**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

RA HEATH CONSTRUCTION, INC

2770 FAITH INDUSTRIAL DRIVE

BUFORD, GA 30518

# National TAB

**Project: Deweys Evaluation (Covington, KY)**

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## 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:

- 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.

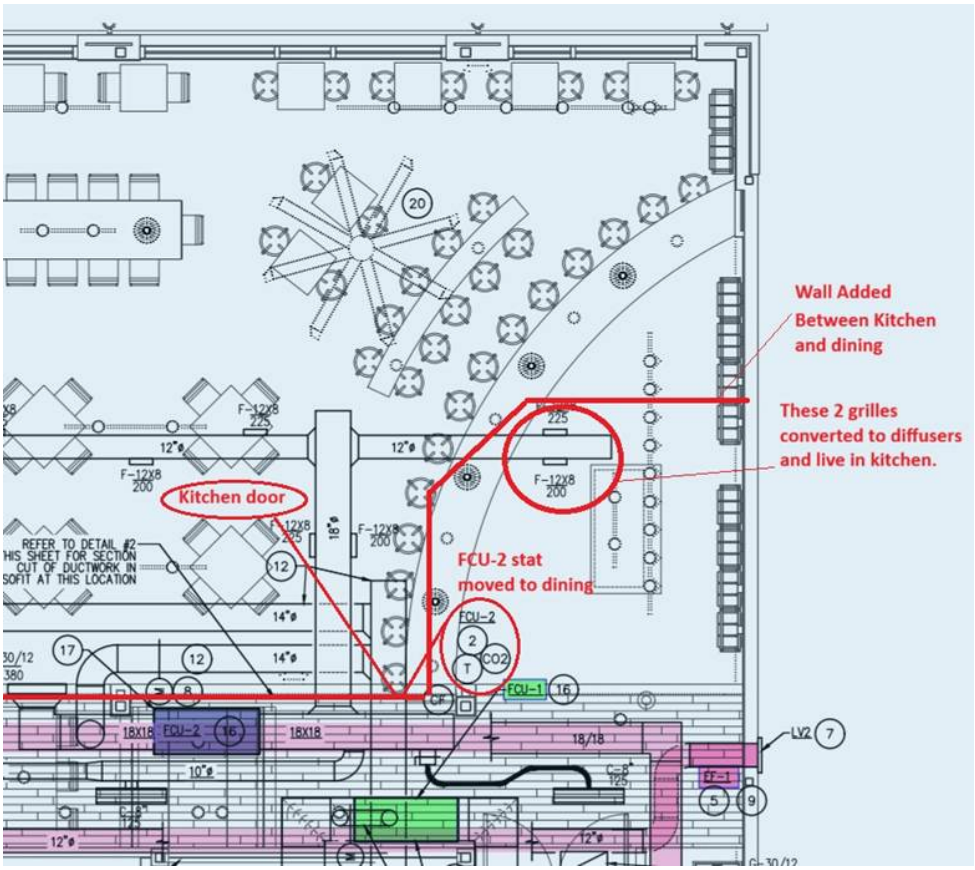
- Next we Measured total airflow only on Fan Coils throughout the space and amount of outside air going to any FC unit. The space consist of Qty (3) Fan Coil Units (FCU) each designed at 2000 CFM of total supply airflow and 350 CFM (OA) of outside air.
  - FCU-1 (Kitchen) Total Flow: Total=1370 CFM in high cooling mode. OA= 24 cfm. Possible closed damper.
  - FCU-2 (Dining) Total Flow: Verified power to unit, sent commands through stat, blower does not operate.
  - FCU-3 (Dining) Total Flow: 1612 CFM in high cooling mode. OA= 375.
- We also verified the exterior outside air intake louvers are not clogged with debris
- 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.

- 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.

- 


- Building Pressure was Check building pressure with hoods on & off
  - 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

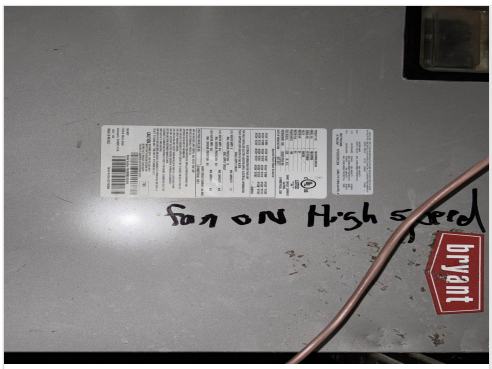
**Asset: FCU-1** AREA:KITCHEN

| 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)**

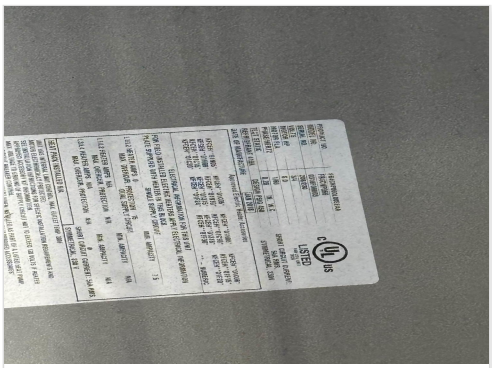
## System/Unit: Fan Coil

**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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**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

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# 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% |

# National TAB

**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 |

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

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **CFM** | 2800 | 2479 |

## Unit Data - PHOTO LOG

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**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

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