

HeatShift™ System

Planning and Installation: H3 with HeatShift®

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

Application

The HeatShift™ 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.

Only the LDK8 plenum with 4" diameter collars can be used on H3 as opposed to 5' diameter collars of other plenums.

The instructions in the following pages must be used jointly with the fireplace's installation instructions shown in this manual.

The use of this system allows for lower combustible mantel clearances—see Combustible Mantel Clearances in this manual. **The clearances listed are ONLY allowed when the HeatShift System is installed and the internal convection baffle has been removed from the appliance.**

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—see GV60CKO Outdoor Conversion Kit for more information..

4" [102 mm] 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.



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 [2134 mm] above floor level as discharge temperatures are hot!



WARNING

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

NOTE—Sprinklers

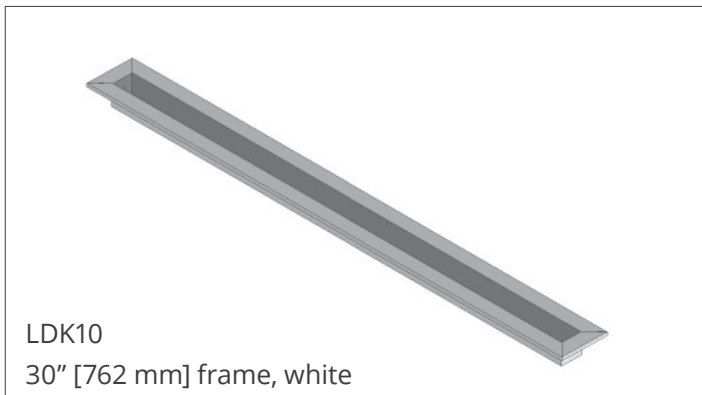
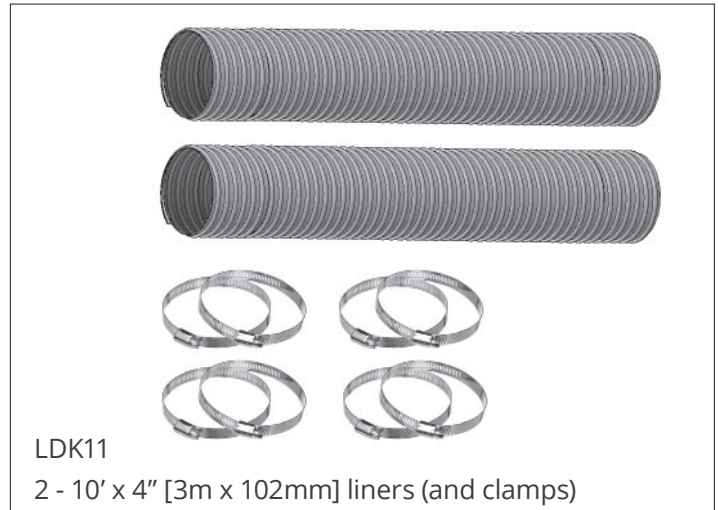
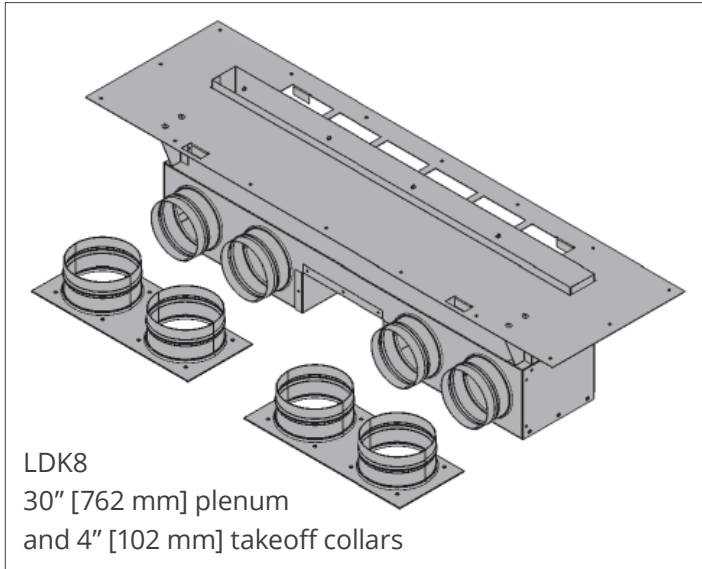
Depending on room temperature, HeatShift air discharge temperatures can be in the range of 210 °F (99 °C). Please refer to local building code, choose appropriate sprinkler heads and place them accordingly. See Typical Framing page.

Kits

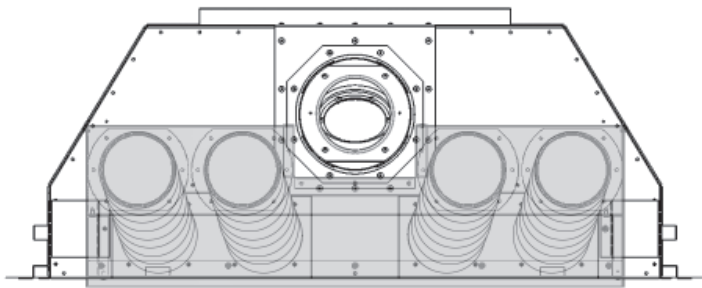
The LDK8 HeatShift kit is required for use with the H3 fireplace if HeatShift is to be implemented.

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" [762 mm] HeatShift plenum and (2) dual collar plates (4" [102 mm] diameter)
- LDK10 - 30" [762 mm] finishing frame to use with LDK8
- LDK11 - (2) 10' [3 m] lengths of 4" [102 mm] 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" [102 mm]) 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.

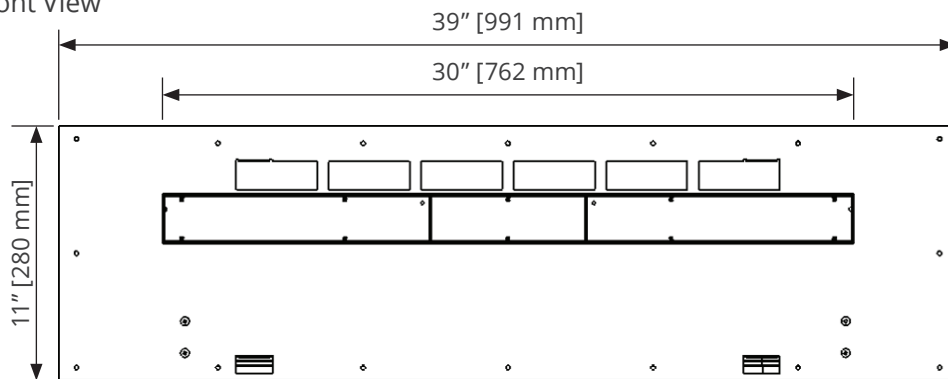
⚠ WARNING

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 [2134 mm] of the floor level as discharge air temperatures are hot!

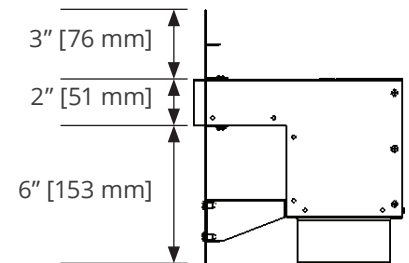
DO NOT DISCHARGE THROUGH EXTERIOR WALLS!

Dimensions

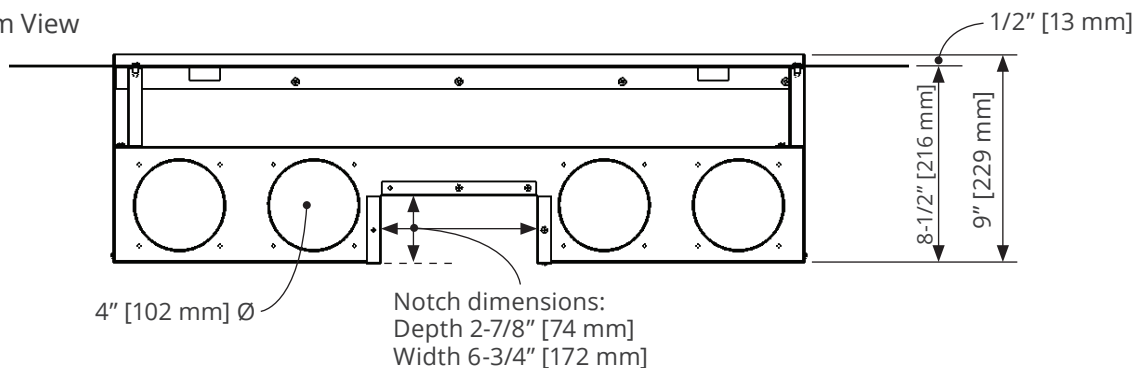
Front View



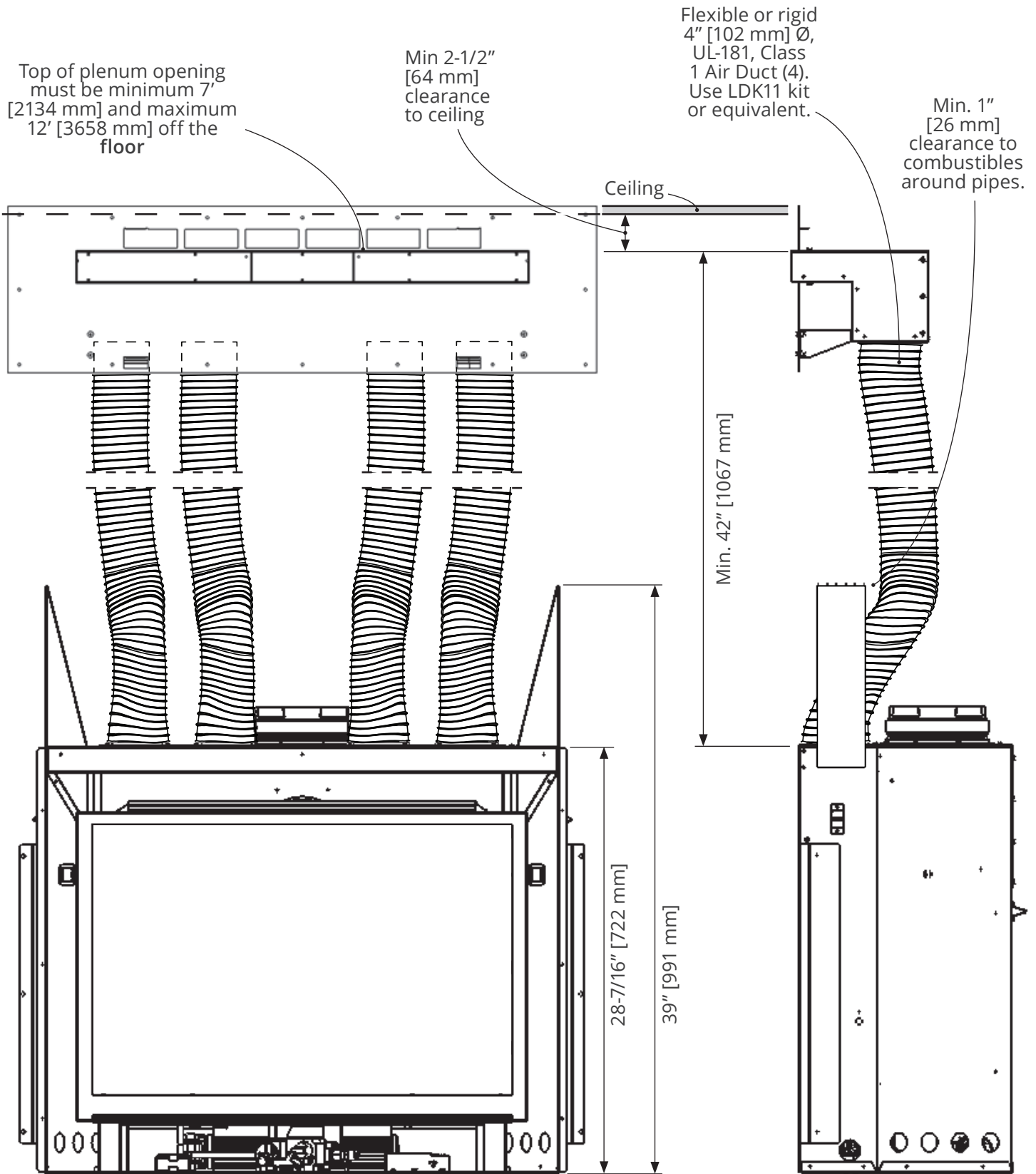
Side View



Bottom View

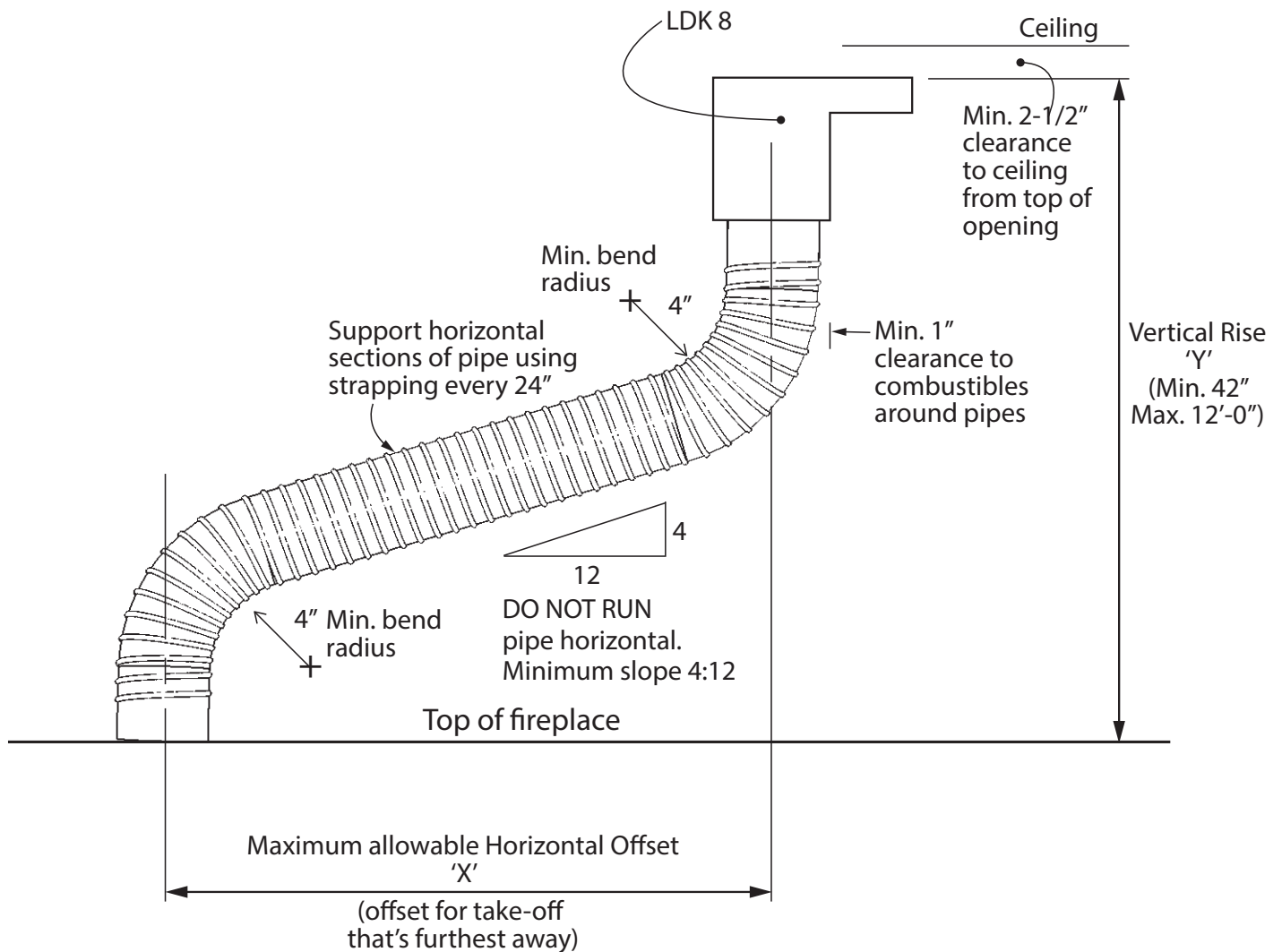


Overview - LDK8 Kit



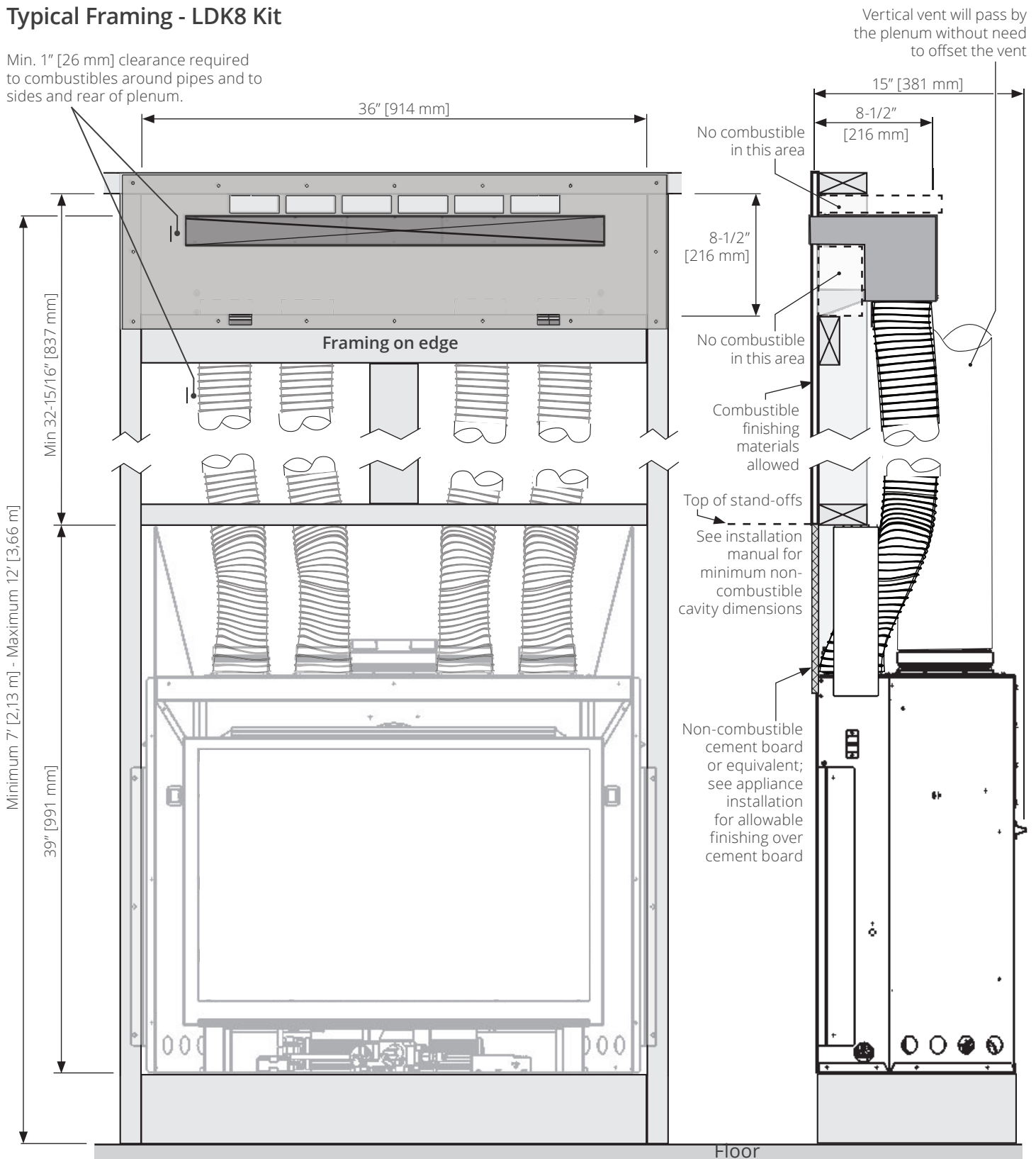
Allowable Rise and Offset

Y Vertical Rise	X Max. Allowable Horizontal Offset
42" [1067 mm]	48" [1220 mm]
48" [1220 mm]	60" [1524 mm]
54" [1372 mm]	72" [1829 mm]
60" [1524 mm]	84" [2134 mm]
66" [1677 mm]	96" [2439 mm]
12'-0" [3658 mm]	96" [2439 mm] Max.



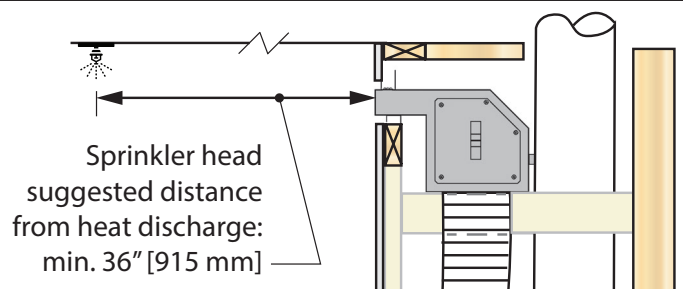
Typical Framing - LDK8 Kit

Min. 1" [26 mm] clearance required to combustibles around pipes and to sides and rear of plenum.



NOTE—Sprinklers

Depending on room temperature, HeatShift air discharge temperatures can be in the range of 210 °F (99 °C). Please refer to local building code, choose appropriate sprinkler heads and place them accordingly.

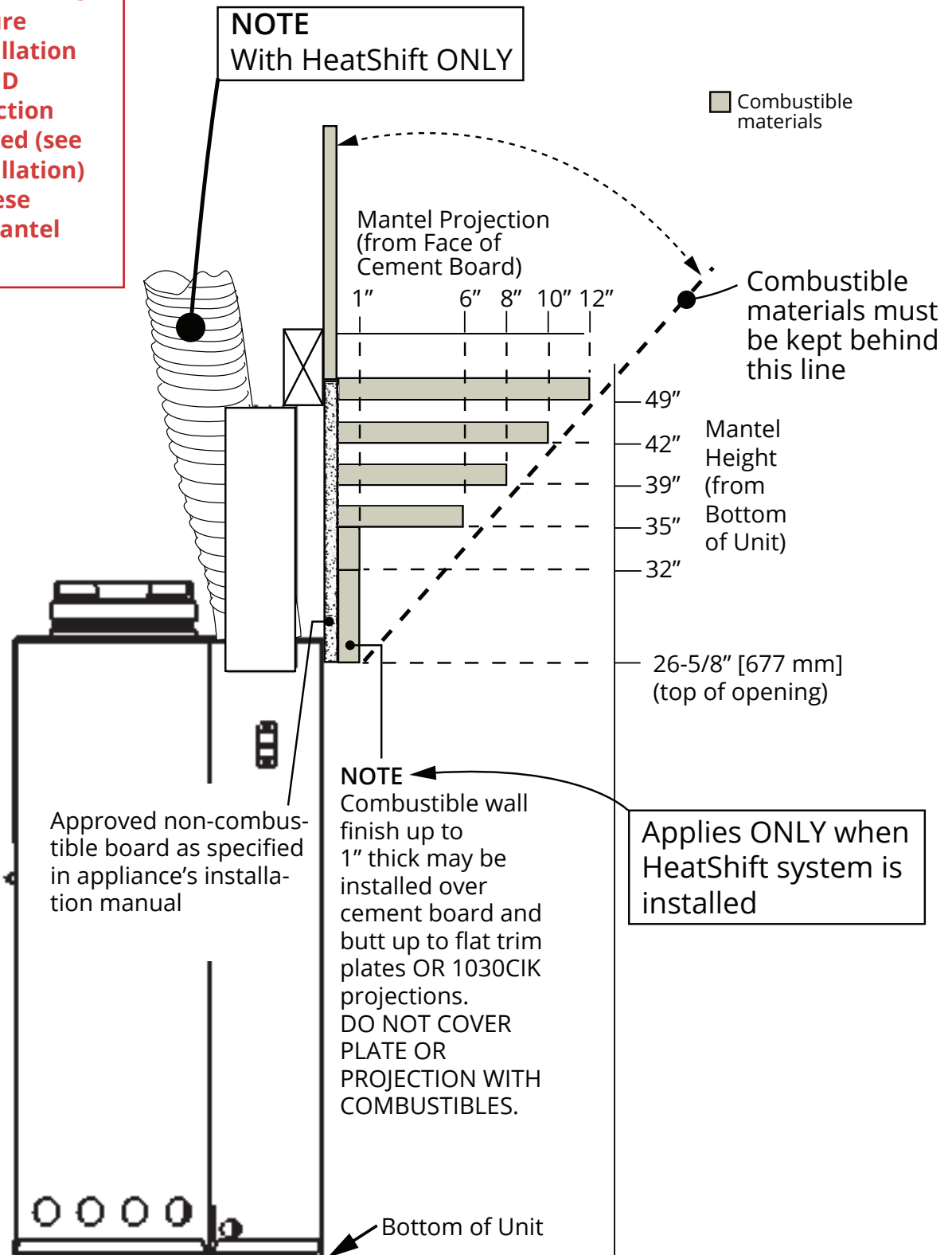


COMBUSTIBLE Mantel Clearances H3 appliances (when using HeatShift System ONLY)

Sidewall clearances remain as stated in this installation manual.

WARNING

RISK OF OVERHEATING AND FIRE! Ensure HeatShift installation is complete AND internal convection baffle is removed (see HeatShift installation) when using these combustible mantel clearances.



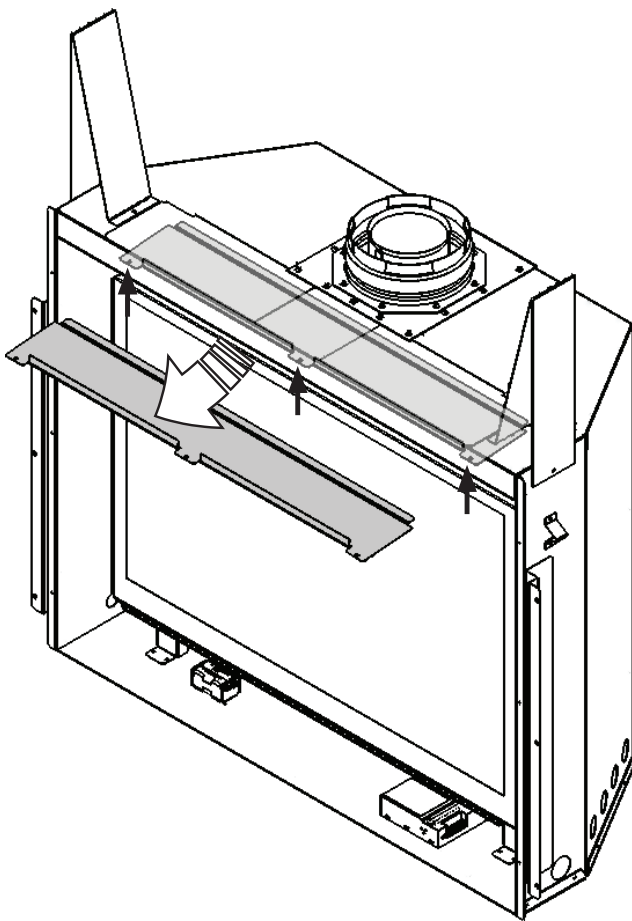
not to scale

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.

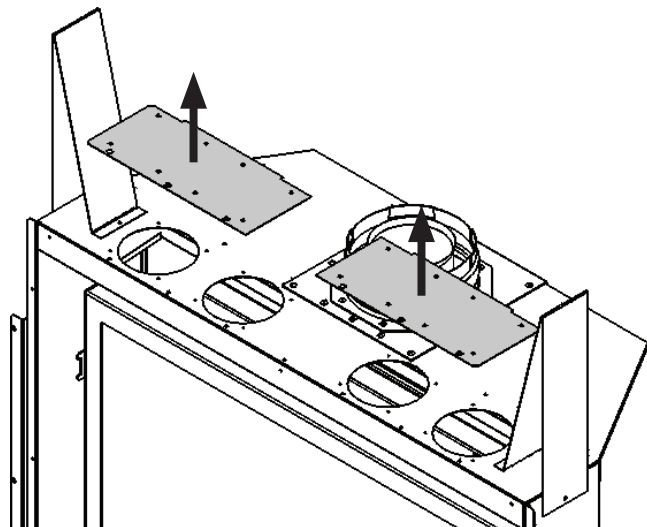
Remove the convection baffle from the appliance. It is held in place by 3 screws located right behind the upper edge of the fireplace opening. Recycle this panel as it is no longer needed.

Top of fireplace shown transparently for clarity.

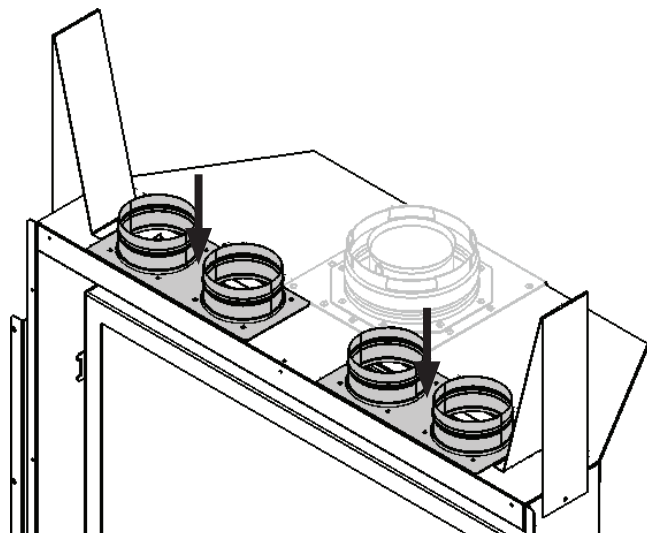


Install HeatShift Take-Off Collars

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).



WARNING

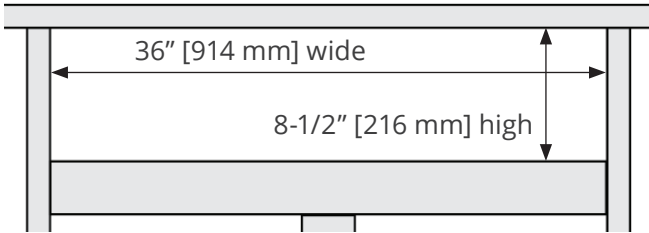
The H3 fireplace **requires the removal of the internal convection baffle** for the HeatShift system to function properly—read instructions carefully!

WARNING

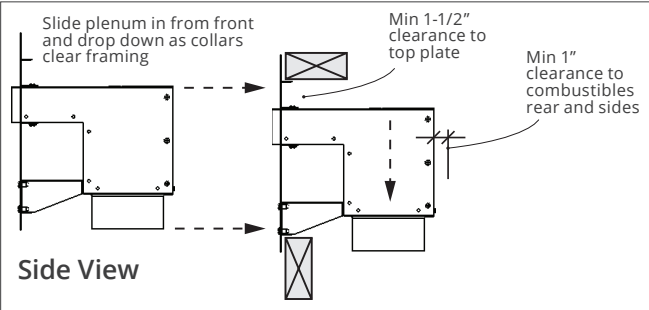
All FOUR (4) takeoffs MUST BE CONNECTED TO PLENUM(S).

Install Plenum Kit (LDK8)

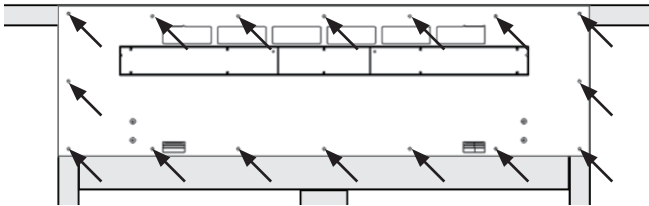
1. Frame a rough opening at the desired location—see earlier sections of this manual for detail.



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

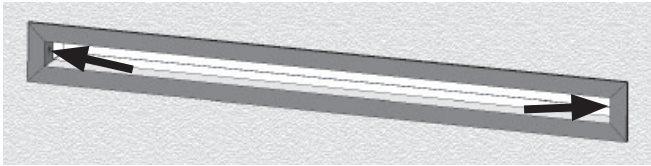


3. Fix the plenum to the front of the framing using screws through the faceplate (16 screws).



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 *Allowable Rise and Offset*. Use straps as necessary to maintain the pipes positions. Support horizontal sections every 24 inches.

6. Paint the inside surfaces of the plenum using high-temperature 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" [762 mm] Quad Hot Air Plenum Kit	
	30" x 2" [762 x 61 mm] quad plenum	4007873
	2x4" [102 mm] take-off collar plates (2)	4007864
LDK10	30" [762 mm] Outlet Frame Kit for LDK4	
	Aux Frame-SPL 30" x 2" [762 x 61 mm] white	4007951
LDK11	4" [102 mm] Aluminum 2-ply Flex Kit	
	4" [102 mm] dia 10' [3 m] (uncompressed) aluminum chimney liners (2)	4007953
	2.5-4.5" [64-115 mm] ss gear clamps (8)	4007955

Each kit is sold separately.