

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     | DINING      | 6000        | 5796   | 4175        | 3950   | 1825         | 1846   | 30.4%  | 31.8%  |              |        |              |        |              |        |
| RTU-2     | KITCHEN     | 6225        | 6001   | 4450        | 4221   | 1775         | 1780   | 28.5%  | 29.7%  |              |        |              |        |              |        |
| PRV-1     | RESTROOM    |             |        |             |        |              |        |        |        |              |        |              |        | 300          | 294    |
| PRV-2     | HD1 GRIDDLE |             |        |             |        |              |        |        |        |              |        | 1500         | 1469   |              |        |
| PRV-3     | HD2 FRYER   |             |        |             |        |              |        |        |        |              |        | 1500         | 1538   |              |        |
| EF-1A(X2) | EMP.RR/MOP  |             |        |             |        |              |        |        |        |              |        |              |        | 150          | 145    |
| TOTALS    |             | 12225       | 11797  | 8625        | 8171   | 3600         | 3626   |        |        | 0            | 0      | 3000         | 3007   | 450          | 439    |

NET BUILDING AIRFLOW CALCULATION

| TOTALS        | DESIGN | ACTUAL |
|---------------|--------|--------|
| TOTAL OA      | 3600   | 3626   |
| TOTAL EXHAUST | 3450   | 3446   |
| NET AIRFLOW   | 150    | 180    |

| DOOR TESTED | BUILDING PRESSURE MEASUREMENTS (IN. H2O) |
|-------------|------------------------------------------|
| FRONT       | 0.0035                                   |
| SIDE        | 0.0016                                   |
| REAR        | 0.0023                                   |
| AVERAGE     | 0.0025                                   |

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:

OA taken under windy conditions

## 07-11 CULVERS - ELLISVILLE, MO

### Project Issue Information

**Issue Name :** asset note RTU1 [1]  
**Description :** OA filters and hood have not arrived yet. GC helped make a makeshift hood to read OA measuring 14.75x76  
**Created By :** National TAB **Assigned To :** National TAB - Will Turnbough  
**Status :** Pending  
**Originated Date :** 07/13/2022 - Jacob Davidson - National TAB

#### Project Issue File Details



Makeshifthood.jpeg

#### Project Issue Response Details

- **07/14/2022**      **National TAB - Dan Hertenstein**
  - HIGH PRIORITY

## 07-11 CULVERS - ELLISVILLE, MO

### Project Issue Information

**Issue Name :** Diffuser note RTU1 SGRD 1-12 low on flow

**Description :** Branch is low on flow due to hard right angle coming out of one of the main duct lines. Diffuser is in an open space and should not create comfort issues

**Created By :** National TAB **Assigned To :** National TAB - Will Turnbough

**Status :** Pending

**Originated Date :** 07/13/2022 - Jacob Davidson - National TAB

#### Project Issue File Details



Aboveceiling.jpeg



Belowceiling.jpeg

## 07-11 CULVERS - ELLISVILLE, MO

### Project Issue Information

**Issue Name :** Diffuser note RTU1 SGRD 1-22 low on flow

**Description :** Duct is located too close to adjacent duct for the same area, causing turbulence and preventing more airflow from being pushed to diffuser. Since it is in an open area, I do not anticipate comfort issues.

**Created By :** National TAB **Assigned To :** National TAB - Will Turnbough

**Status :** Pending

**Originated Date :** 07/13/2022 - Jacob Davidson - National TAB

#### Project Issue File Details



Belowceiling.jpeg



Aboveceiling.jpeg

## 07-11 CULVERS - ELLISVILLE, MO

### Project Issue Information

**Issue Name :** RTU2 diffusers for dry goods have no dampers

**Description :** Diffusers for dry goods do not have dampers. The 200 cfm diffuser is high and the 600 cfm diffuser is very low due to excess flex and ceiling restrictions. Since it is in an open area, I do not foresee it causing comfort issues.

**Created By :** National TAB **Assigned To :** National TAB - Will Turnbough

**Status :** Pending

**Originated Date :** 07/13/2022 - Jacob Davidson - National TAB

#### Project Issue File Details



FuselT81eab8d5c64a45b1a3235  
0aa71778eb3.jpeg



FuselT02554b2b7dfb48dbbccfa  
e17e57cdad.jpeg



FuselT8b5a4f5c90ce47538d3509  
9b26af319d.jpeg

#### Project Issue Response Details

- **07/13/2022**      **National TAB - Jacob Davidson**
  - Current airflow for each is 260/200 and 344/600. Pic is another angle looking for damper



FuselT3b45930d299243e192  
4652ecb385abb5.jpeg





Comfort. Under control.

07-11 CULVERS - ELLISVILLE, MO

**CheckList Information**

|                                  |              |                 |              |
|----------------------------------|--------------|-----------------|--------------|
| <b>Name :</b>                    | REMARKS      | <b>Status :</b> | NotSubmitted |
| <b>Assigned Organization :</b>   | National TAB | <b>Asset :</b>  |              |
| <b>Requesting Organization :</b> | National TAB |                 |              |

**CheckList Item Details**

**PRIORITY (HIGH/LOW/INFO ONLY)**

INFO ONLY

INFO ONLY

INFO ONLY

INFO ONLY

**Notes/Comments :**



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07-11 CULVERS - ELLISVILLE, MO

CheckList Information

|                           |                      |          |              |
|---------------------------|----------------------|----------|--------------|
| Name :                    | TECH - SITE PICTURES | Status : | NotSubmitted |
| Assigned Organization :   | National TAB         | Asset :  |              |
| Requesting Organization : | National TAB         |          |              |

CheckList Item Details

STORE FRONT



FuseIT6118ff6921ac49349ad9  
6ee1c9f222e2.jpeg

RTU-1



**FuseITbf16370ab8644423916  
8a562d26e26fe.jpeg**

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RTU-2



**FuseIT71cc7b11745846b8862  
b33746bbf8d49.jpeg**

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PRV-1



**FuseIT07c957eac1e54ce9882  
a0c44f34e6516.jpeg**

PRV-2



**FuseIT44e5be38b91e45c29e6  
c936cf2b45643.jpeg**

PRV-3



**FuseIT62a1e0c0c2924295adb  
f7fc53d342299.jpeg**

EF-1A

Mop room fan



**FuseITf3315d787eb74b.jpeg**



**FuseIT3c05a9c33f42459eaa3  
22cb74038dae1.jpeg**

HOOD 1

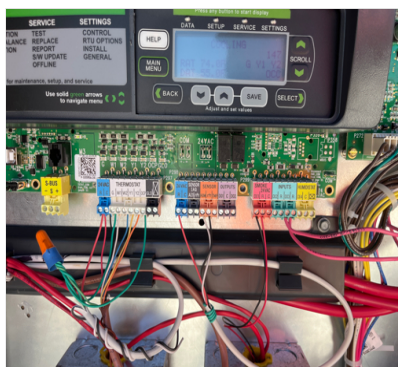


**FuseIT35cf951c59134417944  
622ab09bf707b.jpeg**

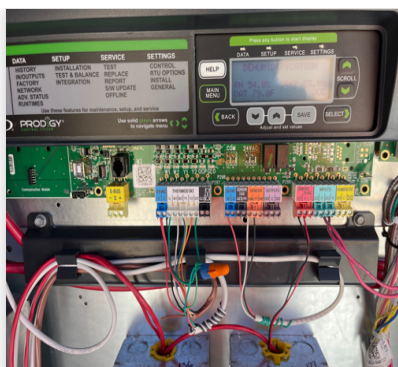
HOOD 2



**FuseIT103001ada41048.jpeg**

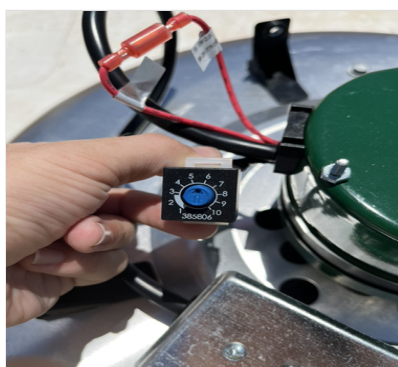


FuseITf18e311e27e5474c85d  
6497e55c6d820.jpeg



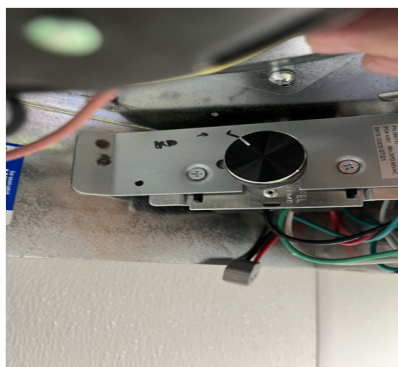
FuseITa8634a826c614134821  
b55d24ebc1c17.jpeg

## PRV1 SETPOINT

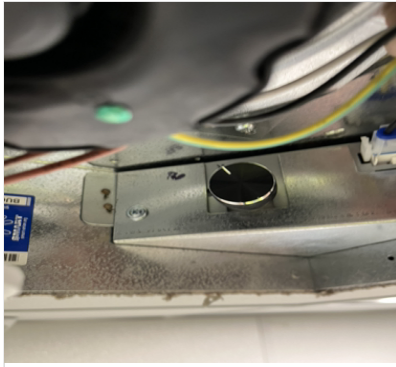


Setpoint.jpeg

## EF-1A MOP ROOM SETPOINT



Setpoint.jpeg



Setpoint.jpeg

Notes/Comments :



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07-11 CULVERS - ELLISVILLE, MO

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 diffusers and grilles are installed and match design?                                          | Yes |
| Perforated diffusers are installed on the cook line? (4-ways will disrupt hood capture)            | Yes |
| All hood filters installed and accounted for?                                                      | Yes |
| Hoods are wired and have power?                                                                    | Yes |
| Thermostats have power?                                                                            | Yes |
| Have trades/general contractor been notified about any issues and are they created on FaciliBuild? | N/A |
| On the cookline diffusers neck is there 18" (12" minimum) straight rigid duct run attached?        | YES |

Notes/Comments :



Comfort. Under control.

## 07-11 CULVERS - ELLISVILLE, MO

### 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:

##### RTU's/AHU's

Economizers are assembled and functional?

NO // 7-12-22 Economizer is installed, however full assembly for hood and OA filters has not arrived. OA read in open area as shown.



Makeshifthood.jpeg



FuselTe2394c818d3b41a1bfd  
56b388d5bf801.jpeg

Thermostat wire run from OCP on the RTU to the Ec terminal at the thermostat? If no, jumper can be installed from R to OCP temporarily. (The economizers will not open without OCP being energized.)

Yes

Motors are all operating below the FLA rating?

Yes

Are belts tight?

YES

If direct drive unit is the speed controller working.

NA

|                                                                                                                                               |     |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Is gas piping installed and valves turned on?                                                                                                 | Yes |
| Unit free of noticeable noise and vibration                                                                                                   | Yes |
| <b>EF's</b>                                                                                                                                   |     |
| Rotation is correct?                                                                                                                          | Yes |
| Belts are tight?                                                                                                                              | YES |
| Grease cup installed on hood fan?                                                                                                             | Yes |
| Hinge kit installed installed on hood fan?                                                                                                    | Yes |
| Lean grease rated fans 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 |
| For restroom fan(s) is the back draft damper installed and can it fully open?                                                                 | Yes |
|  <p><b>FuseIT9a391e7b6acb470e88a2d2fba84fd65c.jpeg</b></p> |     |
| Unit free of noticeable noise and vibration?                                                                                                  | Yes |
| The hood exhaust fans are installed in correct positions and are not switched?                                                                | Yes |
| <b>HOODS</b>                                                                                                                                  |     |
| Kitchen equipment installed in proper places?                                                                                                 | Yes |
| Can kitchen equipment be turned on for final smoke test?                                                                                      | No  |

Second stage Grease Grabber filters are installed on the  
griddle hood?

Yes

#### DOCUMENTATION

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

Yes

**Notes/Comments :**



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## 07-11 CULVERS - ELLISVILLE, MO

### 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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## 07-11 CULVERS - ELLISVILLE, MO

### 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, cooking start ups have not been done yet. |
| List smoke candle type used                 | 45 second smoke emitter                         |
| Smoke test capture - Perimeter of hood      | 100%                                            |
| Smoke test capture - Top of cooking surface | 100%                                            |

#### WITNESS

|                                                          |                                       |
|----------------------------------------------------------|---------------------------------------|
| Date test was completed                                  | 07/13/2022                            |
| TAB tech name / Firm                                     | JACOB DAVIDSON / NATIONAL TAB         |
| Site super name / Firm                                   | CHUCK HERZOG / FICON CONSTRUCTION INC |
| Owner representative name / Firm (if Applicable)         | DANIEL SIEMER / CULVER'S              |
| Building pressure at front & back doors (All Systems On) | FRONT 0.0035 SIDE 0.0016 BACK 0.0023  |

#### ADDITIONAL

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

#### PRODIGY SETTINGS FOR RTU'S

|                       |     |
|-----------------------|-----|
| Parameter 65 set to 0 | Yes |
|-----------------------|-----|

|                                                         |     |
|---------------------------------------------------------|-----|
| Parameter 78 set to 0                                   | Yes |
| Parameter 105 set to 6                                  | Yes |
| Parameter 156 set to 70 (Dining unit only)              | Yes |
| Parameter 156 set to 65 (Kitchen Unit Only)             | Yes |
| Parameter 170 set to 75 (Dining Unit Only)              | Yes |
| Parameter 170 set to 70 (Kitchen Unit Only)             | Yes |
| Parameter 131 set to the same % as OA minimum position? | Yes |
| Parameter 117 set to the same % as OA minimum position? | Yes |

**Notes/Comments :**



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07-11 CULVERS - ELLISVILLE, MO

**CheckList Information**

|                                  |                                    |                 |              |
|----------------------------------|------------------------------------|-----------------|--------------|
| <b>Name :</b>                    | TECH - STEP 5: FINAL DOCUMENTATION | <b>Status :</b> | NotSubmitted |
| <b>Assigned Organization :</b>   | National TAB                       | <b>Asset :</b>  |              |
| <b>Requesting Organization :</b> | National TAB                       |                 |              |

**CheckList Item Details**

| FINAL DOCUMENTATION                               |     |
|---------------------------------------------------|-----|
| Marked Data capture complete for all assets?      | Yes |
| Picture file sent to processing team or uploaded? | Yes |
| Balance schedule complete and uploaded?           | Yes |
| Prelim report generated and reviewed?             | Yes |

**Notes/Comments :**

# National TAB

Project: 07-11 CULVERS - ELLISVILLE, MO

## System/Unit: AHU/RTU



Comfort. Under control.

Asset: RTU1

AREA:DINING

| Unit Data           |             |                |
|---------------------|-------------|----------------|
|                     | Design      | Actual         |
| MFG                 | LENNOX      | LENNOX         |
| Serial Num          | -           | 5622E01871     |
| Model Num           | LGH-210-H4B | LGH-210-H4BM3Y |
| Type                | -           | RTU            |
| Configuration       | -           | VERTICAL       |
| Num OA Filters 1    | -           | [1]            |
| OA Filter Size 1    | -           | [1]            |
| Num Final Filter 1  | -           | 6              |
| Final Filter Size 1 | -           | 24X24X2        |

| Motor Data     |         |           |
|----------------|---------|-----------|
|                | Design  | Actual    |
| Motor MFG      | -       | INTERLINK |
| Frame          | -       | 56HZ      |
| Horsepower     | -       | 3         |
| Motor Rpm      | -       | 1750      |
| Phase          | 3       | 3         |
| Rated Voltage  | 208/230 | 200-230   |
| Rated Amperage | -       | 8.0-7.8   |

| Drive Data         |        |             |
|--------------------|--------|-------------|
|                    | Design | Actual      |
| Motor Sheave Size  | -      | 3.75"       |
| Motor Bore Size    | -      | 7/8"        |
| Motor Sheave SetPt | -      | 6 TURNS OUT |
| Fan Sheave Size    | -      | 7"          |
| Fan Sheave Bore    | -      | 1 3/16"     |
| Belt CL Distance   | -      | 20.75"      |
| Num of Belts       | -      | 1           |
| Belt Size          | -      | BX55        |
| Belt Alignment     | -      | VERIFIED    |

| Test Data              |        |                |
|------------------------|--------|----------------|
|                        | Design | Actual         |
| SF CFM                 | 6000   | 5796           |
| SF RPM                 | -      | 723            |
| RA CFM                 | 4250   | 3950           |
| OA CFM                 | 1825   | 1846           |
| RL Voltage             | -      | 209/207/209    |
| RL Amperage            | -      | 6.1/6.8/6.8    |
| SF Rotation            | -      | CCW            |
| RA Damper Position     | -      | [1] 42%        |
| Min OA Damper Position | -      | [1] 42%        |
| Min OA Damper Type     | -      | ECONOMIZER [1] |
| OA Enthalpy Setpt      | -      | 19 mA          |

| Performance Data |        |        |
|------------------|--------|--------|
|                  | Design | Actual |
| MA Plenum SP     | -      | -0.34" |
| Fan Suction SP   | -      | -0.64" |
| Fan Discharge SP | -      | 0.23"  |
| Total ESP        | -      | 0.57"  |
| Fan Total SP     | -      | 0.87"  |

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

Completed By: Jacob Davidson

Notes:

# National TAB

Project: 07-11 CULVERS - ELLISVILLE, MO

## AHU/RTU



### Diffuser Supply (GRD)

#### RTU1/DINING

| Asset  | Location            | Type | DESIGN CFM | CFM(1) | CFM(2) | FINAL CFM | % to design |
|--------|---------------------|------|------------|--------|--------|-----------|-------------|
| SGRD1  | Dining              | SD1  | 150        | 208    | 140    | 137       | 91.3        |
|        | Size                | AK   |            |        |        |           |             |
|        |                     |      |            |        |        |           |             |
| SGRD2  | Hall                | SD1  | 450        | 379    | 416    | 427       | 94.9        |
|        | Size                | AK   |            |        |        |           |             |
|        |                     |      |            |        |        |           |             |
| SGRD3  | Customer Order Area | SD1  | 450        | 389    | 404    | 430       | 95.6        |
|        | Size                | AK   |            |        |        |           |             |
|        |                     |      |            |        |        |           |             |
| SGRD4  | Dining              | SD1  | 150        | 289    | 137    | 147       | 98.0        |
|        | Size                | AK   |            |        |        |           |             |
|        |                     |      |            |        |        |           |             |
| SGRD5  | Dining              | SD4  | 150        | 170    | 144    | 164       | 109.3       |
|        | Size                | AK   |            |        |        |           |             |
|        |                     |      |            |        |        |           |             |
| SGRD6  | Men                 | SD4  | 150        | 132    | 164    | 155       | 103.3       |
|        | Size                | AK   |            |        |        |           |             |
|        |                     |      |            |        |        |           |             |
| SGRD7  | Dining              | SD4  | 150        | 190    | 157    | 156       | 104.0       |
|        | Size                | AK   |            |        |        |           |             |
|        |                     |      |            |        |        |           |             |
| SGRD8  | Dining              | SD1  | 150        | 196    | 141    | 144       | 96.0        |
|        | Size                | AK   |            |        |        |           |             |
|        |                     |      |            |        |        |           |             |
| SGRD9  | Dining              | SD1  | 150        | 142    | 157    | 156       | 104.0       |
|        | Size                | AK   |            |        |        |           |             |
|        |                     |      |            |        |        |           |             |
| SGRD10 | Dining              | SD1  | 150        | 149    | 159    | 141       | 94.0        |
|        | Size                | AK   |            |        |        |           |             |
|        |                     |      |            |        |        |           |             |
| SGRD11 | Dining              | SD1  | 150        | 150    | 160    | 146       | 97.3        |
|        | Size                | AK   |            |        |        |           |             |
|        |                     |      |            |        |        |           |             |
| SGRD12 | Dining              | SD1  | 150        | 73     | 89     | 93        | 62.0        |
|        | Size                | AK   |            |        |        |           |             |
|        |                     |      |            |        |        |           |             |
| SGRD13 | Dining              | SD1  | 150        | 134    | 140    | 153       | 102.0       |
|        | Size                | AK   |            |        |        |           |             |
|        |                     |      |            |        |        |           |             |
| SGRD14 | Dining              | SD1  | 150        | 145    | 154    | 157       | 104.7       |
|        | Size                | AK   |            |        |        |           |             |
|        |                     |      |            |        |        |           |             |
| SGRD15 | Dining              | SD1  | 150        | 37     | 161    | 142       | 94.7        |
|        | Size                | AK   |            |        |        |           |             |
|        |                     |      |            |        |        |           |             |

|        |                     |             |                   |               |               |                  |                    |
|--------|---------------------|-------------|-------------------|---------------|---------------|------------------|--------------------|
| SGRD16 | <b>Location</b>     | <b>Type</b> | <b>DESIGN CFM</b> | <b>CFM(1)</b> | <b>CFM(2)</b> | <b>FINAL CFM</b> | <b>% to design</b> |
|        | Dining              | SD1         | 150               | 155           | 155           | 146              | 97.3               |
|        | <b>Size</b>         | <b>AK</b>   |                   |               |               |                  |                    |
| SGRD17 | <b>Location</b>     | <b>Type</b> | <b>DESIGN CFM</b> | <b>CFM(1)</b> | <b>CFM(2)</b> | <b>FINAL CFM</b> | <b>% to design</b> |
|        | Dining              | SD1         | 150               | 204           | 197           | 147              | 98.0               |
|        | <b>Size</b>         | <b>AK</b>   |                   |               |               |                  |                    |
| SGRD18 | <b>Location</b>     | <b>Type</b> | <b>DESIGN CFM</b> | <b>CFM(1)</b> | <b>CFM(2)</b> | <b>FINAL CFM</b> | <b>% to design</b> |
|        | Dining              | SD1         | 150               | 173           | 176           | 155              | 103.3              |
|        | <b>Size</b>         | <b>AK</b>   |                   |               |               |                  |                    |
| SGRD19 | <b>Location</b>     | <b>Type</b> | <b>DESIGN CFM</b> | <b>CFM(1)</b> | <b>CFM(2)</b> | <b>FINAL CFM</b> | <b>% to design</b> |
|        | Dining              | SD1         | 150               | 200           | 141           | 163              | 108.7              |
|        | <b>Size</b>         | <b>AK</b>   |                   |               |               |                  |                    |
| SGRD20 | <b>Location</b>     | <b>Type</b> | <b>DESIGN CFM</b> | <b>CFM(1)</b> | <b>CFM(2)</b> | <b>FINAL CFM</b> | <b>% to design</b> |
|        | Drinks & Condiments | SD1         | 300               | 349           | 376           | 317              | 105.7              |
|        | <b>Size</b>         | <b>AK</b>   |                   |               |               |                  |                    |
| SGRD21 | <b>Location</b>     | <b>Type</b> | <b>DESIGN CFM</b> | <b>CFM(1)</b> | <b>CFM(2)</b> | <b>FINAL CFM</b> | <b>% to design</b> |
|        | Entry               | SD1         | 150               | 220           | 145           | 146              | 97.3               |
|        | <b>Size</b>         | <b>AK</b>   |                   |               |               |                  |                    |
| SGRD22 | <b>Location</b>     | <b>Type</b> | <b>DESIGN CFM</b> | <b>CFM(1)</b> | <b>CFM(2)</b> | <b>FINAL CFM</b> | <b>% to design</b> |
|        | Customer Service    | SD1         | 350               | 192           | 194           | 214              | 61.1               |
|        | <b>Size</b>         | <b>AK</b>   |                   |               |               |                  |                    |
| SGRD23 | <b>Location</b>     | <b>Type</b> | <b>DESIGN CFM</b> | <b>CFM(1)</b> | <b>CFM(2)</b> | <b>FINAL CFM</b> | <b>% to design</b> |
|        | Customer Service    | SD1         | 350               | 334           | 349           | 366              | 104.6              |
|        | <b>Size</b>         | <b>AK</b>   |                   |               |               |                  |                    |
| SGRD24 | <b>Location</b>     | <b>Type</b> | <b>DESIGN CFM</b> | <b>CFM(1)</b> | <b>CFM(2)</b> | <b>FINAL CFM</b> | <b>% to design</b> |
|        | Customer Service    | SD1         | 350               | 315           | 319           | 330              | 94.3               |
|        | <b>Size</b>         | <b>AK</b>   |                   |               |               |                  |                    |
| SGRD25 | <b>Location</b>     | <b>Type</b> | <b>DESIGN CFM</b> | <b>CFM(1)</b> | <b>CFM(2)</b> | <b>FINAL CFM</b> | <b>% to design</b> |
|        | Customer Service    | SD1         | 350               | 330           | 362           | 374              | 106.9              |
|        | <b>Size</b>         | <b>AK</b>   |                   |               |               |                  |                    |
| SGRD26 | <b>Location</b>     | <b>Type</b> | <b>DESIGN CFM</b> | <b>CFM(1)</b> | <b>CFM(2)</b> | <b>FINAL CFM</b> | <b>% to design</b> |
|        | Drive Thru          | SD1         | 500               | 548           | 543           | 493              | 98.6               |
|        | <b>Size</b>         | <b>AK</b>   |                   |               |               |                  |                    |
| SGRD27 | <b>Location</b>     | <b>Type</b> | <b>DESIGN CFM</b> | <b>CFM(1)</b> | <b>CFM(2)</b> | <b>FINAL CFM</b> | <b>% to design</b> |
|        | Office              | SD1         | 8"                | 200           | 1             | 178              | 180                |
|        | <b>Size</b>         | <b>AK</b>   |                   |               |               |                  |                    |
|        | 197                 | 98.5        |                   |               |               |                  |                    |

Completed By: Jacob Davidson on

| Asset | Notes |
|-------|-------|
|-------|-------|

# National TAB

Project: 07-11 CULVERS - ELLISVILLE, MO

System/Unit: AHU/RTU



Comfort. Under control.

Asset: RTU2

AREA: KITCHEN

| Unit Data           |             |                |
|---------------------|-------------|----------------|
|                     | Design      | Actual         |
| MFG                 | LENNOX      | LENNOX         |
| Serial Num          | -           | 5622E01390     |
| Model Num           | LGH-240-H4B | LGH-240-H4BM4Y |
| Type                | -           | RTU            |
| Configuration       | -           | VERTICAL       |
| Num OA Filters 1    | -           | 3 METAL MESH   |
| OA Filter Size 1    | -           | 13X23          |
| Num Final Filter 1  | -           | 6              |
| Final Filter Size 1 | -           | 24X24X2        |

| Motor Data     |         |                  |
|----------------|---------|------------------|
|                | Design  | Actual           |
| Motor MFG      | -       | NIDEC MOTOR CORP |
| Frame          | -       | 184TZ            |
| Horsepower     | -       | 5                |
| Motor Rpm      | -       | 1765             |
| Phase          | 3       | 3                |
| Rated Voltage  | 208/230 | 208-230          |
| Rated Amperage | -       | 13.8-13.0        |

| Drive Data         |        |             |
|--------------------|--------|-------------|
|                    | Design | Actual      |
| Motor Sheave Size  | -      | 1VP50BB     |
| Motor Bore Size    | -      | 1 1/8"      |
| Motor Sheave SetPt | -      | 3 TURNS OUT |
| Fan Sheave Size    | -      | 10"         |
| Fan Sheave Bore    | -      | 1 3/16"     |
| Belt CL Distance   | -      | 21"         |
| Num of Belts       | -      | 1           |
| Belt Size          | -      | BX61        |
| Belt Alignment     | -      | VERIFIED    |

| Test Data              |        |             |
|------------------------|--------|-------------|
|                        | Design | Actual      |
| SF CFM                 | 6225   | 6001        |
| SF RPM                 | -      | 789         |
| RA CFM                 | 4525   | 4221        |
| OA CFM                 | 1775   | 1780        |
| RL Voltage             | -      | 209/211/211 |
| RL Amperage            | -      | 8.1/8.2/8.3 |
| SF Rotation            | -      | CCW         |
| RA Damper Position     | -      | 46%         |
| Min OA Damper Position | -      | 46%         |
| Min OA Damper Type     | -      | ECONOMIZER  |
| OA Enthalpy Setpt      | -      | 19 mA       |

| Performance Data |        |        |
|------------------|--------|--------|
|                  | Design | Actual |
| MA Plenum SP     | -      | -0.36" |
| Fan Suction SP   | -      | -0.72" |
| Fan Discharge SP | -      | 0.33"  |
| Total ESP        | -      | 0.69"  |
| Fan Total SP     | -      | 1.05"  |

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

Completed By: Jacob Davidson

Notes:

# National TAB

Project:07-11 CULVERS - ELLISVILLE, MO

## AHU/RTU



Comfort. Under control.

### Diffuser Supply (GRD)

#### RTU2/KITCHEN

| Asset  | Location         | Type               | Size | DESIGN CFM | AK | CFM(1) | CFM(2) |
|--------|------------------|--------------------|------|------------|----|--------|--------|
| SGRD1  | Cook Line        | SD5                | 10   | 200        | 1  | 50     | 280    |
|        | <b>FINAL CFM</b> | <b>% to design</b> |      |            |    |        |        |
|        | 195              | 97.5               |      |            |    |        |        |
| SGRD2  | Cook Line        | SD5                | 12   | 375        | 1  | 66     | 467    |
|        | <b>FINAL CFM</b> | <b>% to design</b> |      |            |    |        |        |
|        | 374              | 99.7               |      |            |    |        |        |
| SGRD3  | Food Prep        | SD5                | 12   | 350        | 1  | 651    | 475    |
|        | <b>FINAL CFM</b> | <b>% to design</b> |      |            |    |        |        |
|        | 354              | 101.1              |      |            |    |        |        |
| SGRD4  | Food Prep        | SD5                | 12   | 400        | 1  | 79     | 324    |
|        | <b>FINAL CFM</b> | <b>% to design</b> |      |            |    |        |        |
|        | 409              | 102.3              |      |            |    |        |        |
| SGRD5  | Food Prep        | SD5                | 12   | 400        | 1  | 85     | 298    |
|        | <b>FINAL CFM</b> | <b>% to design</b> |      |            |    |        |        |
|        | 395              | 98.8               |      |            |    |        |        |
| SGRD6  | Cook Line        | SD5                | 10   | 250        | 1  | 553    | 503    |
|        | <b>FINAL CFM</b> | <b>% to design</b> |      |            |    |        |        |
|        | 250              | 100.0              |      |            |    |        |        |
| SGRD7  | Cook Line        | SD5                | 10   | 275        | 1  | 98     | 502    |
|        | <b>FINAL CFM</b> | <b>% to design</b> |      |            |    |        |        |
|        | 285              | 103.6              |      |            |    |        |        |
| SGRD8  | Sundae Service   | SD1                | 12   | 600        | 1  | 690    | 654    |
|        | <b>FINAL CFM</b> | <b>% to design</b> |      |            |    |        |        |
|        | 591              | 98.5               |      |            |    |        |        |
| SGRD9  | Sundae Service   | SD1                | 12   | 600        | 1  | 684    | 527    |
|        | <b>FINAL CFM</b> | <b>% to design</b> |      |            |    |        |        |
|        | 602              | 100.3              |      |            |    |        |        |
| SGRD10 | Utility Room     | SD1                | 12   | 600        | 1  | 776    | 699    |
|        | <b>FINAL CFM</b> | <b>% to design</b> |      |            |    |        |        |
|        | 566              | 94.3               |      |            |    |        |        |
| SGRD11 | Dry Goods        | SD1                | 12   | 600        | 1  | 565    | 530    |
|        | <b>FINAL CFM</b> | <b>% to design</b> |      |            |    |        |        |
|        |                  |                    |      |            |    |        |        |

|        |                   |                    |             |                   |           |               |               |
|--------|-------------------|--------------------|-------------|-------------------|-----------|---------------|---------------|
|        | 601               | 100.2              |             |                   |           |               |               |
| SGRD12 | <b>Location</b>   | <b>Type</b>        | <b>Size</b> | <b>DESIGN CFM</b> | <b>AK</b> | <b>CFM(1)</b> | <b>CFM(2)</b> |
|        | Employee Restroom | SD4                | 6           | 75                | 1         | 172           | 157           |
|        | <b>FINAL CFM</b>  | <b>% to design</b> |             |                   |           |               |               |
|        | 78                | 104.0              |             |                   |           |               |               |
| SGRD13 | <b>Location</b>   | <b>Type</b>        | <b>Size</b> | <b>DESIGN CFM</b> | <b>AK</b> | <b>CFM(1)</b> | <b>CFM(2)</b> |
|        | Dish Washing      | SD5                | 12          | 350               | 1         | 442           | 243           |
|        | <b>FINAL CFM</b>  | <b>% to design</b> |             |                   |           |               |               |
|        | 347               | 99.1               |             |                   |           |               |               |
| SGRD14 | <b>Location</b>   | <b>Type</b>        | <b>Size</b> | <b>DESIGN CFM</b> | <b>AK</b> | <b>CFM(1)</b> | <b>CFM(2)</b> |
|        | Dish Washing      | SD5                | 12          | 350               | 1         | 705           | 376           |
|        | <b>FINAL CFM</b>  | <b>% to design</b> |             |                   |           |               |               |
|        | 349               | 99.7               |             |                   |           |               |               |
| SGRD15 | <b>Location</b>   | <b>Type</b>        | <b>Size</b> | <b>DESIGN CFM</b> | <b>AK</b> | <b>CFM(1)</b> | <b>CFM(2)</b> |
|        | Dry Goods         | SD1                | 12          | 600               | 1         | 439           | 264           |
|        | <b>FINAL CFM</b>  | <b>% to design</b> |             |                   |           |               |               |
|        | 344               | 57.3               |             |                   |           |               |               |
| SGRD16 | <b>Location</b>   | <b>Type</b>        | <b>Size</b> | <b>DESIGN CFM</b> | <b>AK</b> | <b>CFM(1)</b> | <b>CFM(2)</b> |
|        | Dry Goods         | SD1                | 10          | 200               | 1         | 312           | 182           |
|        | <b>FINAL CFM</b>  | <b>% to design</b> |             |                   |           |               |               |
|        | 261               | 130.5              |             |                   |           |               |               |

Completed By: Jacob Davidson on

| Asset | Notes |
|-------|-------|
|-------|-------|

# National TAB

Project: 07-11 CULVERS - ELLISVILLE, MO

## System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: EF-A1

AREA:MOP ROOM

| Unit Data     |          |          |
|---------------|----------|----------|
|               | Design   | Actual   |
| MFG           | ACCUREX  | ACCUREX  |
| Model Num     | XCR-B80  | XCR-B80  |
| Serial Num    | -        | 19598731 |
| Type          | Celing   | CEILING  |
| Configuration | Vertical | VERTICAL |

| Motor Data       |        |           |
|------------------|--------|-----------|
|                  | Design | Actual    |
| Motor MFG        | -      | GREENHECK |
| Frame            | -      | NL        |
| Horsepower       | -      | NL        |
| Motor Rpm        | 900    | 900       |
| Phase            | 1      | 1         |
| Voltage (rated)  | 115    | 115       |
| Amperage (rated) | -      | 0.16      |
| Service Factor   | -      | 1         |

| Test Data        |        |         |
|------------------|--------|---------|
|                  | Design | Actual  |
| CFM              | 75     | 69      |
| Fan RPM          | 885    | DD      |
| Fan Rotation     | -      | CCW     |
| Motor RPM        | -      | DD      |
| System SetPt     | -      | SEE PIC |
| RL Voltage       | -      | 120     |
| RL Amperage      | -      | 0.14    |
| Total ESP        | 0.125" | UTO     |
| Fan Inlet SP     | -      | UTO     |
| Fan Discharge SP | -      | UTO     |

Completed By: Jacob Davidson

Notes:

| Asset | Notes |
|-------|-------|
|-------|-------|

# National TAB

Project: 07-11 CULVERS - ELLISVILLE, MO

System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: EF-A1

AREA:EMPLOYEE RESTROOM

| Unit Data     |          |          |
|---------------|----------|----------|
|               | Design   | Actual   |
| MFG           | ACCUREX  | ACCUREX  |
| Model Num     | XCR-B80  | XCR-B80  |
| Serial Num    | -        | 20569652 |
| Type          | Ceiling  | CEILING  |
| Configuration | Vertical | VERTICAL |

| Motor Data       |        |           |
|------------------|--------|-----------|
|                  | Design | Actual    |
| Motor MFG        | -      | GREENHECK |
| Frame            | -      | NL        |
| Horsepower       | -      | NL        |
| Motor Rpm        | 900    | 900       |
| Phase            | 1      | 1         |
| Voltage (rated)  | 115    | 115       |
| Amperage (rated) | -      | 0.16      |
| Service Factor   | -      | 1         |

| Test Data        |        |         |
|------------------|--------|---------|
|                  | Design | Actual  |
| CFM              | 75     | 76      |
| Fan RPM          | 885    | DD      |
| Fan Rotation     | -      | CCW     |
| Motor RPM        | -      | DD      |
| System SetPt     | -      | SEE PIC |
| RL Voltage       | -      | 122     |
| RL Amperage      | -      | 0.15    |
| Total ESP        | 0.125" | UTO     |
| Fan Inlet SP     | -      | UTO     |
| Fan Discharge SP | -      | UTO     |

Completed By: Jacob Davidson

Notes:

| Asset | Notes |
|-------|-------|
|-------|-------|

# National TAB

Project: 07-11 CULVERS - ELLISVILLE, MO

System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: PRV1

AREA:RESTROOM

| Unit Data     |            |                      |
|---------------|------------|----------------------|
|               | Design     | Actual               |
| MFG           | ACCUREX    | ACCUREX              |
| Model Num     | XRED-095-D | XRED-095-6-V6-1-17-X |
| Serial Num    | -          | 19602648             |
| Type          | Downblast  | DOWNBLAST            |
| Configuration | Horizontal | VERTICAL             |

| Motor Data       |        |                 |
|------------------|--------|-----------------|
|                  | Design | Actual          |
| Motor MFG        | -      | NL              |
| Frame            | -      | NL              |
| Horsepower       | 0.0667 | 1/6             |
| Motor Rpm        | 1550   | 350-1750        |
| Phase            | 1      | 1               |
| Voltage (rated)  | 115    | 115/208-230/277 |
| Amperage (rated) | -      | 2.3/1.5/1.2     |
| Service Factor   | -      | 1               |

| Test Data        |        |           |
|------------------|--------|-----------|
|                  | Design | Actual    |
| CFM              | -      | 294       |
| Fan RPM          | 1479   | DD        |
| Fan Rotation     | -      | CW        |
| Motor RPM        | -      | DD        |
| System SetPt     | -      | 5 SEE PIC |
| RL Voltage       | -      | NOT SAFE  |
| RL Amperage      | -      | NOT SAFE  |
| Total ESP        | 0.5"   | 0.15"     |
| Fan Inlet SP     | -      | -0.15"    |
| Fan Discharge SP | -      | ATM       |

Completed By: Jacob Davidson

Notes:

# National TAB

Project:07-11 CULVERS - ELLISVILLE, MO

## FAN - Exhaust



Diffuser Ret/Exh (GRD)

### PRV1/RESTROOM

| Asset |                  |                    |             |                   |           |               |               |
|-------|------------------|--------------------|-------------|-------------------|-----------|---------------|---------------|
| EGRD1 | <b>Location</b>  | <b>Type</b>        | <b>Size</b> | <b>DESIGN CFM</b> | <b>AK</b> | <b>CFM(1)</b> | <b>CFM(2)</b> |
|       | Women RR         | EG1                | 10x10       | 150               | 1         | 346           | 147           |
|       | <b>FINAL CFM</b> | <b>% to design</b> |             |                   |           |               |               |
|       | 148              | 98.7               |             |                   |           |               |               |
| EGRD2 | <b>Location</b>  | <b>Type</b>        | <b>Size</b> | <b>DESIGN CFM</b> | <b>AK</b> | <b>CFM(1)</b> | <b>CFM(2)</b> |
|       | Men RR           | EG1                | 10x10       | 150               | 1         | 324           | 144           |
|       | <b>FINAL CFM</b> | <b>% to design</b> |             |                   |           |               |               |
|       | 146              | 97.3               |             |                   |           |               |               |

Completed By: Jacob Davidson on

| Asset | Notes |
|-------|-------|
|-------|-------|

# National TAB

Project: 07-11 CULVERS - ELLISVILLE, MO  
System/Unit: FAN - Exhaust



Asset: PRV2

AREA:HD1 GRILL

| Unit Data     |               |                      |
|---------------|---------------|----------------------|
|               | Design        | Actual               |
| MFG           | ACCUREX       | ACCUREX              |
| Model Num     | XRUB-160XP-15 | XRUB-160XP-15-1-26-G |
| Serial Num    | -             | 19602763             |
| Type          | Upblast       | UPBLAST              |
| Configuration | Vertical      | VERTICAL             |

| Motor Data       |        |         |
|------------------|--------|---------|
|                  | Design | Actual  |
| Motor MFG        | -      | NIDEC   |
| Frame            | -      | 56      |
| Horsepower       | 1.5    | 1.5     |
| Motor Rpm        | 1725   | 1760    |
| Phase            | 3      | 3       |
| Voltage (rated)  | 208    | 230/460 |
| Amperage (rated) | -      | 4.2/2.1 |
| Service Factor   | -      | 1.15    |

| Drive Data         |        |                     |
|--------------------|--------|---------------------|
|                    | Design | Actual              |
| Motor Sheave Size  | -      | 4.25"               |
| Motor Bore Size    | -      | 5/8"                |
| Motor Sheave SetPt | -      | 1.5<br>TURNS<br>OUT |
| Fan Sheave Size    | -      | 3.25"               |
| Fan Sheave Bore    | -      | 1"                  |
| Belt CL Distance   | -      | 5.75"               |
| Num of Belts       | -      | 1                   |
| Belt Size          | -      | AX-24               |

| Test Data     |        |             |
|---------------|--------|-------------|
|               | Design | Actual      |
| CFM           | 1500   | 1469        |
| Fan RPM       | 2411   | 2398        |
| Fan Rotation  | -      | CW          |
| Motor RPM     | -      | 1769        |
| RL Voltage    | -      | 209/210/211 |
| RL Amperage   | -      | 3.2/3.5/3.4 |
| Suction ESP   | -      | -1.01       |
| Discharge ESP | -      | ATM         |
| Total ESP     | -      | 1.01        |

Completed By: Jacob Davidson

Notes:

| Asset | Notes |
|-------|-------|
|-------|-------|

# National TAB

Project: 07-11 CULVERS - ELLISVILLE, MO

System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: PRV3

AREA:HD2 FRYER

| Unit Data     |            |                   |
|---------------|------------|-------------------|
|               | Design     | Actual            |
| MFG           | ACCUREX    | ACCUREX           |
| Model Num     | XRUB-140-7 | XRUB-140-7-1-26-G |
| Serial Num    | -          | 19602805          |
| Type          | Ceiling    | UPBLAST           |
| Configuration | Vertical   | VERTICAL          |

| Motor Data       |        |          |
|------------------|--------|----------|
|                  | Design | Actual   |
| Motor MFG        | -      | NIDEC    |
| Frame            | -      | 56       |
| Horsepower       | 0.5    | 0.75     |
| Motor Rpm        | 1725   | 1760     |
| Phase            | 3      | 3        |
| Voltage (rated)  | 208    | 230/460  |
| Amperage (rated) | -      | 2.3/1.15 |
| Service Factor   | -      | 1.25     |

| Drive Data         |        |             |
|--------------------|--------|-------------|
|                    | Design | Actual      |
| Motor Sheave Size  | -      | 3.25"       |
| Motor Bore Size    | -      | 5/8"        |
| Motor Sheave SetPt | -      | 5 TURNS OUT |
| Fan Sheave Size    | -      | 4"          |
| Fan Sheave Bore    | -      | 11/16"      |
| Belt CL Distance   | -      | 5.5"        |
| Num of Belts       | -      | 1           |
| Belt Size          | -      | AP23        |

| Test Data     |        |             |
|---------------|--------|-------------|
|               | Design | Actual      |
| CFM           | 1500   | 1538        |
| Fan RPM       | 1377   | 1025        |
| Fan Rotation  | -      | CW          |
| Motor RPM     | -      | 1770        |
| RL Voltage    | -      | 209/210/210 |
| RL Amperage   | -      | 1.3/1.5/1.7 |
| Suction ESP   | -      | -0.85"      |
| Discharge ESP | -      | ATM         |
| Total ESP     | -      | 0.85"       |

Completed By: Jacob Davidson

Notes:

| Asset | Notes |
|-------|-------|
|-------|-------|

# National TAB

Project: 07-11 CULVERS - ELLISVILLE, MO

## System/Unit: Kitchen Hood Type I



Comfort. Under control.

Asset: HD1

AREA:Griddle

| Unit Data        |                      |                      |
|------------------|----------------------|----------------------|
|                  | Design               | Actual               |
| MFG              | Accurex              | Accurex              |
| Model Num        | XGEP-64-S            | XGEP-64.00-S         |
| Job / Serial Num | -                    | 19619653             |
| Type             | Type I Low Proximity | TYPE I LOW PROXIMITY |
| Hood length      | 64"                  | 64"                  |
| Hood Width       | 23"                  | 23"                  |

| Test Data Exhaust       |                |           |
|-------------------------|----------------|-----------|
|                         | Design         | Actual    |
| Filter Type             | Grease Grabber | X-TRACTOR |
| Filter Size 1           | 16x16          | 16X16     |
| Filter Qty 1            | 4              | 4         |
| Filter AK factor size 1 | 1.53           | 1.53      |
| Filter Total AK Area    | 6.12           | 6.12      |
| Filter1 FPM             | -              | 270       |
| Filter2 FPM             | -              | 225       |
| Filter3 FPM             | -              | 230       |
| Filter4 FPM             | -              | 235       |
| Filter Ave FPM(corr)    | -              | 240       |
| CFM                     | -              | 1469      |

| Cooking Equipment |        |         |
|-------------------|--------|---------|
|                   | Design | Actual  |
| Item 1            | -      | GRIDDLE |

| Performance Data           |        |                         |
|----------------------------|--------|-------------------------|
|                            | Design | Actual                  |
| Smoke Generation Type      | -      | 45 SECOND SMOKE EMITTER |
| Hood Capture %             | -      | 100%                    |
| End Panels Installed (Y/N) | -      | Y                       |

| General             |        |                |
|---------------------|--------|----------------|
|                     | Design | Actual         |
| Third Party Witness | -      | DANIEL SIEMER  |
| Third Party Company | -      | CULVERS        |
| Tech Witness        | -      | JACOB DAVIDSON |

Completed By: Jacob Davidson

Notes:

| Asset | Notes |
|-------|-------|
|-------|-------|

# National TAB

Project: 07-11 CULVERS - ELLISVILLE, MO

## System/Unit: Kitchen Hood Type I



Comfort. Under control.

Asset: HD2

AREA:Fryer

| Unit Data        |                         |                         |
|------------------|-------------------------|-------------------------|
|                  | Design                  | Actual                  |
| MFG              | Accurex                 | Accurex                 |
| Model Num        | XXEP-83-S               | XXEP-83.00-S            |
| Job / Serial Num | -                       | 19619652                |
| Type             | Type I<br>Low Proximity | TYPE I<br>LOW PROXIMITY |
| Hood length      | 83"                     | 83"                     |
| Hood Width       | 23"                     | 23"                     |

| Test Data Exhaust       |                              |           |
|-------------------------|------------------------------|-----------|
|                         | Design                       | Actual    |
| Filter Type             | X-Tractor<br>Stainless Steel | X-TRACTOR |
| Filter Size 1           | 16x16                        | 16X16     |
| Filter Qty 1            | 5                            | 5         |
| Filter AK factor size 1 | 1.53                         | 1.53      |
| Filter Total AK Area    | 7.65                         | 7.65      |
| Filter1 FPM             | -                            | 213       |
| Filter2 FPM             | -                            | 183       |
| Filter3 FPM             | -                            | 185       |
| Filter4 FPM             | -                            | 212       |
| Filter5 FPM             | -                            | 213       |
| Filter Ave FPM(corr)    | -                            | 201       |
| CFM                     | -                            | 1538      |

| Cooking Equipment |        |        |
|-------------------|--------|--------|
|                   | Design | Actual |
| Item 1            | -      | FRYERS |

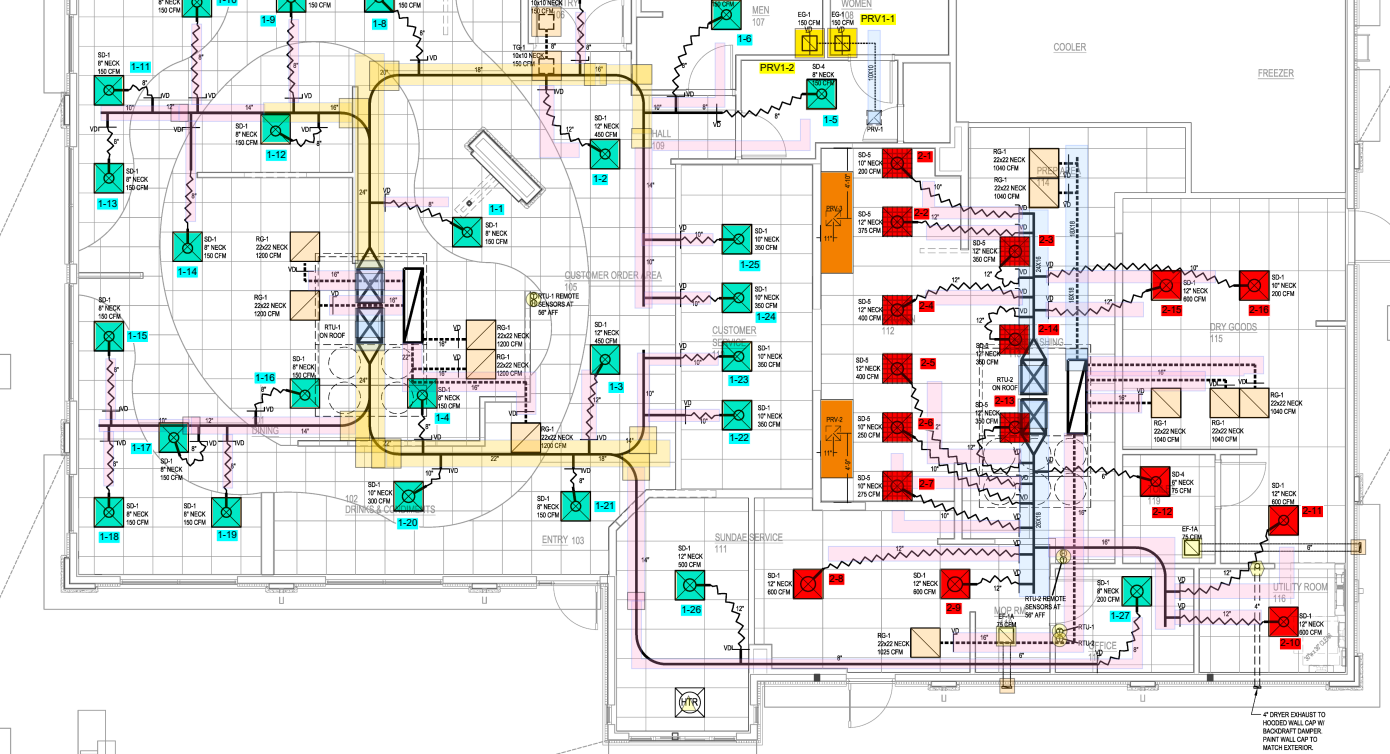
Completed By: Jacob Davidson

Notes:

| Asset | Notes |
|-------|-------|
|-------|-------|

| Performance Data           |        |                                  |
|----------------------------|--------|----------------------------------|
|                            | Design | Actual                           |
| Smoke Generation Type      | -      | 45<br>SECOND<br>SMOKE<br>EMITTER |
| Hood Capture %             | -      | 100%                             |
| End Panels Installed (Y/N) | -      | Y                                |

| General             |        |                   |
|---------------------|--------|-------------------|
|                     | Design | Actual            |
| Third Party Witness | -      | DANIEL<br>SIEMER  |
| Third Party Company | -      | CULVER'S          |
| Tech Witness        | -      | JACOB<br>DAVIDSON |



| SUPPLY DUCTWORK SIZING TABLE* |               |                  |                       |
|-------------------------------|---------------|------------------|-----------------------|
| ROUND                         | CFM RANGE     | RECTANGULAR SIZE | RECTANGULAR CFM RANGE |
|                               | 115 - 235     | 8"x8"            | 305 - 300             |
|                               | 240 - 435     | 10"x8"           | 305 - 400             |
|                               | 440 - 710     | 10"x10"          | 405 - 550             |
|                               | 715 - 1,070   | 12"x10"          | 555 - 700             |
|                               | 1,075 - 1,530 | 12"x12"          | 705 - 900             |
|                               | 1,535 - 2,090 | 14"x12"          | 905 - 1,105           |

**HVAC PLAN**  
SCALE: 1/4" = 1'-0"

NOTE: ALL DUCTWORK TO BE LOCATED IN TRUSS SPACE WHERE POSSIBLE. SEE FRAMING PLAN.  
HVAC SETPOINTS RECOMMENDED BY CORPORATE OPERATIONAL GUIDELINES:  
1. DINING: HEATING 70 DEG; COOLING 72 DEG  
2. KITCHEN: HEATING 68 DEG; COOLING 74 DEG

DIFFUSER, REGISTER, AND GRILL

