**Report By:**

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

**Report: TAB REPORT**

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

**Date: 05/07/2025**

**Completed By:**

# PROJECT

## CW 3300 Olympus - Senske (Dallas, TX)

3300 Olympus Blvd

Dallas, TX 75019

Client

Billingsley

# National TAB

**Project: CW 3300 Olympus - Senske (Dallas, TX)**

## Table Of Contents

# CERTIFICATION

**PROJECT:** CW 3300 Olympus - Senske (Dallas, TX)

The data presented in this report is a record of system measurements and final adjustments that have been obtained in accordance with the current edition of the NEBB *Procedural Standards for Testing, Adjusting, and Balancing of Environmental Systems.* Any variances from design quantities, which exceed NEBB tolerances, are noted in the Test-Adjust-Balance Report Project Summary.

The air distribution system has been tested and balanced and final adjustments have been made in accordance with NEBB standards and the project specifications.

**NEBB TAB FIRM:** National TAB-Southeast
**REGISTRATION NO:** 3755
**CERTIFIED BY:** J. Scott Springer 23312
**DATE:** 5/7/2025

The hydronic distribution system has been tested and balanced and final adjustments have been made in accordance with NEBB standards and the project specifications.

**NEBB TAB FIRM:** National TAB-Southeast
**REGISTRATION NO:** 3755
**CERTIFIED BY:** J. Scott Springer 23312
**DATE:**

## Submitted and Certified by:

**NEBB TAB FIRM:** National TAB-Southeast
**TAB PROFESSIONAL:** J. Scott Springer
**SIGNATURE:**
**REGISTRATION NO:** 3755 (NTAB) / 23312
**CERTIFICATION EXP:** 12/31/2025

# National TAB

## Testing, Adjusting, and Balancing Equipment

| Function | | Range | Minimum Accuracy | Instrument Information | Calibration Date | Date Due |
|---|---|---|---|---|---|---|
| AIR | AIR PRESSURE | 0 in wg to 10 in wg | 2% +/- 0.001 in wg | Shortridge ADM-880C S/N M05066 | 10/15/2024 | 10/15/2025 |
| | AIR VELOCITY INSTRUMENT | 50 fpm to 3900 fpm | +/- 5 % +/- 7 fpm | Shortridge ADM-880C S/N M05066 | 10/15/2024 | 10/15/2025 |
| | DIRECT HOOD READING | 100 cfm to 2000 cfm | +/- 3 % +/- 7 cfm | Shortridge Flow Hood | 10/15/2024 | 10/15/2025 |
| TEMPERATURE | AIR METER | -20 F to 240 F | +/- .5 % 2 F | Cooper ATKINS - SRH77A S/N 081820093 | 10/15/2024 | 10/15/2025 |
| | AIR PROBE | -20 F to 240 F | +/- .5 % 2 F | Cooper ATKINS - PD1388 7-6 S/N 5028 | 10/15/2024 | 10/15/2025 |
| | IMMERSION METER | -20 F to 240 F | +/- .5 % 2 F | Cooper ATKINS - SRH77A S/N 081820093 | 10/15/2024 | 10/15/2025 |
| | IMMERSION PROBE | -20 F to 240 F | +/- .5 % 2 F | Cooper ATKINS - PD1388 7-6 S/N 1075 | 10/15/2024 | 10/15/2025 |
| | CONTACT METER | -20 F to 240 F | +/- .5 % 2 F | Cooper ATKINS - SRH77A S/N 081820093 | 10/15/2024 | 10/15/2025 |
| | CONTACT PROBE | -20 F to 240 F | +/- .5 % 2 F | Cooper ATKINS - PD1388 7-6 S/N 4011 | 10/15/2024 | 10/15/2025 |
| HUMIDITY | HUMIDITY PROBE | 10 % RH to 90 % RH | 3% of reading | Cooper ATKINS - SRH77A S/N 090315046 | 10/15/2024 | 10/15/2025 |
| ELECTRICAL | VOLTAGE MEASUREMENT | 0 VAC to 600 VAC | 2 % reading +/- 5 digits | Dwyer CM-1 - S/N 190800099 | 10/15/2024 | 10/15/2025 |
| | AMPERAGE MEASUREMENT | 0 Amperers to 100 Amperes | 2 % reading +/- 5 digits | Dwyer CM-1 - S/N 190800099 | 10/15/2024 | 10/15/2025 |
| ROTATION | ROTATION MEASUREMENT | 60 rpm to 5000 rpm | 2 % reading 2 rpm | Dwyer TAC-L - S/N S1100123 | 10/15/2024 | 10/15/2025 |
| HYDRONIC | PRESSURE MEASUREMENT | -30 in Hg to 200 psi | ±2% of reading +/- 1 psi | Dwyer 490W-6 - S/N 01L6NK | 6/3/2024 | 6/3/2025 |
| | DIFFERENTIAL PRESSURE MEASUREMENT | 0 psi - 80 psi | ±2% of reading +/- 1 psi | Dwyer 490W-6 - S/N 01L6NK | 6/3/2024 | 6/3/2025 |
| DALT | DUCT LEAKAGE | -10"- +10" wc | ±1% of reading +/- 0.004" wc | Kanomax DALT 6900 S/N: 080439 | 3/2025 | 3/1/2026 |

# Abbreviation List

| | |
|---|---|
| A = Area ($ft^2$) | S.F. = Service Factor |
| AHU = Air Handling Unit | SF = Supply Fan |
| $A_k$ = Effective Area | SP = Static Pressure |
| BHP = Brake Horsepower (IP) HP | SR = Supply Register |
| Btu = British Thermal Unit | T = Temperature |
| Btu/h = Btuh = BTUH = BTU/Hour | $T_{ma}$ = Mixed Air Temperature |
| CL = Center Distance (used in belt formula) | $T_{oa}$ = Outside Air Temperature |
| CD = Ceiling Diffuser | $T_{ra}$ = Return Air Temperature |
| CF = Correction Factor | H = Head (in wc, ft wc, psi) |
| CFM = Volumetric Flow:  Cubic Feet Per Minute | h = Enthalpy |
| CO2 = Carbon Dioxide | HP = Horsepower |
| CO = Carbon Monoxide | hr = Hour |
| $C_v$ = Flow Constant | $K_v$ = Flow constant (SI) |
| d = Diameter (in.) IP | kW = Kilowatt = 1000 Watts |
| Δ = Difference or Change (Final - Initial) | LAT = Leaving Air Temperature |
| DB = Dry Bulb | lb = Pounds |
| EA = Exhaust Air | LWT = Leaving Water Temperature |
| EAT = Entering Air Temperature | ma = Mixed Air |
| EF = Exhaust Fan | MIN = Minimum |
| Eff = Efficiency | MAX = Maximum |
| EG = Exhaust Grille | N/A = Not Applicable |
| ESP = External Static Pressure | NA = No Access |
| EWT = Entering Water Temperature | NL = Not Listed |
| °F = Degrees Fahrenheit, °F | NPSHA = Net Positive Suction Head Available |
| FPB = Fan Powered Box | NS = Not Specified |
| FLA = Full Load Amps | OA = Outside Air |
| fpm = Feet per Minute (fpm) | OAT = Outside Air Temperature |
| ft = Foot | PD = Sheave Pitch Diameter |
| gal = Gallons | P.D. = Pressure Drop |
| GPM = Gallons Per Minute (GPM) | PF = Power Factor |
| h = Enthalpy (BTU/lb dry air) | SG = Supply Grille |
| P = Pressure | SR = Supply Register |
| ppm = parts per million | TP = Total Pressure |
| psi = Pounds Per Square Inch | $T_{ra}$ = Return Air Temperature |
| psid = PSI Differential | TS = Tip Speed (fpm) IP, (m/s) SI |
| r = Radius (in) | TSP = Total Static Pressure |
| $\%_{ra}$ = % of Return Air | V = Velocity |
| RA = Return Air | VAV = Variable Air Volume |
| RAT = Return Air Temperature | VD = Volume Damper |
| RF = Return Fan | VFD = Variable Frequency Drive |
| RG = Return Grille | W = Watt |
| RH = Relative Humidity | WB = Wet Bulb |
| RPM = Revolutions Per Minute | wg = wc = water gauge = water column |
| RTU = Roof Top Unit | WHP = Water Horsepower (IP) |
| SA = Supply Air | ω = Humidity Ratio |

OUTSIDE AIR TAPS:

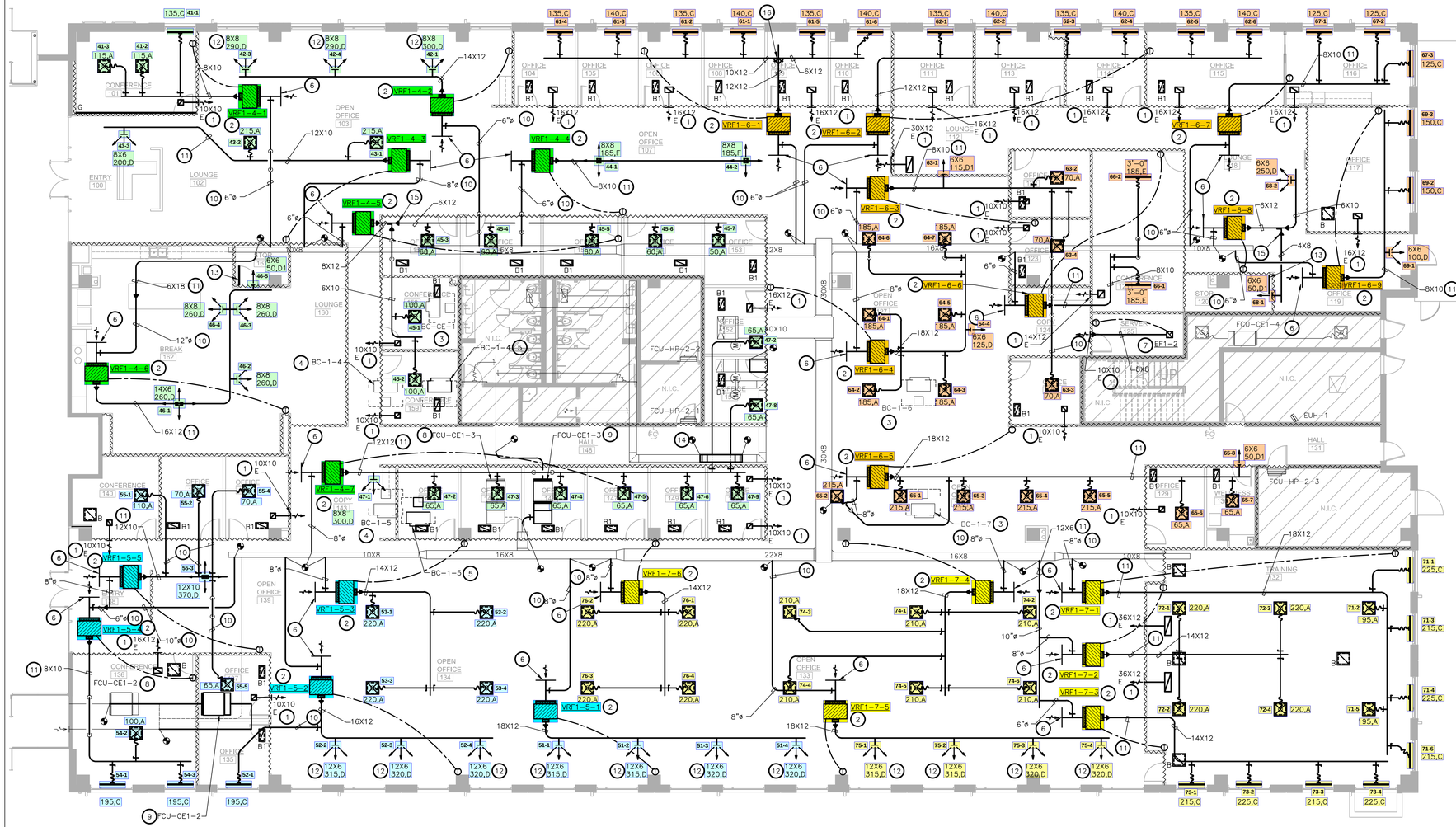
PROVIDE SQUARE TO ROUND TRANSITIONS AT EXISTING OUTSIDE AIR SUPPLY DUCT AS FOLLOWS:

6"X24" SQUARE TO 12"ø.
6"X16" SQUARE TO 10"ø.
6"X10" SQUARE TO 8"ø.

REFER TO SHEET M0.01 FOR GENERAL NOTES, SCHEDULES AND SYMBOLS.

# NOTES BY SYMBOL ⓧ:

1. TRANSFER GRILLE IN WALL TO DECK. SEE SHEET M2.11 FOR ADDITIONAL INFORMATION.
2. VRF TO BE SUSPENDED FROM STRUCTURE. EXTEND FULL SIZED RETURN AIR PLENUM AS INDICATED ON DRAWINGS. PROVIDE MANUAL DAMPER AT OUTSIDE AIR DUCT CONNECTION TO RETURN AIR PLENUM.
3. EXISTING BRANCH CONTROLLER SUSPENDED FROM STRUCTURE WITH ISOLATION SPRINGS.
4. EXISTING BRANCH CONTROLLER TO BE RELOCATED. SEE SHEET M2.21 FOR ADDITIONAL INFORMATION.
5. NEW LOCATION OF EXISTING BRANCH CONTROLLER. SEE SHEET M2.21 FOR ADDITIONAL INFORMATION.
6. FULL SIZED RETURN PLENUM. SEE SHEET M2.11 FOR ADDITIONAL INFORMATION.
7. SUSPEND EXHAUST FAN FROM STRUCTURE USING ALTHREAD HANGER RODS WITH VIBRATION ISOLATOR PER EACH ROD. EXTEND EXHAUST DUCT A MINIMUM OF 5'-0" FROM FAN AND TERMINATE AT TRANSFER GRILLE.
8. EXISTING LOCATION OF FC UNIT TO BE RELOCATED. REMOVE EXISTING DUCTWORK AS INDICATED ON DRAWINGS.
9. NEW LOCATION OF FC UNIT. MOUNT UNIT FROM STRUCTURE ABOVE. ENSURE BOX CLEARANCES ARE MAINTAINED AT NEW LOCATION. EXTEND NEW DUCT AS INDICATED ON DRAWINGS. COORDINATE RELOCATION WITH OTHER TRADES INVOLVED.
10. ALL EXPOSED ROUND DUCTWORK SHALL BE INTERNALLY LINED SPIRAL DUCT WITH MICROBIOLOGICAL TREATMENT AND MOUNTED AT HEIGHT REQUIRED TO MAINTAIN GRILLES AT SAME HEIGHT AS ADJACENT LIGHTING FIXTURES. COORDINATE FINAL HEIGHT WITH ARCHITECTURAL REPRESENTATIVE PRIOR TO ROUGH-IN.
11. ALL EXPOSED RECTANGULAR DUCTWORK SHALL BE 1" INTERNALLY LINED WITH MICROBIOLOGICAL TREATMENT AND MOUNTED AT HEIGHT REQUIRED TO MAINTAIN GRILLES AT SAME HEIGHT AS ADJACENT LIGHTING FIXTURES. COORDINATE FINAL HEIGHT WITH ARCHITECTURAL REPRESENTATIVE PRIOR TO ROUGH-IN.
12. SIDEWALL GRILLE IS INTENDED TO WASH THE PERIMETER GLASS. ADJUST LOUVERS ACCORDINGLY.
13. COORDINATE WITH GC TO UNDERCUT DOOR TO 3/4" FOR RETURN AIR TO ROOM.
14. REROUTE EXHAUST DUCT OVER BRANCH DUCT IN CORRIDOR USING SAME METHODS AND MATERIALS TO MATCH EXISTING.
15. PROVIDE SPLITTER DAMPER AT LOCATION INDICATED ON DRAWINGS. REFER TO DETAIL, SHEET M3.01.
16. PROVIDE EXPANDED TAP AT LOCATION INDICATED ON DRAWINGS. REFER TO DETAIL, SHEET M3.01.




1 LEVEL 01 MECHANICAL PLAN
SCALE: 1/8"=1'-0"

PROJECT COORDINATOR/ DESIGN CONSULTANT

idGROUP
2641 IRVING BLVD.
DALLAS, TEXAS 75207
TEL: 214-638-6800

ARCHITECT/ ENGINEER

©2024 Purdy - McGuire
Mechanical - Electrical Engineers
17300 North Dallas Parkway
Suite 3000
Dallas, Texas 75248-1147
Firm Registration # F-1511
Tel: 972/239-5357
Fax: 972/239-5231
www.purdy-mcguire.com

PMI JOB NO. 24007.004
PROJECT MGR. TODD JOHNSON



SEAL

STATE OF TEXAS
TODD M. JOHNSON
86955
LICENSED
PROFESSIONAL ENGINEER
9/13/24

PROJECT NUMBER: 665-016
DRAWN BY: BH
CHECKED BY: MW
R.S.F.: 27,611

BILLINGSLEY COMPANY

CYPRESS WATERS
SENSKE

3300 OLYMPUS BLVD.
SUITE # 180
DALLAS, TX 75019

| NO. | REVISIONS: | DATE: |
|---|---|---|
| | | |

CLIENT/LANDLORD ISSUE DATE: 09/13/2024
BID ISSUE DATE: 09/13/2024
PERMIT ISSUE DATE: 09/13/2024

DRAWING TITLE:
LEVEL 01 MECHANICAL PLAN

DRAWING NUMBER:
M2.01

# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-4-1** **Area: 101**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP012MA144A |
| **Serial Num** | 4XR0742730P90W |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.114 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 0.89 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 365 | 340 |
| **Fan RPM** | | MED-HIGH |
| **OA CFM** | 75 | 74 |
| **RA CFM** | 290 | 266 |
| **RL Voltage** | 208 | 214 |
| **RL Amperage** | 0.89 | 0.6 |
| **Suction ESP** | | -0.02 |
| **Discharge ESP** | | 0.3 |
| **Total ESP** | 0.5 | 0.32 |
| **Brake HP** | | 0.08 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 41-1 | 101 | C | 8 | 135 | 68 | 132 | 0.98 |
| 41-2 | 101 | A | 8 | 115 | 147 | 104 | 0.90 |
| 41-3 | 101 | A | 8 | 115 | 168 | 104 | 0.90 |
| **VRF1-4-1** | | | | **365** | **383** | **340** | **0.93** |
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# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-4-2** **Area: 103**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFY027MA144A |
| **Serial Num** | 4YR0074930P911 |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.162 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 2.03 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 880 | 894 |
| **Fan RPM** | | MEDIUM |
| **OA CFM** | 120 | 109 |
| **RA CFM** | 760 | 785 |
| **RL Voltage** | 208 | 213 |
| **RL Amperage** | 2.03 | 1.1 |
| **Suction ESP** | | -0.04 |
| **Discharge ESP** | | 0.04 |
| **Total ESP** | 0.5 | 0.08 |
| **Brake HP** | | 0.09 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 42-1 | 103 | D | 8X8 | 300 | 138 | 276 | 0.92 |
| 42-2 | 103 | D | 8X8 | 290 | 157 | 318 | 1.10 |
| 42-3 | 103 | D | 8X8 | 290 | 282 | 300 | 1.03 |
| **VRF1-4-2** | | | | **880** | **577** | **894** | **1.02** |
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# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-4-3** **Area: 102**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP018MA145A |
| **Serial Num** | 4XR0089530P30E |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 630 | 632 |
| **Fan RPM** | | MED-LOW |
| **OA CFM** | 160 | 145 |
| **RA CFM** | 470 | 487 |
| **RL Voltage** | 208 | 213 |
| **RL Amperage** | 2.03 | 0.7 |
| **Suction ESP** | | -0.02 |
| **Discharge ESP** | | 0.26 |
| **Total ESP** | 0.5 | 0.28 |
| **Brake HP** | | 0.06 |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.162 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 2.03 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 43-1 | 103 | A | 8 | 215 | 194 | 223 | 1.04 |
| 43-2 | 102 | A | 8 | 215 | 182 | 224 | 1.04 |
| 43-3 | 100 | D | 8X6 | 200 | 327 | 185 | 0.93 |
| **VRF1-4-3** | | | | **630** | **703** | **632** | **1.00** |
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# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-4-4** **Area: 107**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP012MA144A |
| **Serial Num** | 4XR0738430P90W |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.114 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 0.89 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 370 | 398 |
| **Fan RPM** | | MED-LOW |
| **OA CFM** | 140 | 98 [1] |
| **RA CFM** | 230 | 300 |
| **RL Voltage** | 208 | 213 |
| **RL Amperage** | 0.89 | 0.5 |
| **Suction ESP** | | -0.03 |
| **Discharge ESP** | | 0.04 |
| **Total ESP** | 0.5 | 0.07 |
| **Brake HP** | | 0.06 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 44-1 | 107 | F | 8X8 | 92 | 99 | 99 | 1.08 |
| 44-2 | 107 | F | 8X8 | 93 | 97 | 97 | 1.04 |
| 44-2 | 107 | F | 8X8 | 93 | 102 | 102 | 1.10 |
| 44-2 | 107 | F | 8X8 | 92 | 100 | 100 | 1.09 |
| **VRF1-4-4** | | | | **370** | **398** | **398** | **1.08** |
| | | | | | | | |
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**NOTES:**

**[1] OUTSIDE AIR DAMPER WAS 100% OPEN DURING TIME OF TESTING.**

# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-4-5** **Area: 155**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP015MA144A |
| **Serial Num** | 31R0160730P90X |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.162 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 1.24 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 490 | 512 |
| **Fan RPM** | | LOW |
| **OA CFM** | 135 | 123 |
| **RA CFM** | 355 | 389 |
| **RL Voltage** | 208 | 214 |
| **RL Amperage** | 1.24 | 0.4 |
| **Suction ESP** | | -0.02 |
| **Discharge ESP** | | 0.08 |
| **Total ESP** | 0.50 | 0.10 |
| **Brake HP** | | 0.05 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 45-1 | 158 | A | 8 | 100 | 88 | 104 | 1.04 |
| 45-2 | 159 | A | 8 | 100 | 90 | 108 | 1.08 |
| 45-3 | 157 | A | 8 | 60 | 66 | 66 | 1.10 |
| 45-4 | 156 | A | 8 | 60 | 83 | 61 | 1.02 |
| 45-5 | 155 | A | 8 | 60 | 87 | 58 | 0.97 |
| 45-6 | 154 | A | 8 | 60 | 64 | 65 | 1.08 |
| 45-7 | 153 | A | 8 | 50 | 104 | 50 | 1.00 |
| **VRF1-4-5** | | | | **490** | **582** | **512** | **1.04** |
| | | | | | | | |

# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-4-6** **Area: 162**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP030MA145A |
| **Serial Num** | 48R0038530P30F |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.402 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 3.01 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 1090 | 1418 |
| **Fan RPM** | | HIGH |
| **OA CFM** | 465 | 284 [1] |
| **RA CFM** | 625 | 1134 |
| **RL Voltage** | 208 | 213 |
| **RL Amperage** | 3.01 | 3.0 |
| **Suction ESP** | | -0.10 |
| **Discharge ESP** | | 0.04 |
| **Total ESP** | 0.5 | 0.14 |
| **Brake HP** | | 0.4 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 46-1 | 162 | D | 14X6 | 260 | 218 | 285 | 1.10 |
| 46-2 | 162 | D | 14X6 | 260 | 223 | 271 | 1.04 |
| 46-3 | 162 | D | 8X8 | 260 | 158 | 274 | 1.05 |
| 46-4 | 162 | D | 8X8 | 260 | 198 | 268 | 1.03 |
| 46-5 | 162 | D | 8X8 | 260 | 176 | 268 | 1.03 |
| 46-6 | 161 | D1 | 6X6 | 50 | 74 | 52 | 1.04 |
| **VRF1-4-6** | | | | **1350** | **1047** | **1418** | **1.05** |
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**NOTES:**

**[1] OSA DAMPER WAS 100% OPEN DURING TIME OF TESTING. OSA IS AT 61% OF DESIGN.**

# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-** **Area: 147**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP018MA145A |
| **Serial Num** | 4YR0101530P30E |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.162 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 2.03 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 820 | 875 |
| **Fan RPM** | | MED-LOW |
| **OA CFM** | 155 | 143 |
| **RA CFM** | 665 | 732 |
| **RL Voltage** | 208 | 213 |
| **RL Amperage** | 2.03 | 1.00 |
| **Suction ESP** | | -0.04 |
| **Discharge ESP** | | 0.08 |
| **Total ESP** | 0.5 | 0.12 |
| **Brake HP** | | 0.08 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 47-1 | 143 | D | 8X8 | 300 | 224 | 327 | 1.09 |
| 47-2 | 144 | A | 8 | 65 | 153 | 61 | 0.94 |
| 47-3 | 145 | A | 8 | 65 | 101 | 70 | 1.08 |
| 47-4 | 146 | A | 8 | 65 | 93 | 70 | 1.08 |
| 47-5 | 147 | A | 8 | 65 | 65 | 69 | 1.06 |
| 47-6 | 149 | A | 8 | 65 | 80 | 67 | 1.03 |
| 47-7 | 150 | A | 8 | 65 | 83 | 70 | 1.08 |
| 47-8 | 151 | A | 8 | 65 | 55 | 71 | 1.09 |
| 47-9 | 152 | A | 8 | 65 | 41 | 70 | 1.08 |
| **VRF1-4-7** | | | | **820** | **895** | **875** | **1.07** |
| | | | | | | | |

# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-5-1** **Area: 134**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP036MA144A |
| **Serial Num** | 33R0183130P913 |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.402 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 3.01 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 1270 | 1306 |
| **Fan RPM** | | MED-HIGH |
| **OA CFM** | 160 | 149 |
| **RA CFM** | 1110 | 1157 |
| **RL Voltage** | 208 | 213 |
| **RL Amperage** | 3.01 | 2.1 |
| **Suction ESP** | | -0.09 |
| **Discharge ESP** | | 0.07 |
| **Total ESP** | 0.5 | 0.16 |
| **Brake HP** | | 0.28 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 51-1 | 133 | D | 12X6 | 315 | 299 | 299 | 0.95 |
| 51-2 | 133 | D | 12X6 | 315 | 323 | 323 | 1.03 |
| 51-3 | 133 | D | 12X6 | 320 | 346 | 346 | 1.08 |
| 51-4 | 133 | D | 12X6 | 320 | 338 | 338 | 1.06 |
| **VRF1-5-1** | | | | **1270** | **1306** | **1306** | **1.03** |
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# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-5-2** **Area: 134**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP036MA144A |
| **Serial Num** | 33R0182230P913 |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.402 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 3.01 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 1150 | 1073 |
| **Fan RPM** | | MEDIUM |
| **OA CFM** | 115 | 108 |
| **RA CFM** | 1035 | 965 |
| **RL Voltage** | 208 | 212 |
| **RL Amperage** | 3.01 | 1.7 |
| **Suction ESP** | | -0.05 |
| **Discharge ESP** | | 0.21 |
| **Total ESP** | 0.5 | 0.26 |
| **Brake HP** | | 0.23 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 52-1 | 134 | C | 8 | 195 | 133 | 175 | 0.90 |
| 52-2 | 134 | D | 12X6 | 315 | 342 | 306 | 0.97 |
| 52-3 | 134 | D | 12X6 | 320 | 280 | 287 | 0.90 |
| 52-4 | 134 | D | 12X6 | 320 | 389 | 305 | 0.95 |
| **VRF1-5-2** | | | | **1150** | **1144** | **1073** | **0.93** |
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# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-5-3** **Area: 134**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP027MA144A |
| **Serial Num** | 4YR0073730P911 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 880 | 887 |
| **Fan RPM** | | MED-HIGH |
| **OA CFM** | 195 | 187 |
| **RA CFM** | 685 | 700 |
| **RL Voltage** | 208 | 214 |
| **RL Amperage** | 2.03 | 1.2 |
| **Suction ESP** | | -0.05 |
| **Discharge ESP** | | 0.23 |
| **Total ESP** | 0.5 | 0.28 |
| **Brake HP** | | 0.09 |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.162 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 2.03 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 53-1 | 134 | A | 8 | 220 | 250 | 220 | 1.00 |
| 53-2 | 134 | A | 8 | 220 | 206 | 220 | 1.00 |
| 53-3 | 134 | A | 8 | 220 | 196 | 223 | 1.01 |
| 53-4 | 134 | A | 8 | 220 | 161 | 224 | 1.02 |
| **VRF1-5-3** | | | | **880** | **813** | **887** | **1.01** |
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# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-5-4** **Area: 136**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP015MA144A |
| **Serial Num** | 31R0159730P90X |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.162 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 1.24 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 490 | 477 |
| **Fan RPM** | | MEDIUM |
| **OA CFM** | 100 | 92 |
| **RA CFM** | 390 | 385 |
| **RL Voltage** | 208 | 212 |
| **RL Amperage** | 1.24 | 0.6 |
| **Suction ESP** | | -0.04 |
| **Discharge ESP** | | 0.28 |
| **Total ESP** | 0.5 | 0.32 |
| **Brake HP** | | 0.08 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 54-1 | 136 | C | 8 | 195 | 115 | 182 | 0.93 |
| 54-2 | 136 | A | 8 | 100 | 154 | 103 | 1.03 |
| 54-3 | 136 | C | 8 | 195 | 180 | 192 | 0.98 |
| **VRF1-5-4** | | | | **490** | **449** | **477** | **0.97** |
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# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-5-5** **Area: 139**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP018MA145A |
| **Serial Num** | 4XR0098330P30E |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.162 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 2.03 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 685 | 703 |
| **Fan RPM** | | MED-LOW |
| **OA CFM** | 160 | 109 [1] |
| **RA CFM** | 525 | 594 |
| **RL Voltage** | 208 | 214 |
| **RL Amperage** | 2.03 | 0.8 |
| **Suction ESP** | | -0.05 |
| **Discharge ESP** | | 0.09 |
| **Total ESP** | 0.5 | 0.14 |
| **Brake HP** | | 0.06 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 55-1 | 140 | A | 8 | 110 | 66 | 107 | 0.97 |
| 55-2 | 141 | A | 8 | 70 | 112 | 71 | 1.01 |
| 55-3 | 139 | D | 12X10 | 185 | 181 | 196 | 1.06 |
| 55-4 | 139 | D | 12X10 | 185 | 180 | 197 | 1.06 |
| 55-5 | 142 | A | 8 | 70 | 115 | 70 | 1.00 |
| 55-6 | 127 | A | 8 | 65 | 109 | 62 | 0.95 |
| **VRF1-5-5** | | | | **685** | **763** | **703** | **1.03** |
| | | | | | | | |
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**NOTES:**

**[1] OUTSIDE AIR DAMPER WAS 100% OPEN DURING TIME OF TESTING.**

# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-6-1** **Area: 106**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP024MA144A |
| **Serial Num** | 34R0334930P90Z |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.162 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 2.03 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 825 | 843 |
| **Fan RPM** | | MED-HIGH |
| **OA CFM** | 80 | 78 |
| **RA CFM** | 745 | 765 |
| **RL Voltage** | 208 | 213 |
| **RL Amperage** | 2.03 | 1.4 |
| **Suction ESP** | | -0.06 |
| **Discharge ESP** | | 0.13 |
| **Total ESP** | 0.5 | 0.19 |
| **Brake HP** | | 0.11 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 61-1 | 104 | C | 8 | 135 | 108 | 126 | 0.93 |
| 61-2 | 105 | C | 8 | 140 | 71 | 150 | 1.07 |
| 61-3 | 106 | C | 8 | 135 | 134 | 149 | 1.10 |
| 61-4 | 108 | C | 8 | 140 | 130 | 133 | 0.95 |
| 61-5 | 109 | C | 8 | 135 | 95 | 140 | 1.04 |
| 61-6 | 110 | C | 8 | 140 | 136 | 145 | 1.04 |
| **VRF1-6-1** | | | | **825** | **674** | **843** | **1.02** |
| | | | | | | | |
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# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-6-2** **Area: 115**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP024MA133A |
| **Serial Num** | 34R0335030P90Z |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.162 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 2.03 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 825 | 799 |
| **Fan RPM** | | MEDIUM |
| **OA CFM** | 82 | 74 |
| **RA CFM** | 745 | 725 |
| **RL Voltage** | 208 | 213 |
| **RL Amperage** | 2.03 | 1.1 |
| **Suction ESP** | | -0.04 |
| **Discharge ESP** | | 0.15 |
| **Total ESP** | 0.5 | 0.19 |
| **Brake HP** | | 0.09 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 62-1 | 111 | C | 8 | 135 | 130 | 136 | 1.01 |
| 62-2 | 113 | C | 8 | 140 | 126 | 143 | 1.02 |
| 62-3 | 114 | C | 8 | 135 | 118 | 133 | 0.99 |
| 62-4 | 114 | C | 8 | 140 | 112 | 133 | 0.95 |
| 62-5 | 115 | C | 8 | 135 | 110 | 127 | 0.94 |
| 62-6 | 115 | C | 8 | 140 | 110 | 127 | 0.91 |
| **VRF1-6-2** | | | | **825** | **706** | **799** | **0.97** |
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# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-6-3** **Area: 123**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP012MA144A |
| **Serial Num** | 4XR0742630P90W |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.114 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 0.89 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 325 | 339 |
| **Fan RPM** | | MED-LOW |
| **OA CFM** | 85 | 91 |
| **RA CFM** | 250 | 248 |
| **RL Voltage** | 208 | 214 |
| **RL Amperage** | 0.89 | 0.4 |
| **Suction ESP** | | -0.02 |
| **Discharge ESP** | | 0.13 |
| **Total ESP** | 0.5 | 0.15 |
| **Brake HP** | | 0.05 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 63-1 | 112 | D1 | 6X6 | 115 | 65 | 119 | 1.03 |
| 63-2 | 122 | A | 8 | 70 | 134 | 74 | 1.06 |
| 63-3 | 123 | A | 8 | 70 | 103 | 75 | 1.07 |
| 63-4 | 126 | A | 8 | 70 | 60 | 71 | 1.01 |
| **VRF1-6-3** | | | | **325** | **362** | **339** | **1.04** |
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# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-6-4** **Area: 127**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP036MA144A |
| **Serial Num** | 33R0183230P913 |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.402 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 3.01 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 1235 | 1285 |
| **Fan RPM** | | MED-HIGH |
| **OA CFM** | 195 | 203 |
| **RA CFM** | 1040 | 1082 |
| **RL Voltage** | 208 | 212 |
| **RL Amperage** | 3.01 | 2.1 |
| **Suction ESP** | | -0.06 |
| **Discharge ESP** | | 0.2 |
| **Total ESP** | 0.5 | 0.026 |
| **Brake HP** | | 0.28 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 64-1 | 127 | A | 8 | 185 | 174 | 199 | 1.08 |
| 64-2 | 127 | A | 8 | 185 | 207 | 204 | 1.10 |
| 64-3 | 127 | A | 8 | 185 | 207 | 193 | 1.04 |
| 64-4 | 127 | D | 6X6 | 125 | 50 | 120 | 0.96 |
| 64-5 | 127 | A | 8 | 185 | 110 | 190 | 1.03 |
| 64-6 | 127 | A | 8 | 185 | 184 | 184 | 0.99 |
| 64-7 | 127 | A | 8 | 185 | 167 | 195 | 1.05 |
| **VRF1-6-4** | | | | **1235** | **1099** | **1285** | **1.04** |
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# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-6-5** **Area: 128**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP030MA145A |
| **Serial Num** | 48R0038330P30F |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.402 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 3.01 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 1255 | 1214 |
| **Fan RPM** | | MEDIUM |
| **OA CFM** | 215 | 201 |
| **RA CFM** | 1040 | 1013 |
| **RL Voltage** | 208 | 212 |
| **RL Amperage** | 3.01 | 1.8 |
| **Suction ESP** | | -0.05 |
| **Discharge ESP** | | 0.11 |
| **Total ESP** | 0.5 | 0.16 |
| **Brake HP** | | 0.24 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 65-1 | 128 | A | 8 | 215 | 154 | 197 | 0.92 |
| 65-2 | 128 | A | 8 | 215 | 110 | 200 | 0.93 |
| 65-3 | 128 | A | 8 | 215 | 210 | 207 | 0.96 |
| 65-4 | 128 | A | 8 | 215 | 162 | 220 | 1.02 |
| 65-5 | 128 | A | 8 | 215 | 163 | 218 | 1.01 |
| 65-6 | 129 | A | 8 | 65 | 200 | 61 | 0.94 |
| 65-7 | 130 | A | 8 | 65 | 134 | 64 | 0.98 |
| 65-8 | 131 | D1 | 6X6 | 50 | 53 | 47 | 0.94 |
| **VRF1-6-5** | | | | **1255** | **1186** | **1214** | **0.97** |
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# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-6-6** **Area: 121**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP012MA144A |
| **Serial Num** | 4XR0738330P90W |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.114 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 0.89 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 370 | 354 |
| **Fan RPM** | | MED-HIGH |
| **OA CFM** | 120 | 117 |
| **RA CFM** | 250 | 237 |
| **RL Voltage** | 208 | 213 |
| **RL Amperage** | 0.89 | 0.6 |
| **Suction ESP** | | -0.02 |
| **Discharge ESP** | | 0.28 |
| **Total ESP** | 0.5 | 0.30 |
| **Brake HP** | | 0.08 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 66-1 | 121 | E | 8 | 185 | 135 | 171 | 0.92 |
| 66-2 | 121 | E | 8 | 185 | 144 | 183 | 0.99 |
| **VRF1-6-6** | | | | **370** | **279** | **354** | **0.96** |
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# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-6-7** **Area: 116**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP012MA144A |
| **Serial Num** | 4XR0742830P90W |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.114 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 0.89 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 375 | 353 |
| **Fan RPM** | | MEDIUM |
| **OA CFM** | 50 | 47 |
| **RA CFM** | 325 | 306 |
| **RL Voltage** | 208 | 214 |
| **RL Amperage** | 0.89 | 0.5 |
| **Suction ESP** | | -0.02 |
| **Discharge ESP** | | 0.21 |
| **Total ESP** | 0.5 | 0.23 |
| **Brake HP** | | 0.06 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 67-1 | 116 | C | 8 | 125 | 113 | 127 | 1.02 |
| 67-2 | 116 | C | 8 | 125 | 99 | 112 | 0.90 |
| 67-3 | 116 | C | 8 | 125 | 101 | 114 | 0.91 |
| **VRF1-6-7** | | | | **375** | **313** | **353** | **0.94** |
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# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-6-8** **Area: 118**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP006MA144A |
| **Serial Num** | 48R0309430P90U |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.114 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 0.70 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 300 | 295 |
| **Fan RPM** | | MED-HIGH |
| **OA CFM** | 120 | 109 |
| **RA CFM** | 180 | 186 |
| **RL Voltage** | 208 | 214 |
| **RL Amperage** | 0.70 | 0.50 |
| **Suction ESP** | | -0.02 |
| **Discharge ESP** | | 0.29 |
| **Total ESP** | 0.5 | 0.31 |
| **Brake HP** | | 0.08 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 68-1 | 120 | D1 | 6X6 | 50 | 121 | 55 | 1.10 |
| 68-2 | 118 | D1 | 6X6 | 250 | 155 | 240 | 0.96 |
| **VRF1-6-8** | | | | **300** | **276** | **295** | **0.98** |
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# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-** **Area: 117**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP012MA144A |
| **Serial Num** | 4XR0742530P90W |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.114 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 0.89 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 400 | 375 |
| **Fan RPM** | | MED-LOW |
| **OA CFM** | 50 | 54 |
| **RA CFM** | 350 | 321 |
| **RL Voltage** | 208 | 213 |
| **RL Amperage** | 0.89 | 0.4 |
| **Suction ESP** | | -0.02 |
| **Discharge ESP** | | 0.11 |
| **Total ESP** | 0.5 | 0.13 |
| **Brake HP** | | 0.05 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 69-1 | 119 | D | 6X6 | 100 | 100 | 100 | 1.00 |
| 69-2 | 117 | C | 8 | 150 | 135 | 135 | 0.90 |
| 69-3 | 117 | C | 8 | 150 | 140 | 140 | 0.93 |
| **VRF1-6-9** | | | | **400** | **375** | **375** | **0.94** |
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# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-7-1** **Area: 132**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP048MA144A |
| **Serial Num** | 4ZR0305730P914 |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.402 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 3.09 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 1270 | 1282 |
| **Fan RPM** | | MED-LOW |
| **OA CFM** | 200 | 149 [1] |
| **RA CFM** | 1070 | 1133 |
| **RL Voltage** | 208 | 211 |
| **RL Amperage** | 3.09 | 1.4 |
| **Suction ESP** | | -0.06 |
| **Discharge ESP** | | 0.16 |
| **Total ESP** | 0.5 | 0.22 |
| **Brake HP** | | 0.18 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 71-1 | 132 | C | 8 | 225 | 230 | 230 | 1.02 |
| 71-2 | 132 | A | 8 | 195 | 208 | 208 | 1.07 |
| 71-3 | 132 | C | 8 | 215 | 202 | 202 | 0.94 |
| 71-4 | 132 | C | 8 | 225 | 212 | 212 | 0.94 |
| 71-5 | 132 | A | 8 | 195 | 195 | 195 | 1.00 |
| 71-6 | 132 | C | 8 | 215 | 235 | 235 | 1.09 |
| **VRF1-7-1** | | | | **1270** | **1282** | **1282** | **1.01** |
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**NOTES:**

**[1] OUTSIDE AIR DAMPER WAS 100% OPEN DURING TIME OF TESTING.**

# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-7-2** **Area: 132**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP018MA145A |
| **Serial Num** | 4XR0089730P30E |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 880 | 889 |
| **Fan RPM** | | MEDIUM |
| **OA CFM** | 180 | 199 |
| **RA CFM** | 700 | 690 |
| **RL Voltage** | 208 | 212 |
| **RL Amperage** | 2.03 | 1.1 |
| **Suction ESP** | | -0.06 |
| **Discharge ESP** | | 0.15 |
| **Total ESP** | 0.5 | 0.21 |
| **Brake HP** | | 0.09 |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.162 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 2.03 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 72-1 | 132 | A | 8 | 220 | 243 | 237 | 1.08 |
| 72-2 | 132 | A | 8 | 220 | 221 | 234 | 1.06 |
| 72-3 | 132 | A | 8 | 220 | 167 | 213 | 0.97 |
| 72-4 | 132 | A | 8 | 220 | 174 | 205 | 0.93 |
| **VRF1-7-2** | | | | **880** | **805** | **889** | **1.01** |
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# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-7-3** **Area: 132**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP024MA144A |
| **Serial Num** | 34R0336130P90Z |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.162 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 2.03 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 880 | 872 |
| **Fan RPM** | | MED-LOW |
| **OA CFM** | 100 | 67 [1] |
| **RA CFM** | 780 | 805 |
| **RL Voltage** | 208 | 212 |
| **RL Amperage** | 2.03 | 0.8 |
| **Suction ESP** | | -0.03 |
| **Discharge ESP** | | 0.15 |
| **Total ESP** | 0.5 | 0.18 |
| **Brake HP** | | 0.06 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 73-1 | 132 | C | 8 | 215 | 195 | 195 | 0.91 |
| 73-2 | 132 | C | 8 | 225 | 231 | 231 | 1.03 |
| 73-3 | 132 | C | 8 | 215 | 225 | 225 | 1.05 |
| 73-4 | 132 | C | 8 | 225 | 221 | 221 | 0.98 |
| **VRF1-7-3** | | | | **880** | **872** | **872** | **0.99** |
| | | | | | | | |
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**NOTES:**

**[1] OUTSIDE AIRE DAMPER WAS 100% OPEN DURING TIME OF TESTING.**

# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-7-4** **Area: 133**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP030MA145A |
| **Serial Num** | 48R0038430P30F |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 1260 | 1212 |
| **Fan RPM** | | MEDIUM |
| **OA CFM** | 215 | 202 |
| **RA CFM** | 1045 | 1010 |
| **RL Voltage** | 208 | 214 |
| **RL Amperage** | 3.01 | 1.6 |
| **Suction ESP** | | -0.07 |
| **Discharge ESP** | | 0.17 |
| **Total ESP** | 0.5 | 0.24 |
| **Brake HP** | | 0.21 |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.402 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 3.01 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 74-1 | 133 | A | 8 | 210 | 191 | 196 | 0.93 |
| 74-2 | 133 | A | 8 | 210 | 243 | 228 | 1.09 |
| 74-3 | 133 | A | 8 | 210 | 191 | 191 | 0.91 |
| 74-4 | 133 | A | 8 | 210 | 156 | 193 | 0.92 |
| 74-5 | 133 | A | 8 | 210 | 187 | 206 | 0.98 |
| 74-6 | 133 | A | 8 | 210 | 179 | 198 | 0.94 |
| **VRF1-7-4** | | | | **1260** | **1147** | **1212** | **0.96** |
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# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-7-5** **Area: 133**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP036MA144A |
| **Serial Num** | 33R0183030P913 |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.402 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 3.01 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 1270 | 1211 |
| **Fan RPM** | | HIGH |
| **OA CFM** | 160 | 175 |
| **RA CFM** | 1110 | 1036 |
| **RL Voltage** | 208 | 211 |
| **RL Amperage** | 3.01 | 2.7 |
| **Suction ESP** | | -0.08 |
| **Discharge ESP** | | 0.14 |
| **Total ESP** | 0.5 | 0.22 |
| **Brake HP** | | 0.36 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 75-1 | 133 | D | 12X6 | 315 | 193 | 288 | 0.91 |
| 75-2 | 133 | D | 12X6 | 315 | 290 | 341 | 1.08 |
| 75-3 | 133 | D | 12X6 | 320 | 223 | 289 | 0.90 |
| 75-4 | 133 | D | 12X6 | 320 | 222 | 293 | 0.92 |
| **VRF1-7-5** | | | | **1270** | **928** | **1211** | **0.95** |
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# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: VRF1-7-6** **Area: 133**

| Unit Data | |
|---|---|
| **MFG** | MITSUBISHI |
| **Model Num** | TPEFYP024MA144A |
| **Serial Num** | 34R0333830P90Z |

| Motor Data | |
|---|---|
| **Motor MFG** | INTERTEK |
| **Horsepower** | 0.162 |
| **Motor Rpm** | NA |
| **Phase** | 1 |
| **Voltage (rated)** | 208 |
| **Amperage (rated)** | 2.03 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SA CFM** | 880 | 871 |
| **Fan RPM** | | MED-LOW |
| **OA CFM** | 170 | 158 |
| **RA CFM** | 710 | 713 |
| **RL Voltage** | 208 | 212 |
| **RL Amperage** | 2.03 | 0.9 |
| **Suction ESP** | | -0.04 |
| **Discharge ESP** | | 0.12 |
| **Total ESP** | 0.5 | 0.16 |
| **Brake HP** | | 0.07 |

| Asset | Area Served | Type | Size | DESIGN CFM | Prelim CFM | FINAL CFM | % to design |
|---|---|---|---|---|---|---|---|
| 76-1 | 133 | A | 8 | 220 | 204 | 204 | 0.93 |
| 76-2 | 133 | A | 8 | 220 | 219 | 219 | 1.00 |
| 76-3 | 133 | A | 8 | 220 | 225 | 225 | 1.02 |
| 76-4 | 133 | A | 8 | 220 | 223 | 223 | 1.01 |
| **VRF1-7-6** | | | | **880** | **871** | **871** | **0.99** |
| | | | | | | | |
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# National TAB

## Project: CW 3300 - Suite 180 Senske

### Address: 3300 Olympus Blvd  Dallas, TX  75019

**Asset: EF1-2**

| Unit Data | |
|---|---|
| **MFG** | BROAN |
| **Model Num** | L250E-A |
| **Serial Num** | 42J25H |
| **Type** | CABINET |

| Motor Data | |
|---|---|
| **Motor MFG** | BROAD-OCEAN |
| **Frame** | NA |
| **Horsepower** | 0.02 |
| **Motor Rpm** | 833 |
| **Phase** | 1 |
| **Voltage (rated)** | 120 |
| **Amperage (rated)** | 0.53 |
| **Service Factor** | NA |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **CFM** | 200 | 206 |
| **Fan RPM** | 1000 | DIRECT DRIVE |
| **RL Voltage** | 120 | 121 |
| **RL Amperage** | 0.53 | 0.4 |
| **Suction ESP** | | -0.06 |
| **Total ESP** | 0.5 | 0.06 |
| | | 0.02 |