

*Comfort, Quality  
and Efficiency.*

**An Unbeatable Combination!**



**80% Gas Furnace**

*Comfort-Cure*®  
HEAT CONTROLLER



# This low profile gas furnace stands tall in features and fuel economy



Models are available in upflow/horizontal and downflow configurations; upflow/horizontal shown.

## Low Profile Cabinet

At just 34½" high, our 80% furnace cabinet is ideally suited to both new construction and replacements—models can fit into the space of virtually any furnace being replaced, including attics, crawl spaces and utility closets. That also leaves plenty of room for add-ons such as an electronic air cleaner.

Contractors will appreciate not just the small size, but also the number of installation options, including left- or right-side gas, and left- or right-side electric connections.

Because of the small size, there's plenty of working room when the furnace is being installed. It's also a convenient size for loading and unloading on a truck or van, and fits easily through most doors and hallways.

## Energy Efficiency

AFUE ratings of 80% mean that nearly all the heat generated by the furnace is used to heat the home. In this time of soaring fuel prices, better utilization of natural resources can mean significant dollar savings for you.

## Full Range of Models

Our 80% Series packs a lot of heating punch in a small package. The GUH Upflow/Horizontal Series comes in capacities ranging from 45,000 BTUH to 126,000 BTUH, while the GDD Downflow Series is available in 54,000 to 126,000 BTUH capacities.

## Simple Installation

This non-condensing furnace comes completely assembled, ready for installation with a color-coded wiring harness and quick connect fittings. The integrated solid state control board speeds installation and is ready to accept comfort options such as an electronic air cleaner and a humidifier.

Maintenance and servicing is easy to do with readily accessible components. Two-piece doors remove quickly and door screws are secured to the doors so they can't be lost after they're loosened.

Diagnostic lights make it easy to troubleshoot operation: a dedicated light signals flame strength, and others illuminate in combinations that indicate fault codes.

## Quiet Operation

The insulated blower compartment, high static blower, gas valve, and hot surface igniter are all designed and proven over time to provide clean, efficient, and quiet combustion and air delivery.

## Warranty Coverage

Our 80% furnaces are backed by a 20 year warranty on the aluminized steel heat exchanger and a 12 year warranty on other components.

(Limitations apply; refer to printed warranty.)

## Reliability You Can Trust

Heat Controller, Comfort-Aire's parent company, has been in the furnace business since its founding in 1933—in fact, the company can trace its roots to the Wingert Furnace Co. which began building coal, gas and oil furnaces in 1907. Air conditioning equipment was later added to round out the product line.

Known today for efficient, reliable equipment for both heating and cooling, Comfort-Aire continues to keep homes and businesses comfortable, season after season.



**For year 'round comfort, ask your dealer about the**  
*Comfort-Aire* **line of energy efficient central air conditioning**

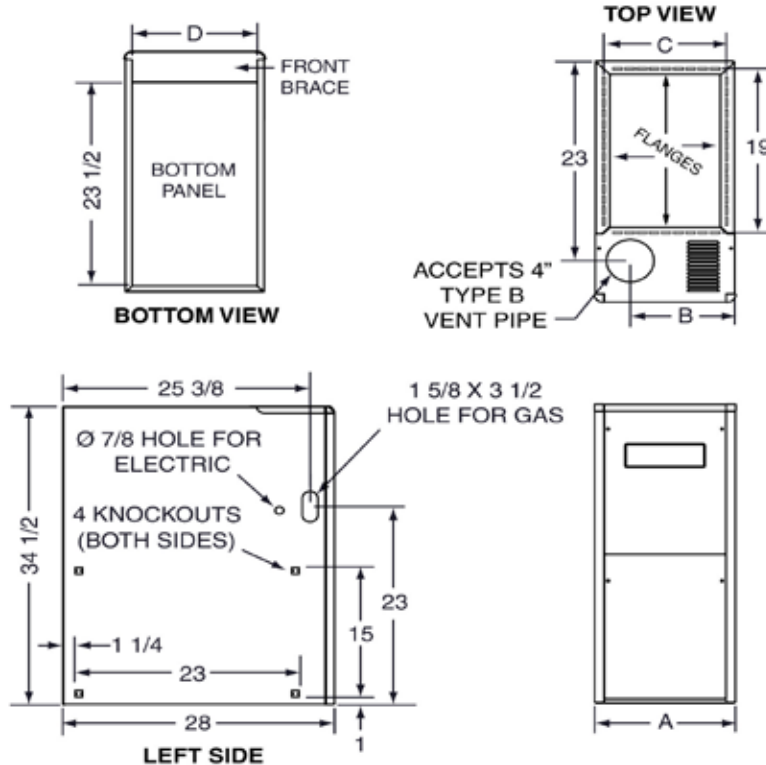
# Upflow/Horizontal GUH

## Physical and Data Specifications

GUH80 Models	-045A3	-054A3	-072B4	-072C5	-090B4	-090C5	-108C5	-126D5
Input-BTUH	45,000	54,000	72,000	72,000	90,000	90,000	108,000	126,000
Heating Cap. BTUH	36,000	43,200	57,600	57,600	72,000	72,000	86,400	100,800
AFUE	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
Nominal Tons Cooling	3	3	4	5	4	5	5	5
Blower D x W	10 x 6	10 x 6	11 x 8	10 x 10	11 x 8	10 x 10	11 x 10	11 x 10
Motor HP/Speed/Type	1/3-4-PSC	1/3-4-PSC	1/2-4-PSC	1/2-4-PSC	1/2-4-PSC	1/2-4-PSC	1.0-4-PSC	1.0-4-PSC
Motor FLA	4.8	4.8	8.2	7.5	8.2	7.5	13.75	13.75
Rated Ext. SP in W.C.	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Temp. Rise Range °F	30-60	30-60	35-65	35-65	35-65	35-65	40-70	40-70
Power Supply	115-1-60	115-1-60	115-1-60	115-1-60	115-1-60	115-1-60	115-1-60	115-1-60
Shipping Weight (lbs)	100	100	110	115	115	120	125	145

Gas connection size for all models is 1/2" N.P.T.

## Upflow/Horizontal GUH Dimensions



### 80% Gas Furnace Upflow

GUH80 Models	A	B	C	D
-045A3	14 $\frac{1}{4}$	10 $\frac{3}{4}$	12 $\frac{5}{8}$	12 $\frac{7}{8}$
-054A3				
-072B4	17 $\frac{1}{2}$	11 $\frac{3}{4}$	15 $\frac{7}{8}$	16 $\frac{1}{8}$
-090B4				
-072C5	21	14	19 $\frac{3}{8}$	19 $\frac{7}{8}$
-090C5				
-108C5				
-126D5	24 $\frac{1}{2}$	15 $\frac{1}{4}$	22 $\frac{7}{8}$	23 $\frac{1}{8}$

### GUH80 Series High Efficiency Upflow/Horizontal Series

**Warning: Do not install horizontal furnace on its back - either side only**



# Blower Performance Data - Upflow

GUH80-Model	Htg Input BTUH	Motor Speed	External Static Pressure (Inches Water Column)															
			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	Rise	CFM	Rise	CFM	Rise
-045A3	45K	High*	1350	25	1290	26	1225	27	1155	29	1100	30	1025	33	950	35	885	38
		Med Hi	1025	33	1015	33	1005	33	1000	33	990	34	920	36	855	39	775	43
		M-Low†	885	38	855	39	815	41	780	43	740	45	695	48	640	52	565	59
		Low	700	48	675	49	655	51	620	54	590	56	555	60	515	65	465	72
-054A3	54K	High*	1350	30	1290	31	1225	33	1155	35	1100	36	1025	39	950	42	885	45
		Med Hi	1025	39	1015	39	1005	40	1000	40	990	40	920	43	855	47	775	52
		M-Low†	885	45	855	47	815	49	780	51	740	54	695	58	640	63	565	71
		Low	700	57	675	59	655	61	620	65	590	68	555	72	515	78	465	86
-072B4	72K	High*	1770	30	1720	31	1685	32	1645	32	1590	34	1550	34	1485	36	1415	38
		Med Hi	1400	38	1360	39	1340	40	1310	41	1275	42	1245	43	1190	45	1125	47
		M-Low†	1235	43	1215	44	1180	45	1155	46	1130	47	1100	48	1060	50	1005	53
		Low	975	55	940	57	930	57	890	60	865	62	840	63	810	66	775	69
-072C5	72K	High*	2030	26	1940	27	1860	29	1785	30	1695	31	1615	33	1535	35	1445	37
		Med Hi	1935	28	1850	29	1780	30	1700	31	1640	40	1560	34	1470	36	1380	39
		M-Low†	1350	40	1290	41	1250	43	1205	44	1165	46	1110	48	1035	52	945	56
		Low	1215	44	1160	46	1105	48	1065	50	1025	52	980	54	925	58	860	62
-090B4	90K	High*	1690	39	1655	40	1610	41	1560	43	1510	44	1455	46	1405	47	1340	50
		Med Hi†	1360	49	1325	50	1300	51	1280	52	1235	54	1190	56	1150	58	1065	63
		M-Low	1215	55	1190	56	1155	58	1125	59	1090	61	1065	63	1015	66	965	69
		Low	925	72	900	74	870	77	840	79	800	83	775	86	710	94	695	96
.090C5	90K	High*	2020	33	1935	34	1860	36	1780	37	1690	39	1600	42	1510	44	1410	47
		Med Hi†	1895	35	1830	36	1765	38	1685	40	1610	41	1525	44	1435	46	1330	50
		M-Low	1345	50	1295	51	1250	53	1200	56	1155	58	1100	61	1035	64	950	70
		Low	1190	56	1155	58	1115	60	1075	62	1040	64	980	68	940	71	870	77
-108C5	108K	High*	2295	35	2235	36	2180	37	2110	38	2050	39	1975	41	1900	42	1810	44
		Med Hi†	2130	38	2075	39	2035	39	1970	41	1915	42	1845	43	1765	45	1675	48
		M-Low	1770	45	1750	46	1710	47	1675	48	1630	49	1585	50	1520	53	1430	56
		Low	1445	55	1425	56	1410	57	1375	58	1350	59	1320	61	1275	63	1225	65
-126D5	126K	High*	2230	42	2180	43	2105	44	2045	46	1990	47	1915	49	1835	51	1740	54
		Med Hi†	2055	45	2005	47	1950	48	1920	49	1855	50	1790	52	1735	54	1665	56
		M-Low	1705	55	1680	56	1640	57	1615	58	1565	60	1505	62	1440	65	1375	68
		Low	1345	69	1360	69	1350	69	1300	72	1230	76	1290	72	1250	75	1220	77

## Notes for Upflow Blower Specifications

- \* Factory set cooling speed
- † Factory set heating speed

## NOTES:

1. Temperature rises in the table are approximate; actual temperature rises may vary.
2. Temperature rises in shaded areas are for reference only; these conditions are not recommended.
3. Two openings are recommended for airflows above 1600 CFM if filter(s) adjacent to furnace.

Specifications shown for side return. See Technical Specifications for bottom return or two sides return.

## WARNING

THIS FURNACE IS NOT APPROVED OR  
RECOMMENDED FOR USE IN MOBILE HOMES

# Downflow GDD Models

## Physical and Data Specifications

GDD80 Models	-054A3	-072B4	-090B4	-108C5	-126D5
Input-BTUH	54,000	72,000	90,000	108,000	126,000
Heating Cap. BTUH	43,200	57,600	72,000	86,400	100,800
AFUE	80.0	80.0	80.0	80.0	80.0
Nominal Tons Cooling	3	4	4	5	5
Blower D x W	10 x 6	11 x 8	11 x 8	11 x 10	11 x 10
Motor HP-Speed-Type	1/3-4-PSC	1/2-4-PSC	1/2-4-PSC	3/4-4-PSC	1.0-4-PSC
Heating Speed*	Med-Low	Med-Low	Med-Low	Med-Low	Med-Low
Cooling Speed*	High	High	High	High	High
Motor FLA	4.80	8.20	8.20	13.75	13.75
Rated Ext. SP in W.C.	0.5	0.5	0.5	0.5	0.5
Temp. Rise Range of	30-60	35-65	35-65	40-70	40-70
Shipping Weight (lbs)	100	110	115	125	145

\* Factory setting

Gas connection for all models is 1/2" N.P.T.

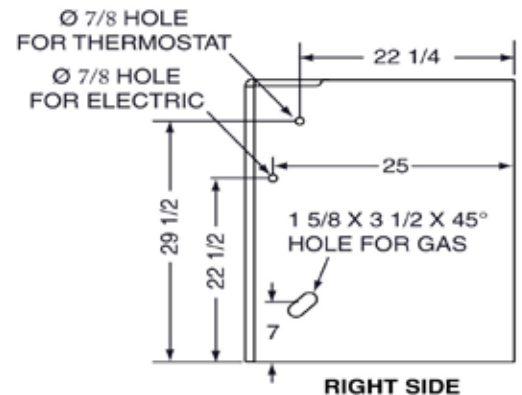
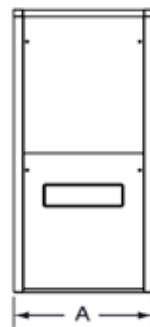
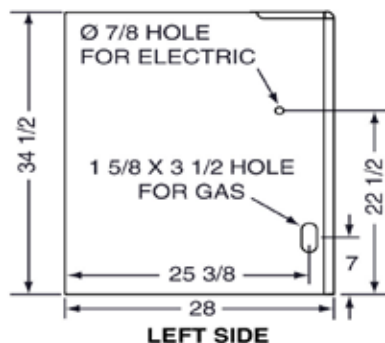
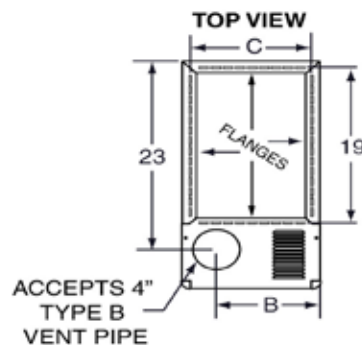
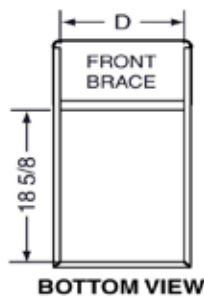
**WARNING**  
THIS FURNACE IS NOT APPROVED OR  
RECOMMENDED FOR USE IN MOBILE HOMES



## Downflow GDD Dimensions

### 80% Gas Furnace Downflow

GDD80 Models	A	B	C	D
-054A3	14 <sup>1</sup> / <sub>4</sub>	10 <sup>3</sup> / <sub>4</sub>	12 <sup>5</sup> / <sub>8</sub>	12 <sup>7</sup> / <sub>8</sub>
-072B4	17 <sup>1</sup> / <sub>2</sub>	11 <sup>3</sup> / <sub>4</sub>	15 <sup>7</sup> / <sub>8</sub>	16 <sup>1</sup> / <sub>8</sub>
-090B4				
-108C5	21	14	19 <sup>3</sup> / <sub>8</sub>	19 <sup>5</sup> / <sub>8</sub>
-126D5	24 <sup>1</sup> / <sub>2</sub>	15 <sup>1</sup> / <sub>4</sub>	22 <sup>7</sup> / <sub>8</sub>	23 <sup>1</sup> / <sub>8</sub>



**GDD80 Series High Efficiency Downflow Series**

# Blower Performance Data - Downflow

GDD80-Model	Htg Input BTUH	Motor Speed	External Static Pressure (Inches Water Column)															
			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	Rise	CFM	Rise	CFM	Rise
-054A3	54K	High*	1375	29	1340	30	1300	31	1270	31	1225	33	1175	34	1115	36	1035	39
		Med Hi	1155	35	1130	35	1110	36	1085	37	1055	38	1015	39	975	41	910	44
		M-Low†	790	51	775	52	765	52	750	53	730	55	700	57	665	60	610	66
		Low	650	62	640	63	630	63	610	66	590	68	565	71	530	75	480	83
-072B4	72K	High*	1610	33	1590	34	1575	34	1560	34	1540	35	1495	36	1460	37	1415	38
		Med Hi	1295	41	1275	42	1260	42	1250	43	1220	44	1195	45	1170	46	1120	48
		M-Low†	1155	46	1135	47	1115	48	1095	49	1065	50	1040	51	1015	53	980	54
		Low	910	59	885	60	860	62	835	64	810	66	785	68	765	70	735	73
-090B4	90K	High*	1675	40	1655	40	1640	41	1620	41	1590	42	1560	43	1520	44	1475	45
		Med Hi	1330	50	1315	51	1300	51	1280	52	1255	53	1230	54	1200	56	1150	58
		M-Low†	1180	56	1165	57	1150	58	1135	59	1115	60	1090	61	1060	63	1010	66
		Low	940	71	925	72	900	74	880	76	850	78	825	81	795	84	760	88
-108C5	108K	High*	2395	33	2335	34	2285	35	2230	36	2200	36	2140	37	2080	38	2000	40
		Med Hi	2190	37	2135	37	2115	38	2080	38	2030	39	1975	41	1915	42	1810	44
		M-Low†	1785	45	1770	45	1740	46	1725	46	1685	47	1645	49	1615	50	1565	51
		Low	1145	70	1110	72	1070	75	1035	77	1000	80	950	84	905	88	835	96
-126D5	126K	High*	2445	38	2395	39	2385	39	2330	40	2275	41	2225	42	2130	44	2015	46
		Med Hi	2195	43	2170	43	2140	44	2120	44	2090	45	2030	46	1975	47	1855	50
		M-Low†	1795	52	1780	52	1770	53	1760	53	1725	54	1690	55	1655	56	1610	58
		Low	1480	63	1475	63	1450	64	1440	65	1440	65	1415	66	1405	66	1375	68

\* Factory set cooling speed

† Factory set heating speed

NOTES: 1. Temperature rises in the table are approximate; actual temperature rises may vary.  
2. Temperature rises in shaded areas are for reference only; these conditions are not recommended.

## Downflow GDD Accessories

Part No.	Description
902974	Downflow sub base kit, 14 ½" cabinet
904911	Downflow sub base kit, 17 ½", 21", and 24 ½" cabinets
905028	U.S. LP conversion kit (0 to 10,000 ft.)
905029	Canada LP conversion kit (0 to 4,500 ft.)
541036	Side return filter kit
904872	Fixed Speed High Eff. Blower Kit, -054A3
904873	Fixed Speed High Eff. Blower Kit, -072B, -090B
904874	Fixed Speed High Eff. Blower Kit, -108C
904875	Fixed Speed High Eff. Blower Kit, -126D
904876	Variable Speed High Eff. Blower Kit, -054A3
904877	Variable Speed High Eff. Blower Kit, -072B, -090B
904878	Variable Speed High Eff. Blower Kit, -108C
904879	Variable Speed High Eff. Blower Kit, -126D

## Clearances

### CLEARANCES TO COMBUSTIBLE MATERIALS

Left Side .....0 inches      Top .....0 inches  
Right side .....0 inches      Front..... 4\* inches  
Vent.....0 inches      Back.....0 inches

\*Minimum clearance for servicing is 24 inches; the recommended clearance is 36 inches.

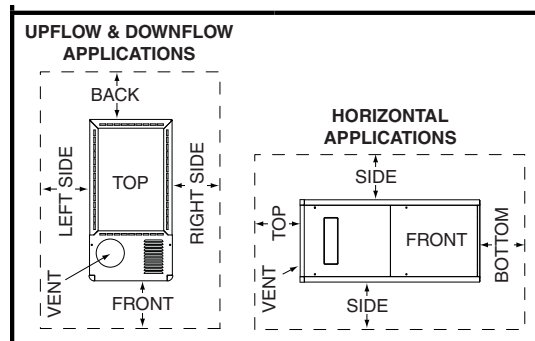


Table 1. Minimum Clearances to Combustible Materials

FLEXIBLE CATEGORY 1 VENTING: May be vented with a dedicated venting system or vented in common with other Category 1 appliances.



# Space Saving, Energy Saving Gas Heat Source

## Tubular Heat Exchanger

The heart of the furnace, the heat exchanger is made of heavy gauge aluminized steel, and carries a 20-year warranty

## Hot Surface Igniter

Quiet and automatic, it eliminates the need for a standing pilot light for improved efficiency

## In-Shot Burner

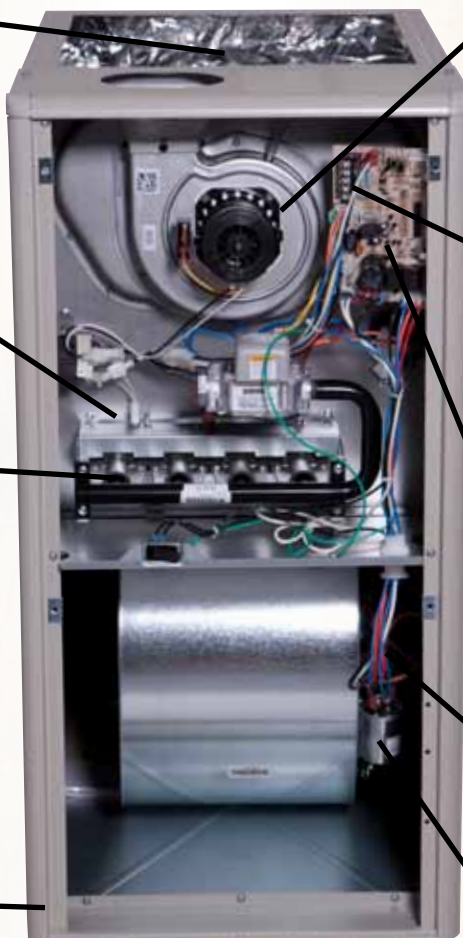
Engineered to deliver to most efficient air/gas mixture, it allows heat to be generated efficiently

## 30 Second Blower Delay

Delay at furnace start-up allows time for duct temperature to warm to alleviate cold blow when furnace turns on; blower off settings can be set at 60, 90, 120 or 180 seconds

## Durable Cabinet

Steel cabinet has attractive corrosion-resistant finish; two-piece door provides easy access to components



## Induced Draft Blower

Designed specifically to work with the tubular heat exchanger, it pulls hot combustion gases through the exchanger until the burner cycles off; heated air is locked in while cold air is locked out

## Diagnostic Lights

Simplifies troubleshooting with a dedicated light for flame signal strength, and specific combinations for other fault codes, eliminating the need to count flashes

## Integrated Control Board

Combining all controls and functions into one board makes the furnace easy to install, and is designed to accept options such as an electronic air cleaner

## Color-Coded Wiring Harness

Harness and quick connect fittings make it easy to service or replace components

## Multi-Speed Direct Drive Blower

Direct drive blower delivers warm, filtered air through the ductwork to each room and also covers a wide range of cooling capacities; switches on PCB make it easy to select motor speed

*NOTE: Upflow model is pictured; features of the downflow model are identical although component arrangement differs.*



*Comfort-Care*®

## Upflow/Horizontal & Downflow Gas Furnaces

All models can be converted by a qualified distributor or local service dealer to L.P. (propane) gas with a simple burner orifice and regulator spring change. Factory approved kits must be used to convert from natural to L.P. gas.

**Upflow/Horizontal Models**—For utility room, closet, alcove, crawl space, attic or basement applications.

**Downflow Models**—For homes without a basement or crawlspace; can be used in utility room, closet, attic or similar space.

**A.F.U.E. Ratings of 80% or better mean energy savings for you!**



# There's a Comfort-Aire 80% furnace model that's right for your home's heating needs

MODELS	INPUT BTUH	HEATING CAP. BUTH	AFUE*	NOM. TONS COOLING	MOTOR HP	SHIPPING WEIGHT
<b>GUH80 - UPFLOW/HORIZONTAL</b>						
-045A3	45,000	36,000	80.0	3	1/3	100
-054A3	54,000	43,200	80.0	3	1/3	100
-072B4	72,000	57,600	80.0	4	1/2	110
-072C5	72,000	57,600	80.0	5	1/3	115
-090B4	90,000	72,000	80.0	4	1/2	115
-090C5	90,000	72,000	80.0	5	1/2	120
-108C5	108,000	86,400	80.0	5	1.0	125
-126D5	126,000	100,800	80.0	5	1.0	145
<b>GDD80 - DOWNFLOW</b>						
-054A3	54,000	43,200	80.0	3	1/3	100
-072B4	72,000	57,600	80.0	4	1/2	110
-090B4	90,000	72,000	80.0	4	1/2	115
-108C5	108,000	86,400	80.0	5	3/4	125
-126D5	126,000	100,800	80.0	5	1.0	145

\* Annual Fuel Utilization Efficiency (A.F.U.E.) rating is your guide for comparing gas furnace efficiencies. The higher the number, the more efficient the furnace. Replacing an older gas furnace with a higher efficiency model such as a Comfort-Aire 80% unit can result in significant energy savings.

Your Comfort-Aire dealer can help you select the model that fits your heating requirements. He can also recommend options such as central air conditioning to create a system for total comfort, and can provide quality installation and maintenance for your new system.



Specifications and performance data subject to change without notice.

*Comfort-Aire*<sup>®</sup>  
HEAT CONTROLLER

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