

Report By:

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



**Report: TAB Report
Function: Test, Adjust, & Balance
Date: 8/26/2022**

PROJECT

08-08 MCDILL ELEMENTARY - WAUSAU, WI

2516 School St

Stevens Point, WI 54481

Client

Accurex
PO Box 410
Schofield, WI 54476

National TAB

Project: 08-08 MCDILL ELEMENTARY - WAUSAU, WI

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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.

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 to bring the unit to within design tolerance. Any MUA's that fell outside of this tolerance is noted throughout the report



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Project Issue Information

Issue Name : EF-1 grease trap not yet installed.

Description : Grease trap not yet installed.

Created By : National TAB

Assigned To : National TAB - Will Turnbough

Status : Open

Originated Date : 08/08/2022 - Michael McDonnell - National TAB

Project Issue File Details



FuseITd26c9341f20e4d019d3c9b
5dbc4e5dd8.jpeg



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Project Issue Information

Issue Name : Hood lights not yet installed

Description : Hood lights are not yet installed.

Created By : National TAB

Assigned To : National TAB - Will Turnbough

Status : Open

Originated Date : 08/08/2022 - Michael McDonnell - National TAB

Project Issue File Details



FuseITd05db5b3fde8452c89f257
904198316b.jpeg



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CheckList Information

Name : TECH - SITE PICTURES **Status :** NotSubmitted

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

CheckList Item Details

STORE FRONT

MAU-1

EF-1



FuseIT4ac40156af51435...

EF-2

HOOD-1



FuseITc3ec83cb5c12410...

HOOD-2



FuseITbbcafe3851074f0...

Notes/Comments :



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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 hood filters installed and accounted for? | Yes |
| Hoods are wired and have power? | Yes |
| Hood is free of alarms? | No, Hood has VFD Communication error alarm. Control is not communicating with and has no control over hood exhaust fan. |
| Thermostats have power? | Yes |
| Have trades/general contractor been notified about any issues and are they created on FaciliBuild? | Yes |

Notes/Comments :



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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:

EF's

| | |
|---|-----|
| Rotation is correct? | Yes |
| Belts are tight? | Yes |
| Grease cup installed on hood fan? | No |
| 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? | Yes |
| Is the motor operating below the motor FLA rating? | Yes |

MUA

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

HOODS

Kitchen equipment installed in proper places? Yes

Can kitchen equipment be turned on for final smoke test? No

DOCUMENTATION

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

Notes/Comments :



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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". | NA |

Notes/Comments :



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CheckList Information

Name : TECH - STEP 4: FINAL TESTS **Status :** NotSubmitted
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB

CheckList Item Details

FINAL TESTS

HOOD CAPTURE TEST

| | |
|---|----------------------|
| List equipment turned on for testing | None |
| List smoke candle type used | 45 Sec smoke emitter |
| Smoke test capture - Perimeter of hood | 100% |
| Smoke test capture - Top of cooking surface | 100% |

WITNESS

| | |
|--|-------------------|
| Date test was completed | 08/08/2022 |
| TAB tech name / Firm | Michael McDonnell |
| Site super name / Firm | Accurex |
| Owner representative name / Firm (if Applicable) | NA |
| Building pressure at front & back doors (All Systems On) | NA |

ADDITIONAL

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

Notes/Comments :

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Project: 08-08 MCDILL ELEMENTARY - WAUSAU, WI

System/Unit: FAN - Exhaust



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Asset: EF1

AREA:

| Unit Data | | |
|---------------|--------|---------------------------|
| | Design | Actual |
| MFG | NA | LOREN COOK |
| Model Num | NA | 245 VCRH 245VH10B |
| Serial Num | - | 012SJ57050- 00/0002701 |
| Type | - | CENTRIFUGAL |
| Configuration | - | UPBLAST |

| Test Data | | |
|---------------|--------|-------------|
| | Design | Actual |
| CFM | 4844 | 4806 |
| Fan RPM | - | |
| Fan Rotation | - | |
| Motor RPM | - | 1316 |
| RL Voltage | - | 210/210/211 |
| RL Amperage | - | 5.30 [1] |
| Suction ESP | - | -0.62" |
| Discharge ESP | - | ATM |
| Total ESP | - | 0.62" |

| Motor Data | | |
|------------------|--------|----------------------|
| | Design | Actual |
| Motor MFG | - | TECO WESTINGHOUSE |
| Frame | - | 182T |
| Horsepower | - | 3.0 |
| Motor Rpm | - | 1755 |
| Phase | - | 3 |
| Voltage (rated) | - | 230/460 |
| Amperage (rated) | - | 8.60/4.30 |
| Service Factor | - | 1.15 |

| Drive Data | | |
|--------------------|--------|-------------------|
| | Design | Actual |
| Motor Sheave Size | - | 2V42 |
| Motor Bore Size | - | 1-1/8" |
| Motor Sheave SetPt | - | 2.5 TURNS OPEN |
| Fan Sheave Size | - | 2AK56 |
| Fan Sheave Bore | - | 1" |
| Belt CL Distance | - | 7" |
| Num of Belts | - | 2 |
| Belt Size | - | A26 |

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Notes: [1] VFD SETPOINT: 45.0 HZ

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Project: 08-08 MCDILL ELEMENTARY - WAUSAU, WI

System/Unit: Kitchen Hood Type I



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Asset: HD1

AREA:

| Unit Data | | |
|------------------|----------------------|--------------------|
| | Design | Actual |
| MFG | ACCUREX | ACCUREX |
| Model Num | XXEW-123-S | XXEW-123-S |
| Job / Serial Num | - | 19903431 |
| Type | TYPE I LOW PROXIMITY | TYPE I LOW PROFILE |
| Hood length | 123" | 123" |
| Hood Width | 63" | 63" |

| Performance Data | | |
|----------------------------|--------|----------------------|
| | Design | Actual |
| Smoke Generation Type | - | 45 SEC SMOKE EMITTER |
| Hood Capture % | - | 100% |
| End Panels Installed (Y/N) | - | NO |

| Test Data Exhaust | | |
|-------------------------|----------|----------|
| | Design | Actual |
| Filter Type | XTRACTOR | XTRACTOR |
| Filter Size 1 | 20X20 | 20X20 |
| Filter Qty 1 | 6 | 6 |
| Filter AK factor size 1 | 3.00 | 3.0 |
| Filter Total AK Area | 18.00 | 18.00 |
| Filter1 FPM | - | 136 |
| Filter2 FPM | - | 140 |
| Filter3 FPM | - | 138 |
| Filter4 FPM | - | 142 |
| Filter5 FPM | - | 127 |
| Filter6 FPM | - | 133 |
| Filter Ave FPM(corr) | - | 136 |
| CFM | - | 2448 |

| General | | |
|---------------------|--------|-------------------|
| | Design | Actual |
| Third Party Witness | - | VIDEO TAPED |
| Third Party Company | - | NA |
| Tech Witness | - | MICHAEL MCDONNELL |

| Cooking Equipment | | |
|-------------------|--------|--------|
| | Design | Actual |
| Item 1 | - | BOILER |
| Item 2 | - | OVEN |

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Notes:

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Project: 08-08 MCDILL ELEMENTARY - WAUSAU, WI

System/Unit: Kitchen Hood Type I



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Asset: HD2

AREA:

| Unit Data | | |
|------------------|----------------------|--------------------|
| | Design | Actual |
| MFG | ACCUREX | ACCUREX |
| Model Num | XXEW-123-S | XXEW-123-S |
| Job / Serial Num | - | 19903433 |
| Type | TYPE I LOW PROXIMITY | TYPE I LOW PROFILE |
| Hood length | 123" | 123" |
| Hood Width | 63" | 63" |

| Performance Data | | |
|----------------------------|--------|----------------------|
| | Design | Actual |
| Smoke Generation Type | - | 45 SEC SMOKE EMITTER |
| Hood Capture % | - | 100% |
| End Panels Installed (Y/N) | - | NO |

| Test Data Exhaust | | |
|-------------------------|-----------|-----------|
| | Design | Actual |
| Filter Type | X-TRACTOR | X-TRACTOR |
| Filter Size 1 | 20X20 | 20X20 |
| Filter Qty 1 | 6 | 6 |
| Filter AK factor size 1 | 3.00 | 3.00 |
| Filter Total AK Area | 18.00 | 18.00 |
| Filter1 FPM | - | 128 |
| Filter2 FPM | - | 123 |
| Filter3 FPM | - | 135 |
| Filter4 FPM | - | 138 |
| Filter5 FPM | - | 131 |
| Filter6 FPM | - | 131 |
| Filter Ave FPM(corr) | - | 131 |
| CFM | - | 2358 |

| General | | |
|---------------------|--------|-------------------|
| | Design | Actual |
| Third Party Witness | - | VIDEO TAPED |
| Third Party Company | - | NA |
| Tech Witness | - | MICHAEL MCDONNELL |

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

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Notes: