# **HeatShift<sup>®</sup>System**

# Planning and Installation: H3 with HeatShift®

For use with 1000K Valor Heaters ONLY (not compatible with Series J)

# Application

The HeatShift<sup>™</sup> convection duct kit redistributes the warm air flow away from the fireplace to a position higher up the wall using natural convection, without the use of a fan.

The result is much cooler wall temperatures above the fireplace opening for locating televisions, artwork, etc.

## Approvals

The LDK8 kit is CSA approved for use only with Valor Series fireplaces listed above—DO NOT use with any other models.

This HeatShift system may also be used to reduce wall surface temperatures on approved outdoor installations.

4-inch diameter duct used with this kit must be metal and meet requirements of UL-181 Class 1 Air Duct. Flexible aluminum duct is acceptable provided it meets the UL-181 Class 1 requirements.

## NOTE

**RC** Backing Plates 1035BPB-RC, 1036BPB-RC or 1040BPB-RC are NOT compatible with HeatShift.

# \land WARNING

When placing discharge close to ceilings, staining or streaking may occur on light colored ceilings due to any dust, etc. in air flow; placing plenum(s) lower on the wall will help reduce the possibility of staining or streaking.

# ⚠ WARNING

DO NOT cover or place objects in front of or on top of air outlet(s). AVOID locating outlet within 7 feet above floor level as discharge temperatures are hot!

# \land WARNING

All fireplaces listed above **require the removal of the internal convection baffle** for this system to function properly—read instructions carefully!

## Note:

The use of this kit will permit lower mantel clearances to be used—see *"Mantel Clearances"* in the *H3 Installation Manual.* 

These lower mantel clearances must ONLY be used when the HeatShift system is installed and the internal convection baffle has been removed.

#### Kits

The LDK8 HeatShift kit is required for use with the H3 fireplace if HeatShift is to be implemented.

The LDK10 and LDK11 are optional accessories, but some approved liner and clamps are required. See "Approvals" on the previous page for size and ratings details.

- LDK8 30" HeatShift plenum and (2) dual collar plates (4" diameter)
- LDK10 30" finishing frame to use with LDK8
- LDK11 (2) 10' lengths of 4" liner and (8) clamps







# Configuration H3 with LDK8



The LDK8 plenum is typically installed directly above the H3 unit, connected by the LDK11 (or approved 4") liners. It may be offset from center, or vented to the rear if desired.

Note: Coaxial vent can be routed vertically through the cutout in the HeatShift plenum. If the plenum must be offset to the rear, the vent must also be offset to accommodate.

# \land WARNING

The plenum duct kits are approved for horizontal discharge ONLY. DO NOT install plenum in floor or ceiling. DO NOT COVER OR PLACE objects in front of or on top of air outlet(s). AVOID locating outlet within 7 feet of the floor level as discharge air temperatures are hot!

DO NOT DISCHARGE THROUGH EXTERIOR WALLS!

## Dimensions







## Allowable Rise and Offset

Y Vertical Rise	X Max. Allowable Horizontal Offset	
42″	48″	
48″	60"	
54″	72″	
60"	84″	
66"	96″	
12'-0"	0" 96" Max.	





Floor

## **Remove Convection Baffle**

To be effective, the HeatShift system **requires** that an internal convection baffle located above the firebox inside the appliance case be removed to allow the hot air flow to convect upwards into ducts installed on the fireplace.

Remove the convection baffle from the appliance. It is held in place by 3 screws located right behind the upper edge of the fireplace opening. Recycle this panel as it is no longer needed.

Top of fireplace shown transparently for clarity.



# ▲ WARNING

The H3 fireplace **requires the removal of the internal convection baffle** for the HeatShift system to function properly read instructions carefully!

## Install HeatShift Take-Off Collars

1. Remove the two cover plates on top of the appliance case (8 screws each).



2. Install the take-off collars on the holes on top of the appliance's case (8 screws each).



# \land WARNING

All FOUR (4) takeoffs MUST BE CONNECTED TO PLENUM(S).

## Install Plenum Kit (LDK8)

1. Frame a rough opening at the desired location—see earlier sections of this manual for detail.



2. Install the plenum into the front of the frame opening, maintaining minimum clearances to combustibles as previously listed.



3. Fix the plenum to the front of the framing using screws through the faceplate (16 screws).



- 4. Attach one section of UL-181, Class 1 approved air duct to each of the collars and secure it with gear clamps provided. **DO NOT SPLICE DUCTS!**
- 5. Attach the top of the pipe sections to the plenum securing them with the gear clamps provided. An upward slope must be maintained in horizontal sections of pipes for proper convection (see *Allow-able Rise and Offset* on page 74). Use straps as necessary to maintain the pipes positions. Support horizontal sections every 24 inches.

- Paint the inside surfaces of the plenum using hightemperature flat black spray paint for installations where the inside of the plenums may be visible.
  Note: The flanges of the white finishing frame (when used) will insert approximately 1-1/4" into the plenum covering the shiny sheet metal.
- 7. Install the LDK10 finishing frame to the plenum after the wall finish is completed.



**Note:** The frame/louver are finished white but may be painted another color if desired; use high temperature paint (250°F). You may also finish up to the perimeter of the plenum opening with your material of choice and not use the frame or louver. Do not finish over any of the opening in the plenum outlet.

8. Continue with the fireplace installation.

#### **Repair Parts List**

	Description	Part no.
LDK8	30" Quad Hot Air Plenum Kit	
	30" x 2" quad plenum	4007873
	2x4" take-off collar plates (2)	4007864
LDK10	30" Outlet Frame Kit for LDK4	
	Aux Frame-SPL 30" x 2" white	4007951
LDK11	4" Aluminum 2-ply Flex Kit	
	4" dia 10' (uncompressed) aluminum chimney liners (2)	4007953
	2.5" - 4.5" ss gear clamps (8)	4007955

Each kit is sold separately.