

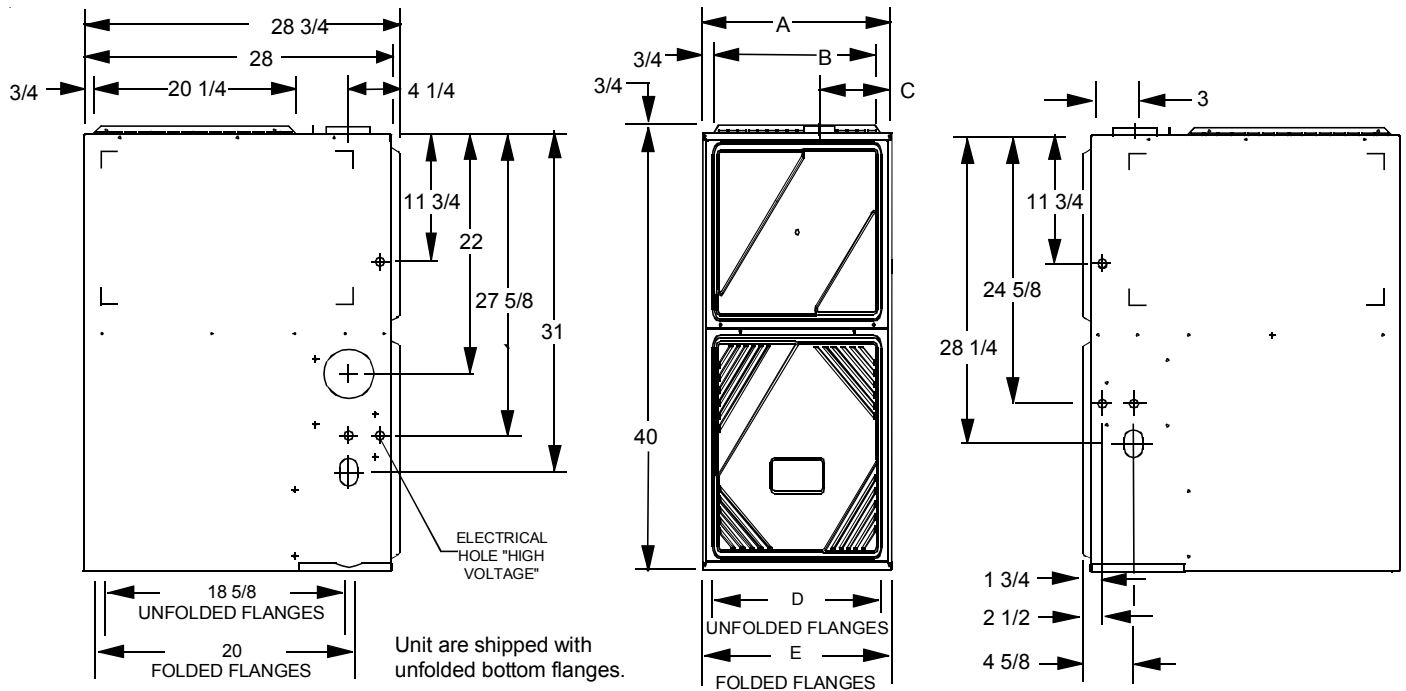
XENON™

HEATING & AIR CONDITIONING

XF8D

Gas Fired Warm Air Furnace Specification Sheet

DIMENSIONS (Inches)



Models	A	B	C	D UNFOLDED	E FOLDED	MINIMUM VENT DIAMETER
070__30	16 1/2	15	5-3/8	13 1/2	15	4
090__50	20 1/2	19	7-3/8	17 1/2	19	4
115__40	24 1/2	23	9-3/8	21 1/2	23	5

All dimensions are in inches.

SPECIFICATIONS

Model Number	Input (Btu/hr)	Output (Btu/hr)	Temp. Rise Range (°F)	Number of Burners	Minimum ¹ Circuit Ampacity (Amps)	Maximum ² Overcurrent Protection (Amps)	Circulator Blower			Tons AC at 0.5" ESP	Pressure Switch Settings (inches w.c.)	Ship. Wt. (lbs)
							Size (D" x W")	HP	No. of Speeds			
070_30	69,000	55,200	45-75	3	6.4	15.0	10 X 7	1/3	4	1.5 - 3.0	-0.62	151
090_50	92,000	73,600	45-75	4	11.2	15.0	10 X 9	3/4	4	3.0 - 5.0	-0.62	178
115_40	115,000	92,000	45-75	5	10.4	15.0	10 X 10	1/2	4	2.5 - 4.0	-0.62	190

FILTERS ARE NOT INCLUDED WITH FURNACE AND MUST BE SUPPLIED BY THE INSTALLER.

¹ Minimum Circuit Ampacity = (1.25 x Circulator Blower Amps) + ID Blower Amps.

² Maximum Overcurrent Protection refers to maximum recommended fuse or circuit breaker size.



WARNING

To avoid death, personal injury or property damage due to fire, do not exceed maximum recommended fuse or circuit breaker size.

MINIMUM CLEARANCES



WARNING

To avoid death, personal injury or property damage due to fire, clearances to combustible surfaces listed as below must be observed.

SERVICE ACCESSIBILITY AND UNIT CONNECTIONS

- 36 inches front clearance is required for servicing or cleaning.
- Unit connections (electrical, flue, and drain) may necessitate greater clearances than the minimum clearances listed below.

NOTE: In all cases, accessibility clearance must take precedence over clearances from the enclosure where accessibility clearances are greater.

MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS (INCHES)							
POSITION ¹	LEFT	FRONT	RIGHT	REAR	TOP	FLUE	FLOOR
Counterflow	0	5 ²	0	0	0	6 ²	NC
Horizontal Left	12	Alcove	6	0	1	6 ²	C
Horizontal Right	6	Alcove	12	0	1	6 ²	C

¹All positioning is determined as installed unit is viewed from the front.

²1 inch when Type B-1 vent is used.

C = If placed on combustible floor, floor MUST be wood ONLY.

NC = For installation on non-combustible floors only.

Counterflow installation on a combustible floor only when installed on special base ASB01.

BLOWER PERFORMANCE

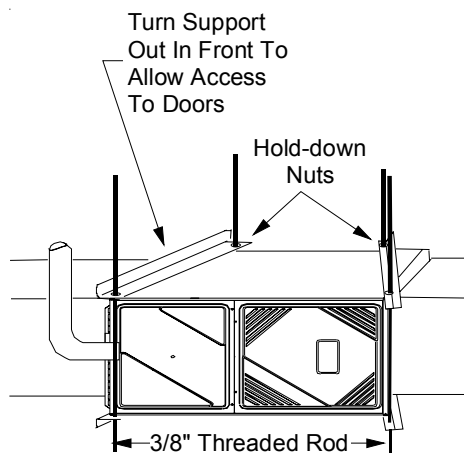
MODEL Heating Speed As Shipped	Motor Speed	Tons AC at 0.5" ESP	EXTERNAL STATIC PRESSURE (inches w.c.)												
			0.1		0.2		0.3		0.4		0.5		0.6	0.7	0.8
			CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	CFM	CFM
070__30 (MED-LO)	HIGH	3.0	1390	---	1361	---	1339	---	1301	---	1255	---	1198	1129	1037
	MED	2.5	1111	46	1102	46	1093	47	1066	48	1037	49	1008	947	893
	MED-LO	2.0	868	59	865	59	865	59	851	60	832	61	806	767	691
	LOW	1.5	669	---	655	---	646	---	631	---	601	---	575	542	482
090__50 (LOW)	HIGH	5.0	2156	---	2089	---	1995	---	1832	---	1751	---	1653	1517	1385
	MED	4.0	1805	---	1779	---	1724	---	1638	---	1548	---	1469	1349	1238
	MED-LO	3.5	1569	---	1549	---	1509	45	1446	47	1370	50	1301	1202	1109
	LOW	3.0	1312	52	1312	52	1277	53	1228	55	1189	57	1123	1052	928
115__40 (MED)	HIGH	4.0	1907	45	1850	46	1782	48	1720	50	1638	52	1551	1448	1337
	MED	3.5	1675	51	1638	52	1590	54	1541	55	1469	58	1394	1314	1191
	MED-LO	3.0	1352	63	1352	63	1330	64	1284	66	1253	68	1196	1119	1016
	LOW	2.5	1136	75	1128	---	1110	---	1073	---	1036	---	976	913	810

NOTES:

- All furnaces ship as high speed for cooling. Installer must adjust blower speed as needed.
- For most jobs, about 400 CFM per ton when cooling is desirable.
- This chart is for furnaces installed at 0 - 4000 feet. At higher altitudes, a properly derated unit will have the same temperature rise at a particular CFM, while the ESP at that CFM will be lower.
- The shaded area (■) indicates ranges in excess of maximum external static pressure allowable when heating. For satisfactory operation, external static pressure should not exceed 0.5" W.C. The data for 0.6" W.C. to 0.8" W.C. is shown for air conditioning purposes only.
- The dashed (-----) areas indicate a temperature rise not recommended for this model.
- The installation must be adjusted to obtain a temperature rise within the range listed on the furnace nameplate.

FURNACE SUSPENSION

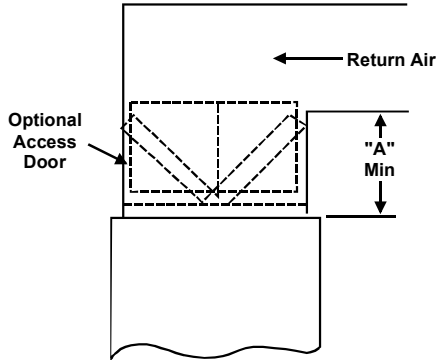
If necessary to suspend the furnace from rafters or joists, use 3/8 inch threaded rod with angle iron as shown below.



FILTERS

NOTE: Filters are required with this furnace and must be provided by the installer. The filters used must comply with UL900 or CAN/ULCS111 standards. Installing this furnace without filters will void the unit warranty.

This furnace has provisions for the installation of return air filters at the counterflow top return. The furnace will accommodate the following filter sizes depending on cabinet size:



COUNTERFLOW TOP RETURN				
Nom. Filter Size (in.)	Qty.	Approx. Flow Area (in ²)	Cabinet Width (in.)	Dim. "A" (in.)
14 x 25 x 1	2	600	16-1/2	14.2
			20-1/2	13.0
			24-1/2	11.3
16 x 25 x 1	2	800	16-1/2	19.7
			20-1/2	18.8
			24-1/2	17.7
20 x 25 x 1	2	1000	16-1/2	25.0
			20-1/2	24.3
			24-1/2	23.4

Refer to Minimum Filter Area tables to determine filter area requirement. **NOTE:** Filters can also be installed elsewhere in the duct system such as a central return.

PERMANENT MINIMUM FILTER AREA (in ²) [Based on a 600 ft/min filter face velocity]								
MODELS		COOLING AIRFLOW REQUIREMENT (CFM)						
		600	800	1000	1200	1400	1600	2000
Input_Airflow	070__30	210*	210*	240	288	---	---	---
	090__50	---	---	---	288	336*	384	480
	140__50	---	---	---	419*	419*	419*	480

DISPOSABLE MINIMUM FILTER AREA (in ²) [Based on a 300 ft/min filter face velocity]								
MODELS		COOLING AIRFLOW REQUIREMENT (CFM)						
		600	800	1000	1200	1400	1600	2000
Input_Airflow	070__30	419*	419*	480	576	---	---	---
	090__50	---	---	---	576	672	768	960
	115__40	---	---	699*	699*	699*	768	---

*Minimum filter area dictated by heating airflow requirement.

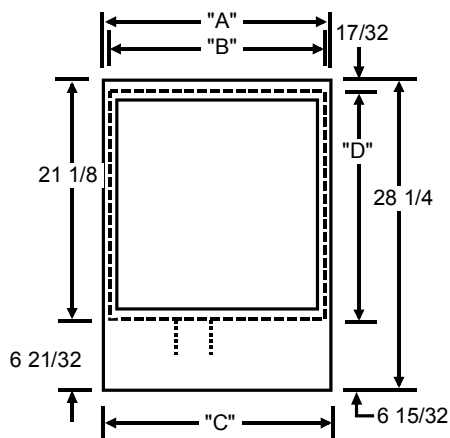
FLAME SENSOR

Flame sensor output is 1 to 4 microamps at 115 volts.

NOTES:

1. All furnaces have a redundant gas valve and blower door interlock switch.
2. All furnaces are manufactured for use on 115 VAC, 60 Hz, single phase electrical supply.
3. **IMPORTANT:** While the data is presented as a guide, it is very important to electrically connect the unit and properly size fuses and wires in accordance with the National Electrical Code and/or all existing local codes.
4. Performance figures are based on Department of Energy information and requirements under continuous operating conditions. Performance will vary with weather conditions and use.

SUBBASE (ASC01A)



Furnace Model	Dim. "A" Subbase Width	Dim. "B" Plenum Chamber	Dim. "C" Floor Opening	Dim. "D" Floor Opening
70	17	15	16-1/8	21-1/4
90	21	19	20-1/8	
115	25	23	24-1/8	

Subbase is adjustable to fit all 3 cabinet sizes.

All dimensions are in inches.

Floor Opening = C x 21 1/4 Plenum Size = B x 21 1/8

(Exterior Dimensions)

Detailed installation instructions are shipped with the subbase.



WARNING

To prevent death, personal injury or property damage due to electrical shock, disconnect electrical power to this furnace before servicing or performing maintenance.

