

## SCOPE OF WORK

### Services Requested: Replacement of two (2) Roof Top Units and two (2) Split Systems

#### Project Overview

The project involves the replacement of existing HVAC units; including ordering and installation of new units and removing and disposing of old units.

#### Current HVAC Unit Specifications

	WC Unit #	Make	Model #	Serial #	Tonnage	Year placed in service
SP 1	CU# 1	Trane	2TTA006A4000	50712AL3L	5	2005
	F-1	Carrier	58CTA135-22	0108A15448	135.000 BTU	2008
SP 2	CU# 4	Trane	TTP060E400A0	Z365TJ11F	5	2001
	F-4	Carrier	58CTA135-22	4506A17227	135.000 BTU	2006
RTU 3	RTU# 6	Carrier	45TME006A601	1306G50191	5	2006
RTU 4	RTU# 4	York	D1N018N03606	N0MM034085	1.5	2004

#### Outside of Scope

- **Electrical connections**

Any electrical connections will be performed by Owner's electrical contractor at Owner's expense.

#### Scope of Work Details

##### 1. Installation

- Installation of each unit shall be performed according to applicable code(s) by a licensed mechanical contractor certified by the manufacturer of the HVAC units.
- HVAC units shall be installed in preexisting roof top locations unless approved otherwise according to Owner's reasonable discretion.
- The RTUs shall be mounted on curbing.
- Install gasket between curb and unit.
- Installation shall also include supply and return duct drops to 12"-24" below the roof deck.
- Any gas and electrical service required to operate the HVAC equipment shall be connected between the Premises services and the applicable HVAC equipment (including any required gas pressure reducing valves (PRV(s)) for each appliance), and the units shall be connected to pre-existing building HVAC controls so the units can be fired and tested prior to completion of the installation work.

- g. Any abandoned roof openings shall be structurally infilled, insulated, and re-roofed to meet applicable code(s) and continue the watertight condition of the roof of the building.

## 2. General System Specifications

- a. **All units shall be manufactured by Carrier.**
- b. HVAC units shall be new units, manufactured no more than twelve (12) months prior to installation.
- c. Interior Design:
  - Cooling: 71°F db:  $\pm 2^{\circ}\text{F}$
  - Humidity  $\leq 50\%$  RH
  - Heating: 72°F db:  $\pm 2^{\circ}\text{F}$
  - People: 30/FT<sup>2</sup> per person minimum, or per the local codes for pre-existing units
  - Lighting: 1 watt/FT<sup>2</sup>
  - Misc. Internal:  $\frac{1}{2}$  watt/FT<sup>2</sup>
  - Ventilation: Per AHJ requirements
- d. Exterior Design: Ambient Conditions per the *American Society of Heating, Refrigerating and Air-conditioning Engineers* (ASHRAE) Weather Data for the following:
  - Heating db: 99%
  - Cooling db: 1% with mean coincident wet bulb temperature
  - Evaporative Systems wb: 1% with mean coincident dry bulb temperature
- e. Required Components:
  - High Efficiency units, or Ultra High Efficiency.
  - Stainless steel or standard heat exchanger with 10-year parts only warranty
  - Comparative enthalpy economizer, 100%
  - Filters - MERV 8 or higher
  - Hail guards
  - Unit mounted circuit breaker or fused disconnect
  - Unpowered GFCI convenience outlet. (Field wired by electrician)
  - Return air smoke detector with interconnect wiring (Supply air as needed)
  - Standard height roof curbs, 8" inches high
  - Factory insulation
  - All other components required by local code(s) and/or the AHJ

## 3. Required Warranties

- Minimum 1-year parts warranty on the entire unit
- Minimum 5-year compressor warranty (Parts only)
- Minimum 10-year heat exchanger warranty (Parts only)

## 4. Expectations:

- Contractor is responsible for all required permits and licenses.
- Contractor is responsible for properly maintaining the work site and for storing materials in a safe and secure manner; location to be specified by Owner. Owner is not responsible for vehicles, equipment, tools, and materials.

- All construction debris must be contained within a Contractor provided dumpster daily.
- Contractor is responsible for all dump fees when disposing of any debris generated by the work performed.
- Smoking is prohibited on all of Owner's properties.
- OSHA safety standards to be strictly adhered to and work may be stopped if PPE or other safety requirements are not followed.
- Contractor will be responsible for all quality-control issues and for accidental or incidental damage to Owner's property and/or others' property caused during the work.
- Contractor to provide a portable restroom for the duration of the project and shall be locked and secured from unauthorized use and/or vandalism during non-work hours.
- Contractor to use the smallest footprint possible for staging and parking. Area to be approved by Owner.
- Any roof patches or additional penetrations to be performed by Owner-approved contractor at Contractor's expense.

**\*\*End of SOW\*\***