

**ROOFTOP UNIT SCHEDULE (ELECTRIC HEAT)**

| MARK  | MANUFACTURER | MODEL  | NOMINAL TONNAGE | SUPPLY FAN |        |          |          |           | COOLING COIL |          |          |      |    | HEATING COIL |          |                 |                 |                 | MIN. O/A CFM | DCV O/A CFM | MIN. EER | MIN. SEER | MCA | MOCP | V/PH | WEIGHT LBS | NOTES |     |
|-------|--------------|--------|-----------------|------------|--------|----------|----------|-----------|--------------|----------|----------|------|----|--------------|----------|-----------------|-----------------|-----------------|--------------|-------------|----------|-----------|-----|------|------|------------|-------|-----|
|       |              |        |                 | CFM        | MIN HP | ESP (IN) | TSP (IN) | VFD (Y/N) | REFR. TYPE   | TH (MBH) | SH (MBH) | EAT  |    |              | LAT (DB) | MIN. OUT. (MBH) | NOM. INPUT (KW) | MIN. NO. STAGES |              |             |          |           |     |      |      |            |       |     |
|       |              |        |                 |            |        |          |          |           |              |          |          | DB   | WB | LAT          |          |                 |                 |                 |              |             |          |           |     |      |      |            |       |     |
| RTU-1 | TRANE        | THC102 | 8.5             | 3,000      | 3.75   | 1.0      | 1.28     | N         | R410A        | 92.7     | 69.4     | 79.7 | 67 | 58.7         | 56.5     | 92.1            | 92              | 27              | 1            | 395         | 685      | 13        | NA  | 46   | 50   | 460/3      | 1591  | A-R |

MODEL NUMBERS SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED BY MANUFACTURER AND MODEL NUMBERS ONLY. REVIEW THE COMPLETE DESCRIPTION, NOTES AND SPECIFICATIONS TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE MANUFACTURERS LISTED ARE THE BASIS FOR THE DESIGN.

**NOTES:**

- A. PROVIDE ENTHALPY ECONOMIZER WITH BAROMETRIC RELIEF DAMPER.
- B. EQUIPMENT SIZED FOR 105 °F AMBIENT TEMPERATURE.
- C. PROVIDE 2", 30% EFFICIENT PLEATED THROWAWAY AIR FILTERS.
- D. SPECIFIED FAN ESP ACCOUNTS FOR DUCT LOSSES EXTERNAL TO UNIT.
- E. SPECIFIED FAN TSP INCLUDES EXTERNAL DUCT AND INTERNAL FILTER, COIL AND CASING LOSSES. FILTER LOSS IS AT MAXIMUM 400 FPM.
- F. MODIFY EXISTING ROOF OPENING AND PROVIDE MANUFACTURER'S STANDARD INSULATED ROOF CURB WITH MINIMUM HEIGHT OF 14". VERIFY WITH LANDLORD IF LANDLORD APPROVED ROOFING CONTRACTOR IS REQUIRED TO PERFORM MODIFICATIONS TO ROOFING SYSTEM. IF NOT, REPAIR ROOF WEATHERTIGHT AND MATCH EXISTING ROOF FINISH AND INSULATION. (CURB WEIGHT NOT INCLUDED IN UNIT WEIGHT)
- G. PROVIDE WITH 7-DAY PROGRAMMABLE THERMOSTAT WITH STAGED HEATING AND COOLING CAPABILITY AS REQUIRED FOR OPERATION OF AUXILIARY HEATING, COOLING AND ECONOMIZER CONTROLS.
- H. PROVIDE MANUFACTURER'S STANDARD COIL WITH HAIL GUARD.
- I. PROVIDE FACTORY INSTALLED SMOKE DETECTORS IN SUPPLY AIR UNIT PLENUM.
- J. PROVIDE FACTORY MOUNTED DISCONNECT SWITCH.
- K. STARTERS FOR ALL MOTORS SHALL BE FURNISHED INTEGRAL WITH UNIT.
- L. COORDINATE SIZE OF CONDUCTOR TERMINATION LUGS WITH CONDUCTOR SIZES SHOWN ON ELECTRICAL DRAWINGS.
- M. PROVIDE DUPLEX RECEPTACLE MOUNTED ON UNIT FOR FIELD WIRING.
- N. COOLING COIL LAT IS LEAVING AIR TEMPERATURE OF COIL.
- O. PROVIDE HEATER TO MEET OR EXCEED SCHEDULED MINIMUM MBH OUTPUT. NOMINAL KW IS BASED ON LISTED MANUFACTURER'S STANDARD PRODUCT. COORDINATE EQUIPMENT POWER SUPPLY WITH ELECTRICAL CONTRACTOR IF DIFFERENT FROM THAT SCHEDULED.
- P. PROVIDE MANUFACTURER'S STANDARD 5 YEAR LIMITED COMPRESSOR WARRANTY.
- Q. PROVIDE, WITH RTU, CO2 SENSOR AS REQUIRED FOR USE WITH DCV. FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR.
- R. PROVIDE HOT GAS REHEAT COIL FOR DEHUMIDIFICATION CONTROL SEQUENCE. PROVIDE, WITH RTU, HUMIDISTAT. FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR.

**OUTDOOR VENTILATION AIR SCHEDULE**

| SPACE SERVED  |                    | CALCULATION OF MINIMUM OUTDOOR AIR(OA) PER 2010 FLORIDA MECHANICAL CODE |                    |                 |                              |                               |  |                         |                                      |                                     |                            |            |                               | PROVIDED OA CFM | SYSTEM PROVIDING OA (UNIT ID) |
|---------------|--------------------|---|--------------------|-----------------|------------------------------|-------------------------------|--|-------------------------|--------------------------------------|-------------------------------------|----------------------------|------------|-------------------------------|-----------------|-------------------------------|
| ZONE          | OCCUPANCY CATEGORY | ZONE FLOOR AREA (SF)  | PEOPLE PER 1000 SF | ZONE POPULATION | OUTDOOR AIRFLOW (CFM/PERSON) | ZONE POPULATION AIRFLOW (CFM) | OUTDOOR AIRFLOW RATE REQUIRED PER UNIT AREA (CFM/SF) | ZONE AREA AIRFLOW (CFM) | BREATHING ZONE OUTDOOR AIRFLOW (CFM) | ZONE AIR DISTRIBUTION EFFECTIVENESS | ZONE OUTDOOR AIRFLOW (CFM) | OA CFM     | SYSTEM PROVIDING OA (UNIT ID) |                 |                               |
| SALES         | RETAIL SALES       | 1897  | 15                 | 29              | 7.5                          | 218                           | 0.12   | 228                     | 446                                  | 0.8                                 | 558                        | 560        | RTU-1                         |                 |                               |
| OFFICE        | OFFICE SPACE       | 277   | 5                  | 2               | 5                            | 10                            | 0.06   | 17                      | 27                                   | 0.8                                 | 34                         | 35         | RTU-1                         |                 |                               |
| STOCKROOM     | RECEIVING          | 585   | ---                | ---             | ---                          | ---                           | 0.12   | 70                      | 71                                   | 0.8                                 | 89                         | 90         | RTU-1                         |                 |                               |
| <b>TOTALS</b> |                    |   |                    |                 |                              |                               |  |                         |                                      |                                     |                            | <b>685</b> |                               |                 |                               |

\*OA VOLUME RESET BY DCV CONTROLLER  
 \*\*REQUIRED MINIMUM OA SETPOINT

**EXHAUST FAN SCHEDULE**

| MARK | MANUFACTURER MODEL | TYPE           | STATIC PRESSURE | SONES | CFM | V/PH/HZ WATTS | NOTES |
|------|--------------------|----------------|-----------------|-------|-----|---------------|-------|
| EF-1 | COOK               | CEILING GC-144 | 0.5"            | 1.8   | 75  | 120/1/60 67   | A     |

- GENERAL INFORMATION (ALL UNITS)
- CONTRACTOR SHALL CHOOSE A SCHEDULED UNIT OR A COMPARABLE UNIT OF A DIFFERENT MANUFACTURER.
  - CONTRACTOR SHALL PROVIDE A BACKDRAFT DAMPER IN THE DISCHARGE SIDE DUCTWORK OF EACH FAN.
  - CONTRACTOR SHALL PROVIDE FAN WITH MANUFACTURER SUPPLIED FAN SPEED CONTROLLER.

- NOTES:
- A. SWITCH WITH LIGHTING.

**PROJECT DESIGN CONDITIONS**

| SPACE SERVED | SUMMER MAXIMUM      | SUMMER              | WINTER MINIMUM      | WINTER              |
|--------------|---------------------|---------------------|---------------------|---------------------|
|              | TEMPERATURE (°F DB) | TEMPERATURE (°F WB) | TEMPERATURE (°F DB) | TEMPERATURE (°F WB) |
| OUTSIDE AIR  | 92.2                | 79.2                | 39.3                | NA                  |
| SALES        | 72                  | 63                  | 72                  | NA                  |
| STORAGE      | 72                  | 63                  | 72                  | NA                  |
| TOILET       | 72                  | 63                  | 72                  | NA                  |

**AIR DEVICE SCHEDULE**

| MARK | SERVICE | MANUFACTURER | MODEL   | STYLE            | FRAME TYPE | FACE SIZE | NOTES     |
|------|---------|--------------|---------|------------------|------------|-----------|-----------|
| CD   | SUPPLY  | TITUS        | TMSA-AA | CEILING DIFFUSER | LAY-IN     | 24" X 24" | A,B,C,D   |
| CD1  | SUPPLY  | TITUS        | 250-AA  | CEILING DIFFUSER | SURFACE    | 10" X 10" | A,B,D,E,F |
| CD2  | SUPPLY  | TITUS        | TMSA-AA | CEILING DIFFUSER | LAY-IN     | 24" X 24" | A,B,C,D,F |
| EG   | EXHAUST | TITUS        | 50F     | EXHAUST GRILLE   | LAY-IN     | 24" X 24" | A,B,D     |
| RG   | RETURN  | TITUS        | 50F     | CEILING DIFFUSER | LAY-IN     | 24" X 24" | A,B,D     |

- GENERAL INFORMATION (ALL DEVICES):
- CONTRACTOR MUST SELECT SCHEDULED MATERIALS OR APPROVED EQUAL. ACCEPTABLE MANUFACTURERS ARE TITUS, CARNES, AND E.H. PRICE.

- NOTES:
- A. ALL ALUMINUM CONSTRUCTION
  - B. BRANCH DUCT SIZE SHALL BE SAME AS DIFFUSER NECK SIZE UNLESS NOTED OTHERWISE.
  - C. DAMPER AT TAKEOFF TO DEVICE.
  - D. STANDARD WHITE BAKED ENAMEL FINISH.
  - E. SUPPORT DEVICE INDEPENDENT OF DUCTWORK.
  - F. OPPOSED BLADE DAMPER IN NECK.

NOTE:  
 EXISTING CONDITIONS WERE TAKEN FROM ORIGINAL DRAWINGS & SITE VISITS AND MAY NOT REFLECT EXACT "AS-BUILT" CONDITIONS. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO SUBMITTING FINAL BIDS. CAREFULLY COORDINATE NEW WORK AND DEMOLITION WITH ALL OTHER DISCIPLINES AND EXISTING CONDITIONS.



THIS DRAWING has been prepared by the Architect, or licensed under his direct supervision as an instrument of service and is intended for use only on this project. All drawings, specifications, notes and conditions, including the contract form, program, and conditions of contract and all amendments thereto, constitute the entire agreement between the Architect and the Client. No verbal, written or otherwise agreement, modification or change in the contract shall be binding on the Architect unless it is in writing and signed by the Architect. Any reproduction, use, or disclosure of the information contained herein without the written consent of the Architect is strictly prohibited.

THE ARCHITECT ASSUMES RESPONSIBILITY FOR THE BUILDING HAZARD, including, but not limited to, asbestos, lead, radon, mold, and other environmental hazards. The Architect shall conduct a pre-construction investigation of the building to identify and assess potential hazards. The Architect shall provide a written report of the findings of the investigation to the Client. The Client shall be responsible for the remediation of any identified hazards. The Architect shall not be responsible for the remediation of any identified hazards. The Architect shall not be responsible for the remediation of any identified hazards.

REVISIONS SHALL BE IN THIS ORDER OF PRECEDENCE: 1. REVISIONS SHEET, 2. REVISIONS SHEET, 3. REVISIONS SHEET, 4. REVISIONS SHEET, 5. REVISIONS SHEET, 6. REVISIONS SHEET, 7. REVISIONS SHEET, 8. REVISIONS SHEET, 9. REVISIONS SHEET, 10. REVISIONS SHEET.

project title

**HELZBERG DIAMONDS**  
 STORE #356  
 PEMBROKE LAKES MALL  
 11401 PINES BLVD, SPACE 874  
 PEMBROKE PINES, FL 33026

project number  
 12007.048  
 drawing issuance  
 LANDLORD/PERMIT/BID 03.06.13  
 drawing revisions  
 No. Description: Date:

professional seal

DUANE S. HENDERSON  
 LICENSE # 46179  
 drawing title

MECHANICAL SCHEDULES  
 drawing number

**M3**