

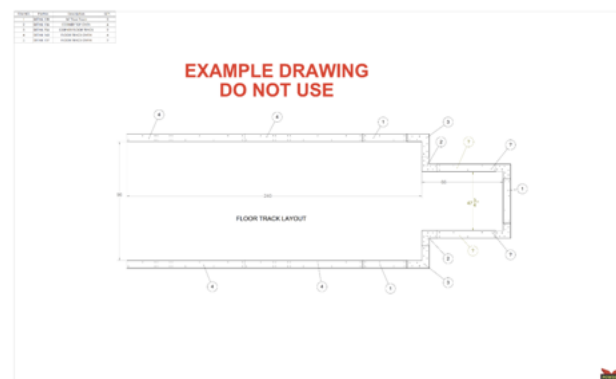
Curing Oven Installation

STEP 1 – OVEN LOCATION

- This oven is an engineered piece of high-quality equipment and should be treated as such. Handle all parts and components with care.
- The oven should be located at or above grade and should be on a level floor that is within 1/8" level. If the floor isn't level, the floor track must be shimmed (not provided) during installation. A floor that isn't level may cause issues with doors opening and closing. In these cases, the floor will need to be ground, so the doors don't drag.
- The oven must be installed on a non-combustible floor.
- Most local code requires a minimum of 3 feet of clearance between the oven and any wall or ceiling. Always follow local code.
- Per NFPA Code, explosion proof must be built into the oven. This is achieved in the doors and ceiling panels – thus, doors and ceilings must not be confined.
- Per NFPA 86, no equipment that produces an open flame, such as the burner on this oven, can be located within 20 feet of a spray area that sprays flammable material unless they are separated by a partition.

STEP 2 – CREATE THE FOOTPRINT OF THE OVEN

- The floor must be level.
- Begin by drawing the layout on your floor with a chalk line. Refer to the drawing section of this manual for the layout. It will be like the example drawing below.
- **Make sure your layout is perfectly square.** You can check this by measuring corner-to-corner (front right to rear left) and then the other corner-to-corner (front left to rear right) and make sure the measurements are the same. If not, you have more of a diamond shape, and the oven will not be square. If the oven isn't square, it will not go together correctly.
- Do NOT begin installation until the next step(s) are completed.



STEP 3 – CREATE THE FOOTPRINT OF THE BURNER BOX (es)

NOTE: If you have a top mounted Burner, SKIP TO STEP 7, THEN STEP 17. ONCE OVEN CABIN IS ASSEMBLED, GO TO THE END OF THIS SECTION FOR DIRECTIONS ON INSTALLING THE ROOF MOUNTED BURNER BOX

Rear or side mounted burners, continue:

- In the drawing section, locate your burner box location(s).
- Mark your floor for the location of the burner box(es).
- Draw all 4 sides of the burner box(es) with a chalk line.
- **Make sure your layout is perfectly square.** You can check this by measuring corner-to-corner (front right to rear left) and then the other corner-to-corner (front left to rear right) and make sure the measurements are the same. If not, you have more of a diamond shape, and the oven will not be square. If the oven isn't square, it will not go together correctly.

STEP 4 – LOCATE THE 4 SMALL True-X CORNER FLOOR TRACKS

- Locate the small True-X floor corner tracks. You should have 4 small corner tracks for each burner box on the oven, unless you have a 6 feet wide oven. Set these to the side. These are powder coated black.
- The small corner tracks make up the burner box corners (all 4 corners).
- There are 2 corners that go to the back of the burner box and 2 that go where the burner box transitions to the oven. To differentiate, remember that the lip of the tracks goes to the inside of the oven.
- Note: If your oven has doors on one end, you will also have 2 larger True-X Corner Floor Tracks. If your oven has doors on both ends, you will not have the 2 larger True-X Corner Floor Tracks.

STEP 5 - INSTALL BURNER BOX FLOOR TRACK

- Lay the 4 small True-X corner tracks in place at the corners of the burner box. These should lay to the outside edge of the chalk line you have drawn on the floor.
- Lay out your burner box floor track based on the drawing of the floor track located in the drawing section of this manual. The track should lie to the outside edge of the lines that you have on the floor.
- Using a hammer drill with a 3/8" bit, drill holes in concrete through the holes for the floor track. You don't have to drill every hole but make sure to drill enough that the floor track is stable. Typically, holes are drilled diagonally every other hole.
- Locate your box of provided hardware. Only remove what you need from the box so you can keep everything together until needed.
- Find the Industrial Expanding Industrial Fasteners in your hardware box.

- Insert Industrial Expanding Industrial Fastener into the drilled hole. Drive down until flush.
- Using a socket, tighten the bolts of the Industrial Expanding Industrial Fasteners. Do not overtighten.

STEP 6 – LOCATE THE 2 LARGE True-X CORNER FLOOR TRACKS (NOTE: IF YOU HAVE DOORS ON BOTH ENDS, YOU WILL NOT HAVE THESE PIECES and WILL SKIP THIS STEP

- Locate the large True-X floor corner tracks. These are powder coated black.
- Lay the two large True-X floor corner tracks at the corners of the rear wall of the oven. The track should lie to the outside edge of the lines that you have on the floor.
- DO NOT install yet.

STEP 7 – INSTALL REMAINING OVEN FLOOR TRACK

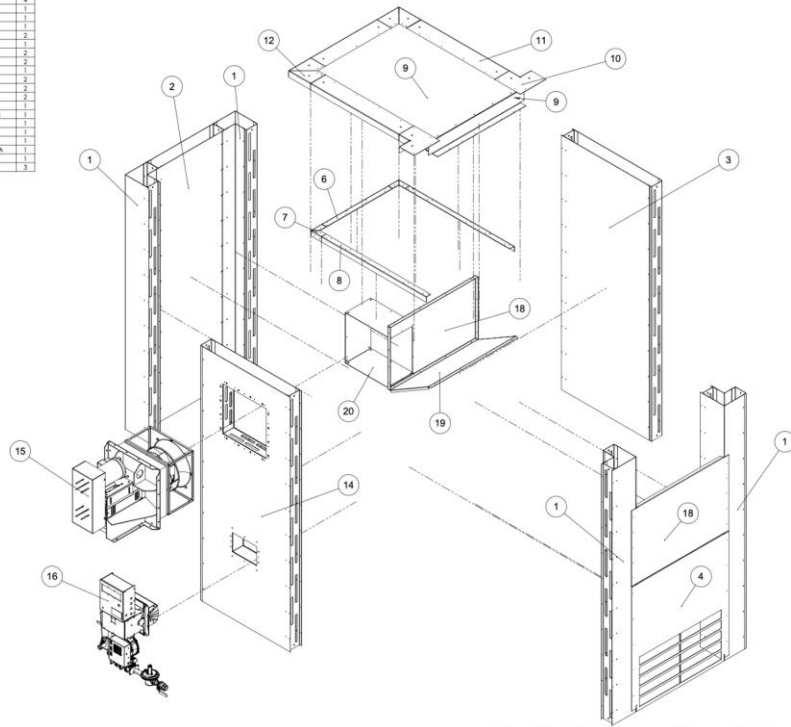
- Locate all floor tracks. It is 6" wide and has multiple hole locations. Set all floor tracks to the side.
- Lay out your floor track based on the drawing of the floor track. The track should lay to the outside edge of the lines that you have on the floor.
- The floor track should butt up end-to-end. It should meet your installed Burner Box Track and your two large True-X corner floor track pieces.
- Make sure this completes the perimeter of your oven prior to installation. The track should be a near-perfect fit to the perimeter drawn.
- Although the parts to your oven were cut on a state-of-the-art Fiber Laser, minor discrepancies may cause the track to not come to the front edge of the oven. If not, pull the track to the front end, and very small gaps between the tracks (less than 1/8") are acceptable. Before making these adjustments, double-check measurements.
- Using a hammer drill with a 3/8" bit, drill holes in concrete through the holes for the floor track. You don't have to drill every hole but make sure to drill enough that the floor track is stable. Typically, holes are drilled diagonally every other hole.
- Locate your box of provided hardware. Only remove what you need from the box so you can keep everything together until needed.
- Find the Industrial Expanding Industrial Fasteners in your hardware box.
- Insert Industrial Expanding Industrial Fastener into the drilled hole. Using a hammer, drive down until flush.
- Using a socket, tighten the bolts of the Industrial Expanding Industrial Fasteners. Do not overtighten.

STEP 8 – BUILD THE BURNER BOX WALLS

- Begin by building the burner box. Refer to the drawings section of this manual for guidance
- Locate the small True-X corners. There are 4 of these for every burner box. These are pre-built insulated corners. Set to the side.
- Locate the wall panel that has the cut-out for the oven burner. This panel is insulated, with a rectangle cutout that the burner will go in. Set this panel to the side.

- Refer to your exploded view drawing in the drawing section. Your custom oven may require 1' wide and/or 2' wide wall panels to complete the back wall of the burner box. Find these panels and set them to the side.
- **IMPORTANT POINT: All insulated panels are either male/female or male/male. The male edge of a male/female panel always fits inside the female edge of a male/female panel.**
- Place a small True-X corner (that you set aside earlier in this step) into a small True-X floor track **AT THE LEFT REAR OF THE BURNER BOX**. When standing inside the burner box and holding this corner up, **the FEMALE EDGE MUST BE on the LEFT**, and the **MALE EDGE MUST BE on the RIGHT**. Be sure to set the panel all the way down into the channel.

ITEM NO.	PARTNO	DESCRIPTION	QTY
1	A-WP-12012-036-SC	WALL PANEL, OVEN CORNER, SMALL, 120 IN X 6 IN X 12 IN	4
2	A-WP-120-036-MF	WALL PANEL, BURNER BOX, MALE/FEMALE, 120 IN X 36 IN	1
3	A-WP-120-036-MF	WALL PANEL, BURNER BOX, MALE/FEMALE, 120 IN X 48 IN	1
4	D-CP-VENT-040-053	COVER PLATE, BURNER BOX, COVER, VENTED, 40 IN X 53 IN X 1/8 GAUGE	1
5	DETAIL 1B	ROOF SUPPORT, BURNER BOX, ANGLES, 100 X 3 X 4 X 1/2	2
6	D-RS-036-002	ROOF SUPPORT BRACKET, COVER, 36 IN X 2.5 IN X 2.5 IN X 1/8 GA	2
7	D-RS-036-002	ROOF SUPPORT BRACKET, SMALL CORNER, 5.875 IN X 5.875 IN X 2.5 IN X 1/8 GAUGE	2
8	D-RS-036-002	ROOF SUPPORT BRACKET, COVER, 37 IN X 2.5 IN X 2.5 IN X 1/8 GA	2
9	A-BB-49-001	ROOF PANEL, BURNER BOX, 48 X 66	1
10	D-RCS-004-P	ROOF COVER SEAL, CORNER, SMALL, 48 IN X 1/8 IN X 1/8 GAUGE	2
11	D-RCS-048-P	ROOF COVER SEAL, 48 IN X 8 IN X 1/8 GA	2
12	D-RCS-004-P	ROOF COVER SEAL, CORNER, SMALL, COVER, 48 IN X 1/8 IN X 1/8 GAUGE	2
13	D-RCS-048-P	ROOF COVER SEAL, 36 IN X 8 IN X 1/8 GA	1
14	A-WP-120-036-120-20FF	WALL PANEL, BURNER BOX, 120 IN PLUG FAN, CIRCINNAT, 120 IN X 48 IN	1
15	PLUG FAN, 18 IN	PLUG FAN, 18 IN CIRCINNAT	1
16	V2 BURNER	V2 BURNER, ONE, STANDARD	1
17	D-CP-LG-036-033	COVER PLATE, BURNER BOX, UPPER, LARGE, 36 IN X 53 IN X 1/8 GAUGE	1
18	D-CP-18P-88-048-030	COVER PLATE, 18 IN PLUG FAN TO BURNER BOX, UPPER, 47.875 IN X 27.625 IN X 1/8 GA	1
19	D-CP-20P-88-048-034	COVER PLATE, PLUG FAN TO BURNER BOX, LOWER, 47.875 IN X 26.375 IN X 1/8 GA	1
20	D-CP-18P-024-014	COVER PLATE, 20 IN PLUG FAN, CIRCINNAT, 25.625 IN X 13.875 IN X 1/8 GA	3



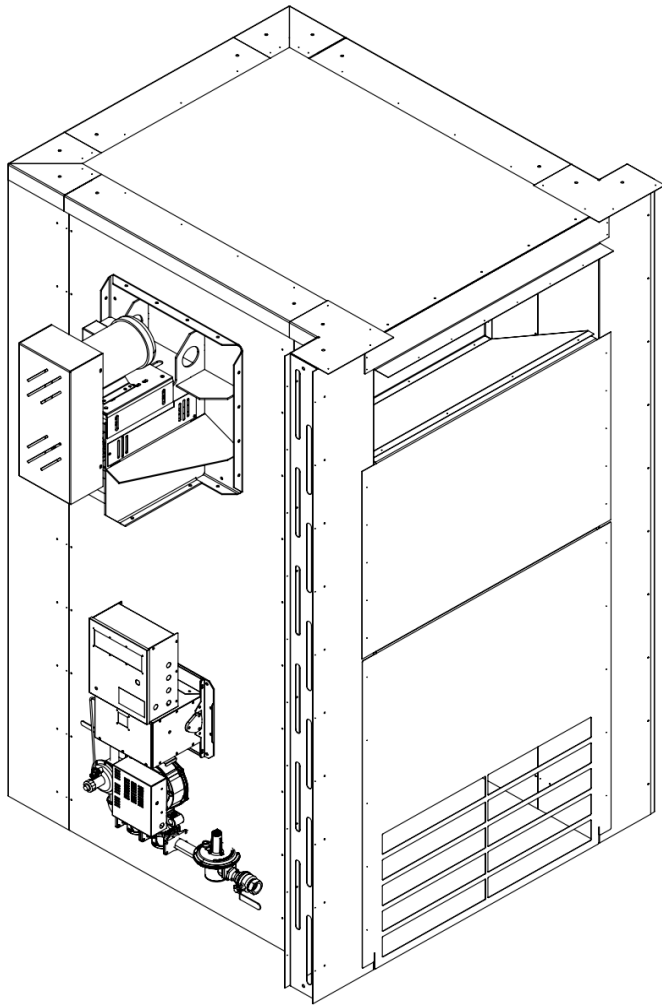
- Using your assembly drawing as a guide, place the remaining rear walls (that you set aside earlier in this step) in place. Be sure to set the panels entirely into the floor track and make sure the male edges are pushed completely into the female panels.
- **VERY IMPORTANT NOTE:** As you look at this standing wall from what will be the **INSIDE** of the burner box, you should now have an **exposed FEMALE edge** of a corner panel on the left and an **exposed MALE edge** of a corner panel on the right.
- Using a 4' or larger level, ensure this wall is level and plumb.

- Once the wall is level and plumb, locate the large box of self-tapping screws (#10-16 self-drilling screws) in your hardware box.
- Using a drill with a hex head attachment, install self-tapping screws through the holes in the sides of the floor track and into the wall panels. Do this on both the inside and outside of the floor track. DO NOT SKIP SCREWS.
- Using the drawings section as a reference, locate the Recirculation Fan Wall. This wall is square and has a very large square hole for the Recirculation fan. Sit this panel to the side.
- Depending on the height of your oven, you may have one or more panels that are the exact width of the Recirculation Fan Wall section that will stack on top of it during installation. Refer to your exploded view drawing in the drawings section. Find these panels and sit them to the side.
- Locate one of the small True-X corner panels (set aside earlier).
- **IMPORTANT NOTE: Before installing these panels, look very closely at the Recirculation Fan Wall Panel (set aside earlier). Note that there is one edge that has no vents cut in it. THIS EDGE is at the bottom and MUST GO DOWN INTO THE TRACK.**
- Begin placing these panels per the drawing into the burner box floor track that is on the left-hand side (as standing on what will be the inside of the burner box).
- Be sure to set the panels completely into the floor track and make sure the male edges are entirely pushed into the female panels.
Using a 4' or larger level, make sure this wall is level and plumb.
- Once the wall is level and plumb, locate the large box of self-tapping screws in your hardware box.
- Using a drill with a hex head attachment, install self-tapping screws through the holes in the sides of the floor track and into the wall panels. Do this on both the inside and outside of the floor track. DO NOT SKIP SCREWS.
- Using a drill with a hex head attachment, install self-tapping screws through the holes in the Female edge of the wall panels and into the fully inserted male edges. Do this on both the inside and outside of the walls. DO NOT SKIP SCREWS.
- Refer to your exploded view drawing. Determine what size wall panels are needed to complete the right side (when looking from inside of the burner box) wall panel. Set these panels to the side.
- Locate the final small True-X corner panels (set aside earlier).
- Begin placing these panels per the drawing into the burner box floor track that is on the right-hand side (as standing on what will be the inside of the burner box).
- Be sure to set the panels completely into the floor track and make sure the male edges are pushed completely into the female panels.
- Using a 4' or larger level, make sure this wall is level and plumb.
- Once the wall is level and plumb, locate the large box of #10-16 self-tapping screws
- Using a drill with a hex head attachment, install self-tapping screws through the holes in the sides of the floor track and into the wall panels. Do this on both the inside and outside of the floor track. DO NOT SKIP SCREWS.

- Using a drill with a hex head attachment, install self-tapping screws through the holes in the Female edge of the wall panels and into the fully inserted male edges. Do this on both the inside and outside of the walls. **DO NOT SKIP SCREWS.**

STEP 9 – INSTALL RECIRCULATION PLUG FAN

- Locate the recirculation plug fan. This is the large fan located on the skid by itself.
- The recirculation plug fan will be placed into the large square hole on the burner box side.
- You might need to disassemble the cage around your plug fan before installing it into the burner box wall.
- To do this, there are about 4-8 bolts holding the cage onto the corners of the fan. Remove these bolts, then on the side closest to the wall, install the cover plates that deflect the air. Once the cage is properly reinstalled, follow the rest of the instructions listed and the prints given to you with this owner's manual.
- **NOTE: The fan is hefty and will require multiple people to align. THIS WILL REQUIRE A FORKLIFT. BE VERY CAREFUL**
- Before installing the fan, Install cover plates on the FAN FRAME. This is the frame of the fan that will go inside the oven burner box. **NOTE: Leave the bottom and top cover plates off until the frame is properly bolted to the fan, otherwise you will not have access to the bolts on the rear.** Be sure to cover the rear, the top, and the bottom with the smaller plates and the front opening with the larger plate. This leaves only the front of the frame left open. This is where the air from the fan will enter the oven, so it's the side nearest the Burner Box opening.
- **Lift fan with forklift and CAREFULLY slide into place. DO NOT REMOVE FORKLIFT.**
- From inside the burner box, insert the provided large bolts (with a flat washer) through the bolt holes for the recirculation fan. Note: Someone will need to stay inside the burner box and hold the bolts in place while the recirculation fan is mounted.
- Line up the protruding bolts with the holes on the recirculation fan. Slide the recirculation fan through the large square hole in the burner box.
- NOTE: It is recommended that the recirculation fan be leveled and braced (not provided) to support the weight and keep it level during operation.
- Install a provided flat washer, then a lock washer, then a nut onto the bolts. Snug all bolts before tightening any of them. The recirculation fan needs to sit uniformly flush against the oven wall to prevent air leakage.
- CAREFULLY release the weight from the forklift.



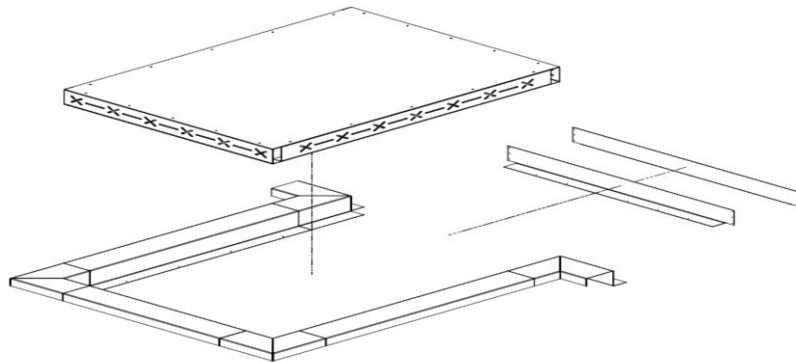
STEP 10 – INSTALL THE BURNER BOX ROOF TRACK

- Locate the angled steel roof support tracks.
- The 6-inch gap of the roof track connects to the top of the wall panel. See picture in step 10

STEP 11 – INSTALL THE BURNER BOX ROOF

- Refer to the drawings section for the size of the burner box roof panel.
- Carefully place the burner box roof panel into place. It sits inside the burner box walls and onto the roof support track. Make sure that 3 male sides of the roof panels face the 3 walls of the burner box.

- Using ratchet straps, pull the sides of the burner box together tightly before attaching the Burner Box Roof to the roof support track.
- Using a drill with a hex head attachment, install self-tapping screws through the holes in the bent lip of the track-up and into the burner box roof panel. DO NOT SKIP SCREWS.
- Refer to the drawing and locate the Two L - shaped support brackets that attach to the front of the burner box. They are sandwiched together and attached to the burner box face. One leg is used to support the burner box roof, and the other is used to support the rear oven roof panel.
- Using a drill with a hex head attachment, install self-tapping screws through the holes in the support bracket and into the face of the small True-X corners.
- Using a drill with a hex head attachment, install self-tapping screws through the holes in the support bracket and bottom of the burner roof panel.



Step 12 – SEAL BURNER BOX ROOF

- Using a ratchet strap, seal the roof of the burner to the burner walls. It's essential to close all gaps.
- Locate the 44 inch and the 2- 66-inch roof seals, seal the roof. Reference your drawings
- Attach with self-tapping screws

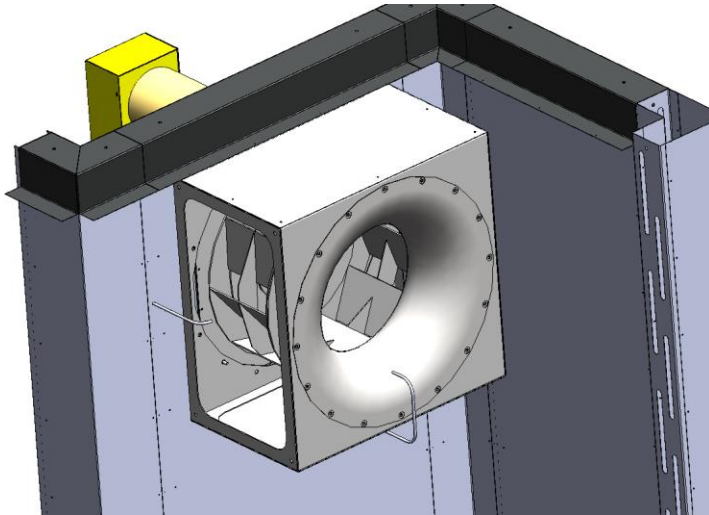
STEP 13 – INSTALL THE OVEN BURNER and GAS TRAIN

- Locate the box that contains your burner and gas train. This is a large box.
- Open the box that contains the burner and remove the packaging materials. Be careful not to discard any paperwork in the box. Remove all paperwork and put it inside your owner's manual.

- Remove the gas train from the box and carefully set it to the side. Please note that this is VERY FRAGILE and should be handled with care.
- Locate the clear bag inside the box that contains the small metal tubes and the gasket. Remove the gasket from this package.
- Carefully remove the burner from the box. It is suggested that two people are used for this.
- NOTE: IF your burner is supposed to be PROPANE FIRED, look for a propane conversion kit (which includes an orifice and a spring) and directions. This may already be installed for you - if it is, the box will be labeled LP.
- Look for the Endplate Replacement Kit in the box for your burner (or this might be included in your hardware box). These end plates MUST be changed out on your burner. They are provided to help with longevity. Directions are included.
- Notice the square pattern of holes on the burner. Look at the rear of your burner box. You will notice a square cutout where the burner will insert and the holes that correspond with the holes on the burner.
- **IMPORTANT** - Some drawings may show a filter covering the fresh air intake on the burner. Those filter boxes are not for this burner/gas train combination. It is essential, however, that the air going into the burner is CLEAN. It is recommended that the fresh air intake for the burner be pulled from outside when possible but ALWAYS from a clean air source.
- From inside the burner box, insert the provided large bolts (with a flat washer) through the bolt holes for the burner. Note: Someone will need to stay inside the burner box and hold the bolts in place while the burner is mounted.
- On the outside of the burner box, install the burner gasket by pushing onto the protruding bolts. Cut holes in the gasket as needed.
- Using two people, line up the protruding bolts with the holes in the burner and carefully insert the burner into the square hole and onto the bolts.
- DO NOT RELEASE ANY SUPPORT ON THE BURNER UNTIL NUTS ARE PLACED ON BOLTS AND TIGHTENED.
- Install a provided flat washer, then a lock washer, then a nut onto the bolts. Snug all bolts before tightening any of them. The burner needs to sit uniformly flush against the oven wall to prevent air leakage.
- Locate the gas train that was set aside earlier. Note the connection point on the gas train that attaches to the oven burner.
- On the side of the burner, locate the gas train connection point. Note: on the opposite side of the burner, directly across from that connection point, is a cover. The cover and the connection point are interchangeable so that the gas train can be installed to either side of the burner.
- NOTE: Oven burners are shipped configured for Natural Gas. If you ordered a PROPANE oven, there is a conversion kit with your hardware. This must be done before you continue. Go to the section of this manual called PROPANE CONVERSION.
- Install the burner train to the burner. Be sure to tighten completely. Your gas contractor should check for leaks.

- Sit the two small metal tubes that were in the bag with the gas train gasket near the burner. Your gas contractor should install these. They have fittings on the burner train and the burner and connect the two. NOTE: These are safeties and **MUST BE INSTALLED** for proper operation.

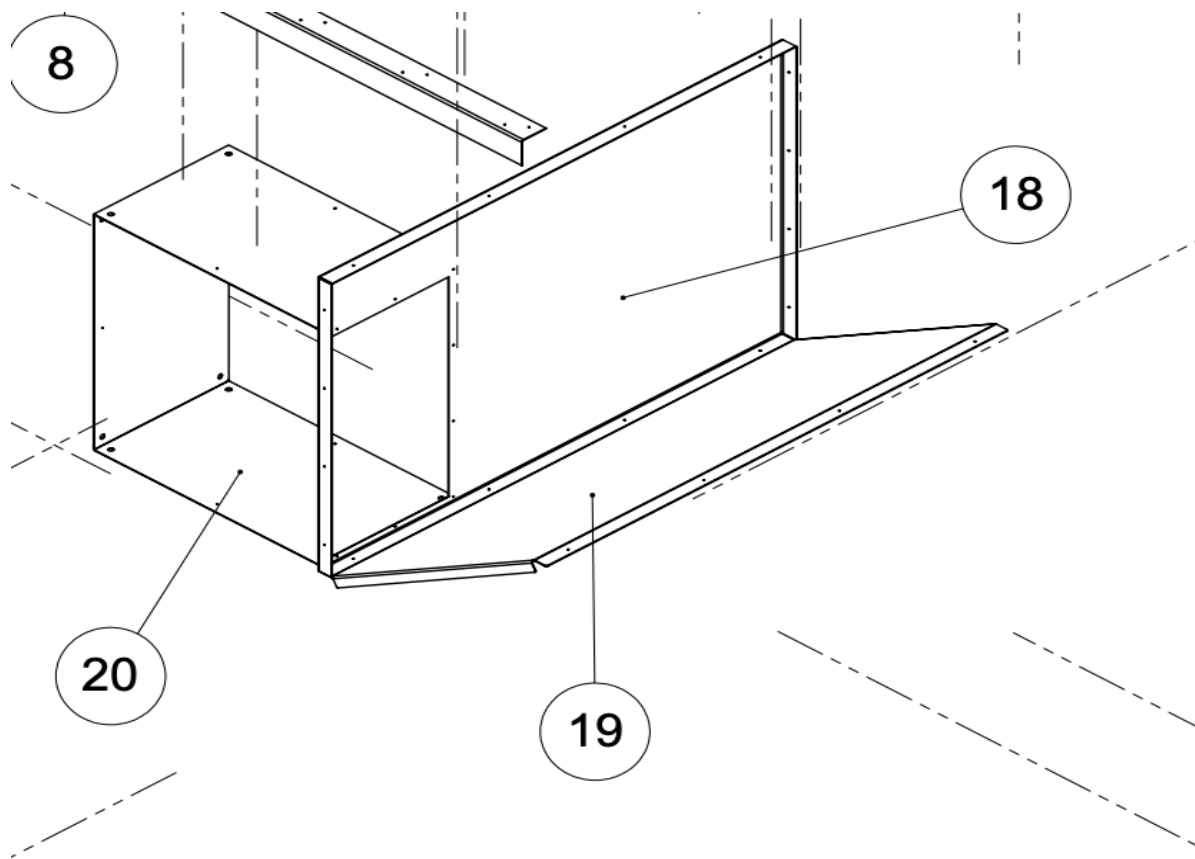
STEP 14 – INSTALL RECIRCULATION FAN AIR SAFETY SWITCH



- Airflow safety switches are provided. These switches ensure airflow requirements are being met.
- NOTE: Tubes CAN NOT BE BENT. They are reading airflow and should be as least restrictive as possible.
- Install both positive and negative tubes to airflow switches for the best results.
- Mount air proving (Differential Pressure Switch) on the burner box. Mount near the bottom right corner (looking from outside) of the recirculation fan.
- Drill ONE hole that is ¼" next to both the high pressure and low-pressure inputs of the switch. Place these holes far enough away that the copper tube will be bent as little as possible.
- Feed the tube from INSIDE the burner box to the outside. Make sure you use enough tubing to reach the switch with minimal bending.
- On the inside of the burner box, the tube that connects to the high-pressure port needs to be where the air is blowing into it.
- On the inside of the burner box, the tube that connects to the low-pressure port needs to be where the air is being pulled (sucked) through the tube.

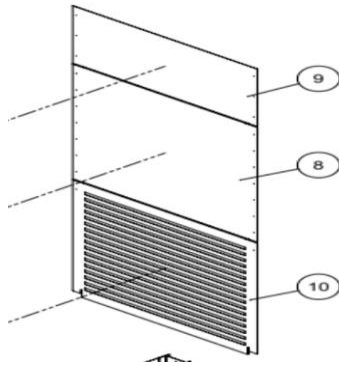
STEP 15 – INSTALL UPPER LARGE COVER PLATE

- Attach the Upper Large Cover Plate (part #18 below) to the Plug Fan Frame (part #20 below). Align holes and bolt to the frame. Then use self-tapping screws to attach to the side walls and the roof of the burner box.
- DO NOT INSTALL Plug Fan to Burner box (Part # 19 below) yet.



STEP 16 - CAULK BURNER BOX AND INSTALL BURNER BOX INSIDE COVER PANELS

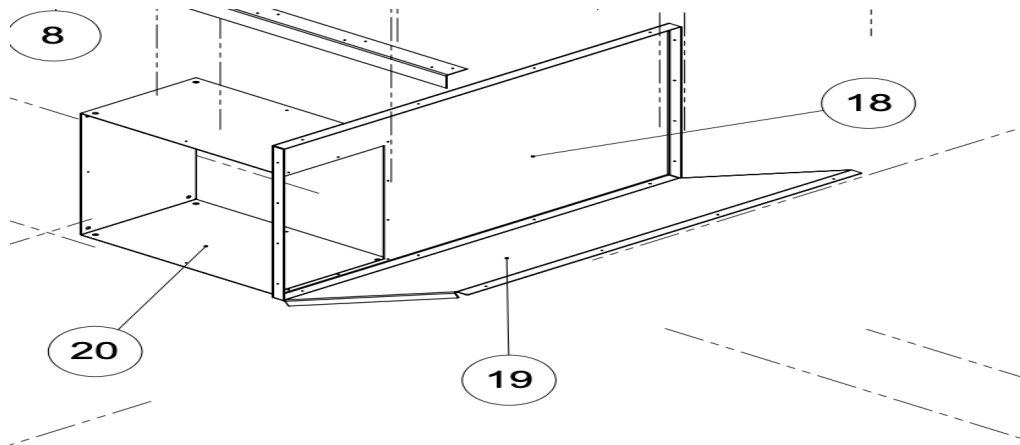
- Using a high temperature caulk (not included) from a home improvement store, fully caulk all seams inside the burner box. Chimney caulk or other high temperature materials may be approved by the local code.
- The Burner Box Inside Cover Panels are used to cover the burner box from the inside of the oven.
- Your configuration may consist of 2 or 3 panels



- The slotted Burner Box Cover Panel goes mounted first. It sits on the floor
- Using a drill with a hex head attachment, install self-tapping screws through the holes in the Inside Cover Panel and into the True-X Small Corners on each side. DO NOT SKIP SCREWS
- Stack and attach (one at a time) the remaining Burner Box Inside Cover Panels. See Drawings for clarification.
- Using a drill with a hex head attachment, install self-tapping screws through the holes in the Air Intake Panel and into the inner burner box walls. DO NOT SKIP SCREWS

STEP 17 – INSTALL PLUG FAN TO BURNER BOX COVER PLATE

- Attach the Plug Fan to Burner Box Cover Plate (part #19 below) to the Upper Large Cover Plate (part #19 below). Use self-tapping screws
- The Plug Fan to Burner Box Cover Plate (Part #19 Below) sits atop the top Burner Box Cover Panel. Attach using self-tapping screws.



STEP 18 – INSTALL REAR WALL OF OVEN

- Using your assembly drawing as a guide, place the rear oven walls in place one at a time. Be sure to set the panels completely into the floor track and make sure the male edges are pushed completely into the female panels. These are the 2' insulated panels.
- Using a 4' or larger level, make sure each wall is level and plumb.
- Once each wall is level and plumb, locate the large box of #10-16 self-tapping screws in your hardware box.
- Using a drill with a hex head attachment, install self-tapping screws through the holes in the sides of the floor track and into the wall panels. Do this on both the inside and outside of the floor track. DO NOT SKIP SCREWS.
- Using a drill with a hex head attachment, install self-tapping screws through the holes in the Female edge of the wall panels and into the fully inserted male edges. Do this on both the inside and outside of the walls. DO NOT SKIP SCREWS
- Install roof track on the rear wall. Do NOT screw the roof track to the rear wall.

STEP 19 – INSTALL OVEN WALLS, ROOF TRACK, AND ROOF.

SEAL ROOF AS YOU GO ALONG

- **Locate the MALE/MALE oven wall(s). When you build your oven from the rear to the front, one side wall will end with a male edge in the front. The other will require a male/male panel to make that happen. There is also one roof panel that is male/male. It goes on the front edge. SIT THIS PANEL TO THE SIDE.**
- **Using your assembly drawing as a guide, place the oven walls in place one at a time. Be sure to set the panels completely into the floor track and make sure the male edges are pushed completely into the female panels.**
- Using a 4' or larger level, make sure each wall is level and plumb.
- Once each wall is level and plumb, locate the large box of #10-16 self-tapping screws in your hardware box.
- Using a drill with a hex head attachment, install self-tapping screws through the holes in the sides of the floor track and into the wall panels. Do this on both the inside and outside of the floor track. DO NOT SKIP SCREWS.
- Using a drill with a hex head attachment, install self-tapping screws through the holes in the Female edge of the wall panels and into the fully inserted male edges. Do this on both the inside and outside of the walls. DO NOT SKIP SCREWS.
- **IMPORTANT: Walls will have nothing to prevent the walls from falling over as being built. Only build the walls long enough for the roof track and roof panels to be installed. The walls and roof should be built a section at a time for rigidity, safety, square, level, and plumb.**
- Refer to the drawings section for the size of the roof panels. Make sure they are put in place correctly.
- Locate the Male/Male roof panel and sit to the side. This one goes in last.

- Carefully place the roof panels into place. Start with a M/F roof panel and the Male edge to the rear of the oven. These panels sit inside the walls and onto the lips of the roof track. Make sure each roof panel is pushed flush into the previous roof panel. The seams of the roof panels should align closely with the seams of the wall panels.
- Using a drill with a hex head attachment, install self-tapping screws through the holes in the bent lip of the track-up and into the roof panels. DO NOT SKIP SCREWS.
- Using a drill with a hex head attachment, install self-tapping screws through the holes in the Female edge of the roof panels and into the fully inserted male edges. Do this on both the inside and outside of the roof panels. DO NOT SKIP SCREWS.
 - Using the roof seal strips, seal the gaps. Reference your drawings as to which length of seal and where they go.
- Using a high temperature caulk (not included) from a home improvement store, fully caulk all seams inside the oven. Chimney caulk or other high temperature materials may be approved by your local code.

STEP 20 - INSTALL DOOR FRAMES

- There are a set of 3 pieces that make up the door frame for each end of the oven that has doors. These parts are heavy gauge tube steel (6" x 6") and are powder coated black. Locate these parts
- REFER TO THE DRAWING SECTION OF THIS MANUAL.
- Using self-tapping screws, install a rope gasket to the front face of the front wall panels and ceiling panel. This helps seal the door frames and the header panel to the actual oven.



- One at a time, set each of the two-door support frames into place. They should be pushed tightly against the rope gasket seal.
- Using a 4' or larger level, make sure each support is level and plumb.

- Using a hammer drill with a 3/8" bit, drill holes in concrete through the holes for the Air Intake Panel.
- Find the Industrial Expanding Industrial Fasteners in your hardware box.
- Insert Industrial Expanding Industrial Fastener into the drilled hole. Using a hammer, drive down until flush.
- Using a socket, tighten the bolts of the Industrial Expanding Industrial Fasteners. Do not overtighten.
- Install the Horizontal Door Frame section. Make sure the doorstop is oriented facing down and toward the inside of the oven. The header support track is facing up.
- Using the provided hardware, attach the Horizontal Door Frame section to the vertical door supports.

STEP 21 – INSTALL DOOR HEADER

- Refer to drawings and locate the door header panel and track.
- Carefully lift the door header and sit entirely down into the door header panel support track.
- Using a 4' or larger level, make sure each wall is level and plumb.
- Once each wall is level and plumb, locate the large box of #10-16 self-tapping screws in your hardware box.
- Using a drill with a hex head attachment, install self-tapping screws through the holes in the sides of the header support track and into the header panel.
- Refer to the drawing and locate the Header Trim Pieces. These pieces are used to tie the header to the oven. There are 2 side pieces, a roof piece, and a piece for the inside of the oven.
- Put the top trim piece on the header so that it fits over the front of the header. Using self-tapping screws, attach to the front of the header. Pull the header snugly against the oven. Using self-tapping screws, attach the top trim piece to the top of the oven.
- Install the two side trim pieces per drawing using self-tapping screws.
- Install the inside trim piece per drawing using self-tapping screws.

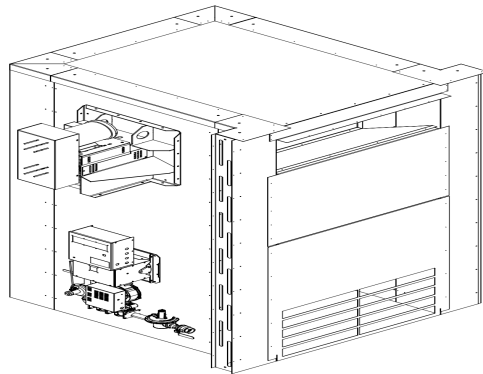
STEP 22 – INSTALL PLENUM SUPPORT BRACKETS

Note: Each installation is different depending on the location of the burner. If your burner is on the end of the oven, follow the directions as shown. If you have a side burner, the ends will have a side panel on each end of the plenum assembly. The installation is different because you start with the side plenum panel, space it 12" from the end of the back wall then install plenum supports as shown below.

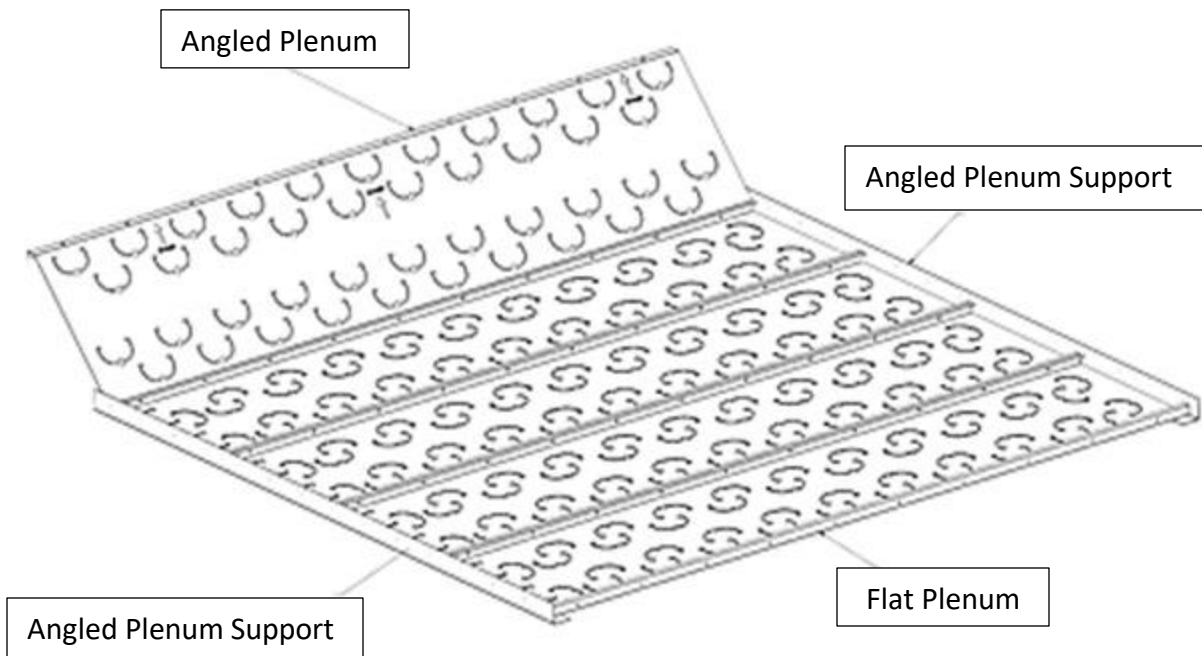
- Refer to drawings and locate L shaped plenum supports.
- For ease of installation, start from the back wall of the oven. Using a tape measure and a marker, measure 18" down from the bottom of the roof on each side wall and mark the spot. **STOP**
- **BEFORE PROCEEDING: MAKE SURE YOUR MARK IS BELOW THE HEIGHT OF THE OPENING AT THE TOP OF THE BURNER BOX.** This hole is where the air blows into the oven, and

the plenum must be below this hole. Depending on your floor and how level your panels were installed, the 18" mark may need to be adjusted slightly.

NOTE BOTTOM OF THE OPENING at the INSIDE TOP OF BURNER BOX. THE PLENUM MUST BE BELOW THIS OPENING. AIR FROM THE BOX BLOWS INTO THE PLENUM



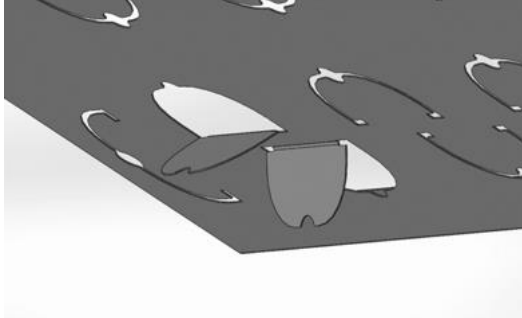
- Once you have confirmed the markings on each wall are below the bottom of the opening, use a measuring tape, a level, and a chalk line to mark a line down the entire length of each wall.
- Install supports with the bottom edge of the support on the line and the leg of the L shaped support going upwards. When the plenum sits on this support, the screws for this support will be up inside the plenum. This hides the screws.
- Once the support is level and plumb, locate the large box of #10-16 self-tapping screws in your hardware box.
- Using a drill with a hex head attachment, install self-tapping screws through the holes in the flange of the support to the wall using the holes in the support, DO NOT SKIP SCREWS.
- Do not install the next set of plenum support until you install plenum panels (see step 22)
- Once the plenum panels are installed, add the next set of plenum supports as before.
- Check level and distance before each install of plenum supports.



STEP 23 - INSTALL PLENUM

- Refer to drawings and locate plenum panels. There are two types of panels, the flat panel, and the end panel (see above). The end has a 45-degree bend on the end flange.
- Locate the end panels and set them aside.
- NOTE: With a burner on the rear, you will have a flat panel against the wall, a series of flat plenum panels, and end with an angled plenum panel near the front of the oven. For side burners or ovens with multiple burners, separate plenums are used for each burner and have angled plenums on each end.
- Locate the flat panels and slide them with the flanges up toward the roof. Install all flat panels until you reach the end of the support.
- Bolt the panels together BEFORE they are screwed to the plenum support brackets.
- Once panels are level and plumb, locate the large box of #10-16 self-tapping screws in your hardware box.
- Using a drill with a hex head attachment, install self-tapping screws through the holes in the flange of the support and attach panels using the holes in the support, DO NOT SKIP SCREWS.
- Once all panels are attached, return to step 21 and repeat until all flat panels are installed. Leave the last panel loose. You must attach it to the side panel before installation.
- Locate the side panel and bolt to the last flat panel before installing.
- Install the last panel assembly with the side panel facing the roof.
- Using a drill with a hex head attachment, install self-tapping screws through the holes in the flange of the side panel and attach panels to roof on the inside, DO NOT SKIP SCREWS.

STEP 23 - OPEN PLENUM HOLES (VERY CRITICAL STEP)



- For best performance and even heating, once the plenum is installed, you must bend down at least 50% of the openings to at least 45 degrees. This will allow the heat to be distributed evenly inside of the oven. **Failure to open enough plenum holes will not allow the oven to heat properly and will cause back pressure and damage to components and will void the warranty.**
- If you have areas that need more heat, increase the opening to balance airflow.
- **NOTE: A photo of the installed plenum with open vents will be required on the Warranty Validation Form**

STEP 24 - INSTALL EXHAUST FAN

- Locate exhaust fan, mesh cover, and Flange Adapter.
- Locate mesh cover and frame cover. This goes inside the oven and covers the exhaust fan hole. You will bolt these with self-tapping screws located in your hardware box.
- The mesh panel is placed against the wall.
- The mesh cover is bolted to the wall panel.
- 8" metal tube (not included) is inserted in the wall hole from outside until flush with a mesh cover.
- Slide Flange Adapter over an 8" metal tube and attach it to the outer wall skin.
- The fan unit is aligned with the end of the tube once the tube and fan are aligned.
- Find the Industrial Expanding Industrial Fasteners in your hardware box.
- Insert Industrial Expanding Industrial Fastener into the drilled hole. Using a hammer, drive down until flush.
- Using a socket, tighten the bolts of the Industrial Expanding Industrial Fasteners. Do not overtighten.

STEP 25 - INSTALL DOORS

- Locate door assembly, Left and Right hand.
- **Caution: before moving doors, the panel inserts are loose and will fall out if stood up.**
- Remove panel inserts and set them aside.

- Place O-ring spacers on the hinge pins on the door frame opening.
- Stand the door frame up and move to the door opening.
- Installing the door frame is just lining up the door hinge with the door hinge pins on the opening frame.
- The doors open out; pay attention to which is the right- and left-hand door.
- Once door frames are installed, locate panel assembly and insert it into the door. The panels should be installed from the outside of the oven.
- Pay attention to holes on the panel for the door handle.
- Once the upper and lower panel is indoor, locate the door handles.
- Door handles are attached with ¼-20 x 4 bolts, flat washer, lock washer, and nut.
- Once panels are level and plumb, locate the large box of #10-16 self-tapping screws in your hardware box.
- Using a drill with a hex head attachment, install self-tapping screws through the holes in the flange of the door panel to door frame, DO NOT SKIP SCREWS.
- Check the door swing should open smoothly without any rubbing on the floor or frame.

STEP 26 – INSTALL DOOR SEALS and LATCHES

- Locate the floor sweep gasket in the hardware box.



- At the bottom of the door with it closed. Place the gasket touching the floor and against the inside bottom edge of the door.
- Locate the large box of ¼-14 self-tapping screws in your hardware box.
- Using a drill with a hex head attachment, install self-tapping screws every 12" into the inside of the door panel.
- Repeat on the second door.
- Locate the door seal in the hardware box. This is the same seal you used on the door frame.
- Install the seal in the door between the overlapping area of the door.
- This will be attached to the frame opening with ¼-14 x 1.25 self-drilling screws located in the hardware box.
- To install, shut the door, and align the seal with the vertical edge of the door.
- Once aligned, start at the bottom and attach a seal to the door.
- Using a drill with a hex head attachment, install self-tapping screws through the seal into the door frame every 12 inches, DO NOT SKIP SCREWS.
- NOTE: The oven will operate with negative pressure. The doors will seal firmly but not necessarily tightly. Because of the negative pressure, air should not leak from this area.
- Locate the provided Friction Latches in the hardware box. Close doors firmly and attach latches.

- Locate the door latch located in the hardware box.
- This will be mounted on the door frame opening above the right door. This should be in a position to catch the right door when closed toward the center of the opening.
- This will be attached to the frame opening with ¼-14 x 1.25 self-drilling screws located in the hardware box (see example photo below).



STEP 27 – INSTALL CONTROL PANEL

- **Control panel must be installed per local code. Control panel needs to NOT be mounted directly to the oven wall so it can remain cool. An air gap should be between the wall of the oven and the rear of the control panel.**

STEP 28 – INSTALL AIRFLOW SAFETY SWITCH on EXHAUST STACK ONCE STACK IS INSTALLED.

- Airflow safety switches are provided. These switches ensure airflow requirements are being met.
- NOTE: Tubes CAN NOT BE BENT. They are reading airflow and should be as least restrictive as possible.
- Install both positive and negative tubes to airflow switches for the best results. Use the same principle as used on the airflow switch for the recirculation fan.



Exhaust Fan Air-Flow Tube Location

STEP 29 – INSTALL TEMPERATURE PROBES

- You will need a drill with 3/8" x 8" drill bit, (2) Four square junction boxes with covers, (1) 3/8" One hole Flex Conduit Strap, self-tapping screws, and high temperature chimney caulk. These are not provided.
- Note: Temperature probes are often mounted by a licensed electrician.

MAIN TEMPERATURE PROBE

- 1. Knock out the center hole in the rear of the junction box. Mount the box on the outside of the oven midway down the length of the oven. If you have multiple burners, each burner will be controlled by the main temperature probe. They should be spaced out down the length of the oven. These need to be about 4' from the floor. Choose the side of the oven nearest the main control panel, so the run of wire will be shortest.**
- 2. Drill a 3/8" hole in the center of the knockout hole and into the inside of the oven.**
- 3. Find a temperature probe. From inside the oven, carefully feed the wires through the hole and into the junction box. Be very careful as to now damage these wires.**
- 4. Slide the probe until the spring section is just inside the hole.**

5. Bend the probe 90 degrees towards the REAR of the oven. Using the Flex conduit strap, secure the probe at the base.
6. Use a small amount of chimney caulk to seal the hole inside the junction box.
7. NOTE: PROBE CAN NOT BE TOUCHING THE WALL



HIGH-TEMPERATURE PROBE

1. Knock out the center hole in the rear of the junction box. Mount the box on the oven's roof directly in front of where the burner box meets the oven cabin. Approximately 1 foot in front of the seam where they meet. This probe will be in the oven plenum. If you have multiple burners, each burner will have a high-temperature probe
2. Drill a 3/8" hole in the center of the knockout hole and into the inside of the oven.
3. Find a temperature probe. Slide the probe headfirst into this hole. Be very careful as to now damage these wires or the probe. Note: This probe goes straight down and is not bent at an angle.
4. Use a small amount of chimney caulk to seal the hole inside junction box
5. NOTE: PROBE CAN NOT BE TOUCHING ANY METAL

STEP 29 – HAVE LICENSED ELECTRICIAN WIRE OVEN

- Wiring schematics are provided in this manual. A licensed electrician is needed to pull and land all interconnect wiring and main wiring. The license number, name, and contact information will be required on the Warranty Validation Form.

STEP 30 – HAVE A LICENSED CONTRACTOR CONNECT UTILITIES

- A licensed technician must connect all utilities. The technician's license number, name, and contact information will be required on the Warranty Validation Form.

STEP 31 – HAVE A LICENSED CONTRACTOR INSTALL THE EXHAUST DUCT

- Exhaust stack required is typically Class B Double Wall. Local code may supersede this requirement. NOTE: The exhaust must go outside of the building because of heat and burnt gas fumes. The exhaust stack must have a cap to prevent intrusion of animals and precipitation. Exhaust roof cap MUST be high flow with no restriction. Exhaust caps that restrict airflow may cause safety switches to inadvertently fail to make. A photo of the installed stack will be required on the Warranty Validation Form.

STEP 32 – PERFORM ALL READINGS AND SUBMIT WARRANTY VALIDATION FORM FOR REVIEW

- **This form must be completed, submitted, and approved prior to the start-up of the oven for warranty validation. Start-up of the oven without a signed Warranty Validation Approval form from a Powder-X Factory Authorized Technician will immediately void the warranty.**

STEP 33 - SEE OVEN START-UP PAGE