

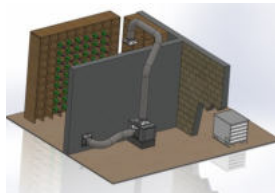


1. Unpackage

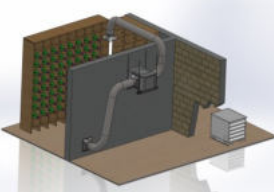
- A. Remove unit from box. Check for any signs of concealed damage, and that all optional equipment has been provided. Contact Air Innovations immediately if components are missing or unit has been damaged in shipping.
- B. Shipment includes:
  - One (1) fan-coil unit
  - One (1) condensing unit
  - One (1) remote interface controller with 50' control cable
  - One (1) 7' clear plastic drain hose

2. Installation—Mounting Locations

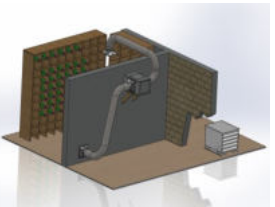
Duct work of Wine Guardian split system fan coil units are typically installed indoors located near the room to minimize the length of ductwork to and from the wine room. Provide a three-foot clearance around the unit for removal of ductwork, or access for unit maintenance. The fan coil unit can be located either above, or below the condensing unit in height keeping any height difference to a minimum.



Floor mount



Wall mount



Ceiling mount

Floor Mounting

- A. Mount the Wine Guardian fan coil on a plywood surface at least 12 inches above the floor to keep it away from water. Allow adequate space for the external drain

Wall Mounting

- A. Provide adequate support on both ends of the unit to accommodate the weight of the system. Angle brackets are available as an option for these types of applications

Ceiling Mounting

A. Construct a structurally sound, level platform to place the unit on when hanging it from the ceiling joists. The SPLIT system is NOT designed to be suspended from the top of the unit; it must support from the bottom.

3. Wiring Thermostat

- A. Unit is supplied with 50 feet (15 meters) of 6- wire, cable with RJ14 type connection to the Remote User Interface controller.
- B. Disconnect cable from fan coil and the Remote Interface Controller. Route the cable to the desired mounting location within the room.
- C. Locate Remote User Interface within the room mid-point on a wall in an area with good airflow and away from any windows or heat sources.
- D. Remove back plate of controller and mark mounting points at desired location.

NOTE: Only use wiring provided by Air Innovations or damage to the unit may occur.

- E. Drill two 1/8" (3 mm) holes and insert anchors within mounting surface. Anchors may not be required if securing to wall studs or racking.



- F. Provide 1¼" (32 mm) diameter hole within wall or racking structure to provide clearance for RJ14 connection at back of controller.
- G. Connect cable to the back of the remote user interface and attach backing plate to wall using two screws supplied with remote user interface.
- H. Re-attach front cover plate by snapping it into place on the back plate.
- I. Reconnect cable to side of SPLIT Series unit at either COMM1 or COMM2.

NOTE: Splitter devices (if being used for multiple sensors) must be mounted at the unit. DO NOT mount the splitter device at the back of the Remote Interface Controller or to the back of the remote sensor as this WILL cause equipment failure.

4. Condensate Drain

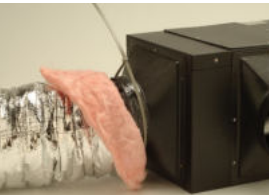
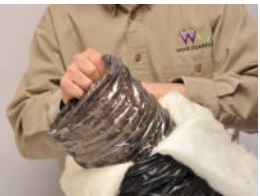
- A. Wine Guardian ducted systems are supplied with 7 feet (2 meters) of ½" (13 mm) inside dimension clear tube.
- B. Connect clear plastic tube to barbed fitting at unit and route to nearest open floor drain, sink or condensate pump.



NOTE: Wine Guardian units have an internal trap. Do not double trap piping. Failure to comply may lead to water leaks and possible water damage to surrounding mounting area. Install drain line with a ¼ inch per linear foot (1.25 cm/linear

5. Installing Ductwork

- A. The split units are supplied with one (1) supply duct collar and (1) return duct collar as standard equipment.
- B. Install ductwork by folding back the insulation to expose the wire reinforced vinyl duct. Slip the ductwork over the end of the duct collar and fasten using two tie wraps supplied with the kit making sure the ductwork is tight on the duct collar.
- C. Fold the insulation back over the duct and duct collar and secure to collar using duct tape.



6. Installing the Condensing Unit

- A. A minimum of 12 inches is required around the perimeter of the condensing unit for proper airflow across the unit.
- B. Keep horizontal & vertical distances between the indoor and outdoor section as close as possible to minimize refrigerant charge required. Maximum combined line length, including lift, run and bend should not exceed 100 ft. (30 meters). Maximum lift = 35 ft (11 meters)
- C. Provide a one-inch pitch in suction and liquid line toward the evaporator for every 10 feet of run to prevent any refrigerant that condenses in the suction line from flowing to the compressor or when the unit is off.



MODEL	LIQUID LINE (OD)	SUCTION LINE (OD)
D025	1/4"	3/8"
D050	1/4"	1/2"
D088	3/8"	1/2"
D200	3/8"	7/8"

- D. Prevent dips, sags, or other low spots that will trap refrigerant oil.
- E. Evacuate and leak check system by purging the dry air charge from the unit by opening the liquid line shut-off valve or removing the liquid line outlet fitting or plug, whichever is applicable for your unit. Connect the suction and liquid lines to the
- F. Pressurize and leak test system including the condensing unit, evaporator and all connecting tubing, fittings, and brazed joints using the intended operating refrigerant for leak testing. A pressure equal to the low side test pressure marked on the unit nameplate is recommended for leak testing.
- G. Evacuate the system to hold at 500 microns and break the vacuum with refrigerant. Charge the system with the correct amount of refrigerant and mark the amount, with a permanent marker in the space provided on the unit nameplate. See chart on left

Wiring the Auxiliary Contact

- A. Connect primary power to the condensing unit and wire as per the wiring schematics found on page 10-17 of the Wine Guardian Split System Manual.
- B. Run 24 volt power wires from the two position terminal block on the fan-coil on the fan coil to the field installed enclosed contactor (in plastic housing) to be placed on the condensing unit, or somewhere adjacent that is easily accessible.
- C. Turn onpower to the condensing unit 24 hours prior to system start-up to allow crankcase heater to warm up



24 volt contactor enclosure



6. Turn Unit On

- A. Turn the ON/OFF switch to the "ON" position. Green LED lit when unit is on . The Remote User Interface is preset to a room temperature of 55°F (13°C).
- B. Press the "Up" arrow once. The display will show the existing temperature setpoint. Press the "up or down" arrow buttons to adjust the temperature to the desired setpoint
- C. The system will turn on after a 5-minute time delay and the cold air section will start to deliver cold air. Contact Air Innovations if the system fails to turn on.



Cheers!  
Enjoy your newly installed  
Wine Guardian Ducted Wine Cellar

