

## Guide Specification for TEMSPEC Unit Ventilator Model VHC 30/36/48/60

1. The unit ventilator shall be model VHC 30/36/48/60 manufactured by **Temspec Inc.**

### **2. ELECTRIC COIL**

The electric heating coil shall have wire nickel-chrome elements carried in floating ceramic bushings. Auto-reset high limit switches shall be factory installed in the coil frame. The coil shall be rated for \_\_\_\_kW at a supply voltage \_\_\_\_Volts \_\_\_\_ phase 60 Hz. Each coil stage shall have an electromagnetic contactor to energize the coil.

### **3. HOT WATER HEATING COIL**

The coil shall have 1/2" copper tube of minimum wall thickness 0.016" and shall have aluminum fins. The coil supply and return headers shall be copper pipe, stubbed out for sweat connection. The coil shall be factory pressure tested at not less than 350 p.s.i. A manual air vent shall be factory installed and ball valves fitted. The coil capacity shall be as shown in the schedule.

### **4. DIRECT EXPANSION EVAPORATOR COIL**

The coil shall have 3/8" copper tube and aluminum fins. The coil capacities shall be as shown in the schedule. A galvanized steel pitched drain pan shall be provided. The pan shall have a 'P' trap.

### **5. HOT GAS REHEAT (Optional)**

A hot gas reheat coil shall be provided and a solenoid valve factory installed.

### **6. COMPRESSOR**

The compressor shall be a hermetic one or two stage scroll type. The compressor shall be rated for \_\_\_\_Volts \_\_\_\_ phase 60 Hz. The compressor shall be equipped with a low ambient cut out, low and high pressure controls. A crankcase heater shall be included on reciprocating compressors. The system shall be factory charged with R-410A refrigerant.

### **7. HOT GAS BYPASS (Optional)**

A hot gas bypass device shall be factory installed.

### **8. THERMAL EXPANSION VALVE**

A thermal expansion valve shall be factory installed at the evaporator coil.

### **9. CABINET**

The unit cabinet shall be 14ga corrosion resistant steel, braced and reinforced for rigidity. The finish shall be textured powder coat, color as per the Architect's instruction. The cabinet shall be fully lined with 1" coated glass fiber insulation. The return air grille shall be heavy duty steel. The unit shall have a draw through configuration.

### **10. TOP EXTENSION (Optional)**

The unit manufacturer shall provide a color matched top extension for the cabinet, of size to suit the ceiling height.

### **11. RAISED BASE (Optional)**

The unit manufacturer shall provide a color matched raised base, height as shown on the plans.

### **12. SIDE PIPE COVER (Optional)**

The unit manufacturer shall provide a 5" wide pipe cover assembly, color matched to the unit. The cover shall be the depth of the unit, height to suit.

### **13. SUPPLY AIR FANS / MOTORS, CONDENSER FANS / MOTORS**

The fan shall be a direct drive centrifugal type with a three speed PSC motor mounted on rubber isolation grommets. The motor voltage shall be \_\_\_\_V / 1/ 60 Hz. All models shall have two supply air fans and two condenser fans.

### **14. OUTDOOR / RETURN AIR MIXING DAMPERS**

The outdoor and return air dampers shall have airfoil section aluminum extruded blades. The dampers shall have neoprene blade tip and jamb seals. Leakage shall not exceed 4 c.f.m. per sq. ft. at 3" W.G. differential pressure, as determined by a recognized testing laboratory.

### **15. FILTERS**

The filters shall be of the manufacturer's standard disposable type.

### **16. EXTERIOR WALL LOUVER**

The unit manufacturer shall provide the wall louver. The louver shall be of heavy gauge steel with 45 deg. blades. The louver shall have 1/2" birdscreen attached to the inner face. The finish on the louver shall be primer coat or a color as per the Architect's instruction. The manufacturer shall provide a wall sleeve to suit the wall thickness, including an air flow separator to prevent mixing of the condenser air intake and outflow.

### **17. POWER EXHAUST (Optional)**

An exhaust control damper shall be installed in the unit and shall modulate in tandem with the outdoor air damper. The condenser fan shall serve as an exhaust fan in the occupied mode.

### **18. CONDENSATE PUMP (Optional)**

A condensate pump shall be factory installed within the unit, behind the return air grille. The head capacity of the pump shall be a minimum of \_\_\_\_ ft.

### **19. LINE VOLTAGE WIRING**

All internal line voltage wiring shall be by the unit manufacturer. A suitably rated remote circuit breaker shall be provided and installed by the electrical contractor.

### **20. INSTALLATION**

The unit ventilator shall be installed plumb. Foam sealing tape shall be installed around the perimeter of the opening in the back of the unit before moving the unit into position against the wall. The exterior louver shall be caulked.

### **21. DDC CONTROLS**

Control items shall be furnished by the controls contractor for factory mounting and shall function as described in the Controls Specification.