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**Report: Inspections TAB Report**  
**Function: Test, Adjust, & Balance**  
**Date: 05/20/2025**  
**Completed By: National TAB**

# PROJECT

**05-19-25 CHICK-FIL-A #02665 DES PERES,  
MO (DES PERES FSU) REINVEST**

11997 MACHESTER RD

DES PERES, MO 63131

## Client

Chick-fil-A (CFA)  
5200 BUFFINGTON ROAD  
ATLANTA, GA 30349-2998

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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.

### Inspections and Commissioning Light

The HVAC equipment, ductwork, and other building assets were inspected per Chick Fil A requirements. The results of this inspection is included in checklists within the report. Operational tests were also performed on the HVAC controls to ensure occupied and unoccupied sequence of operation.

### 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 (Halton)

Each kitchen exhaust fan was measured by taking static pressure at the exhaust plenum and comparing to OEM performance data. The total flow of the exhaust was then adjusted to tolerance of the engineer's design flow.

### 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 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.



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## System/Unit: AHU/RTU

Asset: AC1

AREA:KITCHEN

| Unit Data           |           |                                              |
|---------------------|-----------|----------------------------------------------|
|                     | Design    | Actual                                       |
| MFG                 | TRANE     | TRANE                                        |
| Serial Num          | -         | 250711023D                                   |
| Model Num           | YSK300A3S | YSK300A3SAH02P1C0A2A1A0C200<br>A0000000000D0 |
| Type                | AC        | RTU                                          |
| Configuration       | VERTICAL  | VERTICAL                                     |
| Num OA Filters 1    | -         | 1                                            |
| OA Filter Size 1    | -         | 66x17x1                                      |
| Num Final Filter 1  | -         | 8                                            |
| Final Filter Size 1 | -         | 20x24x2                                      |

| Test Data              |        |                              |
|------------------------|--------|------------------------------|
|                        | Design | Actual                       |
| SF CFM                 | 9500   | 9441                         |
| RA CFM                 | 7300   | 5177                         |
| OA CFM                 | 2200   | 2346                         |
| RL Voltage             | -      | 212/210/212                  |
| RL Amperage            | -      | 12.6/12.6/12.7<br>(Combined) |
| SF System SetPt        | -      | 82.7%                        |
| Min OA Damper Position | -      | 27%                          |
| Min OA Damper Type     | -      | BLADE<br>ECONOMIZER          |

| Motor Data     |        |        |
|----------------|--------|--------|
|                | Design | Actual |
| Motor MFG      | -      | Qty 2  |
| Horsepower     | 4.6    | 5      |
| Phase          | 3      | 3      |
| Rated Voltage  | 208    | 208    |
| Rated Amperage | 11     | 11     |

| Performance Data |        |        |
|------------------|--------|--------|
|                  | Design | Actual |
| MA Plenum SP     | -      | -0.62" |
| Fan Suction SP   | -      | -1.72" |
| Fan Discharge SP | -      | 0.30"  |
| Total ESP        | 0.80"  | 0.92"  |
| Fan Total SP     | -      | 2.02"  |

| General              |        |
|----------------------|--------|
|                      | Actual |
| Fan Rotation Correct | Yes    |
| Unit Filters Clean   | Yes    |

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Project:05-19-25 CHICK-FIL-A #02665 DES PERES, MO (DES PERES FSU) REINVEST

## AHU/RTU

### Diffuser Supply (GRD)

#### AC1/KITCHEN

| Asset      |          |      |      |            |    |        |        |           |             |
|------------|----------|------|------|------------|----|--------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) | FINAL CFM | % to design |
| SGRD1      | KITCHEN  | A    | 14"  | 950        | 1  | 942    | 869    | 925       | 97.4        |
| SGRD2      | KITCHEN  | A    | 14"  | 950        | 1  | 936    | 848    | 975       | 102.6       |
| SGRD3      | KITCHEN  | A    | 14"  | 950        | 1  | 914    | 842    | 1025      | 107.9       |
| SGRD4      | KITCHEN  | A    | 14"  | 950        | 1  | 932    | 884    | 949       | 99.9        |
| SGRD5      | KITCHEN  | A    | 14"  | 950        | 1  | 988    | 899    | 947       | 99.7        |
| SGRD6      | KITCHEN  | A    | 14"  | 950        | 1  | 1099   | 872    | 938       | 98.7        |
| SGRD7      | KITCHEN  | A    | 14"  | 950        | 1  | 863    | 843    | 891       | 93.8        |
| SGRD8      | KITCHEN  | A    | 14"  | 950        | 1  | 804    | 883    | 924       | 97.3        |
| SGRD9      | KITCHEN  | A    | 14"  | 950        | 1  | 819    | 864    | 935       | 98.4        |
| SGRD10     | KITCHEN  | A    | 14"  | 950        | 1  | 800    | 867    | 932       | 98.1        |
| Total      |          |      |      | 9500       |    | 9097   | 8671   | 9441      | 99.38%      |



# National TAB

Project: 05-19-25 CHICK-FIL-A #02665 DES PERES, MO (DES PERES FSU) REINVEST

## System/Unit: AHU/RTU

Asset: AC2

AREA:DINING A

| Unit Data           |           |                                              |
|---------------------|-----------|----------------------------------------------|
|                     | Design    | Actual                                       |
| MFG                 | TRANE     | TRANE                                        |
| Serial Num          | -         | 251512237L                                   |
| Model Num           | YHK06013S | YHK060A3SAH0AP0C0A2A1AOC<br>200A0000000000B0 |
| Type                | AC        | RTU                                          |
| Configuration       | VERTICAL  | VERTICAL                                     |
| Num OA Filters 1    | -         | 1                                            |
| OA Filter Size 1    | -         | 37x23.5                                      |
| Num Final Filter 1  | -         | 3                                            |
| Final Filter Size 1 | -         | 16x24x2                                      |
| Num Final Filter 2  | -         | 3                                            |
| Final Filter Size 2 | -         | 18x24x2                                      |

| Motor Data     |        |        |
|----------------|--------|--------|
|                | Design | Actual |
| Horsepower     | 3      | 3      |
| Phase          | 3      | 3      |
| Rated Voltage  | 208    | 208    |
| Rated Amperage | 8.8    | 8.8    |

| Test Data              |        |                     |
|------------------------|--------|---------------------|
|                        | Design | Actual              |
| SF CFM                 | 1650   | 1853                |
| RA CFM                 | 1260   | 1537                |
| OA CFM                 | 390    | 406                 |
| RL Voltage             | -      | 212/212/214         |
| RL Amperage            | -      | 1.2/1.3/1.3         |
| SF System SetPt        | -      | 44.9%               |
| Min OA Damper Position | -      | 28%                 |
| Min OA Damper Type     | -      | BLADE<br>ECONOMIZER |

| Performance Data |        |        |
|------------------|--------|--------|
|                  | Design | Actual |
| MA Plenum SP     | -      | -0.35" |
| Fan Suction SP   | -      | -0.54" |
| Fan Discharge SP | -      | 0.29"  |
| Total ESP        | 0.80"  | 0.64"  |
| Fan Total SP     | -      | 0.83"  |

| General              |        |
|----------------------|--------|
|                      | Actual |
| Fan Rotation Correct | YES    |
| Unit Filters Clean   | YES    |

Completed By: Will Turnbough on 05/21/2025



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Project:05-19-25 CHICK-FIL-A #02665 DES PERES, MO (DES PERES FSU) REINVEST

## AHU/RTU

### Diffuser Supply (GRD)

#### AC2/DINING A

| Asset      |               |      |      |            |    |        |        |           |             |
|------------|---------------|------|------|------------|----|--------|--------|-----------|-------------|
| Asset Name | Location      | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) | FINAL CFM | % to design |
| SGRD1      | VESTIBULE     | SD   | -    |            | 1  | 527    | 548    | 510       | -           |
| SGRD2      | HALLWAY       | SD   | -    | 455        | 1  | 370    | 477    | 428       | 94.1        |
| SGRD3      | HALLWAY       | SD   | -    | 455        | 1  | 410    | 473    | 431       | 94.7        |
| SGRD4      | MENS RR       | SD   | -    | 105        | 1  | 148    | 128    | 110       | 104.8       |
| SGRD5      | WOMENS RR     | SD   | -    | 105        | 1  | 311    | 123    | 112       | 106.7       |
| SGRD6      | MULTI PURPOSE | SD   | -    |            | 1  | 280    | 297    | 262       | -           |
| Total      |               |      |      | 1120       |    | 2046   | 2046   | 1853      | 165.45%     |

| Asset | Notes                                                                                      | Date       | Written By     |
|-------|--------------------------------------------------------------------------------------------|------------|----------------|
| SGRD1 | No design airflows given for diffusers 1 and 6. Plans state airflow is existing to remain. | 05/21/2025 | Will Turnbough |



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Project: 05-19-25 CHICK-FIL-A #02665 DES PERES, MO (DES PERES FSU) REINVEST

## System/Unit: AHU/RTU

Asset: AC3

AREA:SERVING/ORDER AREA

| Unit Data           |           |                                              |
|---------------------|-----------|----------------------------------------------|
|                     | Design    | Actual                                       |
| MFG                 | TRANE     | TRANE                                        |
| Serial Num          | -         | 251511275L                                   |
| Model Num           | YSK150A3S | YSK150A3SAH0AP0C0A2A1AOC<br>200A0000000000C0 |
| Type                | AC        | RTU                                          |
| Configuration       | VERTICAL  | Vertical                                     |
| Num OA Filters 1    | -         | 1                                            |
| OA Filter Size 1    | -         | 37x23.5                                      |
| Num Final Filter 1  | -         | 3                                            |
| Final Filter Size 1 | -         | 18x24x2                                      |
| Num Final Filter 2  | -         | 3                                            |
| Final Filter Size 2 | -         | 18x18x2                                      |

| Motor Data     |        |        |
|----------------|--------|--------|
|                | Design | Actual |
| Horsepower     | 4.6    | 5      |
| Phase          | 3      | 3      |
| Rated Voltage  | 208    | 208    |
| Rated Amperage | 11     | 11     |

| Test Data              |        |                     |
|------------------------|--------|---------------------|
|                        | Design | Actual              |
| SF CFM                 | 5000   | 4708                |
| RA CFM                 | 3850   | 2767                |
| OA CFM                 | 1150   | 1146                |
| RL Voltage             | -      | 211/211/213         |
| RL Amperage            | -      | 5.1/5.2/5.2         |
| SF System SetPt        | -      | 77%                 |
| Min OA Damper Position | -      | 28%                 |
| Min OA Damper Type     | -      | BLADE<br>ECONOMIZER |

| Performance Data |        |                              |
|------------------|--------|------------------------------|
|                  | Design | Actual                       |
| MA Plenum SP     | -      | -0.28" (-0.72"<br>mixed air) |
| Fan Suction SP   | -      | -1.17"                       |
| Fan Discharge SP | -      | 0.30" (0.68" at<br>unit)     |
| Total ESP        | 0.80"  | 0.58"                        |
| Fan Total SP     | -      | 1.83"                        |

| General              |        |
|----------------------|--------|
|                      | Actual |
| Fan Rotation Correct | YES    |
| Unit Filters Clean   | YES    |

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Project:05-19-25 CHICK-FIL-A #02665 DES PERES, MO (DES PERES FSU) REINVEST

## AHU/RTU

### Diffuser Supply (GRD)

#### AC3/SERVING/ORDER AREA

| Asset      |          |      |      |            |    |        |        |           |             |
|------------|----------|------|------|------------|----|--------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) | FINAL CFM | % to design |
| SGRD1      | DINING   | SD   | -    |            | 1  | 322    | 322    | 315       | -           |
| SGRD2      | DINING   | SD   | -    |            | 1  | 285    | 285    | 280       | -           |
| SGRD3      | DINING   | SD   | -    |            | 1  | 297    | 297    | 306       | -           |
| SGRD4      | DINING   | SD   | -    |            | 1  | 334    | 334    | 304       | -           |
| SGRD5      | DINING   | SD   | -    |            | 1  | 214    | 214    | 221       | -           |
| SGRD6      | DINING   | SD   | -    |            | 1  | 241    | 241    | 247       | -           |
| SGRD7      | DINING   | SD   | -    |            | 1  | 318    | 318    | 319       | -           |
| SGRD8      | DINING   | SD   | -    |            | 1  | 367    | 367    | 372       | -           |
| SGRD9      | DINING   | SD   | -    |            | 1  | 260    | 260    | 264       | -           |
| SGRD10     | DINING   | SD   | -    |            | 1  | 365    | 365    | 375       | -           |
| SGRD11     | DINING   | SD   | -    |            | 1  | 657    | 657    | 675       | -           |
| SGRD12     | SERVING  | SD   | -    |            | 1  | 328    | 328    | 332       | -           |
| SGRD13     | DINING   | SD   | -    |            | 1  | 316    | 316    | 317       | -           |
| SGRD14     | SERVING  | SD   | -    |            | 1  | 370    | 370    | 381       | -           |
| Total      |          |      |      | 0          |    | 4674   | 4674   | 4708      | 0%          |

| Asset | Notes                                                                        | Date       | Written By     |
|-------|------------------------------------------------------------------------------|------------|----------------|
| SGRD1 | Design airflows not provided. Airflows are existing to remain per the plans. | 05/21/2025 | Will Turnbough |



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Project: 05-19-25 CHICK-FIL-A #02665 DES PERES, MO (DES PERES FSU) REINVEST

## System/Unit: AHU/RTU

Asset: AC4

AREA:DINING B

| Unit Data           |            |                                           |
|---------------------|------------|-------------------------------------------|
|                     | Design     | Actual                                    |
| MFG                 | TRANE      | TRANE                                     |
| Serial Num          | -          | 251512280L                                |
| Model Num           | YSKH060A3S | YSKH060A3SAH0AP0C0A2A1A0C200A0000000000B0 |
| Type                | AC         | RTU                                       |
| Configuration       | VERTICAL   | VERTICAL                                  |
| Num OA Filters 1    | -          | 1                                         |
| OA Filter Size 1    | -          | 37x23.5                                   |
| Num Final Filter 1  | -          | 3                                         |
| Final Filter Size 1 | -          | 16x24x2                                   |
| Num Final Filter 2  | -          | 3                                         |
| Final Filter Size 2 | -          | 18x24x2                                   |

| Motor Data     |        |        |
|----------------|--------|--------|
|                | Design | Actual |
| Horsepower     | 3      | 3      |
| Phase          | 3      | 3      |
| Rated Voltage  | 208    | 208    |
| Rated Amperage | 8.8    | 8.8    |

| Test Data              |        |                  |
|------------------------|--------|------------------|
|                        | Design | Actual           |
| SF CFM                 | 1800   | 1820             |
| RA CFM                 | 1400   | 1380             |
| OA CFM                 | 400    | 438              |
| RL Voltage             | -      | 212/212/214      |
| RL Amperage            | -      | 1.05/1.05/1.06   |
| SF System SetPt        | -      | 39%              |
| Min OA Damper Position | -      | 25%              |
| Min OA Damper Type     | -      | BLADE ECONOMIZER |

| Performance Data |        |        |
|------------------|--------|--------|
|                  | Design | Actual |
| MA Plenum SP     | -      | -0.12" |
| Fan Suction SP   | -      | -0.31" |
| Fan Discharge SP | -      | 0.21"  |
| Total ESP        | 0.80"  | 0.33"  |
| Fan Total SP     | -      | 0.52"  |

| General              |        |
|----------------------|--------|
|                      | Actual |
| Fan Rotation Correct | YES    |
| Unit Filters Clean   | YES    |

Completed By: Will Turnbough on 05/21/2025

Notes:

TRAVERSE AVG: 1071 FPM

16X20 DUCT ID: 2.22 SQFT AREA

CFM: 2380

Reduced by fan law to 1820 SA-CFM, read OA directly at RTU 438 OA-CFM, Final Return Direct Readings 1380 RA-CFM

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Project: 05-19-25 CHICK-FIL-A #02665 DES PERES, MO (DES PERES FSU) REINVEST

## System/Unit: AHU/RTU

Asset: AC5

AREA:BACK OF HOUSE

| Unit Data           |           |                                          |
|---------------------|-----------|------------------------------------------|
|                     | Design    | Actual                                   |
| MFG                 | TRANE     | TRANE                                    |
| Serial Num          | -         | 251111978L                               |
| Model Num           | YSK036A3S | YSK036A3SAH0AP0C0A2A1A0A200A0000000000A0 |
| Type                | AC        | RTU                                      |
| Configuration       | VERTICAL  | VERTICAL                                 |
| Num OA Filters 1    | -         | 1                                        |
| OA Filter Size 1    | -         | 26x15                                    |
| Num Final Filter 1  | -         | 4                                        |
| Final Filter Size 1 | -         | 20x20x2                                  |
| Num Final Filter 2  | -         | NA                                       |
| Final Filter Size 2 | -         | NA                                       |

| Motor Data     |         |           |
|----------------|---------|-----------|
|                | Design  | Actual    |
| Motor MFG      | -       | EBM PABST |
| Horsepower     | 0.75    | 0.75      |
| Motor Rpm      | -       | 1050      |
| Phase          | 3       | 1         |
| Rated Voltage  | 208     | 240       |
| Rated Amperage | 7.3/9.4 | 6.8       |

| Test Data              |        |                  |
|------------------------|--------|------------------|
|                        | Design | Actual           |
| SF CFM                 | 1200   | 1221             |
| RA CFM                 | 925    | 895              |
| OA CFM                 | 275    | 264              |
| RL Voltage             | -      | 212              |
| RL Amperage            | -      | 1.87             |
| SF System SetPt        | -      | 51.8%            |
| Min OA Damper Position | -      | 35%              |
| Min OA Damper Type     | -      | BLADE ECONOMIZER |

| Performance Data |        |        |
|------------------|--------|--------|
|                  | Design | Actual |
| MA Plenum SP     | -      | -0.11" |
| Fan Suction SP   | -      | -0.28" |
| Fan Discharge SP | -      | 0.25"  |
| Total ESP        | 0.80"  | 0.36"  |
| Fan Total SP     | -      | 0.53"  |

| General              |        |
|----------------------|--------|
|                      | Actual |
| Fan Rotation Correct | YES    |
| Unit Filters Clean   | YES    |

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Project: 05-19-25 CHICK-FIL-A #02665 DES PERES, MO (DES PERES FSU) REINVEST

## AHU/RTU

### Diffuser Supply (GRD)

#### AC5/BACK OF HOUSE

| Asset      |               |      |      |            |    |        |        |           |             |
|------------|---------------|------|------|------------|----|--------|--------|-----------|-------------|
| Asset Name | Location      | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) | FINAL CFM | % to design |
| SGRD1      | MULTI PURPOSE | A    | 12"  | 500        | 1  | 698    | 576    | 542       | 108.4       |
| SGRD2      | OFFICE        | B    | 10"  | 300        | 1  | 0      | 324    | 305       | 101.7       |
| SGRD3      | TEAM ROOM     | A    | 12"  | 400        | 1  | 655    | 398    | 374       | 93.5        |
| Total      |               |      |      | 1200       |    | 1353   | 1298   | 1221      | 101.75%     |

### Diffuser Ret/Exh (GRD)

#### AC5/BACK OF HOUSE

| Asset      |               |      |      |            |    |        |        |           |             |
|------------|---------------|------|------|------------|----|--------|--------|-----------|-------------|
| Asset Name | Location      | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) | FINAL CFM | % to design |
| EGRD1      | MULTI PURPOSE | F    | 10"  | 225        | 1  | 275    | 225    | 225       | 100.0       |
| EGRD2      | MULTI PURPOSE | F    | 10"  | 300        | 1  | 270    | 280    | 280       | 93.3        |
| EGRD3      | MULTI PURPOSE | F    | 12"  | 400        | 1  | 350    | 390    | 390       | 97.5        |
| Total      |               |      |      | 925        |    | 895    | 895    | 895       | 96.76%      |

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Project: 05-19-25 CHICK-FIL-A #02665 DES PERES, MO (DES PERES FSU) REINVEST



## System/Unit: FAN - Exhaust

Asset: EF1

AREA:HOOD # 1L & 1R

| Unit Data     |            |                        |
|---------------|------------|------------------------|
|               | Design     | Actual                 |
| MFG           | LOREN COOK | LOREN COOK             |
| Model Num     | 180 VCR    | 180VH6B 180 VCRH       |
| Serial Num    | -          | 050SL54070-00 /0000701 |
| Type          | UPBLAST    | UPBLAST                |
| Configuration | VERTICAL   | Vertical               |

| Motor Data       |        |                 |
|------------------|--------|-----------------|
|                  | Design | Actual          |
| Motor MFG        | -      | Baldor Reliance |
| Frame            | -      | 56              |
| Horsepower       | .75    | .75             |
| Motor Rpm        | 1078   | 1725            |
| Phase            | 1      | 1               |
| Voltage (rated)  | 115    | 115             |
| Amperage (rated) | -      | 8.2             |

| Drive Data         |                |
|--------------------|----------------|
|                    | Actual         |
| Motor Sheave Size  | 3.125"         |
| Motor Bore Size    | 0.625"         |
| Motor Sheave SetPt | 2.5 TURNS OPEN |
| Fan Sheave Size    | 4.25"          |
| Fan Sheave Bore    | 0.75"          |
| Belt CL Distance   | TENSIONER      |
| Num of Belts       | 1              |
| Belt Size          | A28            |

| Test Data     |        |        |
|---------------|--------|--------|
|               | Design | Actual |
| CFM           | 1913   | 1951   |
| Fan RPM       | -      | 1061   |
| Fan Rotation  | -      | CCW    |
| Motor RPM     | -      | 1762   |
| RL Voltage    | -      | 123    |
| RL Amperage   | -      | 7.2    |
| Suction ESP   | -      | -0.60" |
| Discharge ESP | -      | ATM    |
| Total ESP     | 0.75"  | 0.60"  |

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# National TAB

Project: 05-19-25 CHICK-FIL-A #02665 DES PERES, MO (DES PERES FSU) REINVEST



## System/Unit: FAN - Exhaust

Asset: EF2

AREA:HOOD # 2

| Unit Data     |            |                           |
|---------------|------------|---------------------------|
|               | Design     | Actual                    |
| MFG           | LOREN COOK | LOREN COOK                |
| Model Num     | 150 VCR-HP | 150VH4B 50<br>VCRH        |
| Serial Num    | -          | 050SL54070-00<br>/0002501 |
| Type          | UPBLAST    | UPBLAST                   |
| Configuration | VERTICAL   | VERTICAL                  |

| Motor Data       |        |                 |
|------------------|--------|-----------------|
|                  | Design | Actual          |
| Motor MFG        | -      | Marathon motors |
| Frame            | -      | 56              |
| Horsepower       | .33    | .33             |
| Motor Rpm        | 1295   | 1725            |
| Phase            | -      | 1               |
| Voltage (rated)  | -      | 115             |
| Amperage (rated) | -      | 6.0             |

| Drive Data         |           |
|--------------------|-----------|
|                    | Actual    |
| Motor Sheave Size  | 3.125"    |
| Motor Bore Size    | 0.625"    |
| Motor Sheave SetPt | 0 TURNS   |
| Fan Sheave Size    | 3.75"     |
| Fan Sheave Bore    | 0.75"     |
| Belt CL Distance   | TENSIONER |
| Num of Belts       | 1         |
| Belt Size          | A26       |

| Test Data     |        |        |
|---------------|--------|--------|
|               | Design | Actual |
| CFM           | 701    | 689    |
| Fan RPM       | -      | 1425   |
| Fan Rotation  | -      | CCW    |
| Motor RPM     | -      | 1725   |
| RL Voltage    | -      | 124    |
| RL Amperage   | -      | 5.8    |
| Suction ESP   | -      | -0.67" |
| Discharge ESP | -      | ATM    |
| Total ESP     | 0.75"  | 0.67"  |

Completed By: Will Turnbough on 05/21/2025

# National TAB

Project: 05-19-25 CHICK-FIL-A #02665 DES PERES, MO (DES PERES FSU) REINVEST



## System/Unit: FAN - Exhaust

Asset: EF3

AREA:RESTROOMS

| Unit Data     |          |                       |
|---------------|----------|-----------------------|
|               | Design   | Actual                |
| MFG           | EXISTING | Cook                  |
| Model Num     | EXISTING | 90C15DH               |
| Serial Num    | -        | 050SD38090-00/0006402 |
| Type          | --       | Upblast               |
| Configuration | --       | VERTICAL              |

| Motor Data       |        |           |
|------------------|--------|-----------|
|                  | Design | Actual    |
| Motor MFG        | -      | US MOTORS |
| Frame            | -      | 48Y       |
| Horsepower       | -      | 0.125     |
| Motor Rpm        | -      | 1600      |
| Phase            | -      | 1         |
| Voltage (rated)  | -      | 115       |
| Amperage (rated) | -      | 1.7       |
| Service Factor   | -      | NA        |

| Drive Data         |              |
|--------------------|--------------|
|                    | Actual       |
| Motor Sheave Size  | DIRECT DRIVE |
| Motor Bore Size    | DD           |
| Motor Sheave SetPt | DD           |
| Fan Sheave Size    | DD           |
| Fan Sheave Bore    | DD           |
| Belt CL Distance   | DD           |
| Num of Belts       | DD           |
| Belt Size          | DD           |

| Test Data     |        |         |
|---------------|--------|---------|
|               | Design | Actual  |
| CFM           | 300    | 316     |
| Fan RPM       | -      | MED-LOW |
| Fan Rotation  | -      | CCW     |
| Motor RPM     | -      | MED-LOW |
| RL Voltage    | -      | NA      |
| RL Amperage   | -      | NA      |
| Suction ESP   | -      | -0.21"  |
| Discharge ESP | -      | ATM     |
| Total ESP     | -      | 0.21"   |

Completed By: Will Turnbough on 05/20/2025

# National TAB

Project:05-19-25 CHICK-FIL-A #02665 DES PERES, MO (DES PERES FSU) REINVEST

## FAN - Exhaust



Diffuser Ret/Exh (GRD)

### EF3/RESTROOMS

| Asset      |           |      |      |            |    |        |        |           |             |
|------------|-----------|------|------|------------|----|--------|--------|-----------|-------------|
| Asset Name | Location  | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) | FINAL CFM | % to design |
| EGRD1      | MENS RR   | EG   | -    | 150        | 1  | 162    | 138    | 150       | 100.0       |
| EGRD2      | WOMENS RR | EG   | -    | 150        | 1  | 202    | 171    | 166       | 110.7       |
| Total      |           |      |      | 300        |    | 364    | 309    | 316       | 105.33%     |

# National TAB

Project: 05-19-25 CHICK-FIL-A #02665 DES PERES, MO (DES PERES FSU) REINVEST



## System/Unit: FAN - Exhaust

Asset: EF4

AREA:HOOD #3

| Unit Data     |            |                        |
|---------------|------------|------------------------|
|               | Design     | Actual                 |
| MFG           | LOREN COOK | LOREN COOK             |
| Model Num     | 150VCR-HP  | 150VH4B 150 VCRH       |
| Serial Num    | -          | 050SL54070-00 /0002502 |
| Type          | UPBLAST    | UPBLAST                |
| Configuration | VERTICAL   | Vertical               |

| Test Data     |        |        |
|---------------|--------|--------|
|               | Design | Actual |
| CFM           | 701    | 730    |
| Fan RPM       | -      | 1262   |
| Fan Rotation  | -      | CCW    |
| Motor RPM     | -      | 1742   |
| RL Voltage    | -      | 123    |
| RL Amperage   | -      | 5.8    |
| Suction ESP   | -      | -0.63" |
| Discharge ESP | -      | ATM    |
| Total ESP     | 0.75"  | 0.63"  |

| Motor Data       |        |          |
|------------------|--------|----------|
|                  | Design | Actual   |
| Motor MFG        | -      | Marathon |
| Frame            | -      | 56       |
| Horsepower       | .33    | .33      |
| Motor Rpm        | 1295   | 1725     |
| Phase            | -      | 1        |
| Voltage (rated)  | -      | 115      |
| Amperage (rated) | -      | 6.0      |

| Drive Data        |           |
|-------------------|-----------|
|                   | Actual    |
| Motor Sheave Size | 3.125"    |
| Motor Bore Size   | 0.625"    |
| Fan Sheave Size   | AK39      |
| Fan Sheave Bore   | 0.75"     |
| Belt CL Distance  | TENSIONER |
| Num of Belts      | 1         |
| Belt Size         | A26       |

Completed By: Will Turnbough on 05/21/2025

# National TAB

Project: 05-19-25 CHICK-FIL-A #02665 DES PERES, MO (DES PERES FSU) REINVEST



## System/Unit: Kitchen Hood Type I

Asset: HD2

AREA:HOOD # 2

| Unit Data        |          |            |
|------------------|----------|------------|
|                  | Design   | Actual     |
| MFG              | HALTON   | HALTON     |
| Model Num        | KVL-C IC | KVL-C IC   |
| Job / Serial Num | -        | 125216-812 |
| Type             | TYPE I   | TYPE I     |
| Hood length      | 42"      | 42"        |
| Hood Width       | 34"      | 34"        |

| Test Data Supply |        |        |
|------------------|--------|--------|
|                  | Design | Actual |
| TAB SP           | .29"   | 0.29"  |

| Test Data Exhaust |               |               |
|-------------------|---------------|---------------|
|                   | Design        | Actual        |
| Filter Size 1     | SS KSA FILTER | SS KSA FILTER |
| Filter Qty 1      | 2             | 2             |
| TAB SP            | .295          | 0.285"        |
| CFM               | 701           | 689           |

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

Completed By: Will Turnbough on 05/19/2025

Notes:  
Initially 619 CFM.

Written By: Will Turnbough on 05/19/2025

# National TAB

Project: 05-19-25 CHICK-FIL-A #02665 DES PERES, MO (DES PERES FSU) REINVEST



## System/Unit: Kitchen Hood Type I

Asset: HD3

AREA:HOOD #3

| Unit Data        |          |            |
|------------------|----------|------------|
|                  | Design   | Actual     |
| MFG              | HALTON   | HALTON     |
| Model Num        | KVL-C IC | KVL-C IC   |
| Job / Serial Num | -        | 125216-860 |
| Type             | TYPE I   | TYPE I     |
| Hood length      | 42"      | 42"        |
| Hood Width       | 34"      | 34"        |

| Test Data Supply |        |        |
|------------------|--------|--------|
|                  | Design | Actual |
| TAB SP           | .29"   | 0.29"  |

| Test Data Exhaust |               |               |
|-------------------|---------------|---------------|
|                   | Design        | Actual        |
| Filter Size 1     | SS KSA FILTER | SS KSA FILTER |
| Filter Qty 1      | 2             | 2             |
| TAB SP            | .295          | 0.32"         |
| CFM               | 701           | 730           |

| Cooking Equipment |        |
|-------------------|--------|
|                   | Actual |
| Item 1            | FRYER  |

Completed By: Will Turnbough on 05/19/2025

# National TAB

Project: 05-19-25 CHICK-FIL-A #02665 DES PERES, MO (DES PERES FSU) REINVEST



## System/Unit: Kitchen Hood Type I

Asset: HDL1

AREA:HOOD # 1L

| Unit Data        |          |            |
|------------------|----------|------------|
|                  | Design   | Actual     |
| MFG              | HALTON   | HALTON     |
| Model Num        | KVL-2 IC | KVL-2 IC   |
| Job / Serial Num | -        | 125216-729 |
| Type             | TYPE I   | TYPE I     |
| Hood length      | 107"     | 107"       |
| Hood Width       | 37"      | 37"        |

| Test Data Supply |        |        |
|------------------|--------|--------|
|                  | Design | Actual |
| TAB SP           | .30"   | 0.17"  |

| Test Data Exhaust |               |               |
|-------------------|---------------|---------------|
|                   | Design        | Actual        |
| Filter Size 1     | SS KSA FILTER | SS KSA FILTER |
| Filter Qty 1      | 5             | 5             |
| TAB SP            | .128          | 0.13"         |
| CFM               | 1204          | 1214          |

| Cooking Equipment |                  |
|-------------------|------------------|
|                   | Actual           |
| Item 1            | PRESSURE COOKERS |
| Item 2            | GRILL PRESS      |

Completed By: Will Turnbough on 05/19/2025

Notes:

Reduced capture jet from 0.32" to 0.17" to improve smoke capture.

Written By: Will Turnbough on 05/21/2025

# National TAB

Project: 05-19-25 CHICK-FIL-A #02665 DES PERES, MO (DES PERES FSU) REINVEST



## System/Unit: Kitchen Hood Type I

Asset: HDR1

AREA:HOOD # IR

| Unit Data        |          |            |
|------------------|----------|------------|
|                  | Design   | Actual     |
| MFG              | HALTON   | HALTON     |
| Model Num        | KVL-2 IC | KVL-2 IC   |
| Job / Serial Num | -        | 125216-770 |
| Type             | TYPE I   | TYPE I     |
| Hood length      | 63"      | 63"        |
| Hood Width       | 37"      | 37"        |

| Test Data Supply |        |        |
|------------------|--------|--------|
|                  | Design | Actual |
| TAB SP           | .30"   | 0.28"  |

| Test Data Exhaust |               |               |
|-------------------|---------------|---------------|
|                   | Design        | Actual        |
| Filter Size 1     | SS KSA FILTER | SS KSA FILTER |
| Filter Qty 1      | 3             | 3             |
| TAB SP            | .129          | 0.14"         |
| CFM               | 709           | 737           |

| Cooking Equipment |                  |
|-------------------|------------------|
|                   | Actual           |
| Item 1            | PRESSURE COOKERS |

Completed By: Will Turnbough on 05/19/2025

