JanAire, Inc.

7038 East 125th St. Northfield, MN 55057

(507) 645-4524 FAX: (507) 663-6053
800-246-5387
Website: www.janaire.com E-mail: sales@janaire.com

Please read completely before you begin!

FOR YOUR INFORMATION

1) All JanAire systems are shipped with gutters that measure 8 feet 1 inch. If you have ordered a 63-foot system, you will need to cut 1 foot off a top gutter and 1 foot off a bottom gutter to install a 63-foot system. If you ordered a 75-foot system, you would have 9 gutters plus a 3-foot section of gutter on top and bottom which you would get by cutting two 3 foot sections from a standard 8' gutter.

2) You must include an additional 8 inches to the overall length of your JanAire system. If your system is 99 feet in length, the installed length would measure 99 feet 8 inches (the 8 inches is where the motor shroud is attached to the motor mount end panel). Keep this in mind so that the motor shroud and cap do not "run" past the end of your building, or when butting up to an inside corner such as an alley.

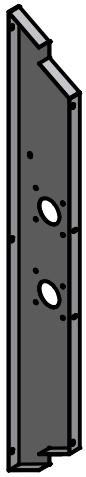
3) If you experience a problem with the poly NOT opening evenly, check the distance from the guides to the bird barrier. The measurement BETWEEN the guides and bird barrier should be no more than 6 inches. If it measures MORE THAN 6 INCHES, in width, the poly might fold over. If it is LESS THAN 6 INCHES, the poly may not slide effectively. If it is too close; i.e., the poly does not drop, go to this area and loosen the nuts & bolts on the guides, spread the gutters apart, and retighten the bolts.

4) Correct sequence for the folds of the PolyVent. Your PolyVent should fold "accordian" style. Standing outside your building, when the PolyVent is inflated, you should be able to press your hand into the first fold at the bottom of the PolyVent. The second fold from the bottom should not let your hand be inserted into the fold; i.e., the fold is on the side of the guides. The third fold from the bottom should let your hand be inserted into the fold. This is accordian style. If your PolyVent does not fold this way, you will need to "turn" the tubes so that they fold in the correct sequence. Usually if the bottom tube is positioned correctly, the rest of the tubes will assume their proper position after a short period of operation; i.e., it needs to cycle up and down for a couple of days.

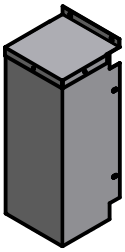
Questions? Call us - We will be glad to help!

PART NAMES FOR JANAIRE POLYVENT SYSTEMS

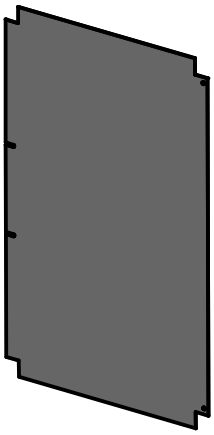
(parts shown at 1:20 scale)



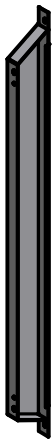
Motor Mount End Panel
1 per unit



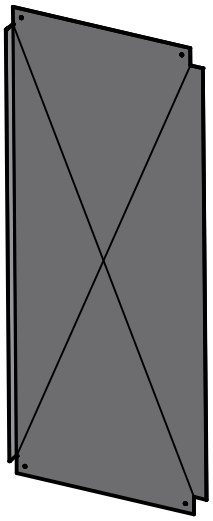
Motor Shroud & Cap
1 per unit



Hose Cover
1 per unit



Return Panel
1 per unit

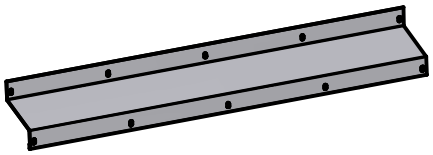


Front Panel
1 per unit

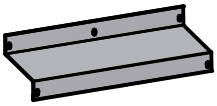
Standard End Panel
1 per unit

Front Guide

Econo Guide

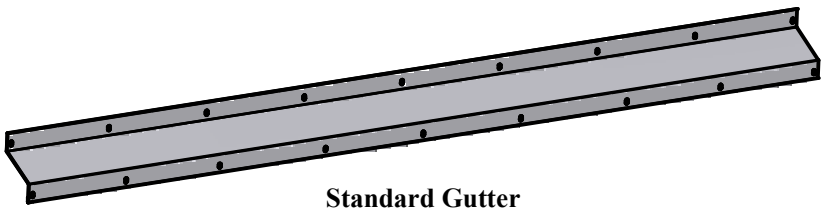


Econo Gutter
4' long



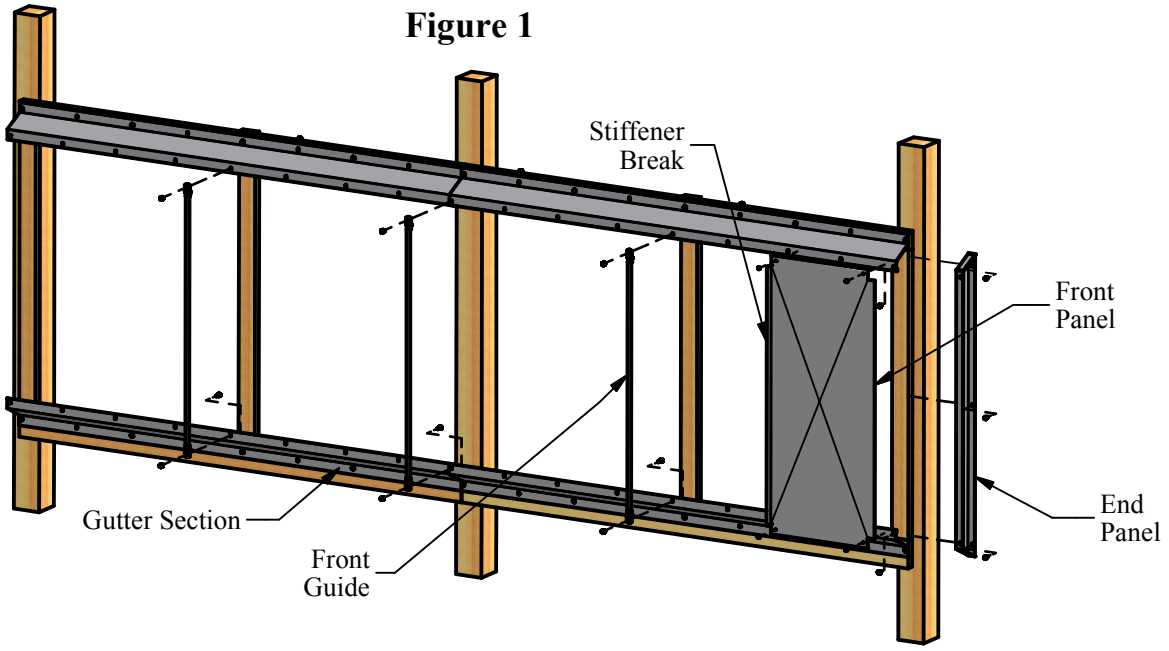
2 Ft. Gutter
2' long

Center Gutter I-Beam
(end view) 8' 1"
Stacked Units Only



Standard Gutter
8' 1" long

Figure 1



Basic Frame Description

Gutter Sections: 8'1" long gutter sections are punched at 1'0" centers. The gutter design is the same for the top and the bottom, with the bottom gutter inverted to hold the PolyVent.

End Panels: One end panel required per unit. It is flanged out (see Figure 1) so that bolting is easier and there are no bolts protruding into the working area of the PolyVent.

Front Panels: One front panel required per unit. Front panels are interchangeable left or right with the stiffener break positioned as shown in Figure 1.

Front Guides: Guides are installed at 4'0" centers. One on each joint and one centered between each joint.

Rear Guides: When installing PolyVent on a building of pole construction, a 2X4 must be added to the rear of the vent rails directly opposite the front guides. This supports the bird barrier, and improves the operation of the PolyVent.

Pole Framing

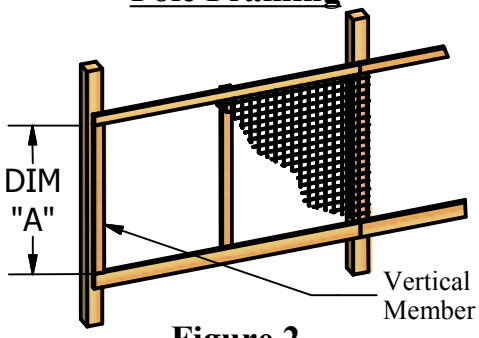


Figure 2

Dimensions for JanAire Units are on page 13.

Stud Framing

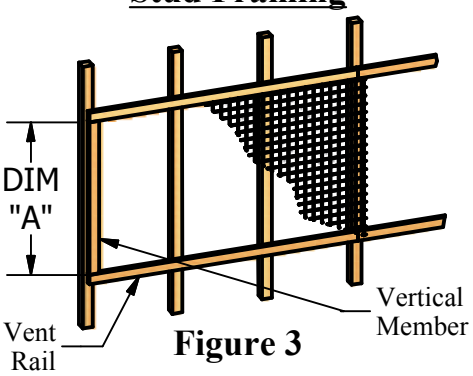
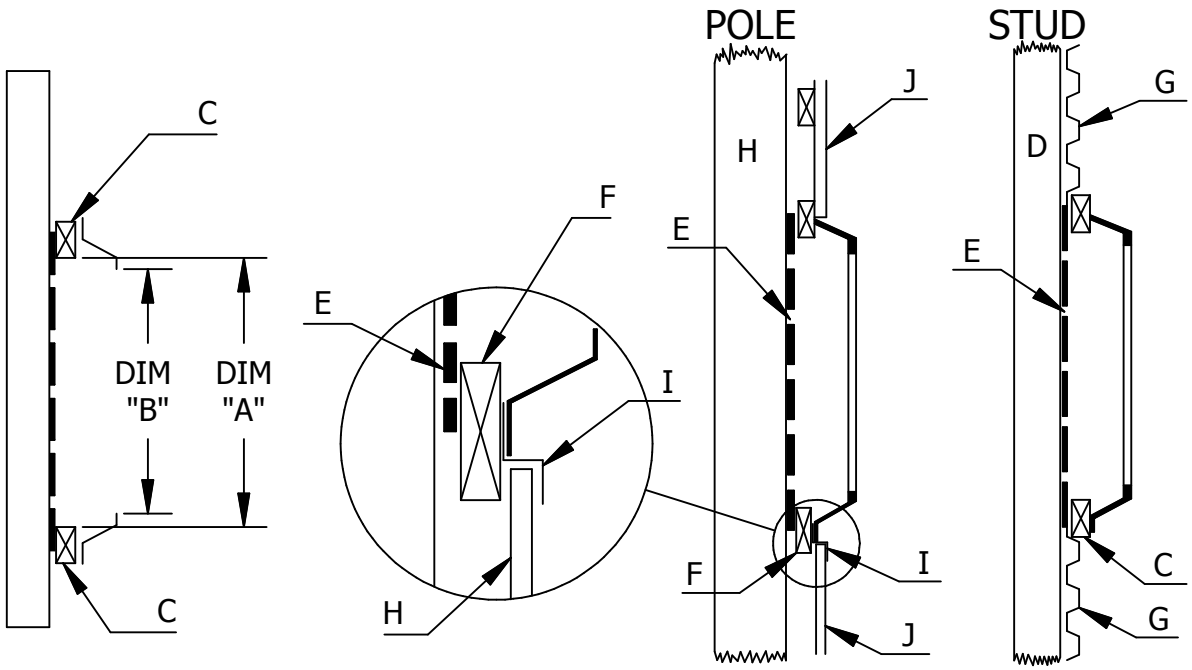


Figure 3

NOTE: BIRD BARRIER IS BEHIND VENT RAILS ON FACE OF STUDS OR POLES.
We recommend that you secure the bird barrier only along the top and bottom edge. Occaisonally a few fasteners are needed in the face of the barrier if you are using 14 guage wire or on turkey or dairy barns to keep the barrier from buckling.

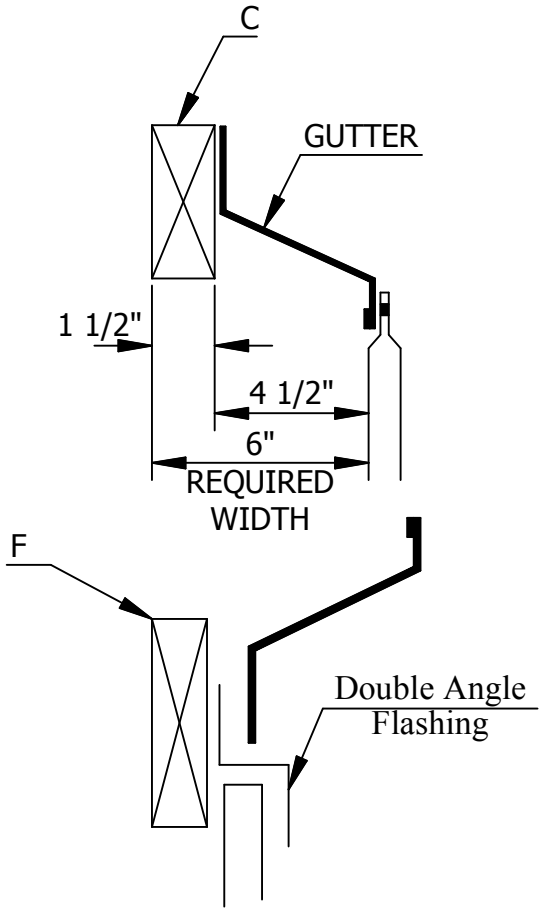
Step #1
Installing Vent Rails:
When 2X4 or 2X6 stud framing is used, it is necessary to install vent rails on the building in order to enable the PolyVent gutters to be hung in place. The rails should be mounted to the building in any appropriate manner. Note on Figure 3, when the horizontal vent rails are installed, you must install two vertical members on either end. This will enable you to attach the frame end panels. On pole construction, the normal wall purlins can be used as vent rails. Use a 2X4 vertically to act as a rear guide directly behind the front guides to support the bird barrier.



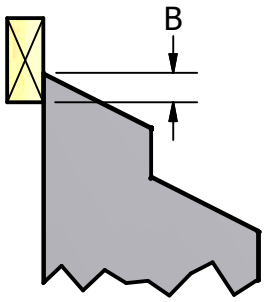
PolyVent	DIM "A"	DIM "B"
2'0"	1'8" or 20"	1'2"
3'0"	2'8" or 32"	2'2"
4'0"	3'8" or 44"	3'2"
5'0"	4'8" or 56"	4'2"

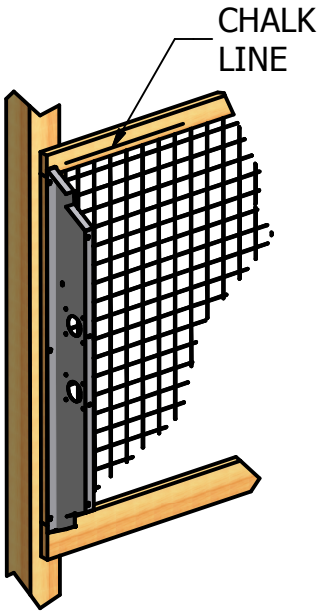
NOTE: There is about 1/2" of width adjustment in the frame due to the 1/2" slotted holes in the gutters and guides. Spreading the outside lip of the gutters apart spreads the width out--bringing the lips together decreases the width.

C - Vent Rail 2X4
D - 2X6 or 2X4 Stud Wall
E - Smooth Barrier
F - 2X6 Vent Rail
G - Steel Siding in Horizontal Position or Plywood
H - Pole
I - Double Angle Flashing*
J - Steel Siding in Vertical Position



*Rainwater can get behind siding if double angle is not used when steel siding runs vertical on pole construction.



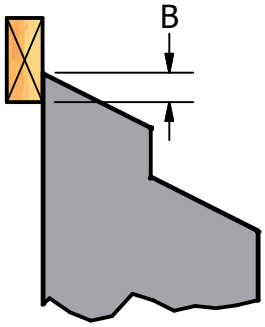


Step #2

Note: Flanges on the motor mount MUST be facing to the "outside" of the unit.

Begin by mounting the motor mount end panel. Center the motor mount end panel on the vertical vent rails equal distance on the top and bottom at the drive end of the opening, then fasten securely.

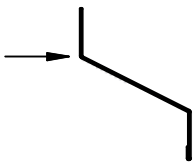
Note: Motor mount end panel is centered when FIGURE B is the same measurement at the top and bottom.



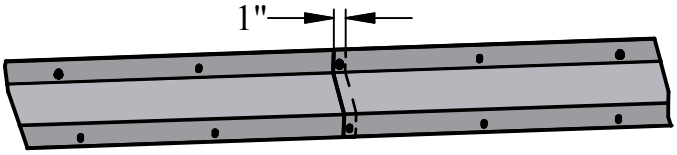
Measure distance B (diagram at right). Use this same measurement at the opposite end of the opening. Snap a chalk line between these points.

Step #3

Line up this bend of the gutter with the line you snapped.



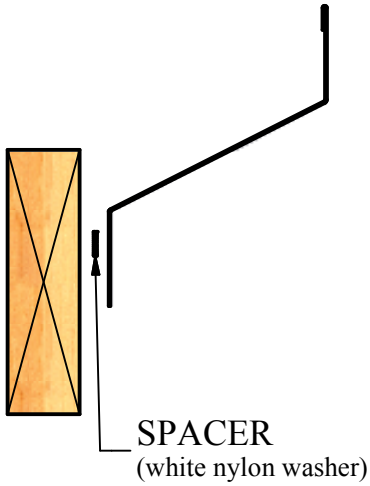
Attach the top gutter flush with the outer edges of the motor mount end panel, using screws or nails in every OTHER hole.



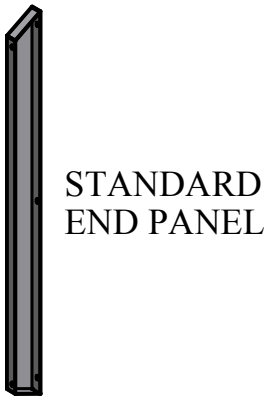
Note: Each gutter overlaps the previous gutter one inch. You MUST secure the gutter leaving the last hole open to allow for the overlapping of the next gutter. Align the last hole with the next gutter and fasten securely.

To attach BOTTOM gutters, begin the first gutter at the motor mount end panel. Use the standard end panel as a measuring device between top and bottom gutters. This will assure correct spacing between top and bottom gutters. Fasten securely and continue with each gutter.

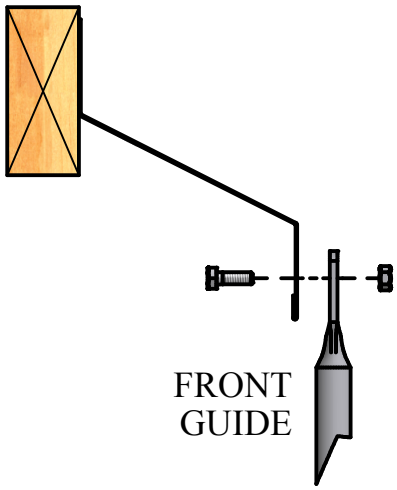
When attaching the bottom gutter, you will use a screw AND A SPACER (white nylon washer) in every other hole to attach to the vent rail. The spacer is installed BETWEEN the gutter and the vent rail for drainage.



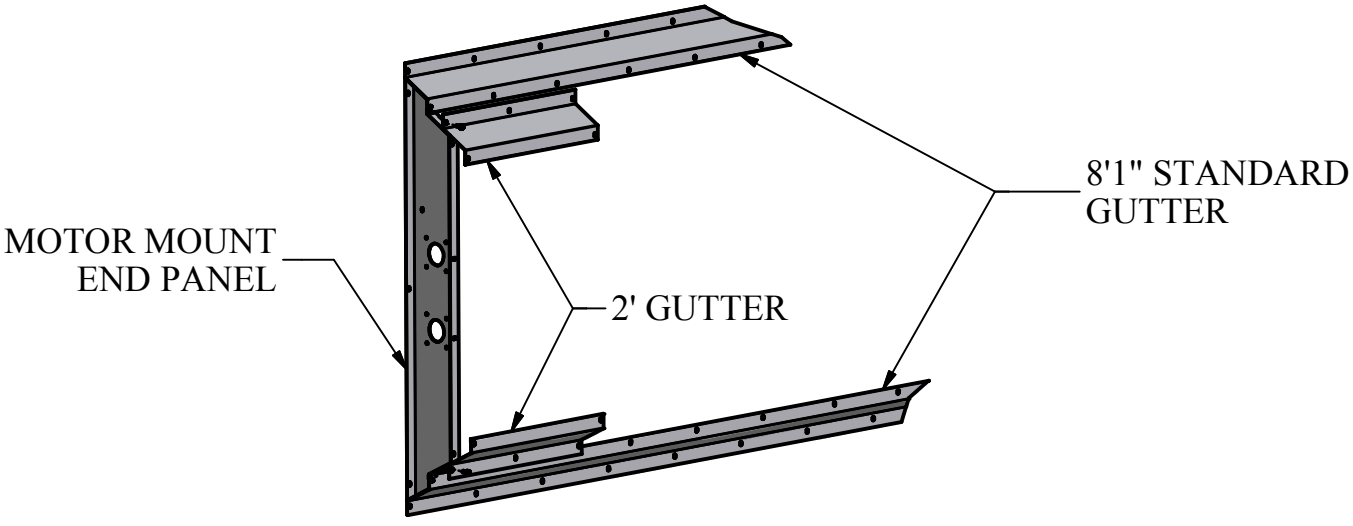
Step #5
After all the top and bottom gutters are in place, attach the end panel at the opposite end of the drive end, with the flange to the outside.



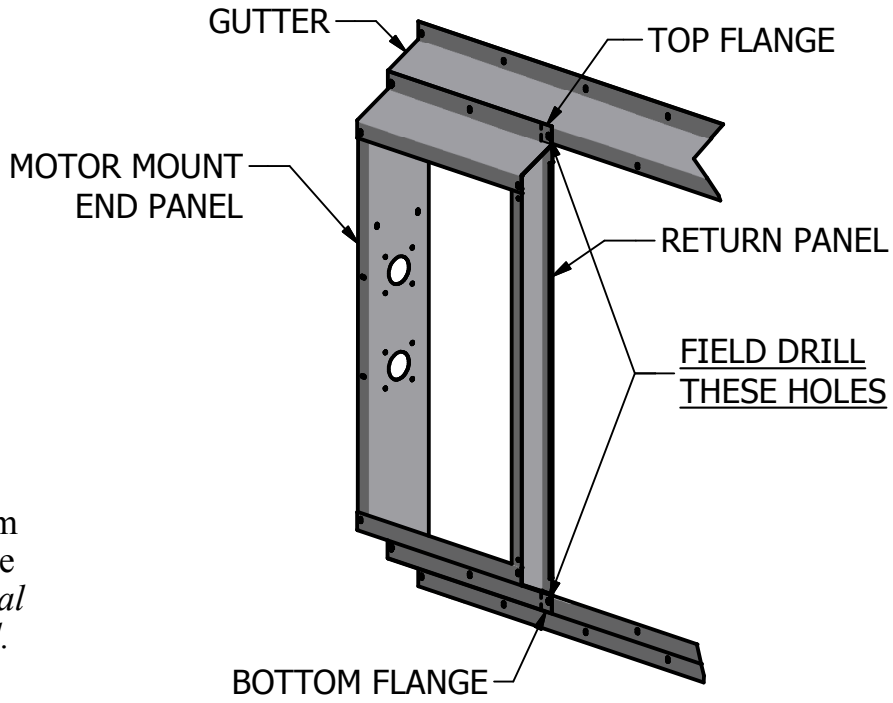
Step #6
Fasten the front guides in place using 1/4" X 3/4" hex bolts. MAKE SURE the threaded ends are protruding to the "outside" of the system. Install guides on each joint AND at 4-foot centers in between.



Step #7
Attach the 2-foot gutter as shown in the bottom figure.



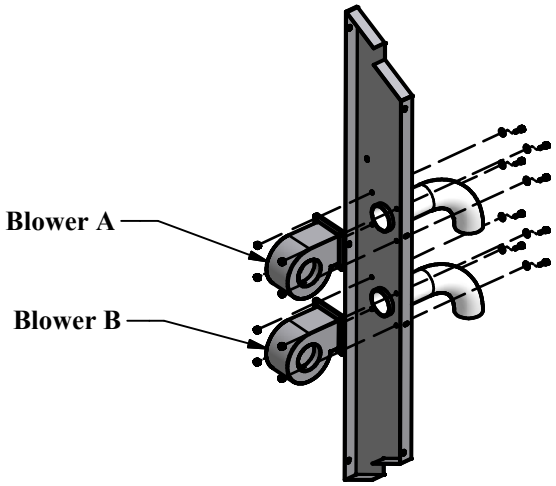
Field Drilling Tip:
Tape the jaws of the vice grip so that you will not mar the finish of the unit.



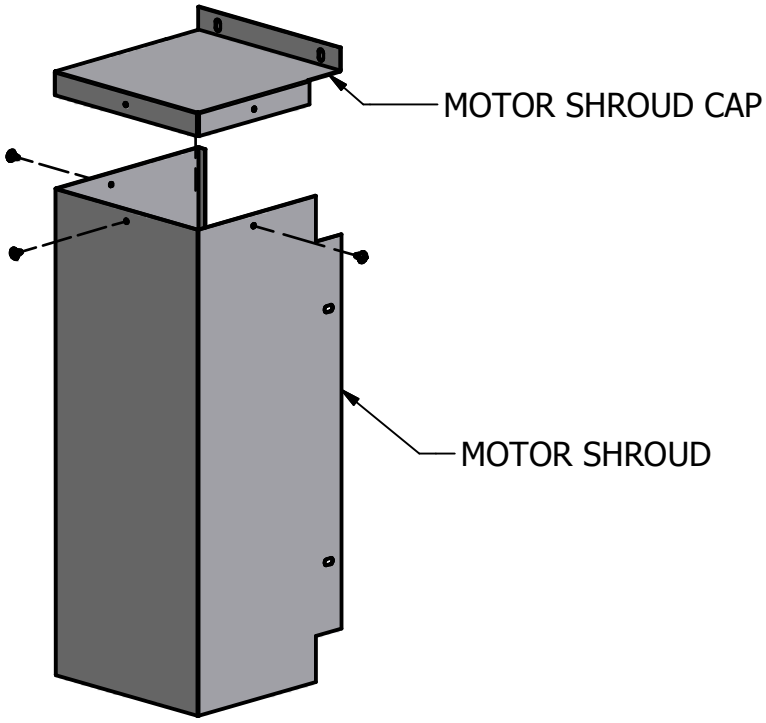
Step #8
Install return panel. The top and bottom flanges of the return panel are inside the gutters. (See figure to the right) *Several of the holes shown must be field drilled.*

Step #9
Installing Hoses and Blowers:
Push 3" diameter flex tube through holes, 2 or 3 turns of wire should be to the "outside" of the motor mount end panel. (Figure B)
Bolt blowers into place. (Figure B)
Note: It is easier to bolt the blower in place if you place the head of the bolt on the "outside" of the blower with the nuts and washer on the "inside" of the unit.

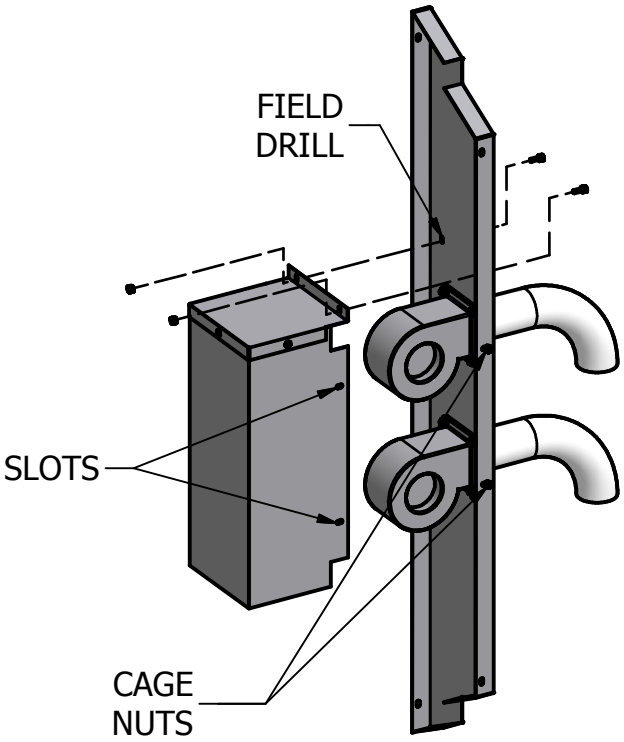
Figure B



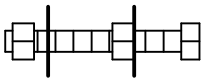
VERY IMPORTANT: *Wiring and sequence of operation of PolyVent*
When wiring thermostats to the PolyVent, it is necessary to ALWAYS OPERATE BLOWER B at the LOWEST TEMPERATURE (i.e. The temperature you want your building to be).
Please note: The PolyVent blowers MUST be wired to the HEAT SIDE of the thermostat. See page 18 for more information.



Step #10
Attach cap to shroud using three #8 tek screws.



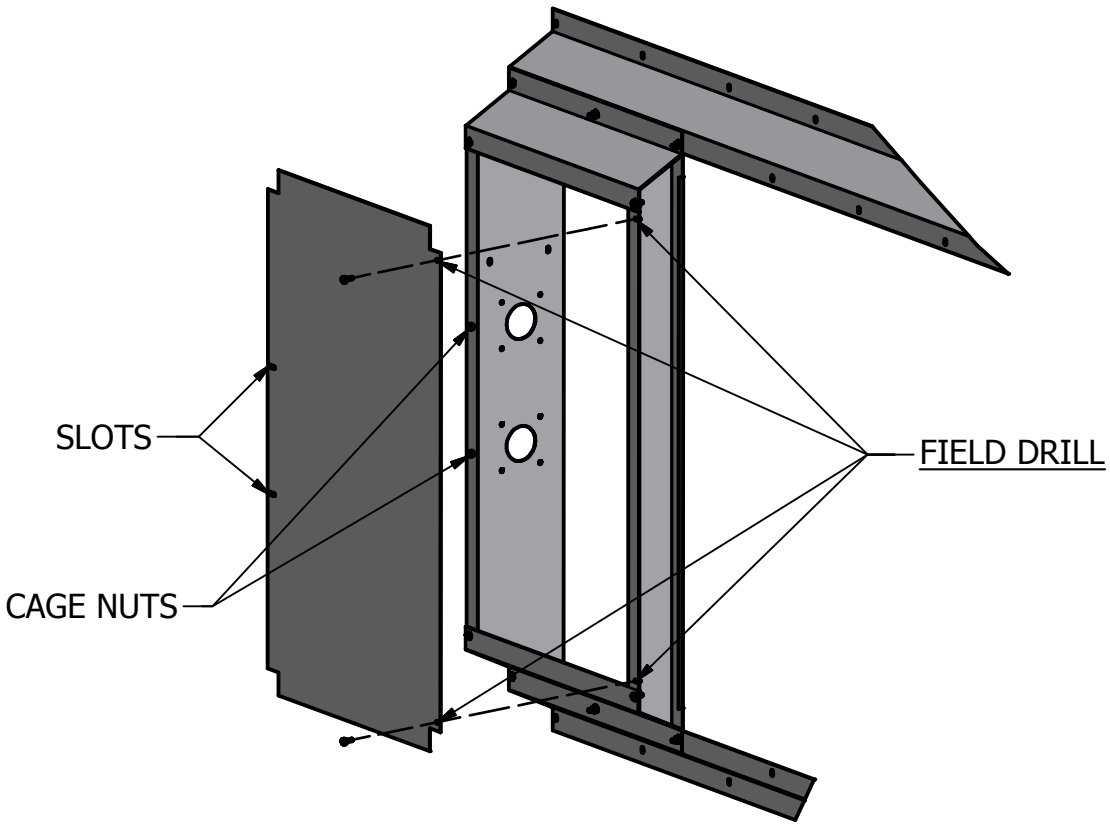
Step #11
Position motor shroud over blowers and locate where to drill holes in motor mount end panel. Place a 1/4" X 3/4" hex head bolt through the hole you just drilled in the panel with threaded end protruding to the OUTSIDE of the unit.

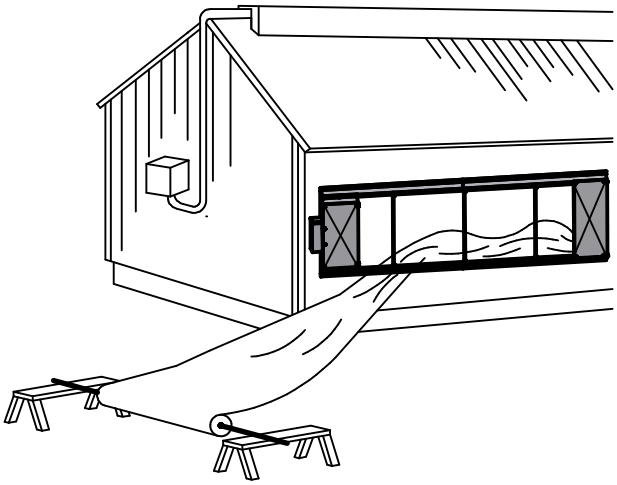


Fasten in place with 1/4" nut. With the motor shroud in position, mark the position of the slots on the outside flange of motor mount end panel. Drill 1/4" holes through the center of these marks and attach cage nuts to motor mount end panel.

Step #12

Position hose cover over opening. Temporarily secure it with vice grips. With the hose cover and shroud in position, mark the position of the slots on the hose cover and cut out slots. Field drill holes, then set aside. After poly is installed, you will use 1/4" X 3/4" hex head bolts to secure it.





Step #13

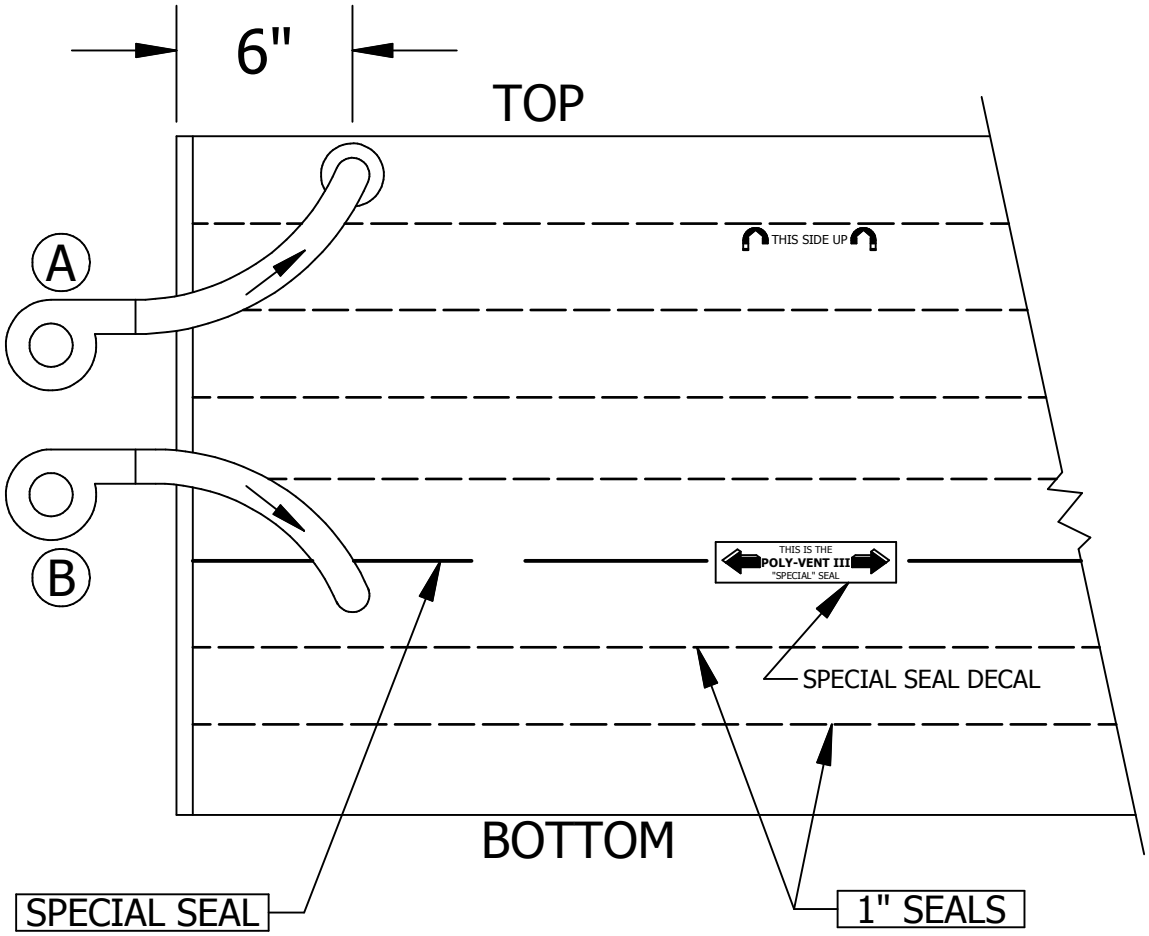
Note: The lay flat dimension of the poly is about 40 inches wider than the actual inflated working width. It is necessary to fold the poly once while you are pulling it through the length of the JanAire unit. Remove the roll of poly from the black wrapping and inspect it for any concealed damage. Ordinary care should be taken when handling the roll of poly so you do not scuff the edges causing leaks. Place a length of pipe through the core of the poly and lay it on top of a set of sawhorses. Gently pull the poly from the roll while you are threading the poly into the JanAire unit. TAKE CARE so you do not "catch" the poly on any sharp corners, bolts, etc., causing tears in the poly. Slide the poly over the laps of the gutter.

Step #14

The following diagram illustrates where to locate the air inlets on your PolyVent III. All inlets shoud be approximately **6 inches from the drive end of the poly.**

Note: The top blower is always attached to the very top tube of the PolyVent. The top tube is indicated by a Mylar decal with arrows pointing up.

Note: The air inlet for the bottom blower must be installed in the tube below the "special seal".

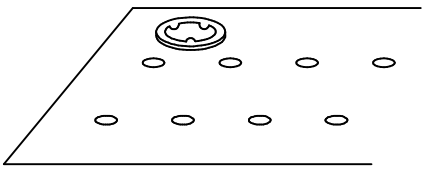


This label indicates which side is "Up" when installing POLYVENT.

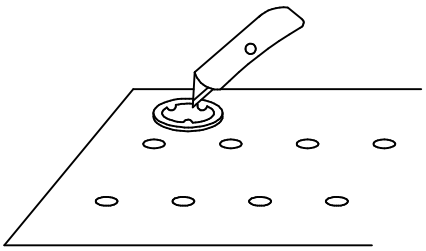
This decal is used to mark the "special" seal in the POLYVENT.

How to make air come into the PolyVent

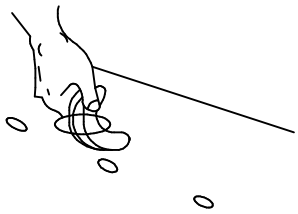
Step #14 *(continued)*



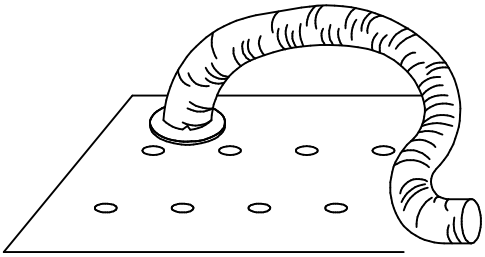
1) Choose the correct tube at 6 inches from the end of the poly for the air connection, making sure it will always be in the top tube of the PolyVent. Peel the backing from one gasket and apply to clean, dry poly.



2) With a sharp knife, carefully cut out the center portion of the poly, making sure to cut through only the top layer. Undersize this hole by 1/4 inch to make a snug fit. You can undersize the hole by 1/2 inch and after gaskets are stapled in place, stretch the hole out with your fingers. This will make a tighter fit but it will also be harder to insert the hose.



3) Remove the release paper from the second gasket, carefully fold, and slip through the hole just cut. Attach to inside of poly, under the first gasket, offset this gasket too.



4) Press the two gaskets together. Using an office stapler, staple the two gaskets together. Press the flex tube into position, making sure you have no sharp wire exposed.

5) Attach second gasket in correct tube (see page 8) and follow above directions.

Step #15

When inflating the PolyVent for the first time, turn on only the TOP BLOWER A. Go along and help the PolyVent go up in the frame so that it does not twist. AFTER the top section is completely inflated, turn on the BOTTOM BLOWER. Again, go along and lift the top section of the PolyVent so that the lower tubes inflate properly. Now, turn OFF the bottom blower and watch the top section slide down as the lower tubes deflate.

Important: Connect the PolyVent blowers to the heat side of the thermostats only!

Step #16

Wiring the sequence of operation for PolyVent:

Connect the thermostat to the bottom (B) blower--this thermostat should be set at the temperature you desire in your building. Connect the other thermostat to the top blower--this thermostat should be set at approximately 6 to 8 degrees higher than your desired temperature. (See thermostat placement)

Step #17

Poly Clamp Option:

The Poly Clamp, or T-LOK, Option is provided at no charge with each JanAire unit. In some protected areas it is not needed. You should install this option if the area you live in is known for strong winds, as the wind may shift the POLYVENT out of position. Each bottom base of T-LOK should be installed in both bottom corners of the JanAire unit (Figure A).

Figure A

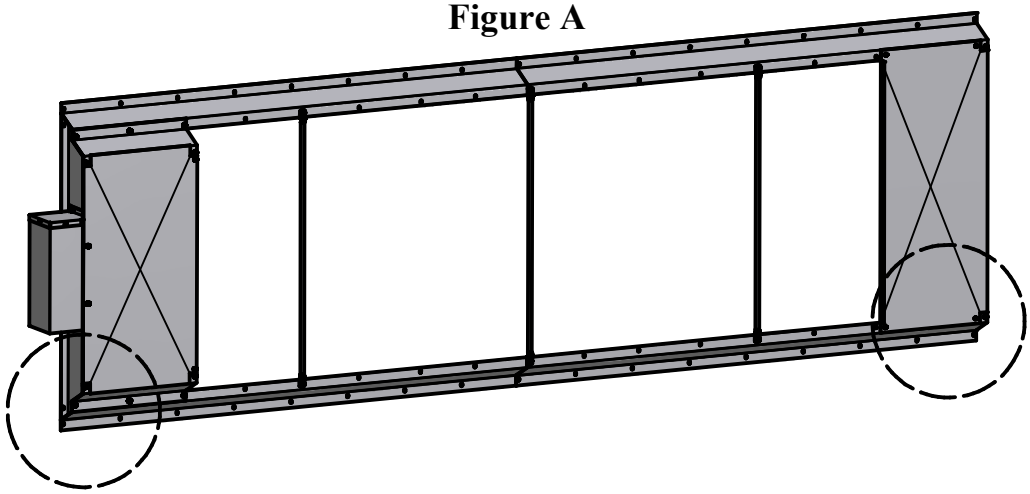
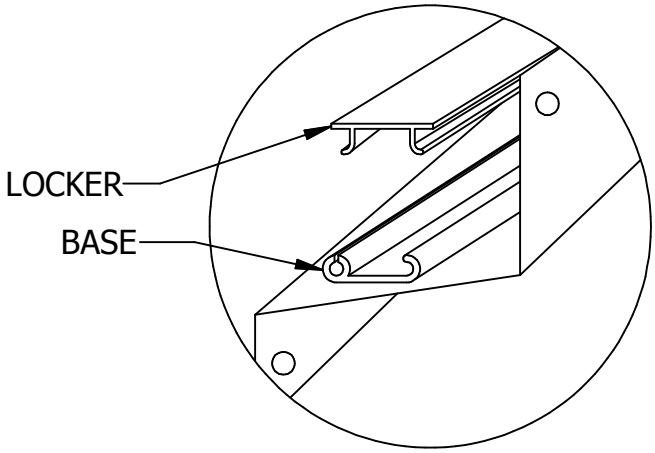


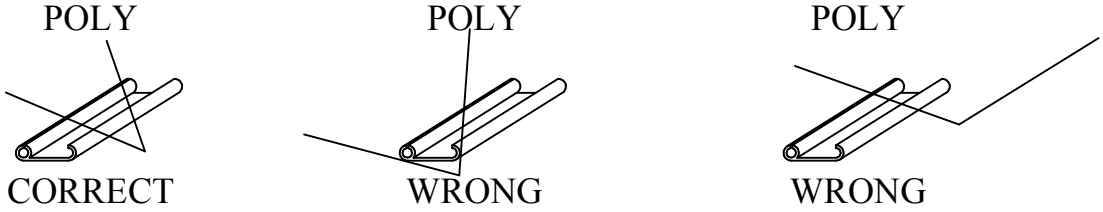
Figure B

Each T-LOK should be installed at the angle shown in the bottom gutter at each end (Figure B).



Place a "corner" of the PolyVent across the T-LOK and clamp together (Figure C).

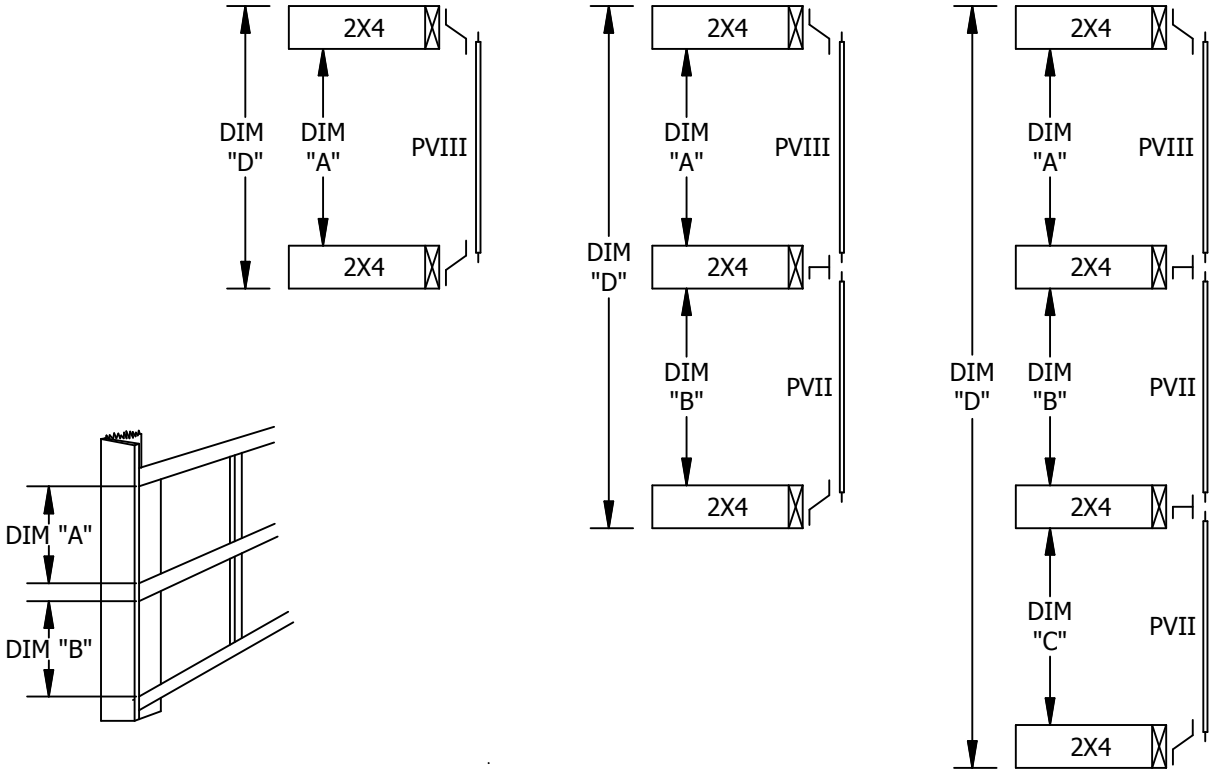
Figure C



The Poly Clamp Option will secure the PolyVent inside the JanAire unit in instances of strong wind. If you live in an area of extreme wind, call us for information about costs and installation of our Poly Retainer Option. The Poly Retainer Option is used if the wind flips the top corner of the PolyVent out from behind the front panel.

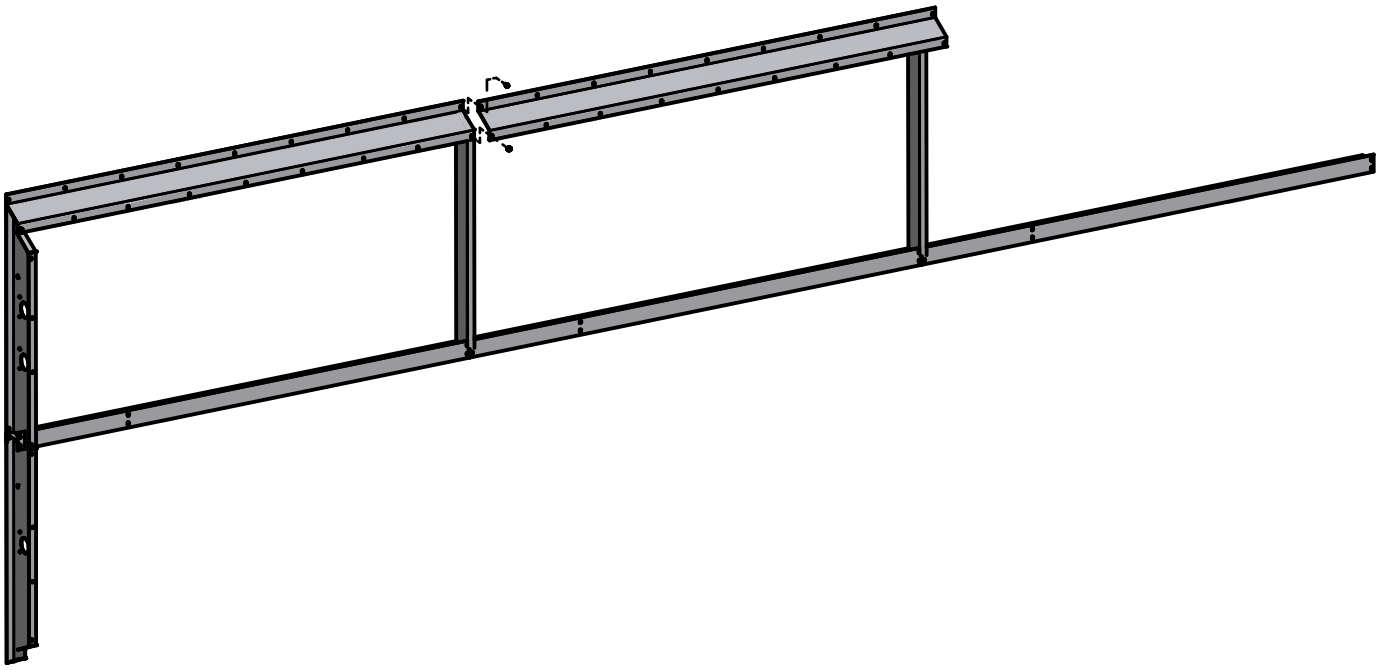
JanAire Unit Dimensions (*as of 3/15/07)

Unit Size	DIM "A"	DIM "B"	DIM "C"	DIM "D"
2 ft.	20 inches	-0-	-0-	2 ft. 2 in.
3 ft.	32 inches	-0-	-0-	3 ft. 2 in.
4 ft.	44 inches	-0-	-0-	4 ft. 2 in.
5 ft.	56 inches	-0-	-0-	5 ft. 2 in.
7 ft.	31 ½ inches	43 ½ in.*	-0-	7 ft. 1 ½ in.*
8 ft.	43 ½ inches	43 ½ in.*	-0-	8 ft. 1 ½ in.*
9 ft.	43 ½ inches	55 ½ in.*	-0-	9 ft. 1 ½ in.*
10 ft.	55 ½ inches	55 ½ in.*	-0-	10 ft. 1 ½ in.*
12 ft.	43 ½ inches	40 ½ in.*	43 ½ in.*	11 ft. 9 ½ in.*
13 ft.	43 ½ inches	40 ½ in.*	55 ½ in.*	12 ft. 9 ½ in.*
14 ft.	43 ½ inches	52 ½ in.*	55 ½ in.*	13 ft. 9 ½ in.*
15 ft.	55 ½ inches	52 ½ in.*	55 ½ in.*	14 ft. 9 ½ in.*



PLEASE NOTE: The above dimensions are VERY CRITICAL. They must be followed exactly for your JanAire System to work effectively!

7' And Taller PolyVent Assembly



1) Mount the center gutter first in a double-stacked frame, or either one of the center gutters in a triple-stacked frame.

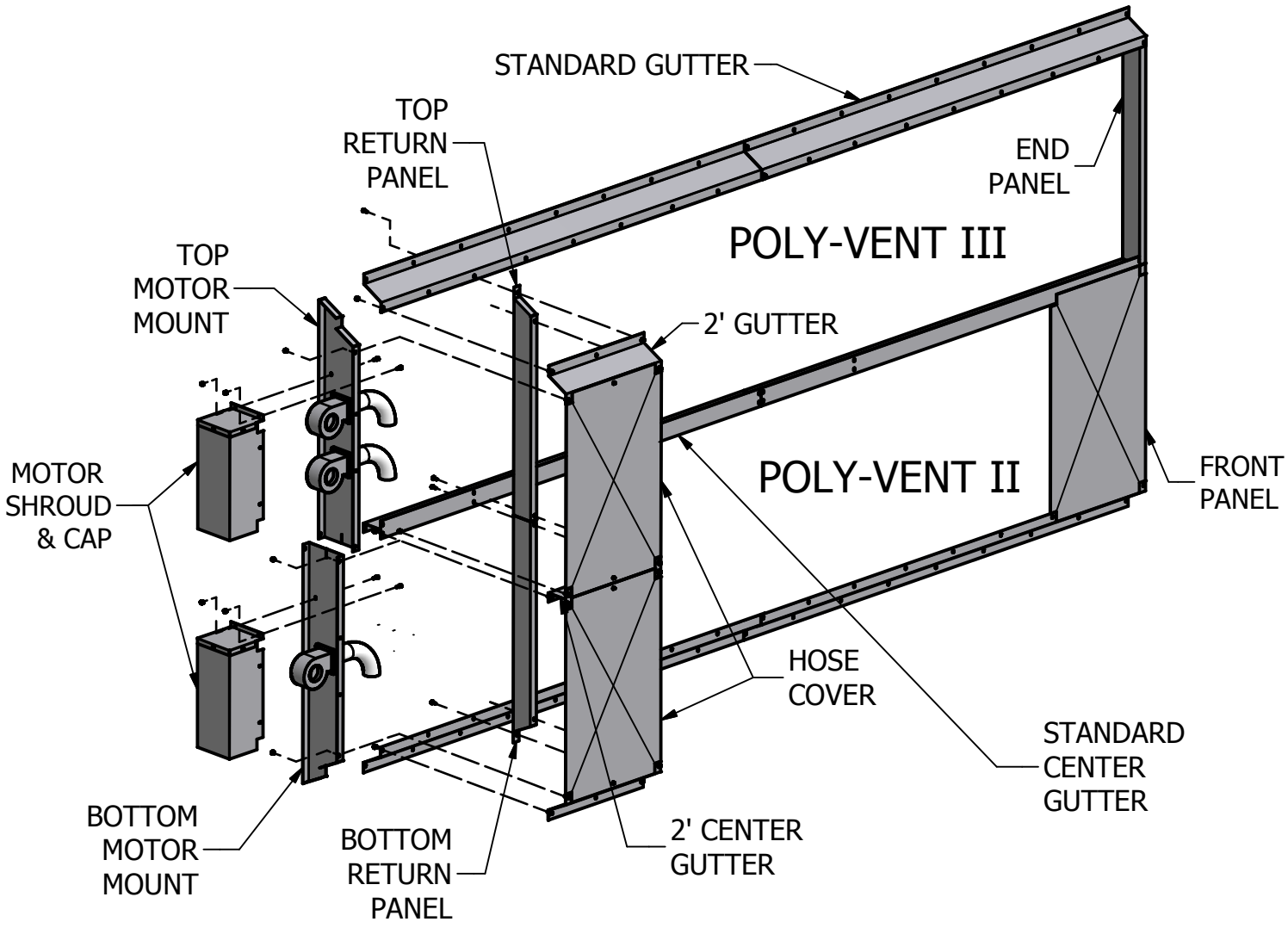
2) Mount the motor mount end panels, top and bottom, making sure they are square to the center gutter.

3) Using the top of the motor mount end panel and the standard end panel as a guide, locate the position of the standard gutter or the other center gutter.

4) Once you have the first standard gutter in place, use it and the end panel to locate the second standard gutter. Continue this way for the entire length of the JanAire system.

5) Refer to the standard PolyVent instruction manual for complete details before you begin.

Ends Package Assembly for 7' and taller JanAire Systems



JanAire double units have PolyVent III in the top half of the unit--this uses two fans and two hoses to operate it. PolyVent III in the top half of the unit controls your fall, winter, and spring air. JanAire double systems have PolyVent II in the bottom half of the unit--this uses one fan and one hose. PolyVent II in the bottom half of the unit opens in the spring and closes in the fall, or on rainy and windy days.

JanAire 12-foot and taller units have PolyVent III in the top third--this uses two fans and two hoses. In the middle and on the bottom, the 12-foot units have PolyVent II, which uses one blower and one fan in each section.

JanAire, Inc.

7038 East 125th St. Northfield, MN 55057

(507) 645-4524 FAX: (507) 663-6053
800-246-5387
Website: www.janaire.com E-mail: sales@janaire.com

PolyVent has a pro rated warranty for up to three years from the shipping date against faulty workmanship or deterioration due to the action of ultraviolet light rays.

If needed, your poly will be replaced according to the following schedule:

Up to 12 months.....100% of poly costs
13-24 months.....50% of poly costs
25-36 months.....20% of poly costs

You must complete the following for JanAire, Inc. to honor your warranty.

From JanAire, Inc., you will receive a billing invoice with a mailing label. The mailing label will include the invoice number...Please use this label!

Within thirty (30) days, send to JanAire, Inc.

1) The serial number of the defective poly. This number will be hand-written in magic marker inside the PolyVent in one of the corners--cut if off and send it to us with a sample of the defect according to #2.

2) A sample of the defect; We need about a three foot length of your poly with the defect in this length. This will fit into a manilla envelope. Please use the mailing label, and don't forget the serial number you cut off. If the serial number is not with the sample of defective poly, we can not warranty your PolyVent!

Please call us @ 1-800-246-5387 if these conditions can not be met.

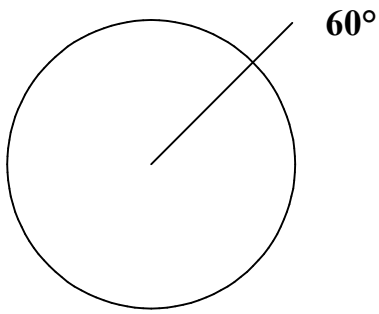
Again - We must have a sample of the defect & the serial number to honor your warranty!

Do your thermostats need calibration?

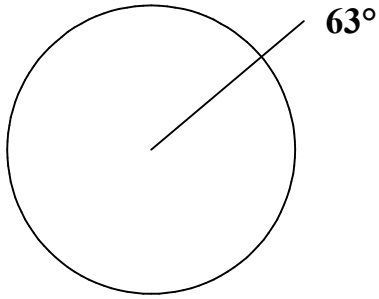
Correct Settings

With correct placement of you thermostats for both PolyVent and RidgeVent, the correct sequence and temperature setting should be as follows: (adjust if you want your building warmer or cooler)

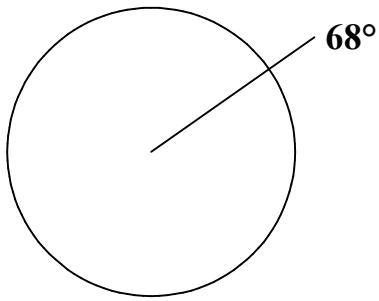
If you want your building to be at 60 degrees.



1) The RidgeVent should always open first. Set the thermostat for the RidgeVent at 60 degrees.



2) Set the thermostat that controls the bottom blower on the PolyVent at 63 degrees. ***(page 7 Figure B)***



3) Set the thermostat that controls the top blower on the PolyVent at 68 degrees. ***(Page 7 Figure B)***

Keep in mind, when it is very cold, probably the only unit that will be ventilating will be the RidgeVent.

Thermostat Placement

Thermostat placement is ALWAYS IMPORTANT in a totally naturally ventilated barn, and in barns using fans with a 10-20 C.F.M/head minimum ventilation rate.

When using a thermostat to operate a JanAire PolyVent, the thermostat should be positioned 4 to 8 feet AWAY from the PolyVent unit. By mounting the thermostat at this distance, the incoming air reaches the thermostat in a relatively short period of time, making the thermostat react faster and keeping the temperature of the building within a tight range.

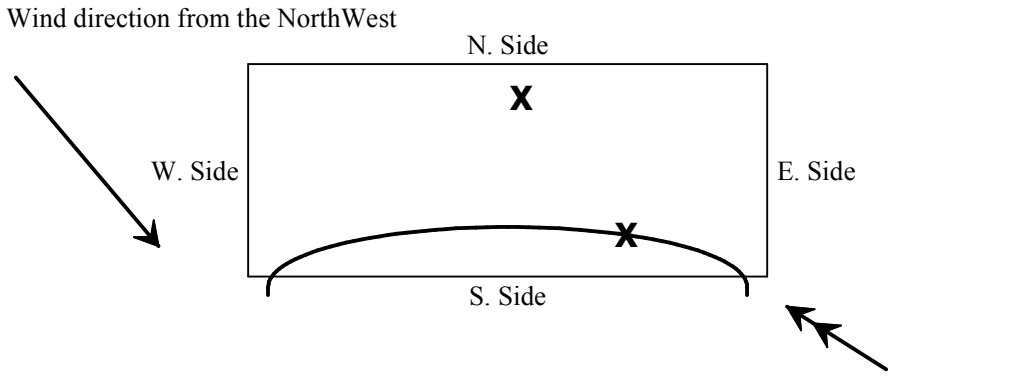
When using ceiling inlets, the thermostat should NOT be positioned in the direct air stream created by the ceiling inlet. Mount the thermostat out in the open so air can get at it from all directions. AVOID mounting the thermostat on a panel as the air will get trapped around the panel and will cause a wide temperature fluctuation. We have MOVED thermostats FROM a panel in the center of the room to a location closer to the PolyVent, and the temperature variation DECREASED from 11 degrees to a much more stable 2 degrees.

Another point to consider is the length of the room and the building orientation to any prevailing winds. Normally, a northwest wind acting on an east/west building will force the air to enter the building in the southeast corner, and will exit the exhaust air out the southwest corner. The longer the zone, (or room) the greater this effect will be on that zone. (The expected wind pattern may be altered by the location of any existing buildings, bins, etc.)

The expected airflow pattern should be considered when deciding where to mount the thermostat that operates the PolyVent installed on the south side of the building.

South Side of Building:
Ideally, we would want to have the south thermostats positioned in the southeast 1/3 of the room. This way, incoming air reaches the thermostats in the shortest amount of time, allowing for a quicker response and less temperature fluctuations.

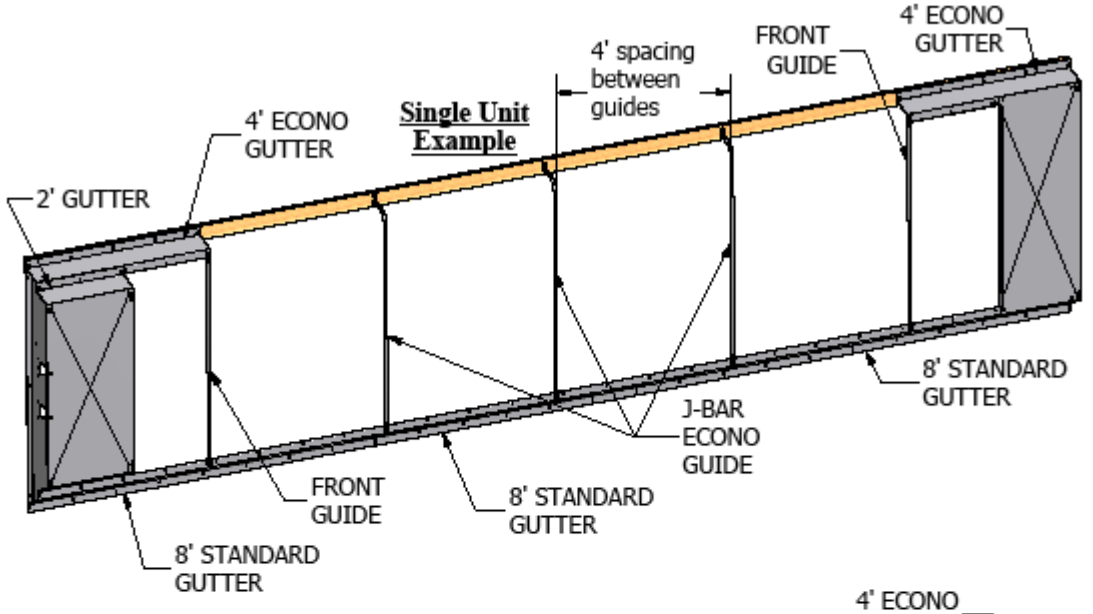
North Side of Building:
When mounting the thermostats for the PolyVent on the north side of the building, the thermostats should be positioned more towards the middle of the JanAire unit on the north side, again for a quicker response.

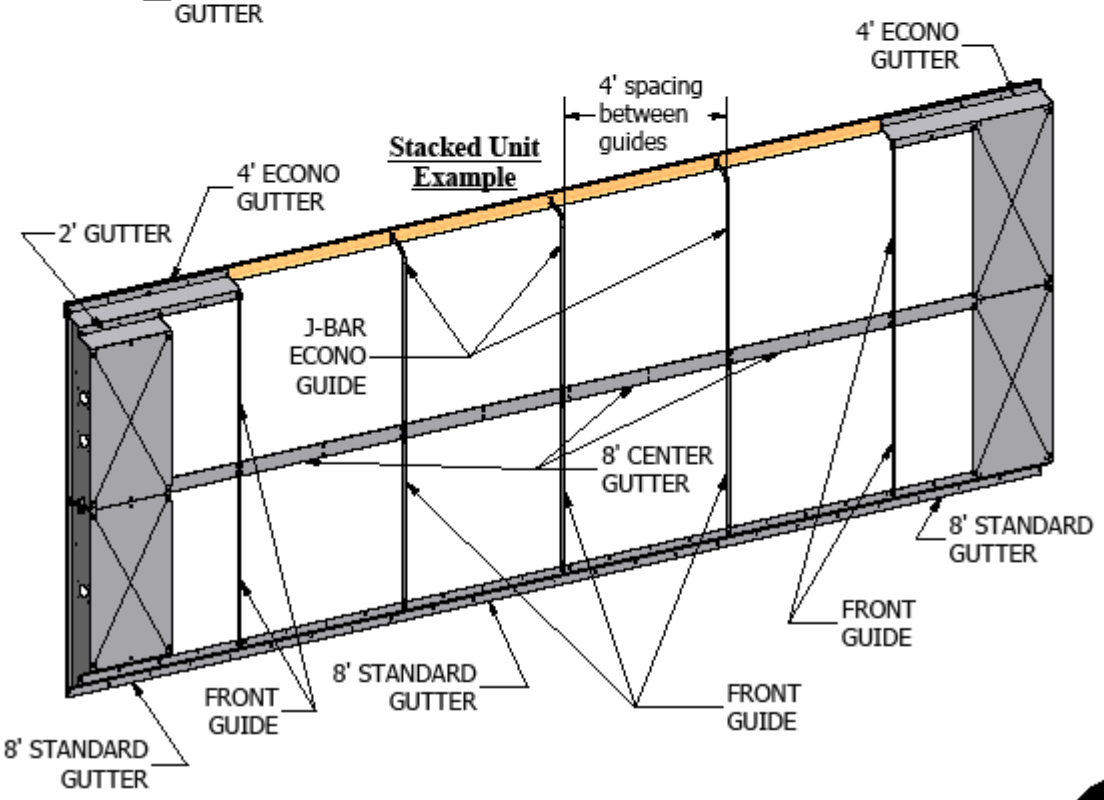


Barns using fans with a 30-45 C.F.M./per head capability or barns using fans to mix the incoming air will see less response to the location of the PolyVent thermostats.

Framing Instructions for JanAire Econo Units

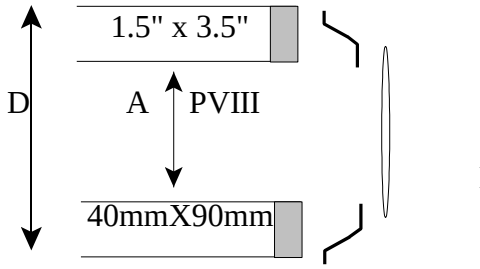
1. **BEGIN** the frame with a 4 foot gutter and **END** the frame with a 4 foot gutter.



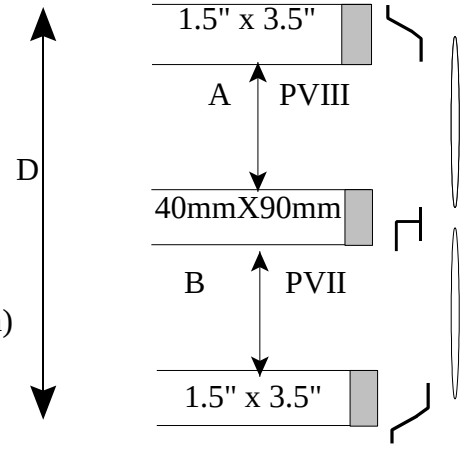


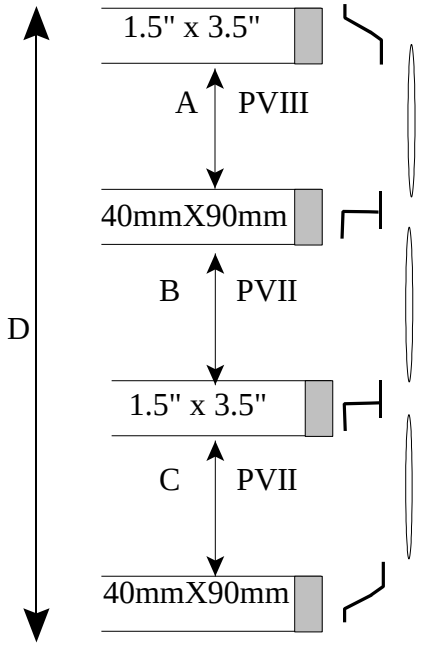
DIMENSIONS FOR JANAIRE UNITS (*as of 3/15/07)

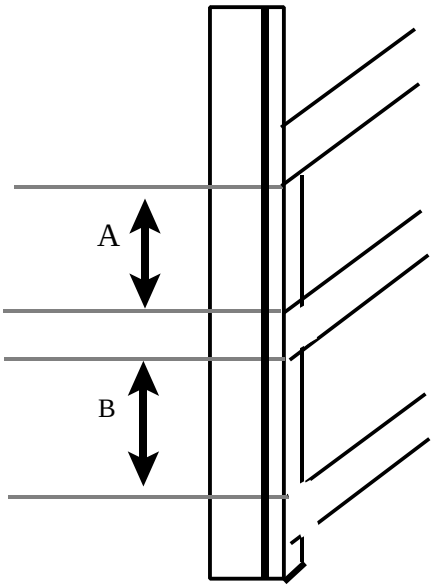
Unit Size	A Dimension	B Dimension	C Dimension	D Dimension
2 ft.	20 in. (510 mm)	-0-	-0-	2 ft. 2 in. (660 mm)
3 ft.	32 in. (810 mm)	-0-	-0-	3 ft. 2 in. (970 mm)
4 ft.	44 in. (1120 mm)	-0-	-0-	4 ft. 2 in. (1270 mm)
5 ft.	56 in. (1420 mm)	-0-	-0-	5 ft. 2 in. (1580 mm)
7 ft.	31½ in. (800 mm)	43½ in* (1100 mm)	-0-	7 ft. 1½ in.*(2180 mm)
8 ft.	43½ in (1100mm)	43½ in* (1100 mm)	-0-	8 ft. 1½ in.*(2490 mm)
9 ft.	43½ in (1100mm)	55½ in* (1410 mm)	-0-	9 ft. 1½ in*(2790 mm)
10 ft.	55½ in (1410mm)	55½ in* (1410 mm)	-0-	10 ft. 1½ in*(3100 mm)
12 ft.	43½ in (1100mm)	40½ in* (1030 mm)	43½ in* (1100 mm)	11 ft. 9½ in*(3660 mm)
13 ft.	43½ in (1100mm)	40½ in* (1030 mm)	55½ in* (1410 mm)	12 ft. 9½ in*(3960 mm)
14 ft.	43½ in (1100mm)	52½ in* (1330 mm)	55½ in* (1410 mm)	13 ft. 9½ in*(4320 mm)
15 ft.	55½ in (1410mm)	52½ in* (1330 mm)	55½ in* (1410 mm)	14 ft. 9½ in* (4570 mm)



wooden framing
(1.5" x 3.5" = 40mm x 90mm)







PLEASE NOTE: **These dimensions are VERY CRITICAL, they must be followed exactly for your JanAire System to work effectively!!!**

DIMENSIONS IN METRIC