



Air Conditioning & Heating



GMV8 Models may qualify for a \$50 Tax Credit*

PRODUCT SPECIFICATIONS



GMV8 SERIES 80% AFUE

**MULTI-POSITION,
TWO-STAGE/VARIABLE-SPEED
GAS FURNACE**

**HEATING INPUT:
70,000–115,000 BTU/H**



The Goodman® GMV8 80% AFUE Two-Stage, Variable-Speed Gas Furnace features a patented aluminized-steel tubular heat exchanger and durable Silicon Nitride Hot Surface Ignition system. This furnace is run-tested for heating or combination heating/cooling applications. With a heavy-gauge, reinforced, insulated steel cabinet and durable baked-enamel finish, these units can be installed in a variety of locations. The GMV8 qualifies for the new EPACK \$50 energy tax credit.

Standard Features

- Patented TuffTube™ dual-diameter tubular heat exchanger with lifetime limited warranty plus 10-year limited furnace replacement warranty
- Two-stage gas valve operates on two-stage or single-stage thermostats
- Super-efficient, ultra-quiet variable-speed circulator motor gently ramps up or down according to heating or cooling demand
- Silicon Nitride igniter with patented adaptive learning control for maximum igniter life
- Furnace control board with self-diagnostics, color-coded low-voltage terminals, and provisions for electronic air cleaner and 120-volt or 24-volt humidifiers
- Extra-low constant fan allows homeowner to activate very low speed to efficiently circulate air throughout the home. This setting costs as little as a 75-watt light bulb to operate.
- Auto-Comfort mode for enhanced dehumidification and energy savings during the cooling months
- Quiet, two-speed induced draft blower
- All models comply with California NOx emissions standards

Cabinet Features

- Fully insulated, heavy-gauge steel cabinet with durable baked-enamel finish
- Designed for multi-position installation: upflow, horizontal left or right
- Removable bottom for side- or bottom-return applications
- Convenient left or right connection for gas and electric service
- Coil and furnace fit flush for most installations

Accessories

- See Page 8.

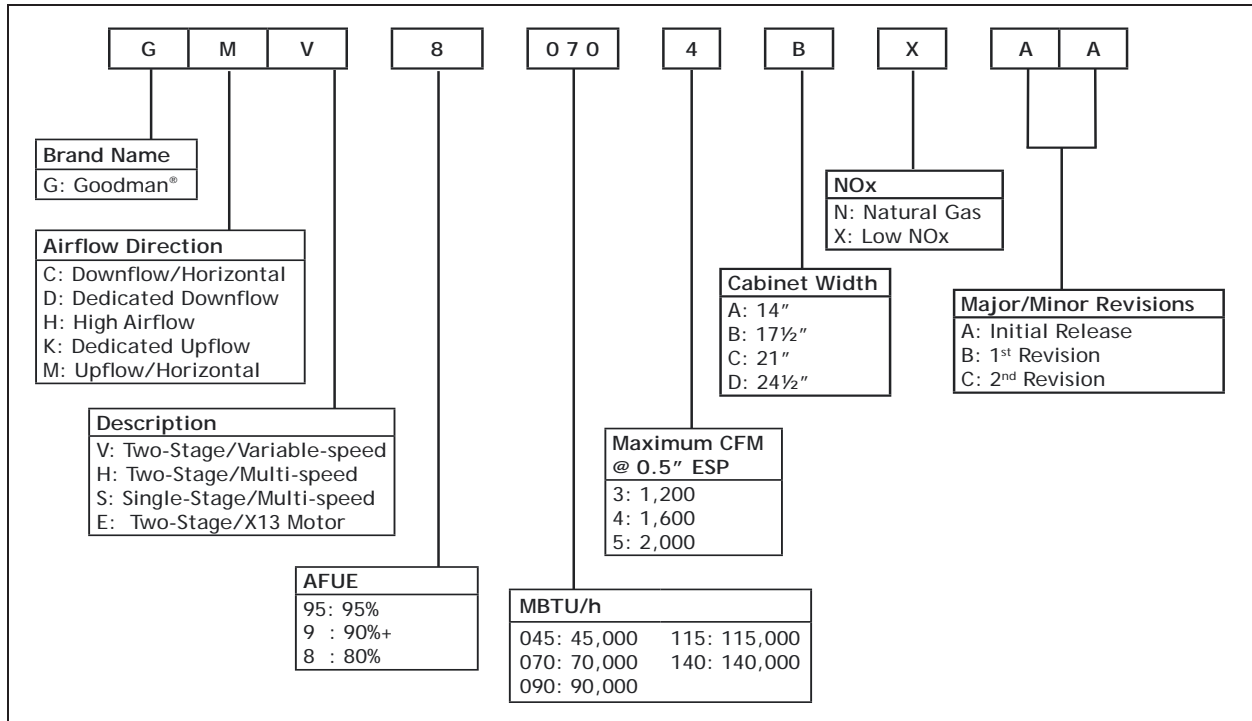
¹ Homeowners should contact their tax advisors concerning available tax credits.

² For full warranty details, visit www.goodmanmfg.com.



PRODUCT SPECIFICATIONS

NOMENCLATURE



SPECIFICATIONS

	GMV80704BXB	GMV80905CXB	GMV81155CXB
Heating Capacity			
High Fire Input ¹	70,000	90,000	115,000
High Fire Output ¹ (below)			
Natural Gas	57,000	74,000	93,000
LP Gas	49,000	64,000	82,000
Low Fire Input ¹	52,500	67,500	86,000
Low Fire Output ¹ (below)			
Natural Gas	42,000	54,000	69,000
LP Gas	42,000	54,000	69,000
AFUE ²	80	80	80
Temperature Rise Range (°F)	20 - 50	25 - 55	25 - 55
Available AC @ 0.5" ESP	1.5 - 4.0	2.0 - 5.0	2.0 - 5.0
Circulator Blower			
Size (D x W)	10" x 8"	10" x 10"	10" x 10"
Horsepower @ 1750 RPM	¾	¾	¾
Speed	Variable		
Vent Diameter ³	4"	4"	4"
No. of Burners	3	4	5
Filter Size (in²)			
Permanent	288	480	480
Disposable	576	460	460
Electrical Data			
Min. Circuit Ampacity ⁴	11.7	11.7	11.7
Max. Overcurrent Device (amps) ⁵	15	15	15
Ship Weight (lbs)			
	152	178	194

1– Natural Gas BTU/h. For altitudes above 2,000', reduce input rating 4% for each 1,000' above sea level.

2– DOE AFUE based upon Isolated Combustion System (ICS)

3– Installer must supply one or two PVC pipes: one for combustion air (optional) and one for the flue outlet (required). Vent pipe must be either 2" or 3" in diameter, depending upon furnace input, number of elbows, length of run and installation (1 or 2 pipes). The optional Combustion Air Pipe is dependent on installation/code requirements and must be 2" or 3" diameter PVC.

4– Minimum Circuit Ampacity = (1.25 x Circulator Blower Amps) + ID Blower amps. Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.

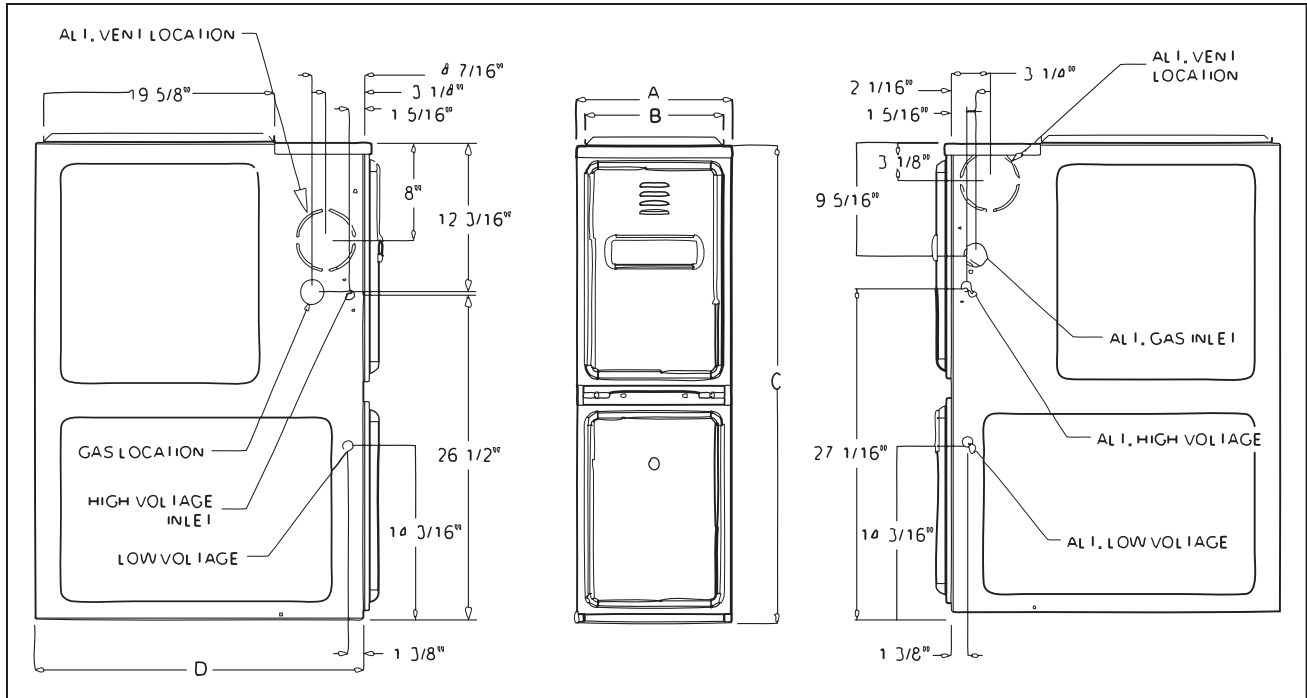
5– Maximum Overcurrent Protection Device refers to maximum recommended fuse or circuit breaker size. May use fuses or HACR-type circuit breakers of the same size as noted.

Notes:

- All furnaces are manufactured for use on 115 VAC, 60 Hz, single-phase electrical supply.
- Gas Service Connection ½" FPT
- Important: Size fuses and wires properly and make electrical connections in accordance with the National Electrical Code and/or all existing local codes.

PRODUCT SPECIFICATIONS

DIMENSIONS



Model	A	B	C	D
GMV80704BXB	17 1/2"	16"	39"	28"
GMV80905CXB	21"	19 1/2"	39"	28"
GMV81155CXB	21"	19 1/2"	39"	28"

MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS

Sides	Rear	Front ¹	Vent ²		Top
			SW	B	
1	0	3	6	1	1

¹ 24" clearance for serviceability recommended.

² Single Wall Vent (SW) to be used only as a connector. Refer to the venting tables outlined in the Installation Manual for additional venting requirements.

Note: Approved for line contact in the horizontal position.

COOLING SPEEDS

HIGH- OR SINGLE-STAGE

GMV80704BXB		
Cooling Speed Tap	Adjust Tap	CFM @ .1" to .8" W.C. ESP
A	Minus (-)	540
	Normal	600
	Plus (+)	660
B	Minus (-)	720
	Normal	800
	Plus (+)	880
C	Minus (-)	990
	Normal	1,100
	Plus (+)	1,210
D	Minus (-)	1,260
	Normal	1,400
	Plus (+)	1,540

GMV80905CXB		
Cooling Speed Tap	Adjust Tap	CFM @ .1" to .8" W.C. ESP
A	Minus (-)	720
	Normal	800
	Plus (+)	880
B	Minus (-)	990
	Normal	1,100
	Plus (+)	1,210
C	Minus (-)	1,260
	Normal	1,400
	Plus (+)	1,540
D	Minus (-)	1,620
	Normal	1,800
	Plus (+)	1,980

GMV81155CXB		
Cooling Speed Tap	Adjust Tap	CFM @ .1" to .8" W.C. ESP
A	Minus (-)	720
	Normal	800
	Plus (+)	880
B	Minus (-)	990
	Normal	1,100
	Plus (+)	1,210
C	Minus (-)	1,260
	Normal	1,400
	Plus (+)	1,540
D	Minus (-)	1,620
	Normal	1,800
	Plus (+)	1,980

LOW-STAGE

GMV80704BXB		
Cooling Speed Tap	Adjust Tap	CFM @ .1" to .8" W.C. ESP
A	Minus (-)	361 ²
	Normal	390
	Plus (+)	429
B	Minus (-)	468
	Normal	520
	Plus (+)	572
C	Minus (-)	644
	Normal	715
	Plus (+)	787
D	Minus (-)	819
	Normal	910
	Plus (+)	1,001

GMV80905CXB		
Cooling Speed Tap	Adjust Tap	CFM @ .1" to .8" W.C. ESP
A	Minus (-)	563 ²
	Normal	563 ²
	Plus (+)	572
B	Minus (-)	644
	Normal	715
	Plus (+)	787
C	Minus (-)	819
	Normal	910
	Plus (+)	1,001
D	Minus (-)	1,053
	Normal	1,170
	Plus (+)	1,287

GMV81155CXB		
Cooling Speed Tap	Adjust Tap	CFM @ .1" to .8" W.C. ESP
A	Minus (-)	563 ²
	Normal	563 ²
	Plus (+)	572
B	Minus (-)	644
	Normal	715
	Plus (+)	787
C	Minus (-)	819
	Normal	910
	Plus (+)	1,001
D	Minus (-)	1,053
	Normal	1,170
	Plus (+)	1,287

¹ Motor CFM maximum

² Motor CFM minimum

Notes:

- These charts are for furnaces installed at 0' - 2,000'. At higher altitudes, a properly de-rated unit will have the same temperature rise at a particular CFM, while the ESP at that CFM will be lower.
- The installation must be adjusted to obtain a temperature rise within the range listed on the furnace nameplate.
- Do not operate above .5" w.c. ESP in heating mode.
- Propane gas installations will have a High Stage rise approximately 4° lower than shown in above table.

PRODUCT SPECIFICATIONS

COOLING SPEEDS (CONT.)

COOLING-BASED CONTINUOUS FAN

GMV80704BXB		
Cooling Speed Tap	Adjust Tap	CFM @ .1" to .8" W.C. ESP
A	Minus (-)	361 ²
	Normal	361 ²
	Plus (+)	370
B	Minus (-)	403
	Normal	448
	Plus (+)	493
C	Minus (-)	554
	Normal	616
	Plus (+)	678
D	Minus (-)	706
	Normal	784
	Plus (+)	862

GMV80905CXB		
Cooling Speed Tap	Adjust Tap	CFM @ .1" to .8" W.C. ESP
A	Minus (-)	563 ²
	Normal	563 ²
	Plus (+)	563 ²
B	Minus (-)	563 ²
	Normal	616
	Plus (+)	678
C	Minus (-)	706
	Normal	784
	Plus (+)	862
D	Minus (-)	907
	Normal	1,008
	Plus (+)	1,109

GMV81155CXB		
Cooling Speed Tap	Adjust Tap	CFM @ .1" to .8" W.C. ESP
A	Minus (-)	563 ²
	Normal	563 ²
	Plus (+)	563 ²
B	Minus (-)	563 ²
	Normal	616
	Plus (+)	678
C	Minus (-)	706
	Normal	784
	Plus (+)	862
D	Minus (-)	907
	Normal	1,008
	Plus (+)	1,109

¹ Motor CFM maximum

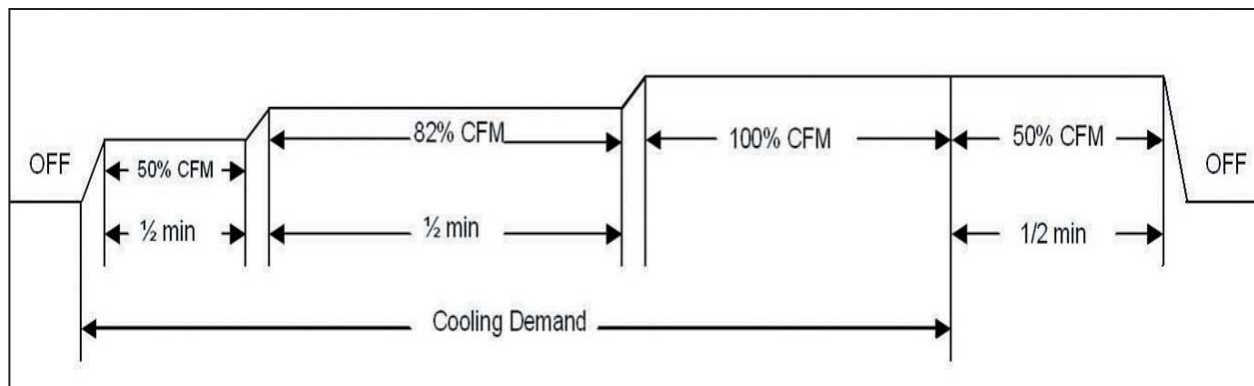
² Motor CFM minimum

Notes:

- These charts are for furnaces installed at 0' - 2,000'. At higher altitudes, a properly de-rated unit will have the same temperature rise at a particular CFM, while the ESP at that CFM will be lower.
- The installation must be adjusted to obtain a temperature rise within the range listed on the furnace nameplate.
- Do not operate above .5" w.c. ESP in heating mode.
- Propane gas installations will have a High Stage rise approximately 4° lower than shown in above table.

AUTO-COMFORT MODE

During Auto-Comfort mode, the furnace ramps up to 50% of the demand for half a minute. It then ramps to 82% of the full cooling demand airflow and operates there for approximately 7½ minutes. The motor then steps up to the full demand airflow. This mode spends a half minute at 50% airflow OFF delay.



HEATING SPEEDS

GMV80704BXB (Rise Range: 20° - 50° F)				
Heating Speed Tap	Adjust Tap	Low Stage CFM at .1" to .5" w.c. ESP	High Stage CFM at .1" to .5" w.c. ESP	Rise
A	Minus (-)	810	1,077	48
	Normal	900	1,197	43
	Plus(+)	990	1,317	39
B	Minus (-)	900	1,197	43
	Normal	1,000	1,330	39
	Plus(+)	1,100	1,463	35
C	Minus (-)	990	1,317	39
	Normal	1,100	1,463	35
	Plus(+)	1,210	1,609	32
D	Minus (-)	1,080	1,436	36
	Normal	1,200	1,596	32
	Plus(+)	1,320	1650*	29

GMV80905CXB (Rise Range: 25° - 55° F)				
Heating Speed Tap	Adjust Tap	Low Stage CFM at .1" to .5" w.c. ESP	High Stage CFM at .1" to .5" w.c. ESP	Rise
A	Minus (-)	945	1,257	53
	Normal	1,050	1,397	48
	Plus(+)	1,155	1,536	43
B	Minus (-)	1,035	1,377	48
	Normal	1,150	1,530	43
	Plus(+)	1,265	1,682	40
C	Minus (-)	1,125	1,496	44
	Normal	1,250	1,663	40
	Plus(+)	1,375	1,829	36
D	Minus (-)	1,215	1,616	41
	Normal	1,350	1,796	37
	Plus(+)	1,485	1,975	34

GMV81155CXB (Rise Range: 25° - 55° F)				
Heating Speed Tap	Adjust Tap	Low Stage CFM at .1" to .5" w.c. ESP	High Stage CFM at .1" to .5" w.c. ESP	Rise
A	Minus (-)	1,170	1,556	55
	Normal	1,300	1,729	49
	Plus(+)	1,430	1,902	45
B	Minus (-)	1,215	1,616	53
	Normal	1,350	1,796	47
	Plus(+)	1,485	1,975	43
C	Minus (-)	1,260	1,676	51
	Normal	1,400	1,862	46
	Plus(+)	1,540	2000*	41
D	Minus (-)	1,373	1,825	47
	Normal	1,525	2000*	42
	Plus(+)	1,678	2000*	38

* Motor CFM maximum

† Motor CFM minimum

Notes:

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- The installation must be adjusted to obtain a temperature rise within the range listed on the furnace nameplate.
- Do not operate above .5" w.c. ESP in heating mode.
- Propane gas installations will have a High Stage rise approximately 4° lower than shown in above table.

PRODUCT SPECIFICATIONS

ACCESSORIES

Model	Description	GMV8 0704BXB	GMV8 0905CXB	GMV8 1155CXB
LPM-03B	LP Conversion Kit (Gas Valve)	√	√	√
LPM-05	LP Conversion Kit (Springs & Orifice)	√	√	√
AFE18-60A	Fossil Fuel Kit (must be used in a dual fuel application with a compatible thermostat)	√	√	√
GSAS*	Electronic Air Cleaners (* = -10, -11, -12 or -18)	√	√	√
GMU*	Media Air Cleaners (* = 1620, 2020, 1625 or 2025)	√	√	√

THERMOSTATS

A two-stage thermostat should be used with the GMV8 furnace. Two-stage thermostats control which firing rate is used depending on the temperature difference between the set point and the room temperature. A properly used two-stage thermostat and furnace will maintain a much tighter control of temperature than a conventional single-stage thermostat and furnace. Two-stage furnaces have “W1” and “W2” terminals. If the thermostat has “Y1” and “Y2” cooling connections and a single-stage cooling system is used, connect “Y” on the furnace control to “Y1” on the thermostat. The table below describes two-stage thermostats that have been configured for use with this furnace.

Model	Description
CHT18-60	Cooling/Heating, Mechanical
CH70TG	Cooling/Heating, Digital, Non-programmable
CHSATG	Cooling/Heating, Mechanical
H20TWR	Heating only, Mechanical



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