SGRD7	KITCHEN	CD3	8"	250	1	197	227	227	90.8
SGRD8	KITCHEN	CD3	8"	250	1	205	230	230	92.0
SGRD9	KITCHEN	CD3	8"	250	1	212	234	234	93.6
SGRD10	KITCHEN	CD3	8"	250	1	202	236	236	94.4
SGRD11	KITCHEN	CD3	8"	250	1	193	240	240	96.0
SGRD12	KITCHEN	ACPSP	165"	700	5.36	787	751	751	107.3
Total				4000		4269	4071	4071	101.78%

Completed By: Stephen Tassinaro on 02/04/2025

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Project: 02-03-25 CHIPOTLE #5377 WESTLAKE, FL

System/Unit: AHU/RTU



Asset: RTU2

AREA:

Unit Data		
	Design	Actual
MFG	CARRIER	CARRIER
Serial Num	-	4124P00104
Model Num	48GC_N14	48GCDN14C3M5A8W4C0
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	2
OA Filter Size 1	-	22.5X25.5
Num Final Filter 1	-	6
Final Filter Size 1	-	18X24X2

Motor Data		
	Design	Actual
Phase	3	3
Rated Voltage	208	208/230
Rated Amperage	-	12.6

Drive Data	
	Actual
Motor Sheave SetPt	DD

Test Data		
	Design	Actual
SF CFM	4400	4411
SF RPM	-	1438
RA CFM	3400	3399
OA CFM	1000	1012
RL Voltage	-	213/214/213
RL Amperage	-	3.8/4.0/3.9
SF Rotation	-	CORRECT
SF System SetPt	-	6.22VDC
RA Damper Position	-	5.0V
Min OA Damper Position	-	5.0V
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	28.00

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.71"
Fan Suction SP	-	-0.91"
Fan Discharge SP	-	0.32"
Total ESP	0.8"	1.03"
Fan Total SP	-	1.23"

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

Completed By: Stephen Tassinaro on 02/04/2025

Notes:
Recommend replacing final filters before turnover with a MERV 8 or greater replacement.

Written By: Stephen Tassinaro on 02/04/2025

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Project:02-03-25 CHIPOTLE #5377 WESTLAKE, FL

AHU/RTU



Diffuser Supply (GRD)

RTU2/

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	ORDERING	SR1	14"	830	1	1090	891	891	107.3
SGRD2	ORDERING	SR1	14"	830	1	1094	894	894	107.7
SGRD3	ORDERING	SR1	14"	830	1	982	802	802	96.6
SGRD4	ORDERING	SR1	14"	830	1	951	777	777	93.6
SGRD5	ORDERING	SR1	14"	830	1	1000	817	817	98.4
SGRD6	ORDERING	CD2	8"	200	1	225	184	184	92.0
SGRD7	ORDERING	CD4	6"	50	1	56	46	46	92.0
Total				4400		5398	4411	4411	100.25%

Completed By: Stephen Tassinaro on 02/04/2025

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Project: 02-03-25 CHIPOTLE #5377 WESTLAKE, FL

System/Unit: FAN - Exhaust



Asset: EF1

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVE AIRE	CAPTIVE AIRE
Model Num	DU180HFA	DU180HFA
Serial Num	-	7034977
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	UPBLAST	UPBLAST

Motor Data		
	Design	Actual
Motor MFG	-	WEG
Frame	-	182/4T
Horsepower	-	2.0
Motor Rpm	-	1170
Phase	-	3
Voltage (rated)	-	230/460
Amperage (rated)	-	6.44/3.22
Service Factor	-	1.25

Test Data		
	Design	Actual
CFM	2550	2508
Fan RPM	-	1049
Fan Rotation	-	CORRECT
Motor RPM	-	1049
System SetPt	-	53.8Hz
RL Voltage	-	113V VFD
RL Amperage	-	5.4A VFD
Total ESP	-	0.81"
Fan Inlet SP	-	-0.81"
Fan Discharge SP	-	ATM

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Project: 02-03-25 CHIPOTLE #5377 WESTLAKE, FL

System/Unit: FAN - Exhaust



Asset: EF2

AREA:BATHROOM

Unit Data		
	Design	Actual
MFG	CAPTIVE AIRE	CAPTIVE AIRE
Model Num	DR12HFA	DR12HFA
Serial Num	-	7034977
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	DOWNBLAST	DOWNBLAST

Motor Data		
	Design	Actual
Motor MFG	-	TELCO INTERCON
Frame	-	42 EC
Horsepower	-	0.25
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	2.9

Test Data		
	Design	Actual
CFM	150	152
Fan RPM	-	739
Fan Rotation	-	CCW
Motor RPM	-	739
System SetPt	-	40P
RL Voltage	-	122
RL Amperage	-	0.32
Total ESP	0.60"	0.09"
Fan Inlet SP	-	-0.09"
Fan Discharge SP	-	ATM

Completed By: Stephen Tassinaro on 02/04/2025

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Project:02-03-25 CHIPOTLE #5377 WESTLAKE, FL

FAN - Exhaust



Diffuser Ret/Exh (GRD)

EF2/BATHROOM

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
EGRD1	BATHROOM	ER1	6/6	75	1	177	82	82	109.3
EGRD2	BATHROOM	ER1	6/6	75	1	123	70	70	93.3
Total				150		300	152	152	101.33%

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Project: 02-03-25 CHIPOTLE #5377 WESTLAKE, FL

System/Unit: FAN - Supply



Asset: MAU1

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVE AIRE	CAPTIVE AIRE
Model Num	A1-G10	A1-15D
Serial Num	-	7034977
Type	MAU	MAU
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	TECO WESTINGHOUSE
Frame	-	143T
Horsepower	-	1.0
Motor Rpm	-	1740
Phase	-	3
Voltage (rated)	-	230/460
Amperage (rated)	-	2.90/1.45
Service Factor	-	1.15

Test Data		
	Design	Actual
CFM	1300	1313
SF RPM	-	1041
Motor RPM	-	1041
SF System SetPt	-	35.9Hz
RL Voltage	-	69V VFD
RL Amperage	-	1.6A VFD

General	
	Actual
Fan Rotation Correct	YES

Completed By: Stephen Tassinaro on 02/04/2025

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Project: 02-03-25 CHIPOTLE #5377 WESTLAKE, FL

System/Unit: Kitchen Hood Type I



Asset: HD1

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVE AIRE	CAPTIVE AIRE
Model Num	5424 ND-2-ACPSP-F	5424 ND-2
Job / Serial Num	-	7034977
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	153"	153"
Hood Width	54"	54"
Supply Plenum Type	-	ACPSP
Supply Plenum Width	9"	9"
Supply Plenum Length	165"	165"

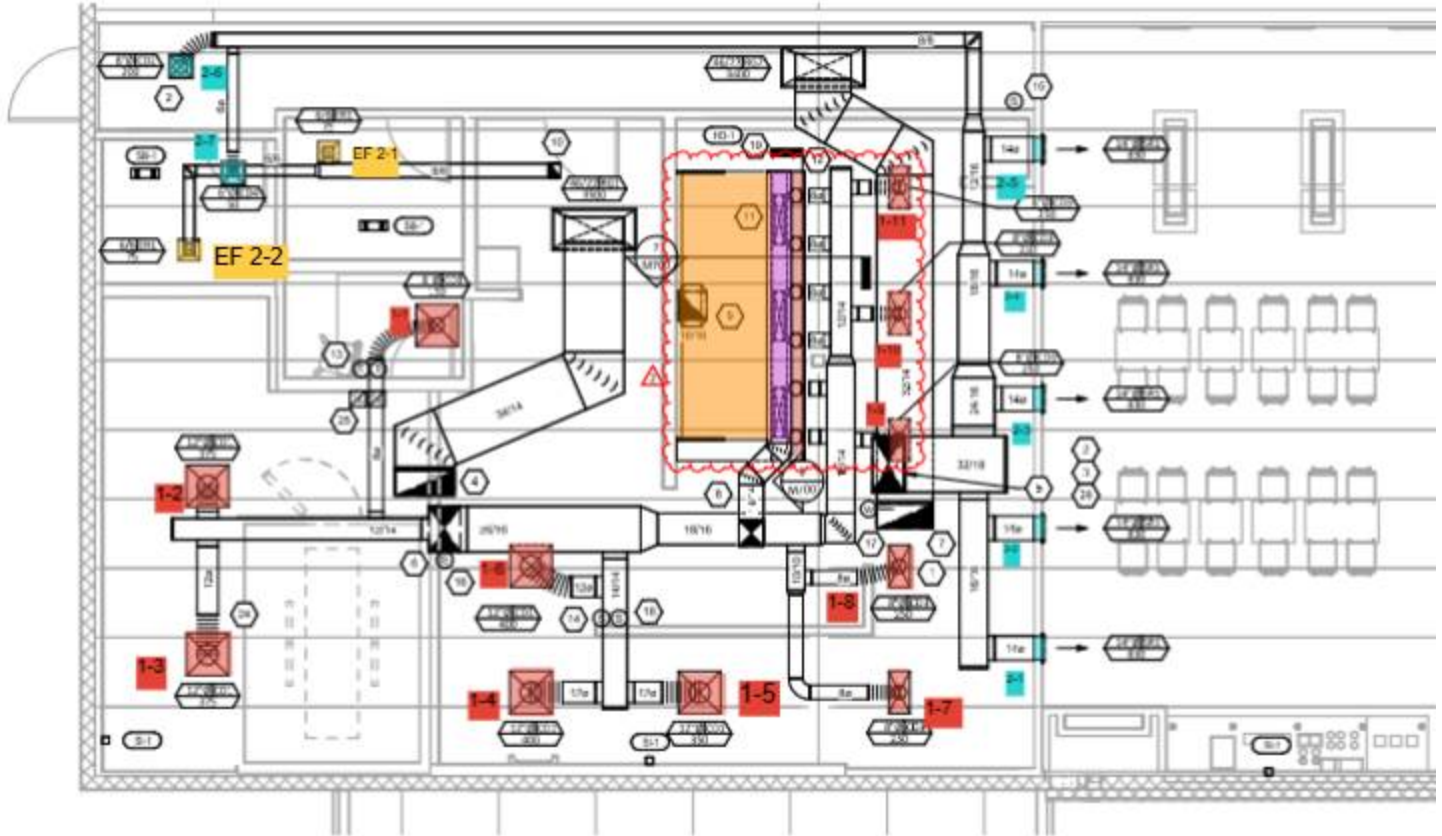
Test Data Exhaust		
	Design	Actual
Filter Type	BAFFLE	BAFFLE
Filter Size 1	16X16	16X16
Filter Qty 1	9	9
Filter AK factor size 1	1.62	1.62
Filter Total AK Area	14.58	14.58
Filter1 FPM	-	169
Filter2 FPM	-	166
Filter3 FPM	-	169
Filter4 FPM	-	200
Filter5 FPM	-	190
Filter6 FPM	-	179
Filter7 FPM	-	178
Filter8 FPM	-	154
Filter9 FPM	-	143
Filter Ave FPM(corr)	-	172
CFM	2550	2508

Cooking Equipment	
	Actual
Item 1	FRYER
Item 2	RICE COOKER
Item 3	STOVE
Item 4	GRILL

Test Data Supply		
	Design	Actual
Total Area	10.31	10.31
Kv factor (Vel)	0.81	0.81
Num of Readings	-	9
Reading1 FPM	-	132
Reading2 FPM	-	139
Reading3 FPM	-	139
Reading4 FPM	-	138
Reading5 FPM	-	157
Reading6 FPM	-	141
Reading7 FPM	-	186
Reading8 FPM	-	182
Reading9 FPM	-	201
Ave FPM(corr)	-	157.22
CFM	1300	1313

Completed By: Stephen Tassinaro on 02/03/2025

HVAC ROOF PLAN
1/2" = 1'-0"



HVAC FLOOR PLAN