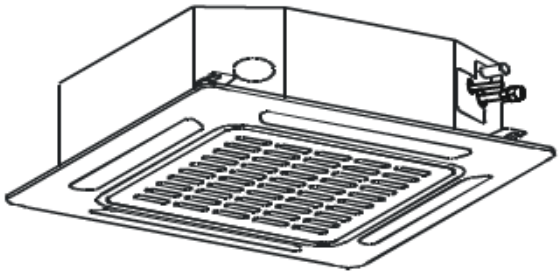
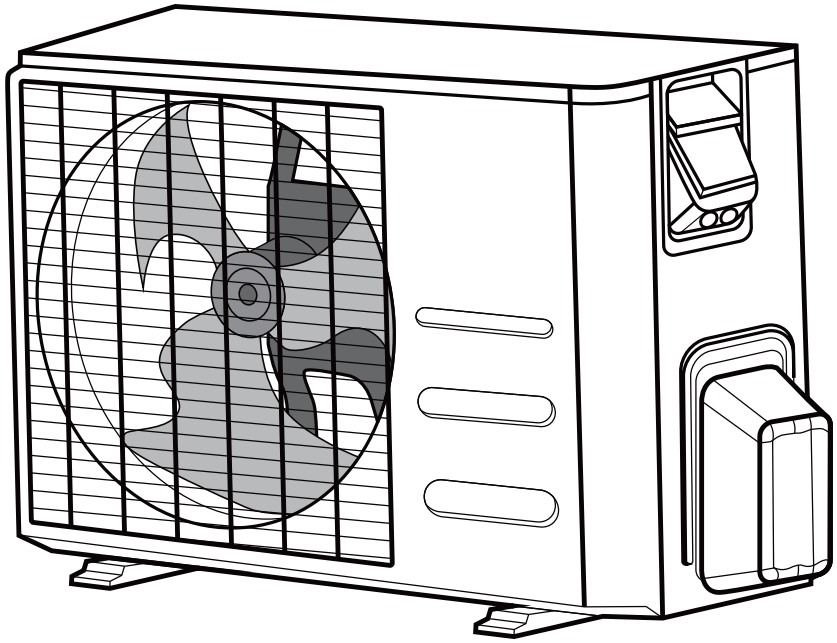
S4 CEILING CASSETTE QUICK INSTALL GUIDE

S4 Ceiling Cassette Mini-Split for Heating & Cooling





MODELS

BMY9HH21CC

BMY12HH22CC

BMY18HH20CC

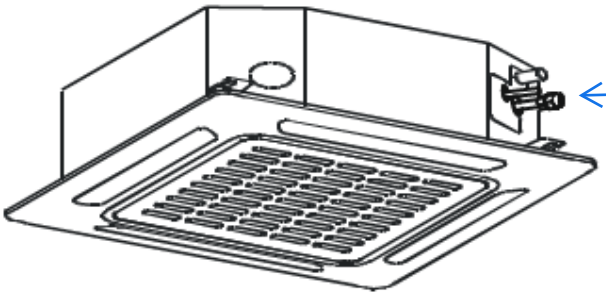
LISTED

AHRI CERTIFIED™ www.ahridirectory.org

PREP FOR INSTALL

1

Your indoor air handler has been pre-pressurized with nitrogen.



- Locate the copper tubes on the side of the indoor unit.
- Loosen the cap on either of the 2 copper tubes.
- You should hear a hissing noise, which is the release of this harmless gas.
- Allow all of the nitrogen to escape the line.
- Put the the cap back on securely, and repeat this process for the other connection.

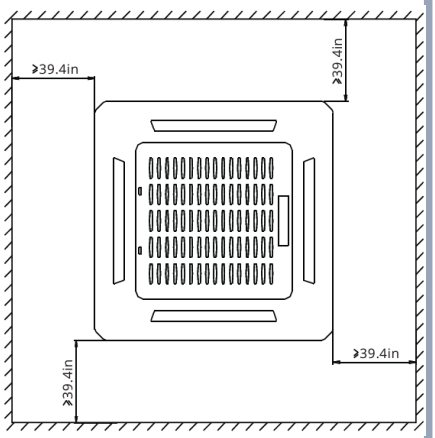
If you don't hear a hissing noise when loosening the cap, please call us at 800.865.5931.

2

These units are designed to be installed into drop ceilings or recessed into flat ceilings with joists that are 24 inches on center (22.5 inches apart).

Maintain at least 39.4 inches of clearance on all four sides of the indoor unit.

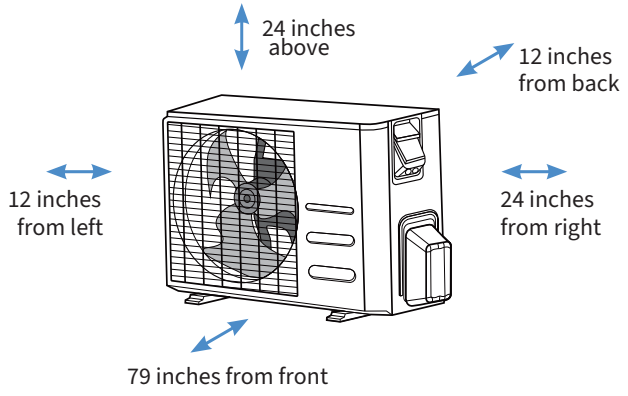
It is recommended to install the indoor unit 8-10 feet above the floor.



You must install this flat. They aren't suitable for pitched ceilings. **You must have accessible space above the air handle**r to install these units.

3

Choose the location to place the outdoor unit.



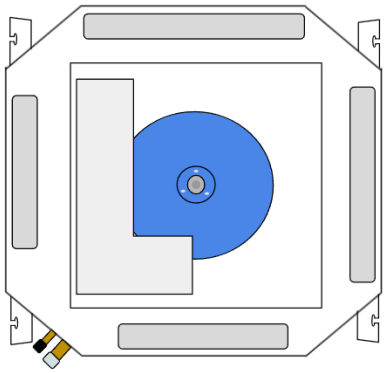
If used for heating, it is recommended to raise the outdoor unit to allow for proper drainage and keep it clear of expected snowfall (if applicable).

Maintain listed clearances

INDOOR UNIT

4

Carefully inspect the indoor unit. Make sure that no accessories are in the blower compartment.

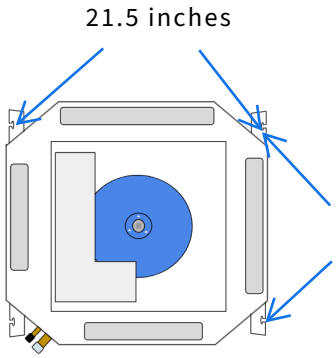


Blower compartment

5

Key measurements.

Note the spacing between where the threaded rod will connect to the indoor unit.

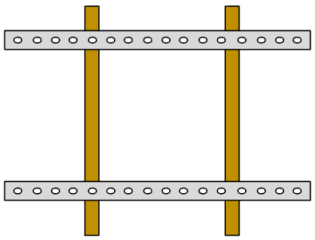


You will need to mirror this spacing when suspending the threaded rod.

6

Prepare the hanging support structure.

Bottom up viewpoint.

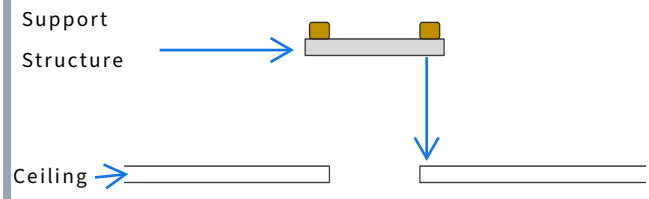


Above where the indoor unit will be installed, you need to use unistrut or 2x4 lumber to create a **solid, secure, level** structure for the threaded rod to install into.

Not all hanging hardware comes the system.

7

Measure the distance from the support structure to the ceiling and add 12 inches.

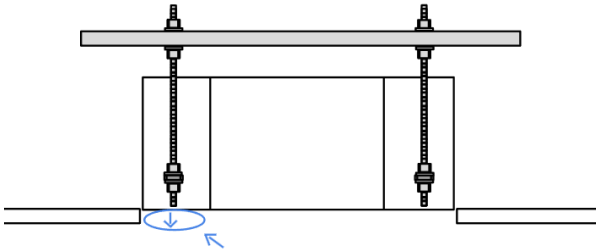


Select 3/8 inch threaded rods that match the last measurement x4 . This will allow for flexibility during the installation. It is common to cut the threaded rod to size using a hacksaw or sawzall.

8

Hang the indoor unit. This is a 2 person job.

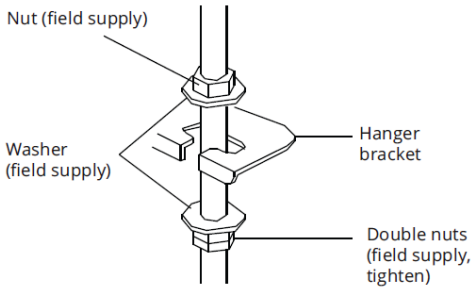
The bottom of the indoor unit needs to be installed level, with a 0.9 inch gap between the bottom of the unit and the interior of the ceiling.



0.9 inches

9

Hang the indoor unit.

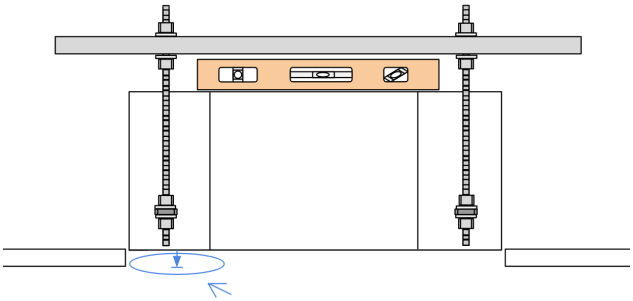


Attach the hanger brackets to the threaded rods. Be sure to fix it securely by using a nut and washer from the upper and lower sides of the hanger bracket.

10

Adjust the unit to the right position for installation.

Verify you have the 0.9 inches from the bottom of the indoor unit to the interior of the ceiling.



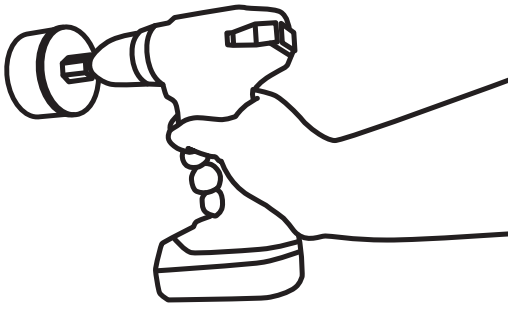
0.9 inches

Ensure that the unit is level. Failure to do so can cause operational issues and condensation leaks.

11

Drill hole through the wall, maintaining a slight pitch downwards to aid outside drainage.

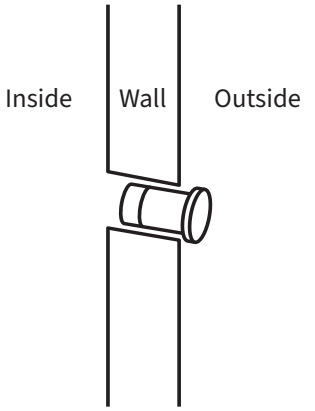
Drilling a vertical hole and feeding the copper tubing, along with the 14/4 stranded wire, through the soffit is also a common installation practice for these models.



Hole must be free of electrical wiring, plumbing, or other obstructions.

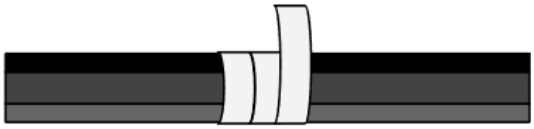
12

Insert wall sleeve through the wall with the flange facing the exterior. A wall sleeve isn't typically needed if drilling a vertical hole into a soffit.



13

Bundle the copper tubes and connection wires together, keeping drain line on bottom. Feed the bundle through the wall to the outside.



Leave enough copper tubing and 14/4 stranded wire to easily connect to the indoor unit.

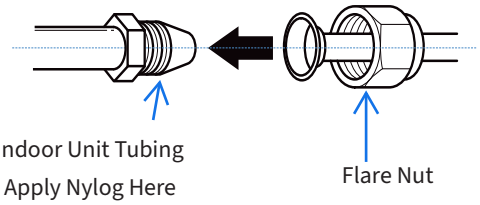
Use PVC electrical tape to secure the bundle. Do so every 5 feet.

The minimum copper tubing is 10 feet. If that length is longer than needed, reposition the outdoor unit or horizontally coil the refrigerant lines after connection.

14

Connect the the copper tubes to the indoor unit.

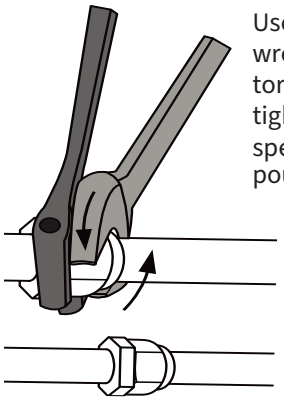
Remove caps from the line set connections on air handler.



Apply a couple of drops of Nylog sealant to the male side of the flare connection.

15

Secure the copper tubing to the indoor unit.



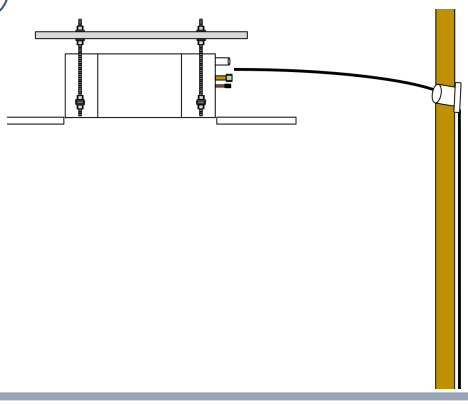
Use a standard wrench and a torque wrench to tighten to the specified foot pounds of torque.

Do not over-tighten

16

Bend the copper tubes on the exterior of the wall towards the outdoor unit.

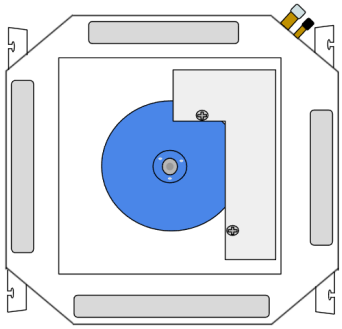
Do not kink the line set.



With lines larger than 3/8 inch OD, use of a tubing bender is recommended.

17

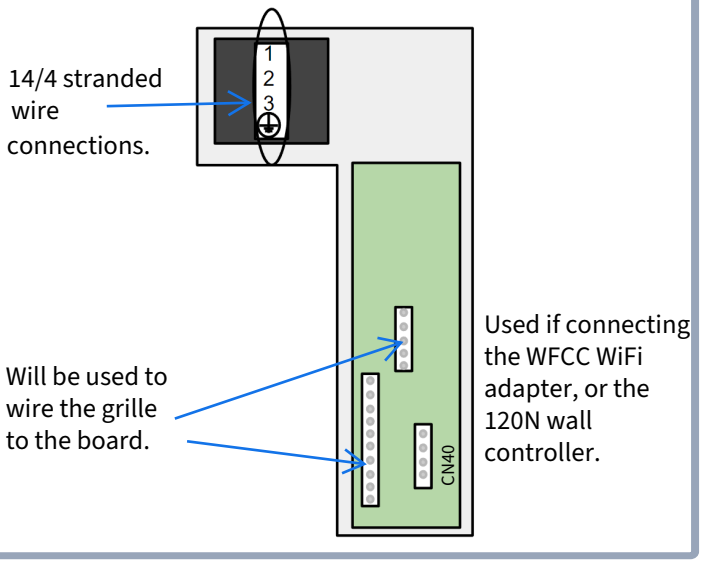
Expose the wiring connections.



Remove the two screws holding the board cover. Then remove the cover.

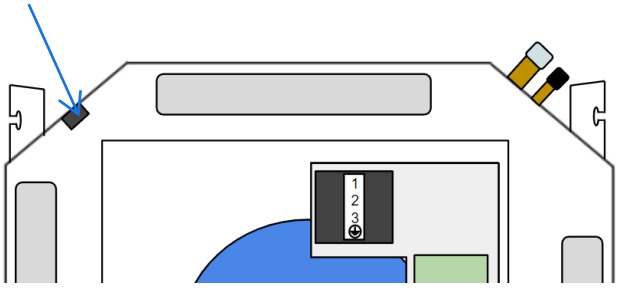
18

Key wire locations on the board.



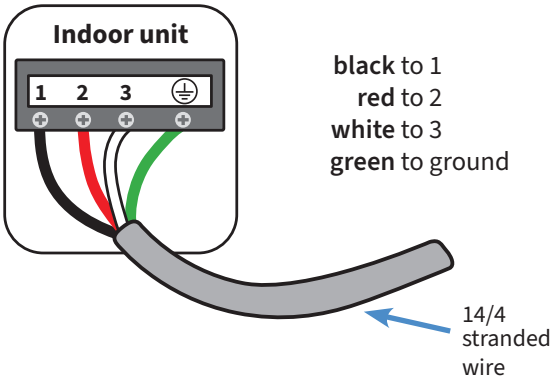
19

Feed the 14/4 stranded wire through the opening in the cabinet.



20

Make the wire connections. You must use 14/4 stranded wire.

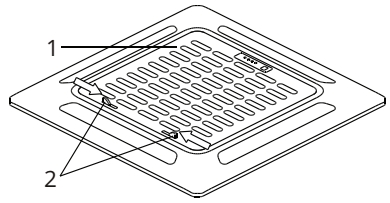


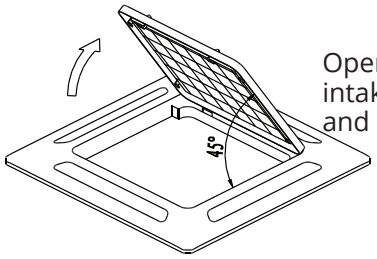
21

Detach the intake grille.

Slide the 2 hooks toward the middle of the grille.

1 - Grille
2 - Grille hook



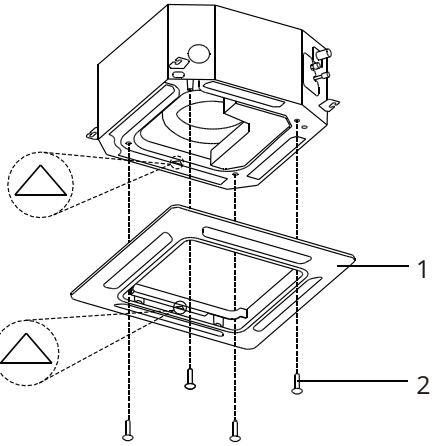


Open the intake grille and remove.

22

Install the decoration panel.

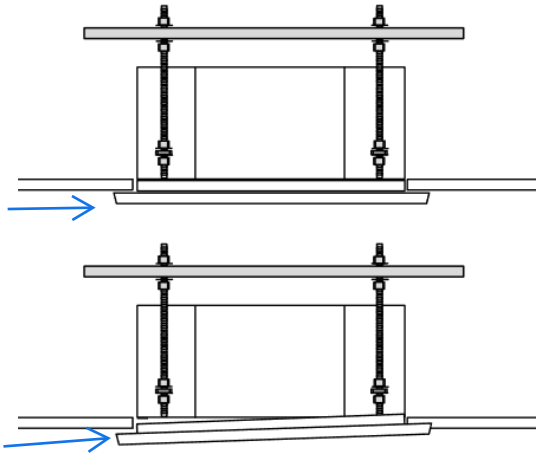
•Align the indicate △ on the decoration panel to the indicate △ on the unit .
•Attach the decoration panel to the unit with the supplied screws as shown.



1 - Decoration panel
2 - Screws (M5) (supplied with the panel)

23

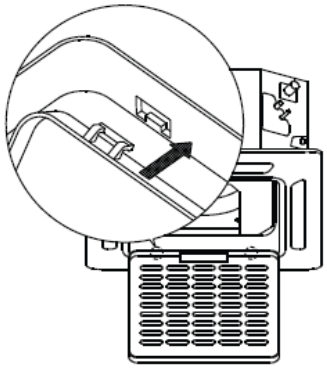
Verify that there is no space between the unit body and decoration panel. Failure to do so can lead to condensation issues.



24

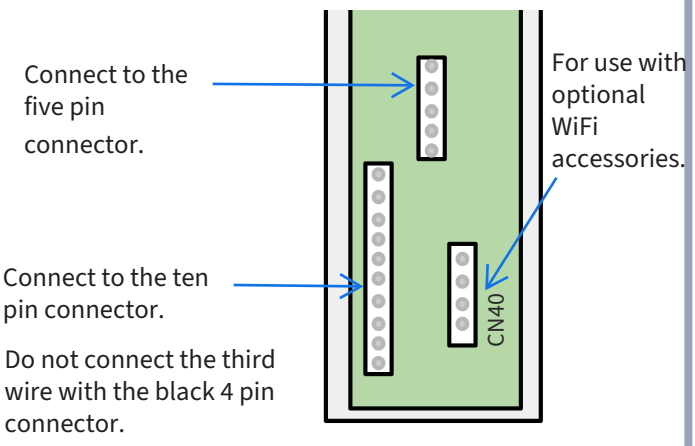
Mount the intake grille.

Ensure that the grille is properly seated in the groove of the panel.



25

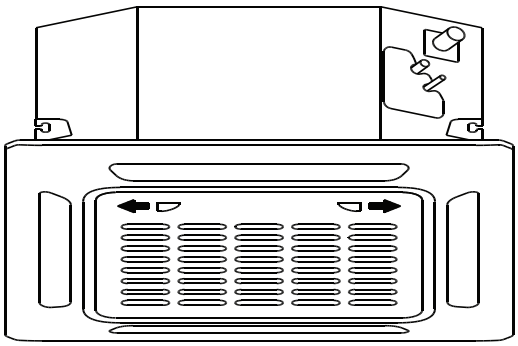
Connect the 2 wires of the decoration panel to the main board of the unit. Leave the third wire detached.



Reconnect the board cover.

26

Close the intake grille, and close the 2 grille hooks.



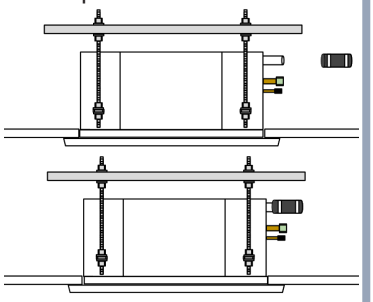
27

Connect the condensate drain line.

Use 3/4 inch PVC

These models have a factory installed condensate pump with a float switch designed to pump the water up to 18 inches vertically. After the up to 18 inches of rise, you must gravity drain. A minimum downwards pitch of 1/4 inch per foot or greater is recommended.

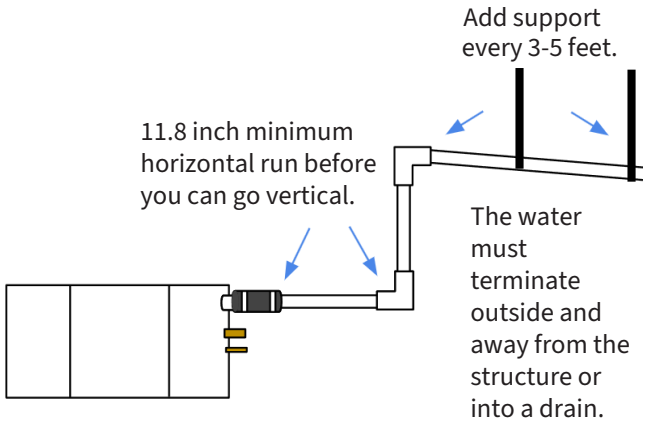
Use the included short drain adapter. discard the long adapter.



Seat the adapter as far on the drain connection as you can. Use the included metal clamp to secure the adapter

28

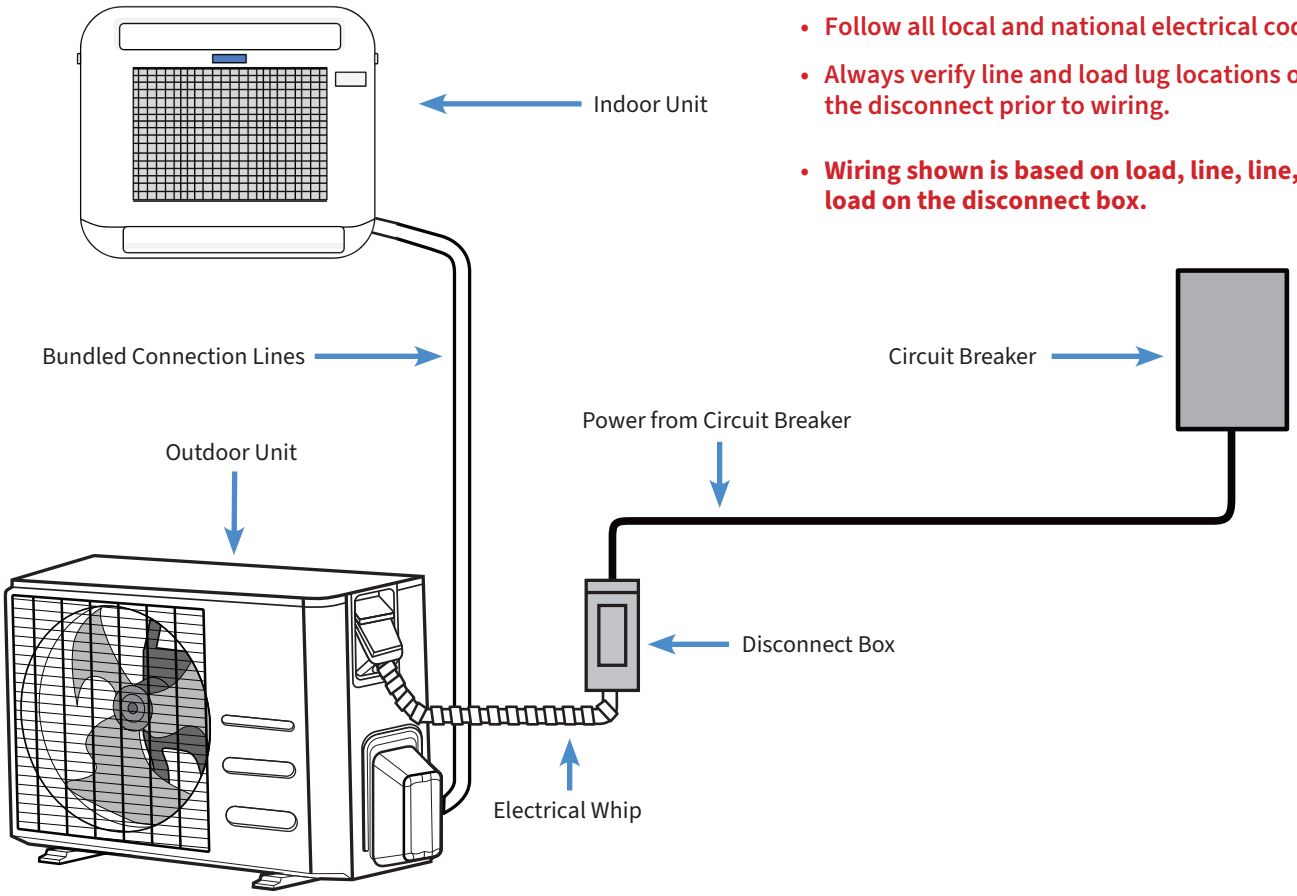
Connect the 3/4 inch PVC.



Use PVC cement to attach the 3/4 inch PVC to the adapter and to assemble the drain.

ELECTRICAL

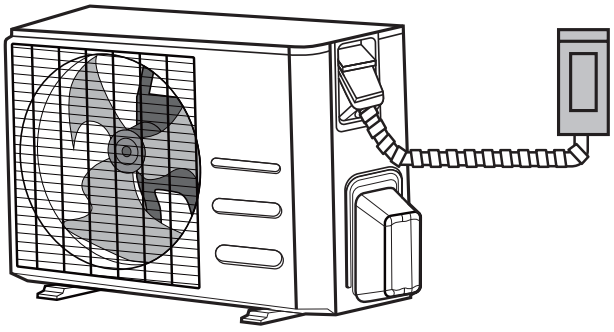
- Any high voltage electrical installation should be performed by an electrician or contractor.
- Make sure the electricity is off.
- Follow all local and national electrical codes.
- Always verify line and load lug locations on the disconnect prior to wiring.
- **Wiring shown is based on load, line, line, load on the disconnect box.**



29

Using correct size breaker and wire, run the power to the disconnect box mounted beside the outside unit.

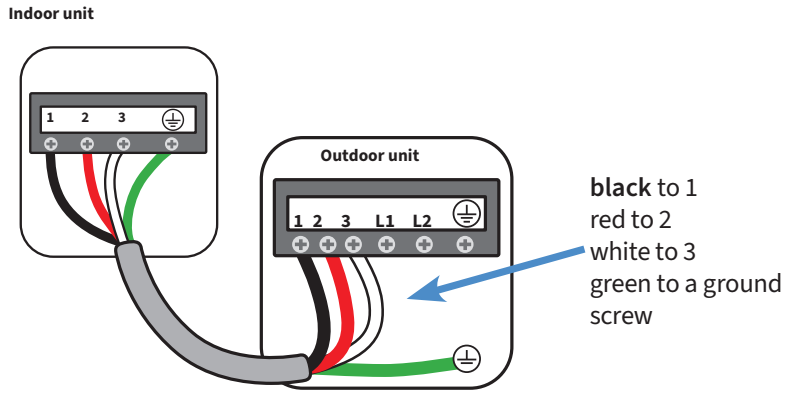
- Connect the indoor unit to the outdoor unit.
- Connect the outdoor unit to the disconnect box with the electrical whip.



See next page for wiring diagrams

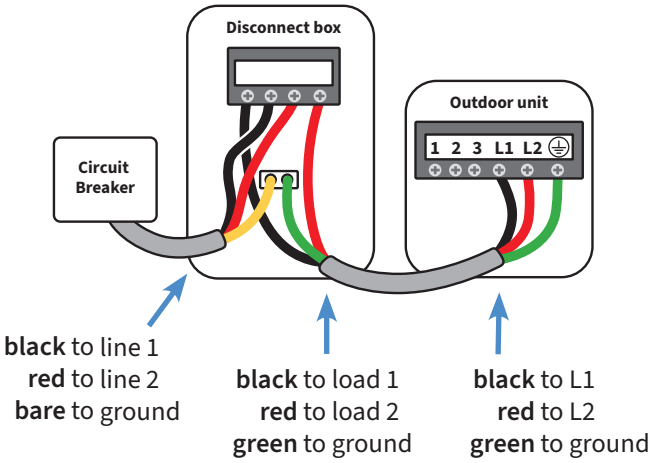
30

Connect indoor unit to the outdoor unit.



31

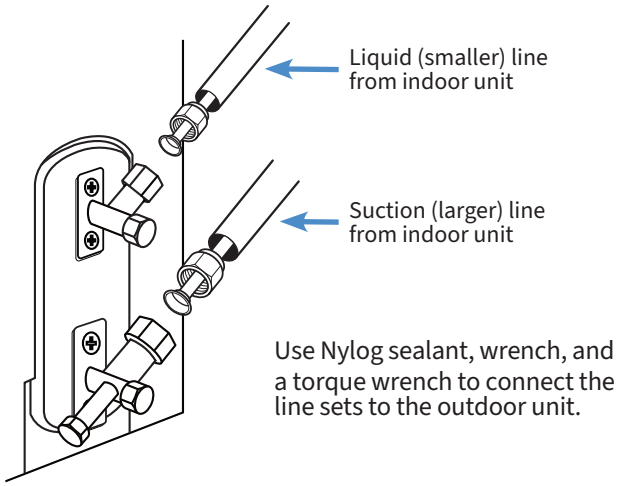
Connect outdoor unit to disconnect box.



Wiring shown is based on load, line, line, load on the disconnect box.

32

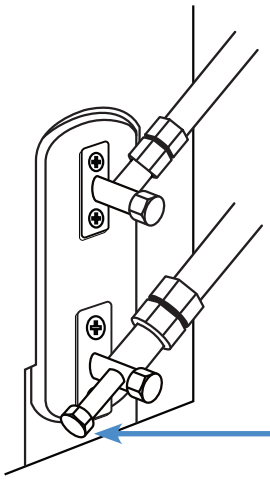
Remove caps from the outdoor unit .



Use Nylog sealant, wrench, and a torque wrench to connect the line sets to the outdoor unit.

33

Remove cap from the service port on the suction line and perform a pressure test to 300 - 350 psi from the outdoor unit.



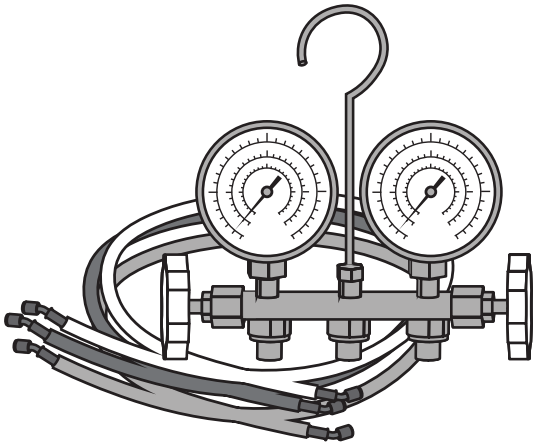
- Spray all joints with a soapy water solution and look for bubbles.
- If no bubbles are present, pull a vacuum down to 500 microns or lower.

After a successful pressure test and vacuum, reconnect the back corner of the cabinet of the indoor unit.

Warning: Refrigerant handling should be done by a trained professional.

34

After creating the vacuum, close the valves to the vacuum pump.

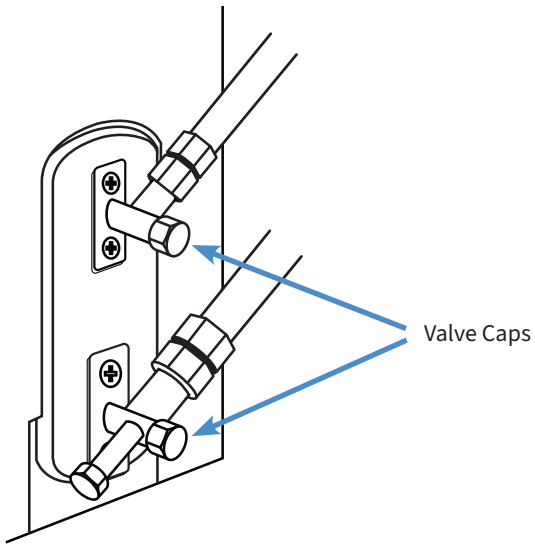


Add refrigerant if the line set used is more than 25 feet in length.

- Add 0.16 oz per foot past 25 if using 1/4 inch OD liquid lines (In 0.75, 1.0, and 1.5 ton models)
- Add 0.32 oz per foot past 25 if using 3/8 inch OD liquid lines (In 2.0 ton models)

35

Open horizontal facing valve caps.



- Use a 5mm allen wrench (hex key) to fully open the lower and then upper valve, releasing the refrigerant into the system .
- Replace caps over open valves.

35

Power up and start the system.

Please call 1.800.865.5931 if you have any questions prior to or during the installation process of your Blueridge Mini-Split System.

Because of the Blueridge promise for continuous product innovation and improvement, some specifications and instructions may change without notification.