

**Report By:**

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



**Report: Deweys Evaluation Phase 1**

**Function: Test, Adjust, & Balance**

**Date: 02/18/2026**

**Completed By: National TAB**

# **PROJECT**

## **Deweys Evaluation (Covington, KY)**

43 W 7th St.

Covington, KY 41011

### **Client**

HD Contracting LLC

605 Valleywood Ct

Loveland, OH 45140

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Project: Deweys Evaluation (Covington, KY)

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Project: Deweys Evaluation (Covington, KY)  
Function: Test, Adjust, & Balance

## Project Summary

TAB Evaluation - The space has consistently from conception of having very uncomfortable conditions throughout the space. Our team was task with to determine current performance and conditions of the HVAC & Hood system to determine next steps.

### Scope:

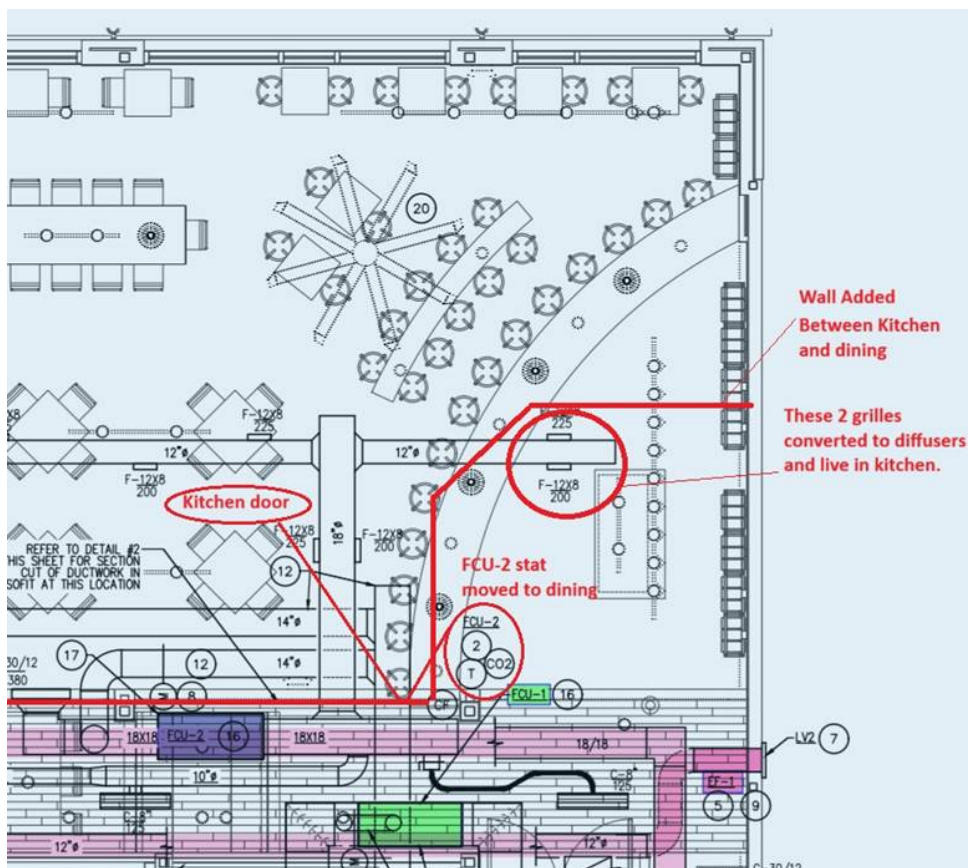
- o We Measured total airflow for exhaust & supply of hood & perform hood capture test. Total Exhaust airflow was 2479 CFM and 1851 CFM of supply airflow. The minimum exhaust for the type & size of hood should be no less than 2400 CFM and any additional supply air introduce would affect hood performance. We performed a smoke test and the top deck ovens seem to capture ok, but not 100%. The lower deck ovens, it is believed not all the heat is being captured off the ovens when doors are open. Ideally, it would be better to have a bit more hood overhang & less supply airflow introduced at the supply plenum. Installing full end panels to left & right ends of hood would help hood performance. We can also look at reducing the make up air airflow some once all FCU units are performing as required.
- o Next we Measured total airflow only on Fan Coils throughout the space and amount of outside air going to any FC unit. The space consist of Qty (3) Fan Coil Units (FCU) each designed at 2000 CFM of total supply airflow and 350 CFM (OA) of outside air.
  - o FCU-1 (Kitchen) Total Flow: Total=1370 CFM in high cooling mode. OA= 24 cfm. Possible closed damper.
  - o FCU-2 (Dining) Total Flow: Verified power to unit, sent commands through stat, blower does not operate.
  - o FCU-3 (Dining) Total Flow: 1612 CFM in high cooling mode. OA= 375.
- o We also verified the exterior outside air intake louvers are not clogged with debris
- o Next we put all Fan Coils into cooling mode & get a temperature drop across each DX coil of each unit to determine cooling performance.

FCU-1 Inlet temperature:55wb/ 74db Outlet Temperature: 56wb/ 72db Thermostat programming or wiring may be an issue. When in auto, and changing temp setpoints, the unit does not shift modes on its own. Stat taken out of auto then forced into heat, fan speed slowed and observed temp shoot up to 105+. When placed back into cooling, airflow sped up as it should in cooling mode, but temp slowly dropped to settle at 73.

FCU-2 see above – N/a - Not functioning so could not test cooling. We confirmed power at line/load to compressing units on roof but no operation. it could be the control wiring.

FCU-3 Inlet temperature: 55wb / 71db, Outlet Temperature: 56wb/73dw. Fcu-3 is experiencing the same issue as fcu-1 regarding thermostat and compressor operation.

- o We verified & marked up (red line) the Mechanical drawings (ALTO PIZZA BUILD OUT Mechanical.pdf) & matched fairly accurately with exceptions of a few minor modifications below.



- o Building Pressure was Check building pressure with hoods on & off
  - o With all units on, the building pressure observed -0.02". All units on but hoods turned off building pressure = +0.007". It does fall into the parameters of -0.02" to +0.02" off building pressure.

We proceeded to gather additional unit information and is documented within the report for further discussion of next steps. Some immediate action steps that should be done are as follows:

FCU-2 isn't working at all- needs repair to run and verify cooling.

FCU-1 and 3 will run but not able to cool. Both in high speed are 20-30% out of design airflow.

When hood is running, space goes into negative pressure. With hoods off, slightly positive.

No dedicated exhaust for dish washer. Need to look at how much heat load is given off during busy times of the evenings.

FCU-1 bringing insufficient amount of airflow. Duct is slightly crushed near unit and may contribute to issue. See pictures in report.

Hood is capturing adequately, but end panels would help performance and after Fan Coils are fixed, we may be able to reduce supply air a bit.

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Project: Deweys Evaluation (Covington, KY)

System/Unit: Fan Coil



Asset: FCU-1

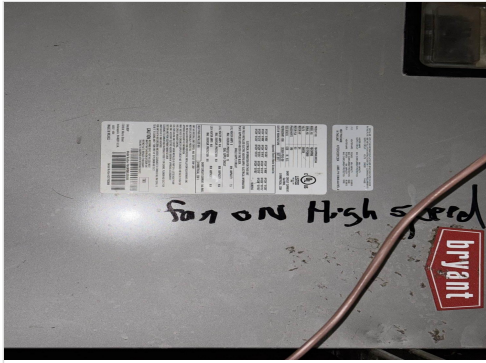
AREA:KITCHEN

Unit Data	
	Actual
MFG	BRYANT
Model Num	F84CNPOS0
Serial Num	4317F03669

Test Data		
	Design	Actual
SFAN CFM	2000	1370
OA CFM	350	24

Completed By: Nick Payne on 02/20/2026

## Unit Data - PHOTO LOG



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Project: Deweys Evaluation (Covington, KY)

## Fan Coil



**Diffuser Supply (GRD)**

**FCU-1/KITCHEN**

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
F1-1	KITCHEN	A	12	500			-
F1-2	KITCHEN	A	12	500			-
F1-3	KITCHEN	A	12	400			-
F1-4	KITCHEN	A	12	500			-
Total				1900	0	0	0%

**Diffuser Ret/Exh (GRD)**

**FCU-1/KITCHEN**

Asset								
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	FINAL CFM	% to design
RF1-1	KITCHEN	D	22X22	650				-
RF1-2	KITCHEN	D	22X22	650				-
Total				1300		0	0	0%

# National TAB

Project: Deweys Evaluation (Covington, KY)

System/Unit: Fan Coil



Asset: FCU-2

AREA: DINING AREA

Unit Data	
	Actual
MFG	BRYANT
Model Num	FB4CNP060
Serial Num	3017F02895

Test Data		
	Design	Actual
SFAN CFM	2000	0
OA CFM	350	0

Completed By: Nick Payne on 02/20/2026

## Unit Data - PHOTO LOG



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# National TAB

Project: Deweys Evaluation (Covington, KY)

System/Unit: Fan Coil



Asset: FCU-3

AREA:DINING AREA

Unit Data	
	Actual
MFG	BRYANT
Model Num	FB4CNP060
Serial Num	0818F08803

Test Data		
	Design	Actual
SFAN CFM	2000	1612
OA CFM	350	375

# Unit Data - PHOTO LOG



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# National TAB

Project: Deweys Evaluation (Covington, KY)

System/Unit: FAN - Exhaust



Asset: EF-1

AREA: BATHROOMS

Unit Data		
	Design	Actual
MFG	NA	[1]
Model Num	NA	[1]
Type	INLINE	INLINE

Test Data		
	Design	Actual
CFM	450	126

Notes:

[1] Unable to locate fan- not in area drawings show. Possibly relocated.

Written By: Nick Payne on 02/25/2026

**Unit Data - PHOTO LOG**



**02/20/2026**

# National TAB

Project: Deweys Evaluation (Covington, KY)

## FAN - Exhaust



Diffuser Ret/Exh (GRD)

**EF-1/BATHROOMS**

Asset								
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	FINAL CFM	% to design
E1-1	WOMEN'S RR	E	12X12	150	1		30	20.0
E1-2	MEN'S RR	E	12X12	300	1		96	32.0
Total				450		0	126	28%

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Project: Deweys Evaluation (Covington, KY)

System/Unit: FAN - Exhaust



Asset: KEF-1

AREA:

Unit Data		
	Design	Actual
MFG	NA	CAPTIVEAIRE
Model Num	NA	USBI18DD-RM
Serial Num	-	3405768
Type	KEF	UTILITY

Test Data		
	Design	Actual
CFM	2800	2479

Motor Data		
	Design	Actual
Horsepower	-	2.0
Phase	-	3
Voltage (rated)	-	208
Amperage (rated)	-	8.3

## Unit Data - PHOTO LOG



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# National TAB

Project: Deweys Evaluation (Covington, KY)

System/Unit: FAN - Supply



Asset: KMAU-1

AREA: KITCHEN

Unit Data	
	Actual
MFG	CAPTIVEAIRE
Model Num	A1-D.250-G10
Serial Num	3405768

Test Data		
	Design	Actual
CFM	2300	1851

Notes:

Unable to reach or locate unit data due to install above cooking surfaces and walls.

Written By: Nick Payne on 02/25/2026

**Unit Data - PHOTO LOG**



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# National TAB

Project: Deweys Evaluation (Covington, KY)

## System/Unit: Kitchen Hood Type I



Asset: KHD-1

AREA:KITCHEN

Unit Data		
	Design	Actual
MFG	NA	CAPTIVEAIRE
Model Num	NA	7224VHB
Job / Serial Num	-	3405768
Type	I	TYPE II
Hood length	16'0"	192"
Hood Width	-	14"
Supply Plenum Type	-	PSP
Supply Plenum Width	192"	192"
Supply Plenum Length	14"	14"

Test Data Exhaust		
	Design	Actual
Filter Type	-	NO FILTERS
Filter Total AK Area	(3) 12" holes	2.36
Filter1 FPM	-	1365
Filter2 FPM	-	998
Filter3 FPM	-	789
Filter Ave FPM(corr)	-	1051
CFM	-	2479

Cooking Equipment	
	Actual
Item 1	PIZZA OVEN
Item 2	PIZZA OVEN

Test Data Supply		
	Design	Actual
Total Area	-	18.67
Kv factor (Vel)	-	0.91
Num of Readings	-	12
Reading1 FPM	-	121
Reading2 FPM	-	104
Reading3 FPM	-	90
Reading4 FPM	-	90
Reading5 FPM	-	112
Reading6 FPM	-	89
Reading7 FPM	-	135
Reading8 FPM	-	148
Reading9 FPM	-	156
Reading10 FPM	-	107
Reading11 FPM	-	124
Reading12 FPM	-	161
Ave FPM(corr)	-	109
CFM	2800	1851

Completed By: Nick Payne on 02/20/2026

## Unit Data - PHOTO LOG



02/20/2026



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