

GCCA Gas Fired FURNACE SPECIFICATION SHEET



Heating & Air Conditioning
Amana

Installer: Affix literature adjacent
to the unit.

Model Number	Input (Btu/hr)	Output (Btu/hr)	Rated AFUE	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 ³ Switch Settings (inches w.c.)		Ship. Wt. (lbs)
								Size (D" x W")	HP	No. of Speeds		ID Blwr	Front Cover	
045_30	46,000	43,000	92.1	35 - 65	2	9.0	15.0	11 X 6	1/3	4	1.5 - 3.0	-0.37	-0.37	132
070_30	69,000	65,400	92.1	35 - 65	3	9.8	15.0	11 X 7	1/2	4	2.0 - 3.5	-0.37	-0.37	145
070_40	69,000	63,300	92.1	35 - 65	3	8.9	15.0	11 X 9	1/2	4	2.5 - 4.0	-0.37	-0.37	153
090_40	92,000	87,500	92.1	40 - 70	4	8.9	15.0	11 X 9	1/2	4	2.5 - 4.0	-0.37	-0.37	167
090_50	92,000	86,200	92.1	35 - 65	4	12.2	15.0	11 X 9	3/4	4	3.0 - 5.0	-0.37	-0.37	176
115_50	115,000	109,100	92.1	40 - 70	5	10.9	15.0	11 X 10	1/2	4	3.0 - 5.0	-0.37	-0.37	188

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.

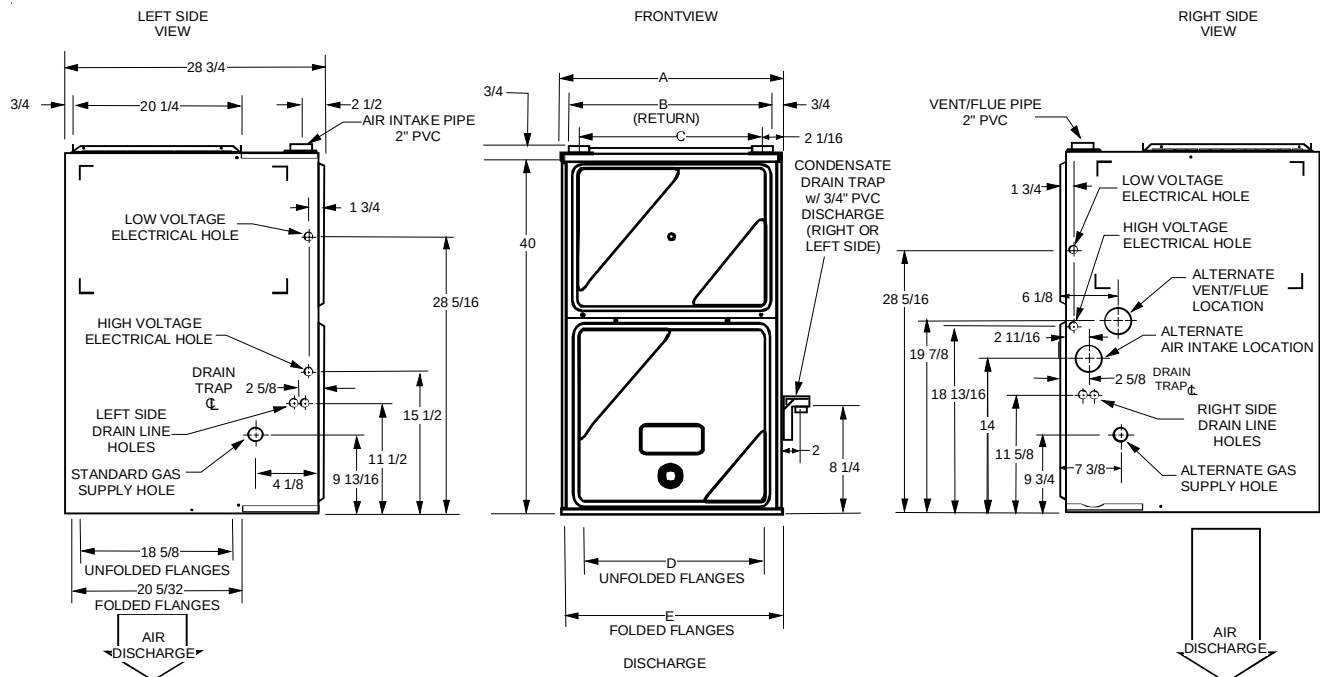
³ As shipped for installations below 4500 feet.



WARNING

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

DIMENSIONS (Inches)



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	A	B	C	D Unfolded	E Folded
045_30	16-1/2	15	12-3/8	13-1/2	15
070_30	20-1/2	19	16-3/8	17-1/2	19
090_40	24-1/2	23	20-3/8	21-1/2	23
090_50					
115_50					

All dimensions are in inches.

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
045_30 (MED-LO)	HIGH	3.0	1327	----	1312	----	1305	----	1251	----	1195	----	1128	1056	969
	MED	2.5	1195	----	1179	----	1136	35	1092	36	1037	38	988	918	839
	MED-LO	2.0	979	40	949	42	906	43	862	46	816	48	791	736	668
	LOW	1.5	779	51	755	52	723	55	693	57	657	60	633	583	534
070_30 (MED)	HIGH	3.5	1551	39	1499	40	1445	42	1390	44	1324	46	1256	1183	1105
	MED	3.0	1383	44	1347	45	1287	47	1240	49	1191	51	1123	1069	1002
	MED-LO	2.5	1176	52	1139	53	1104	55	1057	57	1016	60	960	908	846
	LOW	2.0	928	65	891	----	867	----	824	----	794	----	747	701	651
070_40 (MED-LO)	HIGH	4.0	1911	----	1838	----	1762	----	1674	35	1590	37	1501	1407	1294
	MED	3.5	1674	35	1609	37	1551	38	1481	40	1407	42	1329	1234	1157
	MED-LO	3.0	1481	40	1407	42	1352	44	1329	44	1234	48	1157	1076	972
	LOW	2.5	1282	46	1234	48	1183	50	1117	53	1047	56	987	906	818
090_40 (HIGH)	HIGH	4.0	1867	42	1797	44	1730	46	1660	47	1581	50	1498	1403	1316
	MED	3.5	1654	48	1594	49	1531	51	1485	53	1403	56	1263	1239	1157
	MED-LO	3.0	1452	54	1407	56	1353	58	1295	61	1225	64	1156	1083	1005
	LOW	2.5	1255	63	1206	65	1165	68	1115	----	1056	----	997	931	849
090_50 (MED-LO)	HIGH	5.0	2153	37	2096	38	2030	39	1969	40	1891	42	1809	1714	1605
	MED	4.0	1775	45	1740	45	1696	47	1651	48	1595	50	1527	1446	1359
	MED-LO	3.5	1537	52	1487	53	1456	54	1414	56	1370	58	1325	1255	1180
	LOW	3.0	1288	61	1273	62	1250	63	1210	65	1169	----	1126	1073	998
115_50 (MED)	HIGH	5.0	2130	47	2079	49	1982	51	1936	52	1849	55	1756	1677	1574
	MED	4.0	1815	56	1766	57	1716	59	1651	61	1604	63	1517	1451	1361
	MED-LO	3.5	1616	63	1573	64	1536	66	1484	68	1431	----	1375	1310	1233
	LOW	3.0	1424	----	1382	73	1361	----	1310	----	1256	----	1200	1134	1072

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.

Due to policy of continual product improvement, the right is reserved to change specifications and design without notice.

MINIMUM CLEARANCES



WARNING

To avoid property damage, personal injury or death 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	SIDES	FRONT	REAR	TOP	BOTTOM	FLUE
Counterflow	0	1	0	1	NC	0
Horizontal	6	Alcove	0	4	C	0

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

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

NC = For installation on non-combustible floors only. A combustible floor subbase must be used for installations on combustible flooring.

STANDARD ALTITUDE INSTALLATIONS

For installations above 7000 feet, please refer to your Amana distributor for required kit(s).

Gas	Altitude	Kit	Orifice	Manifold Pressure	Pressure Switch Change
Natural	0-7500	None	#43	3.5" w.c.	None
Propane		LPTK09	#55	10.0" w.c.	

NOTE: In Canada, gas furnaces are certified to 4500 feet.

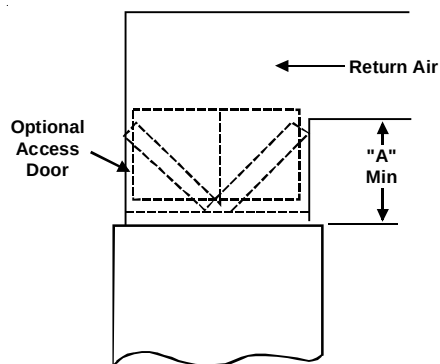
FLAME SENSOR

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

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 duct return. The furnace will accommodate the following filter sizes depending on cabinet size:



COUNTERFLOW TOP RETURN				
Nominal Filter Size (in.)	Qty.	Approx. Flow Area (in ²)	Cabinet Width (in.)	Dimension "A" (in.)
15 x 20 x 1	2	600	16-1/2	14.2
			20-1/2	13.0
			24-1/2	11.3
20 x 20 x 1	2	800	16-1/2	19.7
			20-1/2	18.8
			24-1/2	17.7
25 x 20 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 (in²)

[Based on a 600 ft/min filter face velocity]

		COOLING AIRFLOW REQUIREMENT (CFM)						
		600	800	1000	1200	1400	1600	2000
Input_Airflow	045__30	188*	192	240	288	---	---	---
	070__30	---	282*	282*	282*	336	---	---
	070__40	---	---	260*	260*	336	384	---
	090__40	---	---	376*	376*	376*	384	---
	090__50	---	---	---	376*	376*	384	480
	115__50	---	---	---	470*	470*	470*	480

*Minimum filter area dictated by heating airflow requirement.

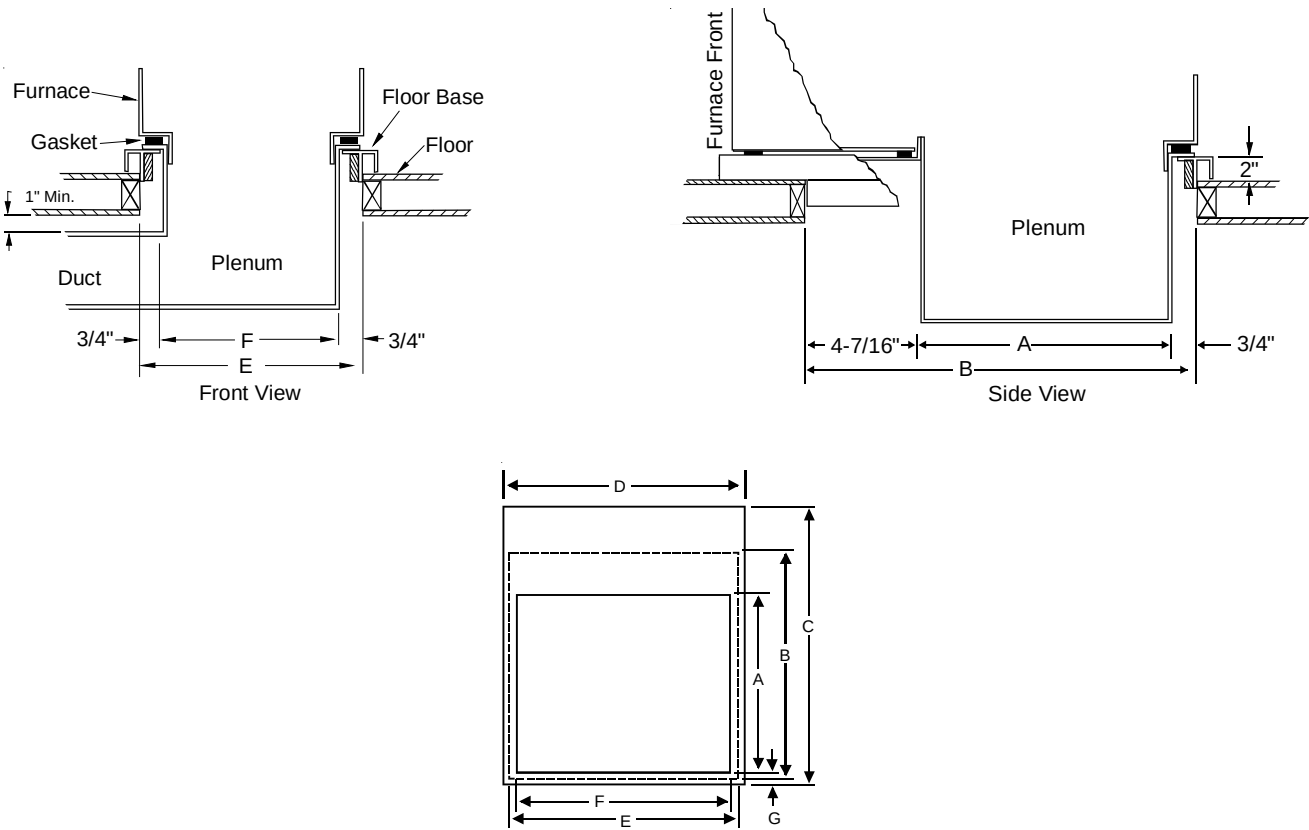
Disposable Minimum Filter Area (in²)

[Based on 300 ft/min filter face velocity]

		COOLING AIRFLOW REQUIREMENT (CFM)						
		600	800	1000	1200	1400	1600	2000
Input_Airflow	045__30	376*	384	480	576	---	---	---
	070__30	---	564*	564*	564*	672	---	---
	070__40	---	---	564*	564*	672	768	---
	090__40	---	---	752*	752*	752*	768	---
	090__50	---	---	---	752*	752*	768	960
	115__50	---	---	---	940*	940*	940*	960

*Minimum filter area dictated by heating airflow requirement.

SUBBASE



Counterflow subbases required when GCCA furnace is installed directly on wooden floor.

Subbase	Furnace Model	A	B	C	D	E	F	G
CFB16	045__30, 070__30	18-9/16	23-3/4	29	17-1/2	16-1/2	15	1-11/32
CFB20	070__40, 090__40				21-1/2	20-1/2	19	
CFB24	090__50, 115__50				25-1/2	24-1/2	23	

B x E = Floor Opening
A x F = Plenum size

IMPORTANT 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 required to properly size fuses and wires and make electrical connections 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.
- 5. Drain connections must conform to local codes.



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

