

# INSTRUCTIONS

## CostGard™ Condensate Drain Seal Residential Kit - Model 1525R

For Draw-Through Air Handlers, Up to 4 Tons, With 3/4" Drain Outlet

This CostGard™ Condensate Drain Seal Kit is applicable to most draw-through air handlers with a 3/4" drain up to 4 tons. The components provided allow connection to almost any drain configuration on horizontal and vertical units. Installation arrangements are adaptable to units located in the restricted space available in attics or closets.

### INSTALLATION NOTES

1) Assemble the following items:

- 1" Schedule 40 PVC Pipe and Fittings
- Pipe Supports
- Tape Measure
- Felt Marker
- Sharp Knife
- Hand Drill
- 1-5/8" Hole Saw
- Level
- Philips Screwdriver
- PVC Pipe Cutter
- PVC Cleaner
- PVC Cement

2) This CostGard™ Kit includes Parts 1 through 10 listed on the far right. Contact Trent Technologies if parts are missing or damaged.

3) Confirm the condensate drain pan and outlets are clean and free of debris.

4) Using a tape measure, measure the depth available from the middle of the condensate drain outlet to the floor or platform the unit is installed on. Next, consult the Configuration Chart (on the right) to determine the correct configuration for the depth available in your application. Static pressure limits\* apply to the various CostGard™ configurations available.

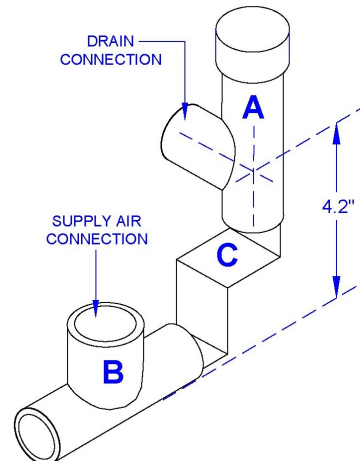
5) Follow the Installation Fundamentals and the Installation Diagram on the reverse side of this page. Dry-fit all components according to the Installation Diagram to allow for rotation for pipe routing and attaching the air supply piping prior to bonding each joint with PVC cement.

6) When necessary, insulate the CostGard™ Condensate Drain Seal and connecting piping to prevent condensate formation on outside surfaces.

## CostGard™ CONFIGURATION CHART

### CostGard™ 42

Depth Required: 4.2"



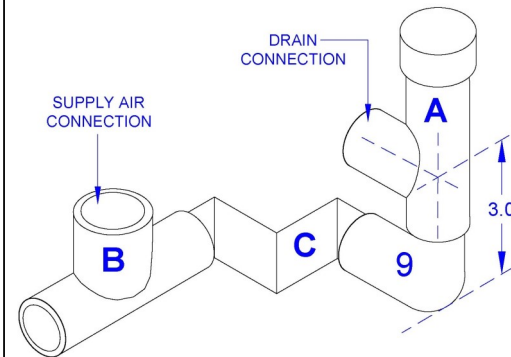
**Drain Size**  
3/4"

**Static Pressure Limit\***  
-1.0" w.c.

### CostGard™ 30

Depth Required: 3.0"

- Street Elbow
- Horizontal Part C

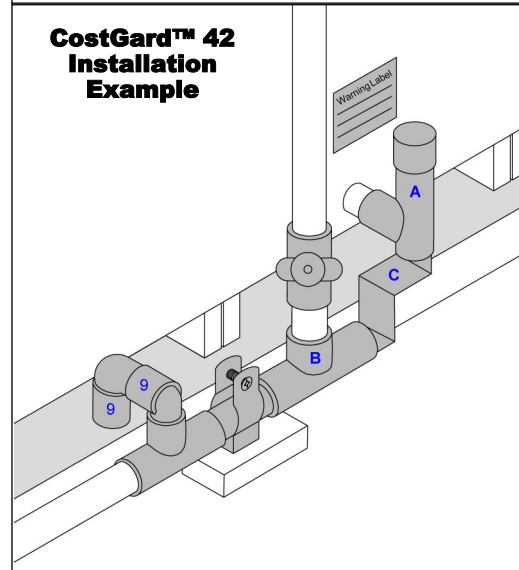


**Drain Size**  
3/4"

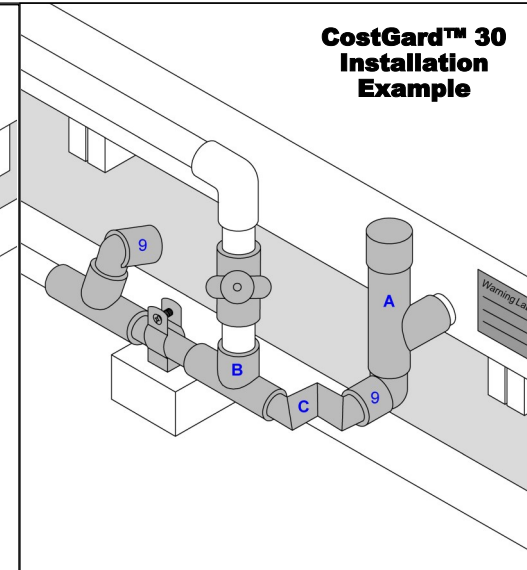
**Static Pressure Limit\***  
-0.8" w.c.

\*Do not exceed static pressure limit. If measured pressure in the drain pan exceeds static pressure limits noted above please call Trent Technologies at (903) 509-4843

### CostGard™ 42 Installation Example



### CostGard™ 30 Installation Example



## PARTS LIST

Part #	Description	Qty.
1	CostGard™ Drain Seal Parts A, B, C, & Warning Label	1
<p>Note: Will not operate without cap or if cap is removed.</p> <p>Properly assembled when the internally sloped end of Part C is inserted into the short leg of Part A.</p> <p>Rotate Part B until proper position is found (up to 60°).</p>		
2	1" Supply Pipe Grommet	1
<b>3/4" Black UV Inhibited Pipe</b>		
3	1-1/2" Long	1
4	3-1/4" Long	1
5	4-1/4" Long	1
<b>Supports</b>		
6	CostGard™ Support (Includes 1" screw)	1
<b>Fittings</b>		
7	3/4" Male Threaded Adapter	1
8	3/4" Vent Tee	1
9	3/4" Street Elbow	2
10	1" Ball Valve	1
FSP	Field Supplied Pipe for Supply Line and to Main Disposal Area	

# INSTRUCTIONS

## CostGard™ Condensate Drain Seal Residential Kit - Model 1525R

For Draw-Through Air Handlers, Up to 4 Tons, With 3/4" Drain Outlet

### INSTALLATION FUNDAMENTALS

This CostGard™ Condensate Drain Seal is connected to the drain connection of the HVAC unit the same as the condensate trap. In order to form an air seal, in place of a water seal, one other pipe connection is required. For most applications these connections are quite simple; however, some can be more complex. The basic criteria for a successful installation are:

### Pipe Connections

The CostGard™ Condensate Drain Seal must be connected with Schedule 40 PVC piping to the air handler at the following two (2) points:

- 1) The condensate drain pan connection where condensate traps are usually connected;
- 2) Using a 1-5/8" hole saw, cut hole\* into the air supply plenum or duct downstream of the fan. Insert 1" grommet.

\* NOTE: Remove access panels and check for clearance before drilling holes into the air handler cabinet.

### Pipe Routing

All pipes must be routed in such a way that they do not interfere with access panels. As specified by International and Uniform plumbing codes, the field supplied pipe between the CostGard™ and the main drain should slope a minimum of 1/8" per foot.

### Pipe Supports

The pipe must be supported and fixed in place to minimize potential damage to the piping and the CostGard™ Condensate Drain Seal. Pipe supports of varying styles and sizes may be used as deemed necessary.

### Balance the Air Seal Using the Ball Valve

Install the valve in the closed position and leave it closed during the test and balancing process. Before condensate formation and drainage, during operation at rated condition, open the valve in small steps until air begins to flow from the drain line vent. The proper valve setting is when the air from the drain line vent slightly deflects a lighter's flame. Click from a computer or scan the QR code from a smartphone to view a how-to video.

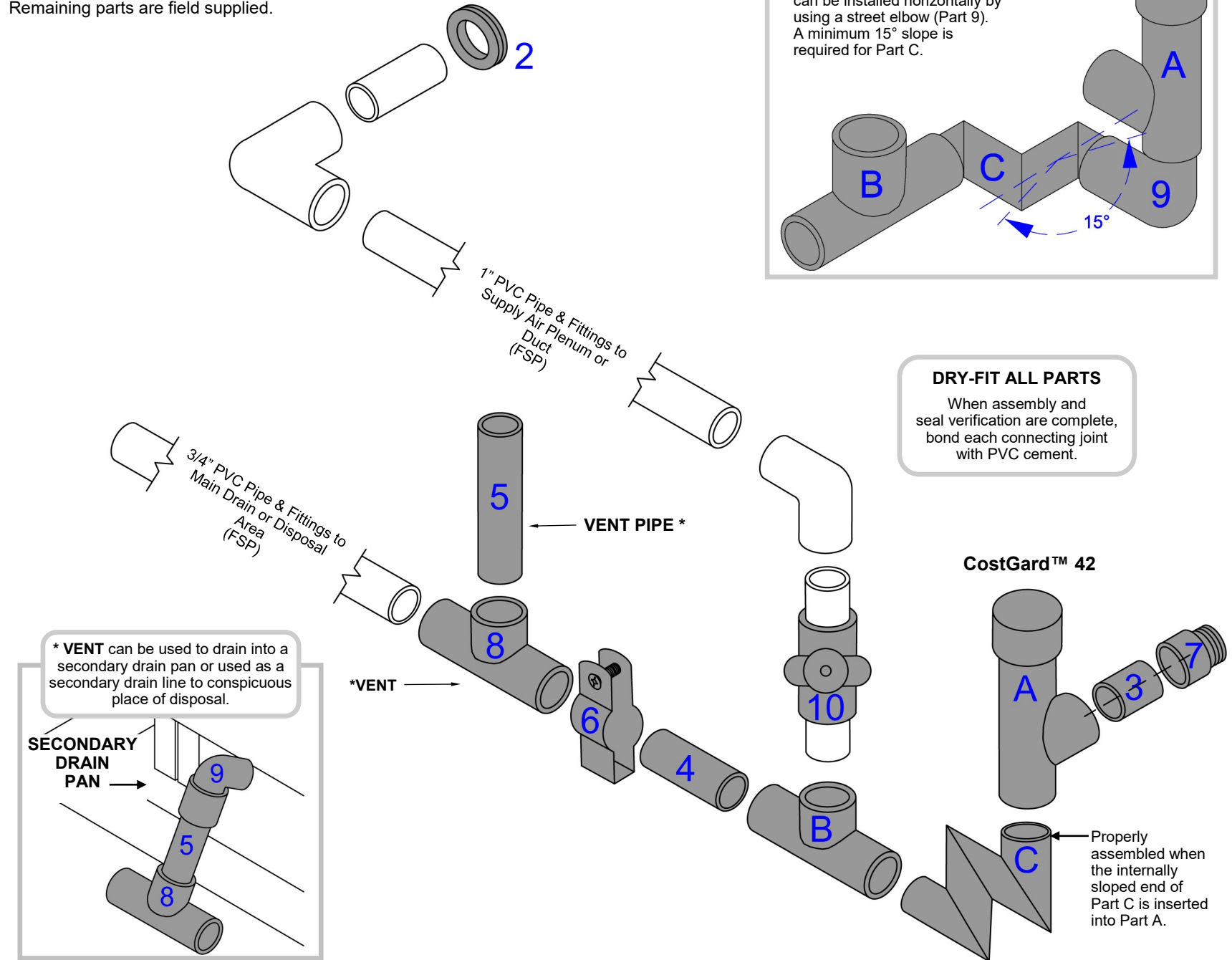


### Final Steps

Once the components are assembled and pipe supports are attached, bond each connecting joint with PVC cement. Attach yellow warning label.

# INSTALLATION DIAGRAM

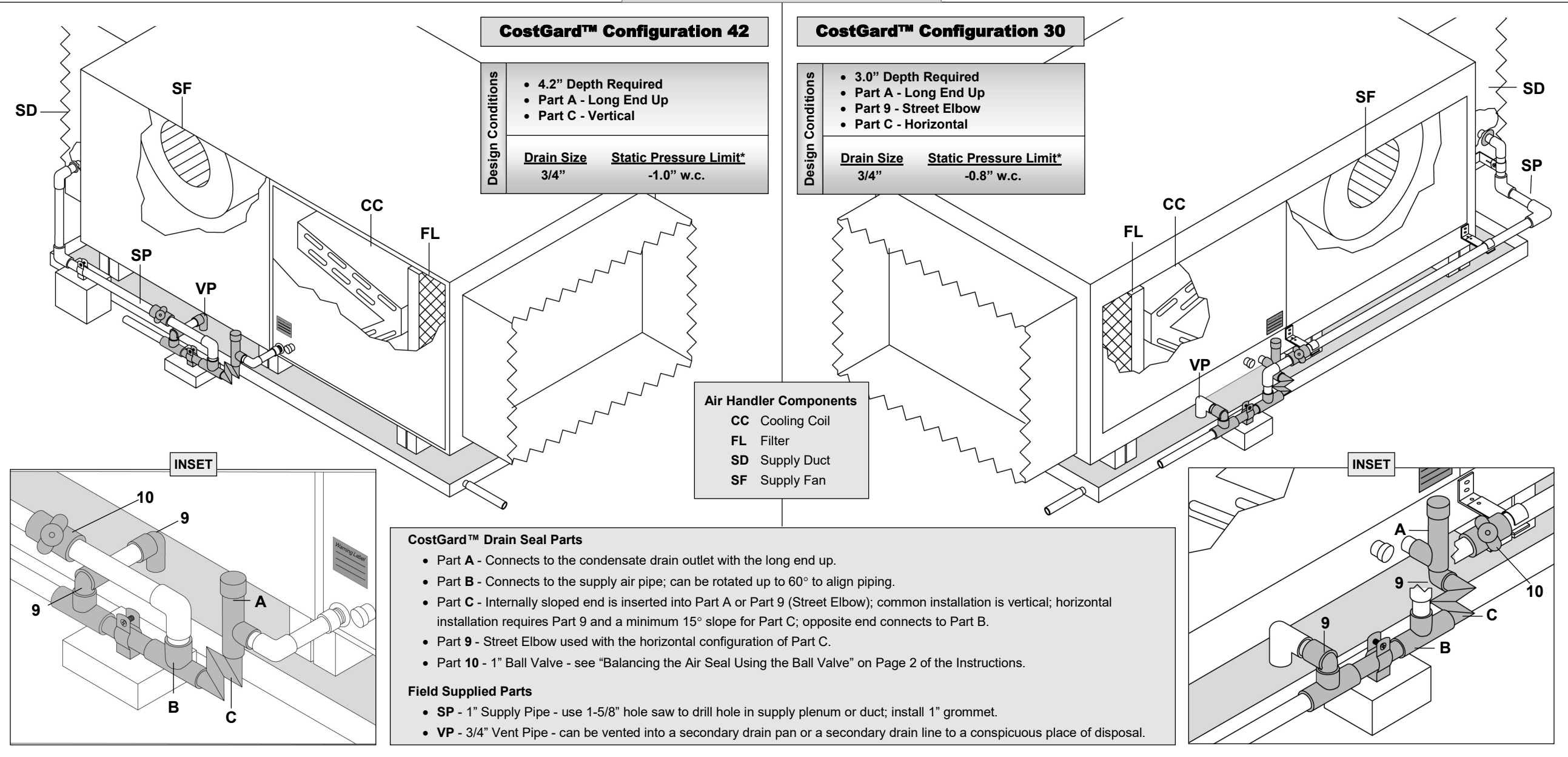
The CostGard™ Residential Kit includes all shaded parts noted below. Remaining parts are field supplied.



# INSTALLATION EXAMPLES

**CostGard™ Condensate Drain Seal**  
**Residential Kit - Model 1525R**  
 For Draw-Through Air Handlers, Up To 4 Tons, With 3/4" Drains

## Horizontal HVAC



# INSTALLATION EXAMPLES

**CostGard™ Condensate Drain Seal**  
**Residential Kit - Model 1525R**  
 For Draw-Through Air Handlers, Up To 4 Tons, With 3/4" Drains

## Vertical HVAC

### CostGard™ Configuration 42

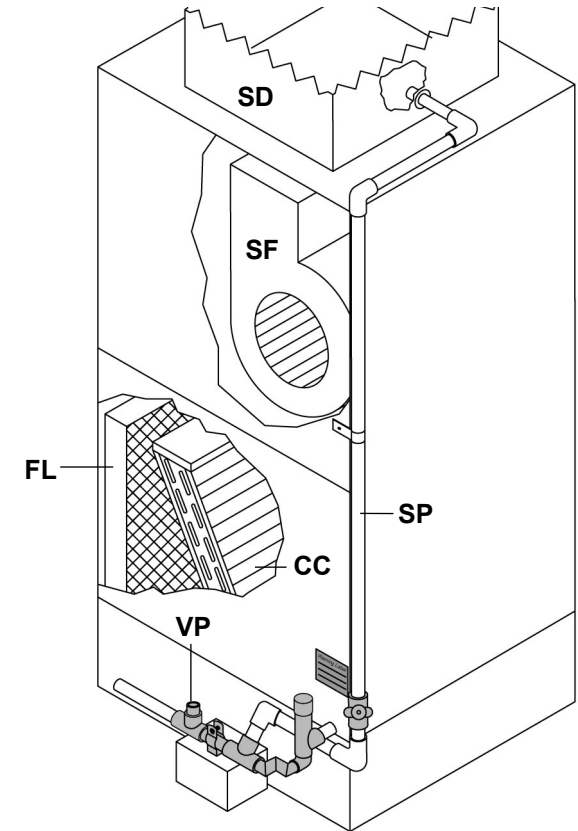
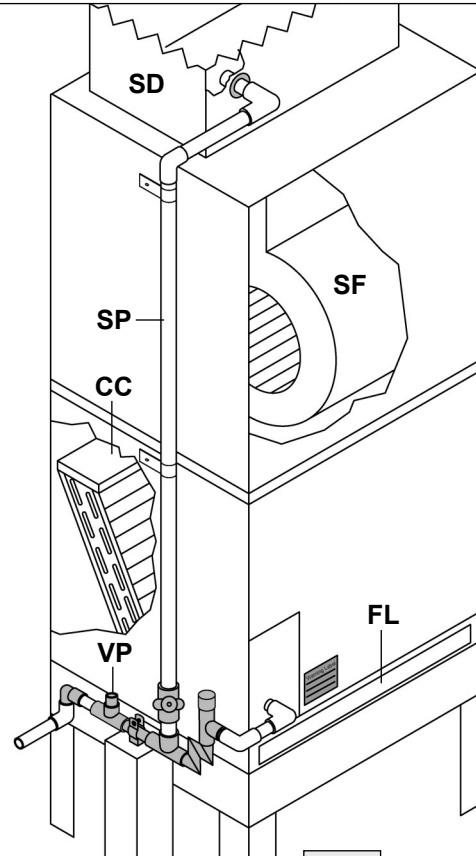
- Design Conditions**
- 4.2" Depth Required
  - Part A - Long End Up
  - Part C - Vertical

Drain Size	Static Pressure Limit*
3/4"	-1.0" w.c.

### CostGard™ Configuration 30

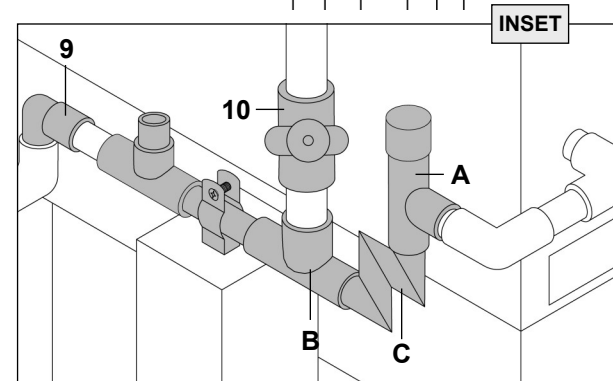
- Design Conditions**
- 3.0" Depth Required
  - Part A - Long End Up
  - Part 9 - Street Elbow
  - Part C - Horizontal

Drain Size	Static Pressure Limit*
3/4"	-0.8" w.c.



#### Air Handler Components

- CC Cooling Coil
- FL Filter
- SD Supply Duct
- SF Supply Fan



#### CostGard™ Drain Seal Parts

- Part A - Connects to the condensate drain outlet with the long end up.
- Part B - Connects to the supply air pipe; can be rotated up to 60° to align piping.
- Part C - Internally sloped end is inserted into Part A or Part 9 (Street Elbow); common installation is vertical; horizontal installation requires Part 9 and a minimum 15° slope for Part C; opposite end connects to Part B.
- Part 9 - Street Elbow used with the horizontal configuration of Part C.
- Part 10 - 1" Ball Valve - see "Balancing the Air Seal Using the Ball Valve" on Page 2 of the Instructions.

#### Field Supplied Parts

- SP - 1" Supply Pipe - use 1-5/8" hole saw to drill hole in supply plenum or duct; install 1" grommet.
- VP - 3/4" Vent Pipe - can be vented into a secondary drain pan or a secondary drain line to a conspicuous place of disposal.

