

LENNOX®

ENGINEERING DATA

**NOTE - ELECTRONIC
VERSION ONLY**

GAS FURNACES

G51MP

ELITE® SERIES

Multi-Position - Direct Vent/Non-Direct Vent

AFUE - up to 92.5%

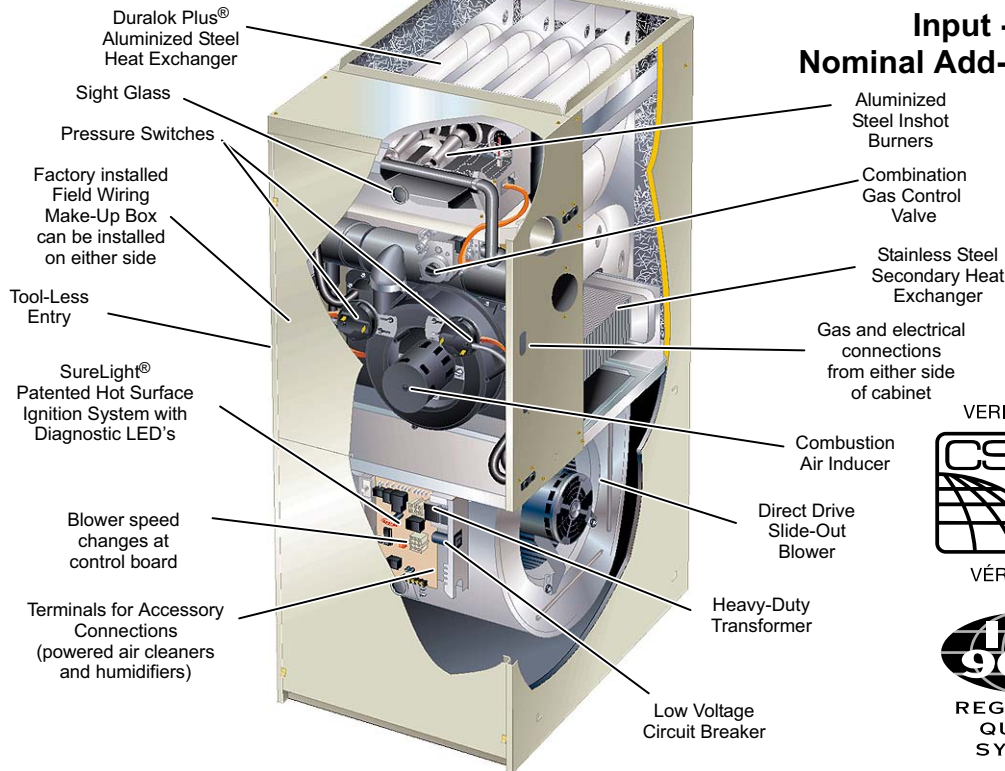
Input - 44,000 to 132,000 Btuh

Nominal Add-on Cooling - 2 to 5 tons

Toronto

February 2004

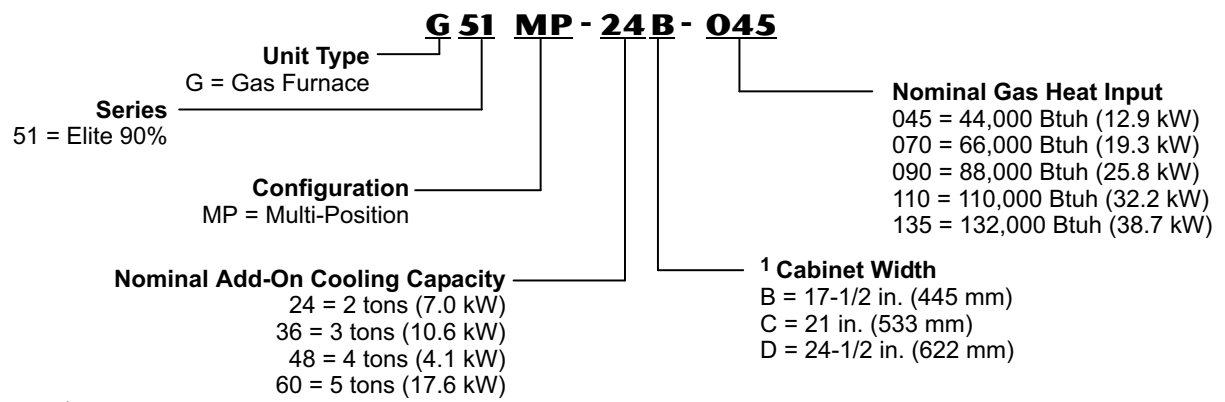
Supersedes July 2003



Energy Performance Rendement Énergétique



MODEL NUMBER IDENTIFICATION



¹ Evaporator coils with the same letter designation will physically match the furnace.

FEATURES

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WARRANTY

Duralok Plus® Aluminized Steel Heat Exchanger - Limited lifetime warranty in residential applications (twenty year transferrable), twenty year limited warranty in non-residential applications.

SureLight® ignition control module - Five year limited warranty in residential applications, one year limited warranty in non-residential applications.

All other covered components - Five year limited warranty in residential applications, one year limited warranty in non-residential applications.

Refer to Lennox Equipment Limited Warranty certificate included with equipment for details.

Visit us at www.lennox.com
 For the latest technical information, www.davenet.com

FEATURES

APPLICATIONS

Input capacities of 44,000, 66,000, 88,000, 110,000, and 132,000 Btuh (12.9, 19.3, 25.8, 32.2, and 38.7 kW).

Energy efficiency (AFUE) up to 92.5% in all four installation configurations.

Compact cabinet for up-flow, down-flow, horizontal-left or horizontal-right applications without any modifications to the unit.

Lennox add-on evaporator coils, high-efficiency air cleaners and humidifiers can easily be added to furnace.

Shipped factory assembled with all controls installed and wired. Each unit factory test operated to ensure proper operation.

APPROVALS

Units certified by CSA International and ratings are certified by GAMA.

Units tested and rated according to US DOE test procedures and FTC labeling regulations.

Blower data from unit tests conducted in Lennox Laboratory air test chamber.

Approved by the California Energy Commission and meets California Seasonal Efficiency requirements and California Nitrogen Oxides (NOx) Standards.

ENERGY STAR® certified units are designed to use less energy, help save money on utility bills, and help protect the environment. ISO 9001 Registered Manufacturing Quality System.

HEATING SYSTEM

Lennox Duralok Plus® Heat Exchanger Assembly

Lennox developed heat exchanger assembly consists of primary heat exchanger and secondary condenser coil assembly.

Main 3-pass clamshell type heat exchanger constructed of heavy-gauge, aluminized steel.

Designed for normal expansion and contraction.

Crimped seam design and construction provides maximum efficiency and minimum resistance to airflow.

Secondary heat exchanger condenser coil constructed of aluminum fins fitted to stainless steel tubes.

Coil is factory tested for leaks.

Condensate drain header box assembly located on front of coil.

Compact size of complete heat exchanger assembly permits low overall design of furnace cabinet.

All components mounted in a heavy-gauge steel frame.

Heat exchanger assembly has been laboratory life cycle tested.

Lennox Designed Header Box

Header box on end of condenser coil collects flue condensate for disposal through condensate collars.

Hose connects the header box drains to the condensate collars.

The condensate collars are located on each side of the cabinet for easy field installation of condensate drain trap. Only one collar is used, the remainder stay plugged.

Condensate drain trap is included with the unit for field installation.

Lennox Designed Flue Condensate Trap Assembly

Condensate trap assembly is mounted outside the conditioned air stream.

Assembly can be mounted on either side of cabinet in up-flow and down-flow applications. Assembly is mounted on the bottom of the cabinet in horizontal applications. See Installation Instructions.

Connection can be made with field provided 1/2 in. PVC pipe, 3/4 in. PVC coupling, or 1-1/4 in. OD x 1 in. ID tubing with hose clamp.

Easy to clean and winterize.

Inshot Burners

Aluminized steel inshot burners provide efficient, trouble-free operation.

Burner venturi mixes air and gas in correct proportion for proper combustion.

Burner assembly is removable from the unit as a single component for ease of service.

SureLight® Hot Surface Ignitor

Tough, reliable, long-life, trouble-free performance.

Tungsten heater element sandwiched between two plates of silicon nitride.

Cemented to steatite block for protection against current leakage. Ignition leads constructed of nickel plated copper enclosed in high temperature Teflon insulation for dependable operation. No electrical noise.

Gas Control Valve

24 volt redundant combination gas control valve combines manual shut off valve (On-Off), automatic electric valve (dual) and gas pressure regulation into a compact combination control.

Combustion Air Inducer

Shaded pole heavy-duty blower prepurges heat exchanger and safely vents flue products.

Pressure switches prove blower operation before allowing gas valve to open.

Operates only during heating cycle.

Limit Control

Automatic reset, primary and secondary limits are accurately located.

Primary limit factory installed on vestibule panel on all units, secondary limit factory installed on blower housing.

Flame Rollout Switch

Manual reset switches are factory installed on burner box.

Switch provides protection from abnormal operating conditions.

CONTROLS

SureLight® Integrated Furnace Control Board

Solid-state board contains all necessary controls and relays to operate furnace.

Combustion air inducer is controlled by board. Prior to ignition, a pre-purge cycle for 15 seconds is initiated. After the main burners are turned off, a post-purge cycle for 5 seconds is run.

Adaptive technology of ignition control board continuously monitors and adjusts the ignitor power to operate at minimum ignitor temperature required for ignition, prolonging ignitor life.

Electronic flame sensor control assures safe and reliable operation. Should loss of flame occur, flame sensor controls will initiate 5 attempts at re-ignition before locking out unit operation for 60 minutes.

Watchguard type circuit automatically resets ignition controls after one hour of continuous thermostat demand after unit lockout, eliminating nuisance calls for service.

Fan control consists of adjustable blower timed-off delay (60, 90, 120, 180 seconds - factory setting 90 seconds) and fixed blower timed-on delay (45 seconds).

For air-conditioning applications, blower is automatically energized on thermostat demand for cooling.

Terminal for continuous low speed blower operation.

Two accessory terminals furnished for additional power supply requirements for 120 volt (less than 1 amp) power humidifiers and powered air cleaners.

Ignition control has two LED's to indicate status and as an aid in troubleshooting.

24 Volt Transformer

Furnished and factory installed in control box.

40VA transformer has circuit breaker wired in series.

Field Wiring Make-up Box

Furnished for line voltage wiring.

Factory installed internally on left side of furnace.

Box may be installed internally or externally on either side of furnace.

BLOWER

Multi-speed, direct drive blower.

Statically and dynamically balanced.

Resiliently mounted.

Blower assembly slides out of unit for servicing.

Blower speeds are easily changed on the integrated furnace control board. See blower performance tables.

FILTER (NOT FURNISHED)

Filter and provisions for external mounting must be field provided.

FEATURES

COIL MATCH-UP

All furnaces exactly match C33 and CX34 cased up-flow evaporator coils and CH33 horizontal evaporator coils with same letter designation in model number. No adaptor required. Engaging holes furnished on cabinet for alignment.

C33 uncased coils match furnaces without any overhang but require an optional adaptor base or field fabricated transition to match furnace opening. See C33 coil bulletin for additional information.

All furnaces exactly match CR26 cased, down-flow evaporator coils with adaptor rails, furnished with coil.

CABINET

Low-profile, narrow width cabinet allows easy installation in up-flow, down-flow or horizontal applications.

Heavy-gauge, cold rolled steel construction.

Pre-painted cabinet finish.

Flanges provided on supply air opening for ease of plenum connection or alignment with evaporator coil.

Fully insulated cabinet with foil faced insulation on sides and back of heating compartment and mat faced insulation in blower compartment.

Tool-less latches on blower and burner doors assure positive lock.

Complete service access.

Safety interlock switch automatically shuts off power to unit when blower compartment access door is removed.

Gas piping and electrical inlets are provided in both sides of cabinet.

Return Air Entry:

For bottom return-air entry, remove furnished bottom seal panel from cabinet.

For side return-air entry (up-flow applications only), corners are marked on either side of cabinet for return air cut-outs. On furnaces with side return air and condensate trap on the same side of the cabinet, a field fabricated transition or RAB is required to use an IAQ product higher than 14-3/16 in. (360 mm) when installed next to the unit and serviced from the front. IAQ products higher than 20 in. (508 mm) require a field fabricated transition. See dimension drawings.

NOTE - 60C and 60D size units that require air volumes over 1800 cfm (850 L/s) must have one of the following:

1. Single side return air with transition, to accommodate 20 x 25 x 1 in. (508 x 635 x 25 mm) cleanable air filter, required to maintain proper air velocity.
2. Single side return air with optional RAB Return Air Base.
3. Bottom return air.
4. Return air from both sides.
5. Bottom and one side return air.

See Blower Performance Tables for additional information.

OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA

TERMINATION KITS

Facilitates installation of combustion air intake pipe and flue exhaust pipe.

Refer to venting table in this bulletin to determine pipe size needed and proper termination kit required.

See Specifications table and dimension drawings.

Termination Kit - Concentric - Direct Vent Applications Only

1-1/2, 2, or 3 inch (38, 51, or 76 mm) kit contains concentric termination assembly, reducer bushing and 45 degree elbow. Kit requires single hole penetration of roof or wall for installation. Roof Termination Flashing Kit is available for use with 1-1/2 and 2 inch Kits.

CSA certified.

Termination Kits - Wall Assembly

Close Couple - Direct Vent Applications Only

2 or 3 inch (51 or 76 mm) kit consists of close-couple, side-by-side PVC piping with galvanized steel wall cover plate for sealing and isolating piping penetration of the wall.

Piping spacing and length is sized for proper wall installations. CSA certified.

Close Couple WTK - Direct Vent Applications Only

2 or 3 inch (51 or 76 mm) kit contains one insulated faceplate, one insulated exhaust pipe, elbow and fittings.

Wall Ring - Direct or Non-Direct Vent

2 inch (51 mm) kit contains 2 stainless steel outside seal caps, 2 galvanized steel inside seal caps, 4 seal rings for the caps and 18 inch (457 mm) insulation sleeve for sealing and isolating intake and exhaust piping penetration of wall.

Maintain a maximum of 6 inches (152 mm) between the inlet and outlet openings in the installation of the pipes.

Roof Termination Flashing Kit - Direct or Non-Direct Vent

2 or 3 inch (51 or 76 mm) kit contains two neoprene rubber roof flashings for vertical venting through a roof.

Vent pipe and insulation not furnished. Each kit contains enough parts for two non-direct vent installations.

Also available for use with 1-1/2 inch (use 2 inch flashing) and 2 inch (use 3 inch flashing) Concentric Vent Termination Kits used in vertical venting rooftop applications.

CONDENSATE DRAIN HEAT CABLE KITS

Self-limiting wattage heat cable prevents condensate drain from freezing in unconditioned areas.

Available in 6, 24 or 50 ft. (1.8, 7.3, or 15.2 m) lengths.

Heat Cable Tape:

66 ft. (20 m) length, 1/2 in. (13 mm) wide fiberglass.

60 ft. (18 m) length, 2 in. (51 mm) wide aluminum foil.

DOWN-FLOW ADDITIVE BASE

Required for heating only units installed on combustible floors.

Not required in add-on cooling applications.

See Dimension Drawing.

RAB RETURN AIR BASE

On furnaces with a side return air and condensate trap on the same side of the cabinet, a field fabricated transition or RAB is required to use an IAQ product higher than 14.2 in. (361 mm) when filters are installed next to the unit and serviced from the front. IAQ devices higher than 20 in require a field fabricated transition.

Must be used for 60C and 60D models with air volumes over 1800 cfm (850 L/s) in up-flow applications when only one side return is required.

Cabinet is pre-painted steel to match the furnace.

See Dimension Drawing.

CONDENSATE TRAP ALTERNATE LOCATION KIT

Allows condensate drain to be installed on the opposite side of the furnace from the exhaust venting (up-flow applications only).

FILTERS

Air Filter and Rack Kit for Horizontal Return Air (End) Applications

Washable or vacuum cleanable polyurethane frame type filter and external end return air rack available for field installation.

Rack has filter door for easy filter servicing.

Flanges on rack allow easy duct connection.

See dimension drawing.

Air Filter and Rack Kit for Side Return Air Applications (Not for use with RAB Return Air Base)

Washable or vacuum cleanable polyurethane frame type filter and external side return air rack available for field installation.

Available in single and ten pack kits.

Rack has filter door for easy filter servicing.

Flanges on rack allow easy duct connection.

Field installs on either side of unit cabinet.

See dimension drawing.

EZ Filter Base for Bottom Return Air Applications

Hinged door with thumbscrew for easy filter access.

Uses standard size filters (field provided).

OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA

HIGH ALTITUDE KITS

High Altitude Orifice Kit - Natural Gas Only

Required for all natural gas models for proper unit operation at altitudes of 7501 to 10,000 feet (2286 to 3048 m).

Proper orifice for LPG/Propane models is included with LPG/Propane Conversion Kit.

High Altitude Pressure Switch Kit

Required on certain units for proper unit operation on installations above 4,500 ft. (1372 m).

Order two per unit.

CONTROLS

Twinning Kit

Required to operate two furnaces simultaneously.

Kit consists of twinning control and two fan sensors.

Thermostat

See Thermostat bulletins in Controls section and Lennox Price Book for a complete list of thermostats.

LPG/PROPANE CONVERSION KIT

Required for field changeover from natural gas to LPG/Propane.

HORIZONTAL SUPPORT FRAME KIT

Provides support of unit in horizontal applications.

Consists of (2) 1 x 1-1/2 x 32-5/8 in. (25 x 38 x 829 mm) and (2) 1 x 3 x 53-7/8 in. (25 x 76 x 1368 mm) painted, heavy-gauge cold rolled steel support channels with assembly and suspending holes.

Bolts and nuts furnished for field assembly.

Suspending rods must be field provided.

EXHAUST PIPE VENTING TABLE

Altitude	Model No.	Maximum Equivalent Vent Length - ft. (m)						
		G51MP-24B-045 G51MP-36B-045		G51MP-36B-070		G51MP-36C-090 G51MP-48C-090 G51MP-60C-090	¹ G51MP-48C-110 ¹ G51MP-60C-110	² G51MP-60D-135
		One Pipe	Two Pipe	One Pipe	Two Pipe	One or Two Pipe	One or Two Pipe	One or Two Pipe
0 - 10,000 ft. (0 - 3048 m)	1-1/2 in. diameter	15 (4.6)	15 (4.6)	not allowed	not allowed	not allowed	not allowed	not allowed
	2 in. diameter	100 (30.5)	55 (16.8)	80 (24.4)	55 (16.8)	25 (7.6)	15 (4.6)	not allowed
	3 in. diameter	130 (39.6)	100 (30.5)	130 (39.6)	100 (30.5)	70 (21.3)	70 (21.3)	³ 55 (16.8)

NOTE - Minimum Equivalent Vent Pipe length is 15 feet (4.6 m).

¹ 110 models must have the supplied 90° street ell installed directly into the unit flue collar. The street ell must be included in the elbow count.

² Must have 3 in. to 2 in. reducing elbow (supplied) installed directly into the flue collar. Reducing ell must **NOT** be included in elbow count.

³ 90° elbows must be limited to sweep type elbows.

VENTING NOTES — One 90° elbow is equivalent to 5 feet (1.5 m) of straight vent pipe.

Two 45° elbows are equal to one 90° elbow.

One 45° elbow is equivalent to 2.5 feet (.75 m) of straight vent pipe.

One foot (305 mm) length of 2 in. (51 mm) diameter pipe is equivalent to 8 feet (2.4 m) of 3 in. (76 mm) diameter pipe.

Wall and roof termination (non-concentric) exhaust pipe must terminate with reducer to improve exhaust velocity away from intake piping.

045 and 070 - 1-1/2, 2 or 3 in. - terminate with 1-1/2 in. pipe

090 and 110 - 2 in. - no change required

090 and 110 - 3 in. - terminate with 2 in. pipe

135 - 3 in. - terminate with 2 in. pipe

FILTER AIR RESISTANCE

For 1 Inch (25 mm) Cleanable Filter (Field Provided)

cfm	L/s	in. w.g.	Pa
0	0	0.00	0
200	95	0.01	0
400	190	0.03	5
600	285	0.04	10
800	380	0.06	15
1000	470	0.09	20
1200	565	0.12	30
1400	660	0.15	35
1600	755	0.19	45
1800	850	0.23	55
2000	945	0.27	65
2200	1040	0.33	80
2400	1130	0.38	95
2600	1225	0.44	110

HIGH ALTITUDE INFORMATION

Pressure regulator adjustment may be required depending on altitude. See below for proper pressure regulator setting.

Fuel	Altitude - ft. (m)	Manifold Pressure (Outlet) in. w.g. (kPa)	
		045, 070, 090, 110 input	135 input
Natural	0-4500 (0-1372)	3.5 (0.87)	3.5 (0.87)
	4501-5500 (1373-1676)	3.5 (0.87)	² 3.3 (0.82)
	5501-6500 (1677-1981)	3.5 (0.87)	² 3.2 (0.80)
	6501-7500 (1982-2286)	3.5 (0.87)	² 3.1 (0.77)
	7501-10000 (2287-3048)	^{1,2} 3.5 (0.87)	^{1,2} 3.5 (0.87)
³ LPG Propane	0-4500 (0-1372)	10.0 (2.49)	10.0 (2.49)
	4501-7500 (1373-2286)	10.0 (2.49)	² 10.0 (2.49)
	7501-10,000 (0-3048)	² 10.0 (2.49)	² 10.0 (2.49)

¹ High Altitude Orifice Kit required, see Specifications table for order number.

² High Altitude Pressure Switch Kits required, see Specifications table for order number.

³ LPG/Propane conversion kit required, see Specifications table for order number.

INSTALLATION CLEARANCES

Sides	1 0 inches (0 mm)
Rear	0 inches (0 mm)
Top/Plenum	1 inch (25 mm)
Front	0 inches (0 mm)
Front (service/alcove)	24 inches (610 mm)
Floor	² Combustible

NOTE - Air for combustion and supply air ventilation must conform to the methods outlined in American National Standard (ANSI-Z223.1) National Fuel Gas Code or National Standard of Canada CAN/CGA-149.1, & CAN/CGA-149.2 "Installation Code for Gas Burning Appliances".

NOTE-In the U.S. flue sizing must conform to the methods outlined in current GAMA/ A.G.A. venting tables, American National Standard (ANSI-Z223.1) National Fuel Gas Code or applicable provisions of local building codes. In Canada flue sizing must conform to the methods outlined in National Standard of Canada CAN/CGA-149.1 and .2.

¹ Allow proper clearances to accommodate condensate trap and vent pipe installation.

² Clearance for installation on combustible floor if optional additive base is installed between the furnace and the combustible floor. Not required in add-on cooling applications if installed in accordance with local codes or National Fuel Gas Code ANSI-Z223.1 or CAN/CGA-149.1,.2. Do not install the furnace directly on carpeting, tile, or other combustible materials other than wood flooring.

SPECIFICATIONS

Gas Heating Performance		Model No.	G51MP-24B-045	G51MP-36B-045	G51MP-36B-070	G51MP-36C-090	G51MP-48C-090
Input - Btuh (kW)			44,000 (12.9)	44,000 (12.9)	66,000 (19.3)	88,000 (25.8)	88,000 (25.8)
Output - Btuh (kW)			41,000 (12.0)	41,000 (12.0)	62,000 (18.2)	82,300 (24.1)	83,000 (24.3)
1 AFUE			92.1%	92.1%	92.1%	92.1%	92.1%
California Seasonal Efficiency			82.7%	82.1%	85.1%	85.9%	86.0%
High static (CSA) - in. w.g. (Pa)			.50 (124)	.50 (124)	.50 (124)	.50 (124)	.50 (124)
Temperature rise range - °F (°C)			30 - 60 (18 - 36)	25 - 55 (14 - 31)	40 - 70 (24 - 42)	40 - 70 (24 - 42)	40 - 70 (24 - 42)
Connections in.	2 Intake Pipe (PVC)		2	2	2	2	2
	2 Exhaust Pipe (PVC)		2	2	2	2	2
	Condensate Drain Trap (PVC pipe) - i.d.		1/2	1/2	1/2	1/2	1/2
	with field supplied (PVC coupling) - o.d.		3/4	3/4	3/4	3/4	3/4
	hose with hose clamp - i.d. x o.d.		1-1/4 x 1	1-1/4 x 1	1-1/4 x 1	1-1/4 x 1	1-1/4 x 1
	Gas pipe size IPS		1/2	1/2	1/2	1/2	1/2
Indoor Blower	Wheel nominal diameter x width - in. (mm)		10 x 7 (254 x 178)	10 x 8 (254 x 203)	10 x 8 (254 x 203)	10 x 8 (254 x 203)	10 x 10 (254 x 254)
	Motor output - hp (W)		1/5 (149)	1/3 (249)	1/3 (249)	1/3 (249)	1/2 (373)
	Tons (kW) of add-on cooling		2 - 2.5 (7.0 - 8.8)	2 - 3 (8.8 - 10.5)	2 - 3 (8.8 - 10.5)	2 - 3 (8.8 - 10.5)	3 - 4 (10.5 - 14.0)
Shipping Data	lbs. (kg) - 1 package		132 (60)	136 (62)	146 (66)	164 (74)	168 (76)
Electrical characteristics			120 volts - 60 hertz - 1 phase (less than 12 amps)				
OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA							
3 Air Filter and Rack Kit Size of filter	Horizontal (end)		87L96 - 18 x 25 x 1 in. (457 x 635 x 25 mm)			87L97- 20 x 25 x 1 in. (508 x 635 x 25 mm)	
	Side Return		Single 44J22 or Ten Pack 66K63 - (1) 16 x 25 x 1 in. (406 x 635 x 25 mm)				
Condensate Drain Heat Cable	6 ft. (1.8 m)		26K68	26K68	26K68	26K68	26K68
	24 ft. (7.3 m)		26K69	26K69	26K69	26K69	26K69
	50 ft. (15.2 m)		26K70	26K70	26K70	26K70	26K70
Heat Cable Tape	Fiberglass - 1/2 in. (38 mm) x 66 ft. (20 m)		39G04	39G04	39G04	39G04	39G04
	Aluminum foil - 2 in. (25 mm) x 60 ft. (18 m)		39G03	39G03	39G03	39G03	39G03
Condensate Trap Alternate Location Kit			76M20	76M20	76M20	76M20	76M20
EZ Filter Base	Catalog Number - Shipping Weight		73P56 - 7 lbs. (3 kg)			73P57 - 8 lbs. (4 kg)	
	Dimensions - H x W x D - in. (mm)		4 x 17-5/8 x 28-5/8 (102 x 448 x 727)			4 x 21-5/8 x 28-5/8 (102 x 549 x 727)	
	Size of field provided filter - in. (mm)		16 x 25 x 1 (406 x 635 x 25)			20 x 25 x 1 (508 x 635 x 25)	
Down-Flow Additive Base			11M60	11M60	11M60	11M61	11M61
4 High Altitude Orifice Kit - Natural Gas			59M16	59M16	59M16	59M16	59M16
4 High Altitude Pressure Switch Kit - order two each			56M06	56M06	56M06	56M07	56M07
8 High Altitude Pressure Switch Kit order two each	4501-7500 ft. (1372-2286 m)		---	---	---	75M20	75M20
	7501-10,000 ft. (2286 -3048 m)		56M06	56M06	56M06	56M07	56M07
Horizontal Support Frame Kit - Ship. Weight - lbs. (kg)			56J18 - 18 (8)	56J18 - 18 (8)	56J18 - 18 (8)	56J18 - 18 (8)	56J18 - 18 (8)
LPG/Propane Kit	0-7500 ft. (0-2286 m)		47M83	47M83	47M83	47M83	47M83
	7501-10,000 ft. (2286-3048 m)		47M81	47M81	47M81	47M81	47M81
5 Termination Kits Direct Vent Applications Only	Concentric 1-1/2 inch (38 mm)		71M80	71M80	71M80	---	---
	2 inch (51 mm)		---	---	---	69M29	69M29
	3 inch (76 mm)		---	---	---	60L46	60L46
	Wall Close Couple - 2 inch (51 mm)		22G44	22G44	22G44	---	---
	3 inch (76 mm)		44J40	44J40	44J40	44J40	44J40
	Close Couple WTK - 2 inch (51 mm)		30G28	30G28	30G28	---	---
3 inch (76 mm)		81J20	81J20	81J20	81J20	81J20	
5, 6 Termination Kits - Direct or Non-Direct Vent	Roof 2 inch (51 mm)		15F75	15F75	15F75	15F75	15F75
	Wall Wall Ring Kit 2 inch (51 mm)		15F74	15F74	15F74	15F74	15F74
Return Air Base			RAB-B-6 (76M88)	RAB-B-6 (76M88)	RAB-B-6 (76M88)	RAB-C-6 (74M74)	RAB-C-6 (74M74)
7 Roof Termination Flashing Kit - Direct or Non-Direct Vent			44J41	44J41	44J41	44J41	44J41
Twinning Kit			15L38	15L38	15L38	15L38	15L38

NOTE - Filters and provisions for mounting are not furnished and must be field provided.

1 Annual Fuel Utilization Efficiency based on DOE test procedures and according to FTC labeling regulations. Isolated combustion system rating for non-weatherized furnaces.

2 Determine from venting tables proper exhaust pipe size and termination kit required.

3 Cleanable polyurethane frame type filter.

4 Required for proper operation at altitudes from 7501 to 10,000 ft. (2286 to 3048 m).

5 See Installation Instructions for specific venting information.

6 Kits contain enough parts for two, non-direct vent installations.

7 Kit contains two roof flashings.

8 Required for proper operation at altitudes from 4501 to 10,000 ft. (1372 to 3048 m).

SPECIFICATIONS

Gas Heating Performance		Model No.	G51MP-60C-090	G51MP-48C-110	G51MP-60C-110	G51MP-60D-135
Input - Btuh (kW)			88,000 (25.8)	110,000 (32.2)	110,000 (32.2)	132,000 (38.7)
Output - Btuh (kW)			83,000 (24.3)	104,000 (30.5)	104,000 (30.5)	124,000 (36.3)
¹ AFUE			92.1%	92.5%	92.1%	92.1%
California Seasonal Efficiency			84.1%	86.9%	85.5%	85.9%
High static (CSA) - in. w.g. (Pa)			.50 (124)	.50 (124)	.50 (124)	.50 (124)
Temperature rise range - °F (°C)			30 - 60 (18 - 36)	45 - 75 (27 - 45)	40 - 70 (22 - 39)	45 - 75 (25 - 42)
Connections in.						
² Intake Pipe (PVC)			2	2	2	3
² Exhaust Pipe (PVC)			2	2	2	3
Condensate Drain Trap (PVC pipe) - i.d.			1/2	1/2	1/2	1/2
with field supplied (PVC coupling) - o.d.			3/4	3/4	3/4	3/4
hose with hose clamp - i.d. x o.d.			1-1/4 x 1	1-1/4 x 1	1-1/4 x 1	1-1/4 x 1
Gas pipe size IPS			1/2	1/2	1/2	1/2
Indoor Blower						
Wheel nominal diameter x width - in. (mm)			11-1/2 x 10 (292 x 229)	10 x 10 (254 x 254)	11-1/2 x 10 (292 x 229)	11-1/2 x 10 (292 x 229)
Motor output - hp (W)			1 (746)	1/2 (373)	1 (746)	1 (746)
Tons (kW) of add-on cooling			4 - 5 (14.0 - 17.5)	3 - 4 (10.5 - 14.0)	4 - 5 (14.0 - 17.5)	4 - 5 (14.0 - 17.5)
Shipping Data						
lbs. (kg) - 1 package			176 (80)	178 (81)	186 (84)	206 (93)
Electrical characteristics			120 volts - 60 hertz - 1 phase (less than 12 amps)			
OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA						
^{3, 4} Air Filter and Rack Kit - Size of filter		Horizontal (end)	87L97 - 20 x 25 x 1 in. (508 x 635 x 25 mm)			87L98 - 25 x 25 x 1 in. (635 x 635 x 25 mm)
		Side Return	Single 44J22 or Ten Pack (66K63) - 16 x 25 x 1 in. (406 x 635 x 25 mm)			
Condensate Drain Heat Cable						
		6 ft. (1.8 m)	26K68	26K68	26K68	26K68
		24 ft. (7.3 m)	26K69	26K69	26K69	26K69
		50 ft. (15.2 m)	26K70	26K70	26K70	26K70
Heat Cable Tape						
		Fiberglass - 1/2 in. (38 mm) x 66 ft. (20 m)	39G04	39G04	39G04	39G04
		Aluminum foil - 2 in. (25 mm) x 60 ft. (18 m)	39G03	39G03	39G03	39G03
Condensate Trap Alternate Location Kit			76M20	76M20	76M20	76M20
⁴ EZ Filter Base		Catalog Number - Shipping Weight	73P57 - 8 lbs. (4 kg)	73P57 - 8 lbs. (4 kg)	73P58 - 10 lbs. (5 kg)	73P58 - 10 lbs. (5 kg)
		Dimensions - H x W x D - in. (mm)	4 x 21-5/8 x 28-5/8 (102 x 549 x 727)	4 x 21-5/8 x 28-5/8 (102 x 549 x 727)	4 x 24-5/8 x 28-5/8 (102 x 625 x 727)	4 x 24-5/8 x 28-5/8 (102 x 625 x 727)
		Number and size of field provided filter - in. (mm)	20 x 25 x 1 (508 x 635 x 25)	20 x 25 x 1 (508 x 635 x 25)	24 x 24 x 1 (610 x 610 x 25)	24 x 24 x 1 (610 x 610 x 25)
Down-Flow Additive Base			11M61	11M61	11M61	11M62
⁵ High Altitude Orifice Kit - Natural Gas Only			59M16	59M16	59M16	47M82
⁶ High Altitude Pressure Switch Kit Order two each		4501-7500 ft. (1372-2286 m)	75M20	75M20	75M20	56M04
		7501-10,000 ft. (2286 -3048 m)	56M07	56M07	56M07	60M35
Horizontal Support Frame Kit - Ship. Weight - lbs. (kg)			56J18 - 18 (8)	56J18 - 18 (8)	56J18 - 18 (8)	56J18 - 18 (8)
RAB Return Air Base			RAB-C-6 (74M74)	RAB-C-6 (74M74)	RAB-C-6 (74M74)	RAB-D-6 (74M75)
LPG/Propane Kit						
		0-7500 ft. (0-2286 m)	47M83	47M83	47M83	47M83
		7501-10,000 ft. (2286 - 3048 m)	47M81	47M81	47M81	47M81
⁷ Termination Kits - Direct Vent Applications						
		Concentric 2 inch (51 mm)	69M29	69M29	69M29	---
		3 inch (76 mm)	60L46	60L46	60L46	60L46
		Wall Close-Coupled 3 inch (76 mm)	44J40	44J40	44J40	44J40
		Close Couple WTK - 3 inch (76 mm)	81J20	81J20	81J20	81J20
^{7, 8} Termination Kits Direct Vent or Non-Direct Vent						
		Roof 2 inch (51 mm)	15F75	15F75	15F75	---
		3 inch (76 mm)	44J41	44J41	44J41	44J41
		Wall Ring Kit 2 inch (51 mm)	15F74	15F74	15F74	⁹ 15F74
¹⁰ Roof Termination Flashing Kit - Direct or Non-Direct Vent			44J41	44J41	44J41	44J41
Twinning Kit			15L38	15L38	15L38	15L38

NOTE - Filters and provisions for mounting are not furnished and must be field provided.

¹ Annual Fuel Utilization Efficiency based on DOE test procedures and according to FTC labeling regulations. Isolated combustion system rating for non-weatherized furnaces.

² Determine from venting tables proper exhaust pipe size and termination kit required.

³ Cleanable polyurethane frame type filter.

⁴ Not for use with RAB Return Air Base or with 60C and 60D size units with air flow requirements of 1800 cfm (850 L/s) or greater. See Blower Performance tables for additional information.

⁵ Required for proper operation at altitudes from 7501 to 10,000 ft. (2286 to 3048 m).

⁶ Required for proper operation at altitudes over 4500 ft. (1370 m).

⁷ See Installation Instructions for specific venting information.

⁸ Kits contain enough parts for two, non-direct vent installations.

⁹ Non-direct vent applications only.

¹⁰ Kit contains two roof flashings.

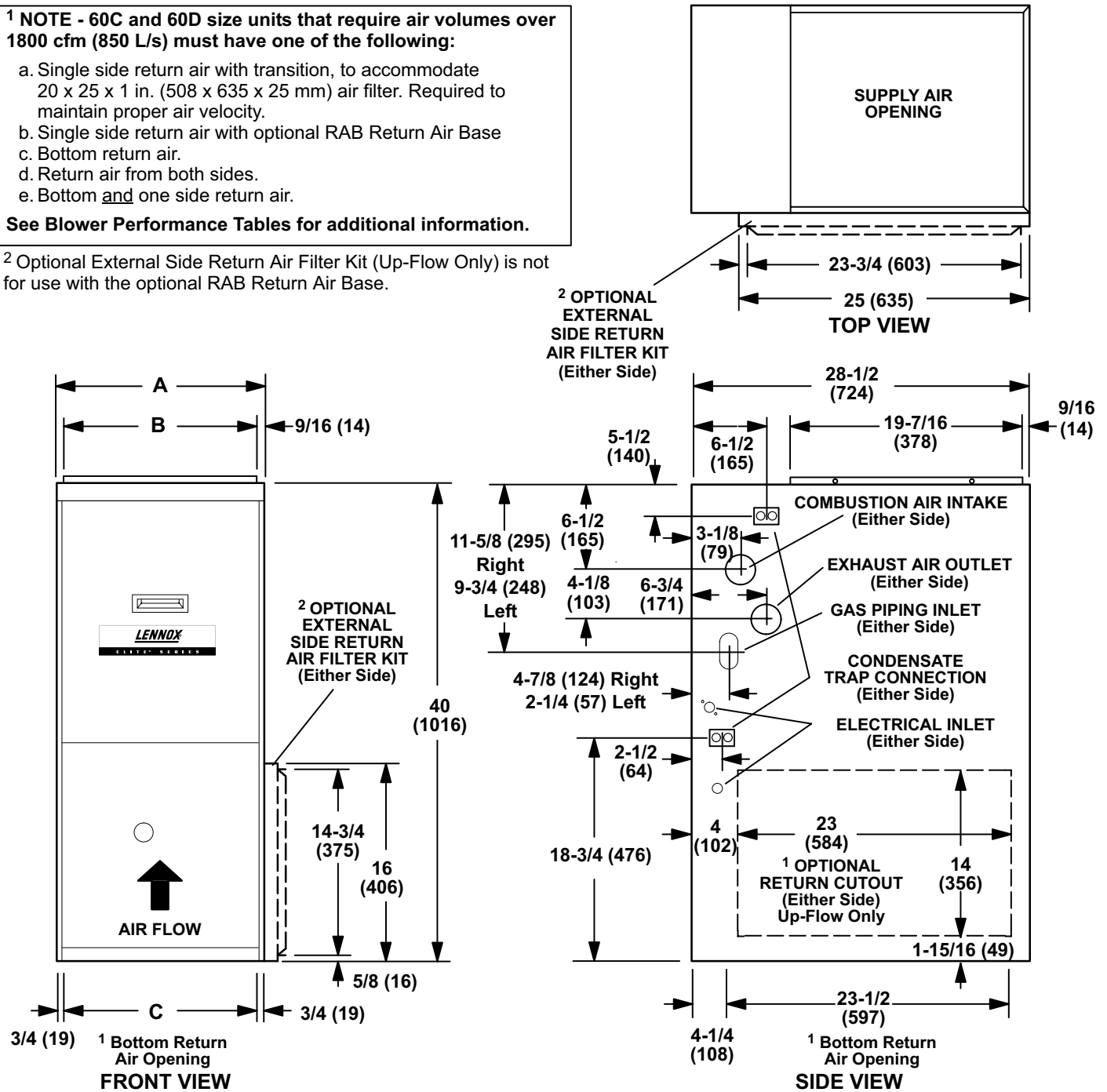
DIMENSIONS - INCHES (MM) UP-FLOW POSITION SHOWN

1 NOTE - 60C and 60D size units that require air volumes over 1800 cfm (850 L/s) must have one of the following:

- a. Single side return air with transition, to accommodate 20 x 25 x 1 in. (508 x 635 x 25 mm) air filter. Required to maintain proper air velocity.
- b. Single side return air with optional RAB Return Air Base
- c. Bottom return air.
- d. Return air from both sides.
- e. Bottom and one side return air.

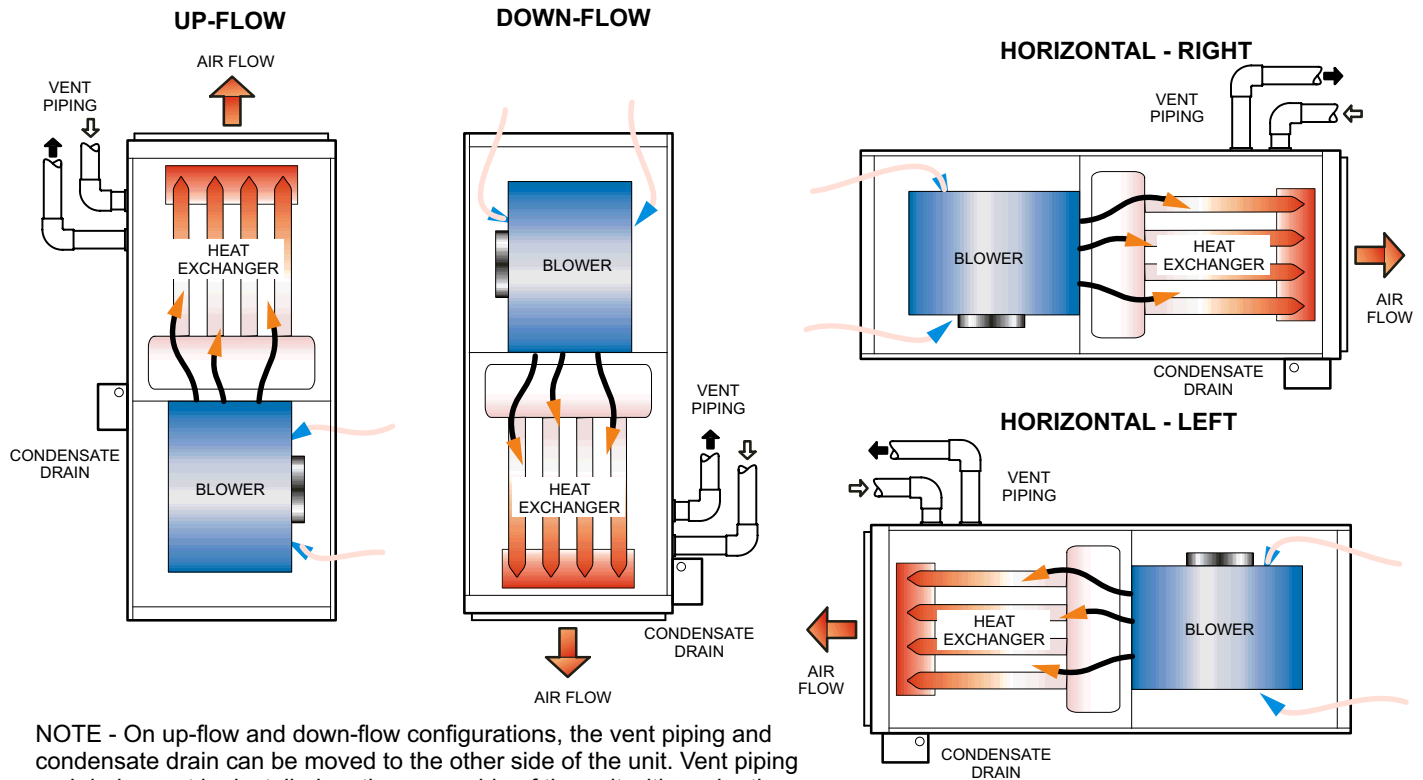
See Blower Performance Tables for additional information.

2 Optional External Side Return Air Filter Kit (Up-Flow Only) is not for use with the optional RAB Return Air Base.



Model No.	A		B		C	
	in.	mm	in.	mm	in.	mm
G51MP-24B-045 G51MP-36B-045 G51MP-36B-070	17-1/2	446	16-3/8	416	16	406
G51MP-36C-090 G51MP-60C-090 G51MP-48C-110 G51MP-60C-110	21	533	19-7/8	454	19-1/2	495
G51MP-60D-135	24-1/2	622	23-3/8	546	23	584

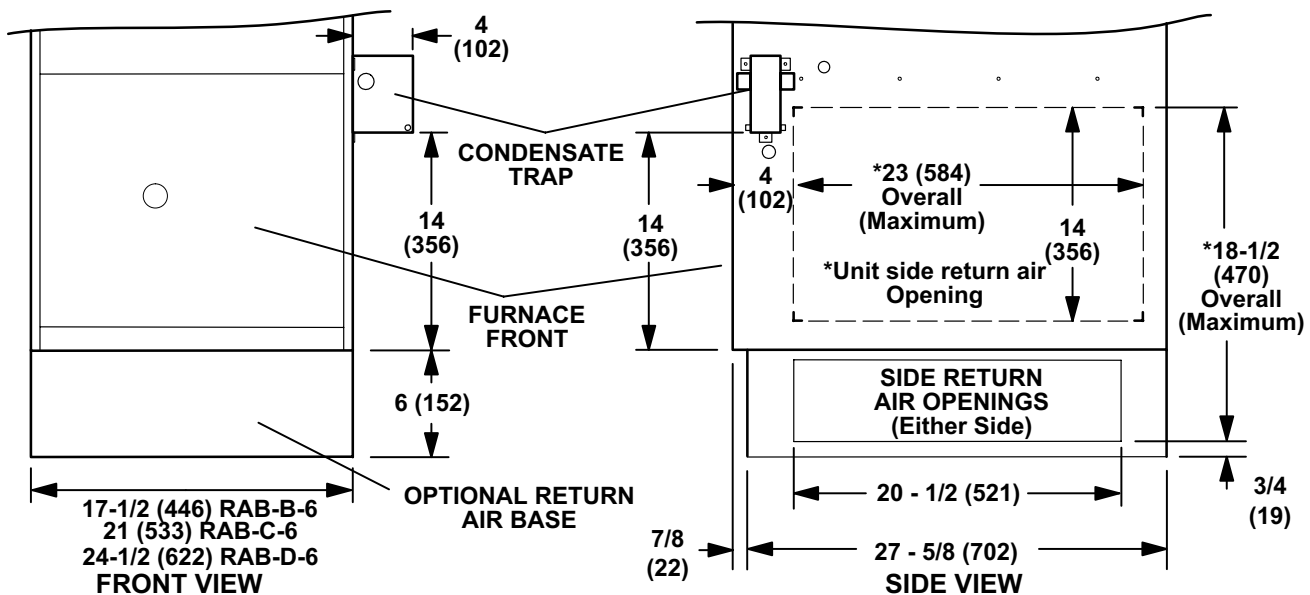
INSTALLATION CONFIGURATIONS



NOTE - On up-flow and down-flow configurations, the vent piping and condensate drain can be moved to the other side of the unit. Vent piping and drain must be installed on the same side of the unit with each other unless optional Condensate Trap Alternate Location Kit (up-flow only) is used. On horizontal installations the drain must be located at the bottom and the vent piping at the top.

OPTIONAL ACCESSORY DIMENSIONS - INCHES (MM)

RAB RETURN AIR BASE (Up-Flow Applications Only) For use with B, C, and D size furnaces only



NOTE- Optional Side Return Air Filter Kits are not for use with RAB Return Air Base.

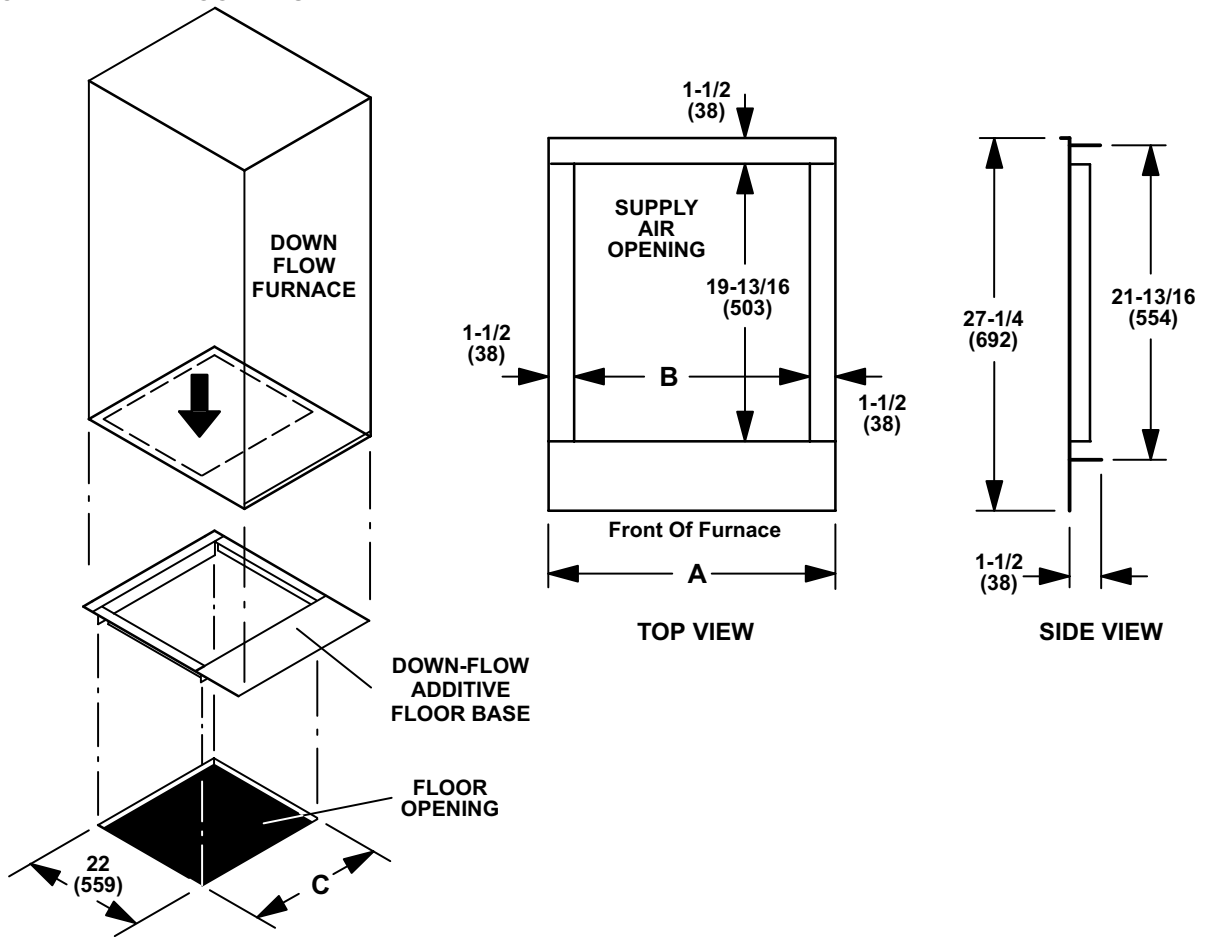
* Both the unit return air opening and the base return air opening must be covered by a single plenum or IAQ cabinet. Minimum unit side return air opening dimensions for units requiring 1800 cfm or more of air: 23 (584) W X 11 (279) H.

The opening can be cut as needed to accommodate plenum or IAQ cabinet.

Side return air openings must be cut in the field. There are cutting guides stenciled on the cabinet for the side return air opening. The size of the opening must not extend beyond the markings on the furnace cabinet.

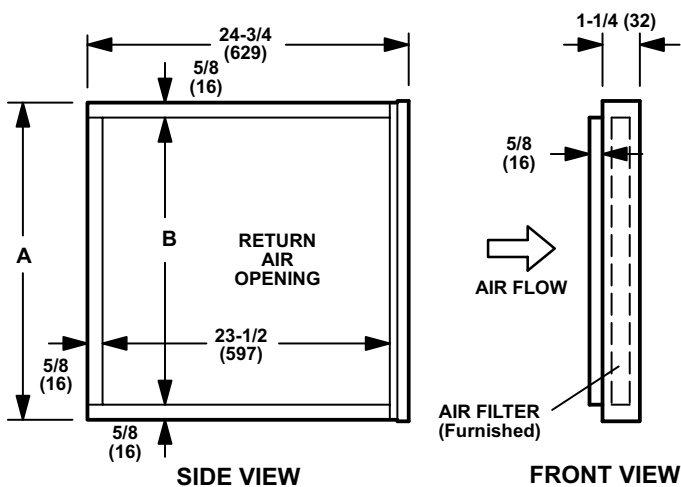
OPTIONAL ACCESSORY DIMENSIONS - INCHES (MM)

DOWN-FLOW ADDITIVE FLOOR BASE



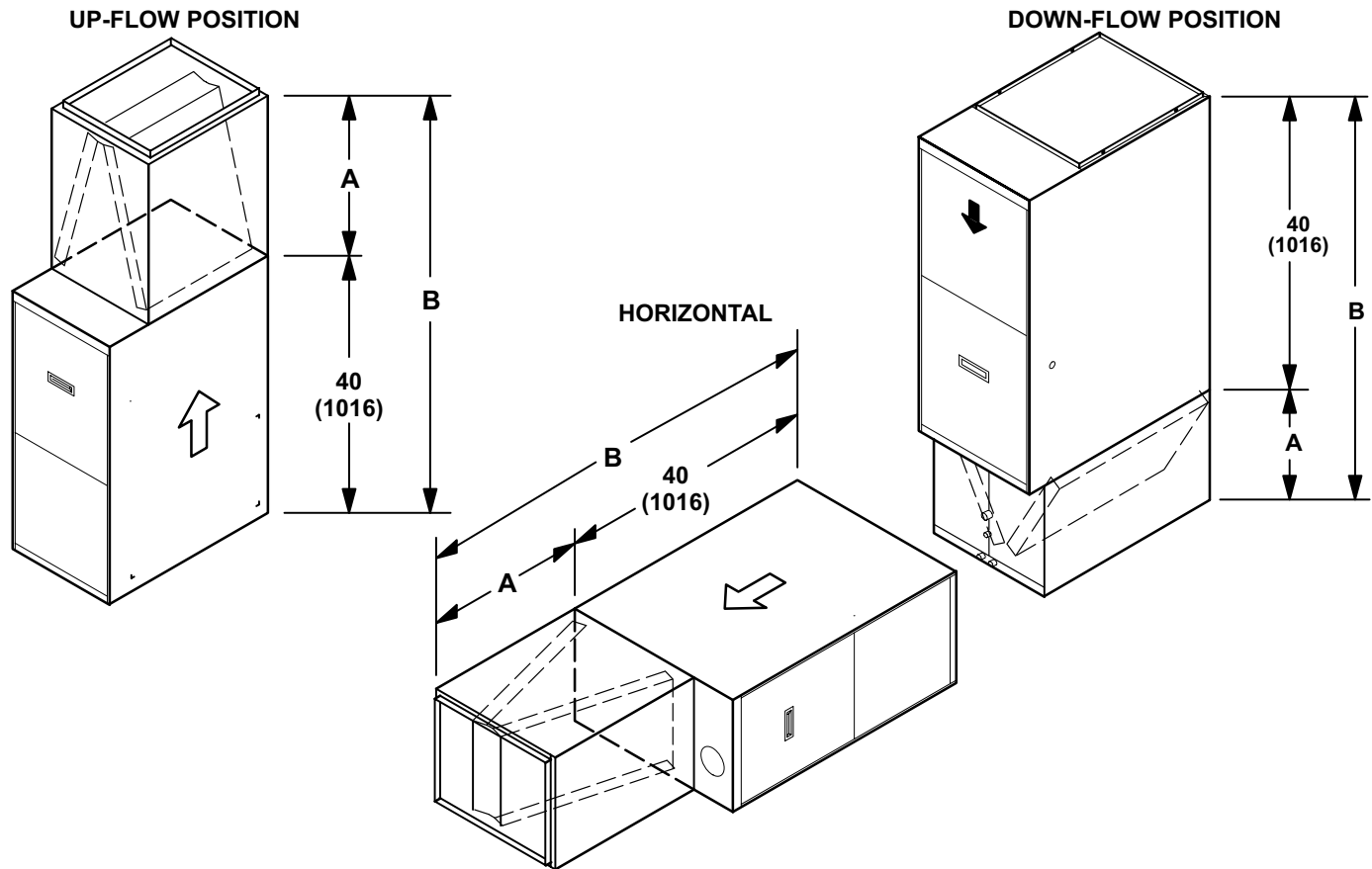
Model No.	A		B		C	
	in.	mm	in.	mm	in.	mm
G51MP-24B-045 G51MP-36B-045 G51MP-36B-070	19-9/16	497	16-9/16	421	18-3/4	476
G51MP-36C-090 G51MP-48C-090 G51MP-60C-090 G51MP-48C-110 G51MP-60C-110	23-1/16	586	20-1/16	510	22-1/4	565
G51MP-60D-135	26-9/16	675	23-9/16	598	25-3/4	654

HORIZONTAL FILTER KIT



Catalog Number	A		B	
	inch	mm	inch	mm
87L96	18	457	16-3/4	425
87L97	21	533	18-3/4	476
87L98	25	635	23-3/4	603

DIMENSIONS - INCHES (MM) - FURNACE/COIL COMBINATIONS

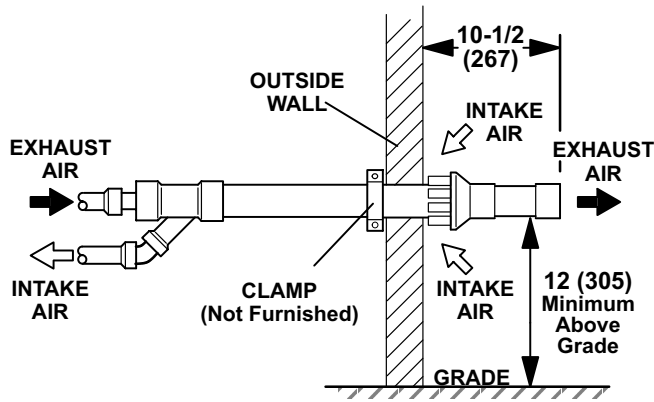


Model No.	A		B	
	in.	mm	in.	mm
Up-Flow Uncased				
C33-24B-2	13-7/8	352	53-7/8	1368
C33-30B-2	17-3/4	451	57-3/4	1467
C33-48B-2	22-1/8	562	62-1/8	1578
C33-36B-2	21-7/8	556	61-7/8	1572
C33-24C-2, C33-30C-2, C33-36C-2	21-1/4	540	61-1/4	1556
C33-38B-2	22	559	62	1575
C33-42B-2	21-7/8	556	61-7/8	1572
C33-44C-2, C33-48C-2	21-1/2	546	61-1/2	1562
C33-50/60C-2, C33-60D-2	24-3/4	629	64-3/4	1645
C33-62D-2	28-3/4	730	68-3/4	1746
Up-Flow Cased				
C33-24B-2F, CX34-18/24B-6F	16-1/2	419	56-1/2	1435
C33-30B-2F, CX34-30B-6F	20-1/2	521	60-1/2	1537
C33-24C-2F, C33-30C-2F, C33-36B-2F, C33-36C-2F, C33-38B-2F, C33-42B-2F, C33-44C-2F, C33-48B-2F, C33-48C-2F, CX34-18/24C-6F, CX34-30C-6F, CX34-36B-6F, CX34-36C-6F, CX34-38B-6F, CX34-42B-6F, CX34-44/48C-6F, CX34-44/48B-6F	24-1/2	622	64-1/2	1638
C33-50/60C-2F, CX34-50/60C-6F	27-1/2	699	67-1/2	1715
C33-60D-2F, CX34-60D-6F	25-1/2	648	65-1/2	1664
C33-62D-2F, CX34-62D-6F	29-1/2	749	69-1/2	1765

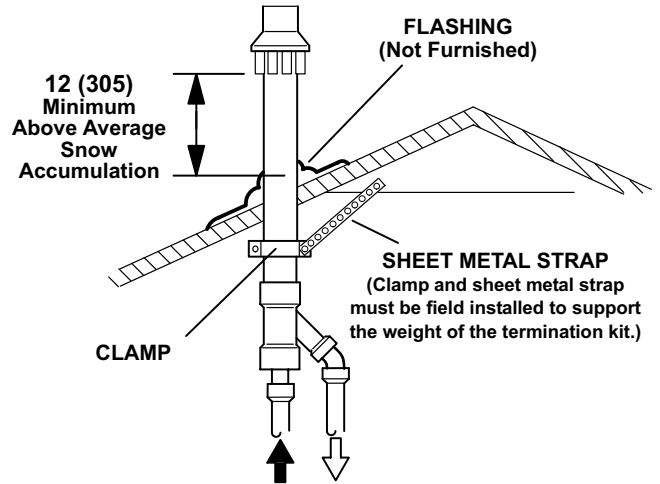
Model No.	A		B	
	in.	mm	in.	mm
Horizontal Cased				
CH33-36B-2F	26-1/2	673	66-1/2	1689
CH33-36C-2F	26-1/2	673	66-1/2	1689
CH33-42B-2F	26-1/2	673	66-1/2	1689
CH33-44/48B-2F	31-1/2	800	71-1/2	1816
CH33-48C-2F	26-1/2	673	66-1/2	1689
CH33-50/60C-2F	31-1/2	800	71-1/2	1816
CH33-60D-2F	26-1/2	673	66-1/2	1689
CH33-62D-2F	31-1/2	800	71-1/2	1816
Down-Flow Cased				
CR26-18N-F	12-3/4	324	52-3/4	1340
CR26-30N-F	12-3/4	324	52-3/4	1340
CR26-36N-F	15-3/8	391	55-3/8	1407
CR26-36W-F	15-3/8	391	55-3/8	1407
CR26-48N-F	19-1/8	486	59-1/8	1502
CR26-48W-F	19-1/8	486	59-1/8	1502
CR26-60N-F	22-7/8	581	62-7/8	1597
CR26-60W-F	22-7/8	581	62-7/8	1597

OPTIONAL ACCESSORY DIMENSIONS - INCHES (MM)

CONCENTRIC WALL TERMINATION APPLICATIONS

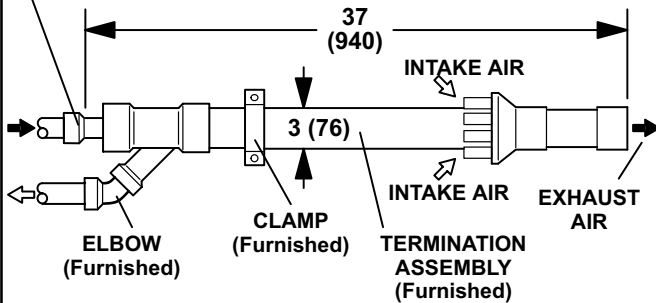


CONCENTRIC ROOF TERMINATION APPLICATIONS

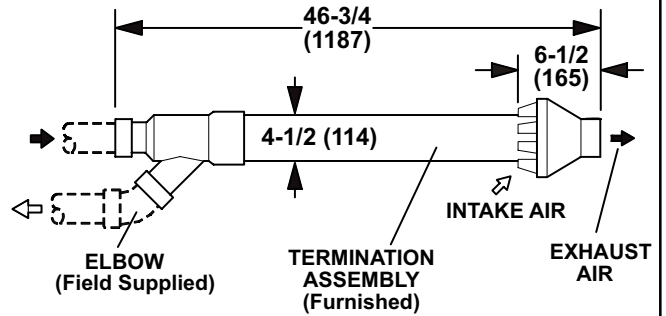


**71M80 — 1-1/2 inch (38 mm)
69M29 — 2 inch (51 mm)**
See Installation Instructions for specific usage.

2 x 1-1/2 in. (51 x 38 mm) 60G77
3 x 2 in. (76 x 51 mm) 33K97
REDUCER BUSHING (Furnished)



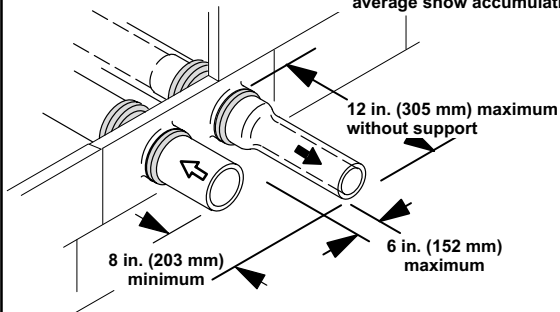
60L46 — 3 inch (76 mm)
See Installation Instructions for specific usage.



**WALL ASSEMBLY TERMINATION KIT - RING KIT
15F74 - 2 inch (51 mm)**
See Installation Instructions for specific usage.

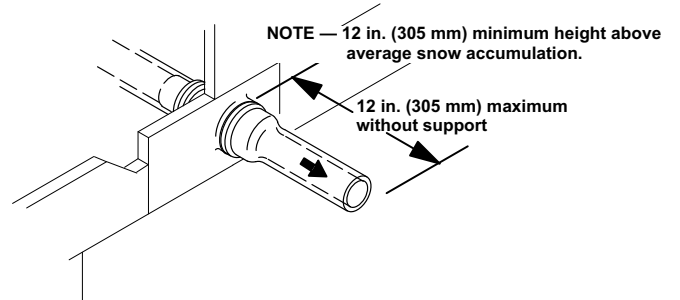
DIRECT VENT APPLICATION

NOTE - 12 in. (305 mm) minimum height above average snow accumulation.



NON-DIRECT VENT APPLICATION

NOTE — EXHAUST PIPE SHOWN
Kit Contains Enough Parts For Two Installations



DIRECT VENT APPLICATIONS

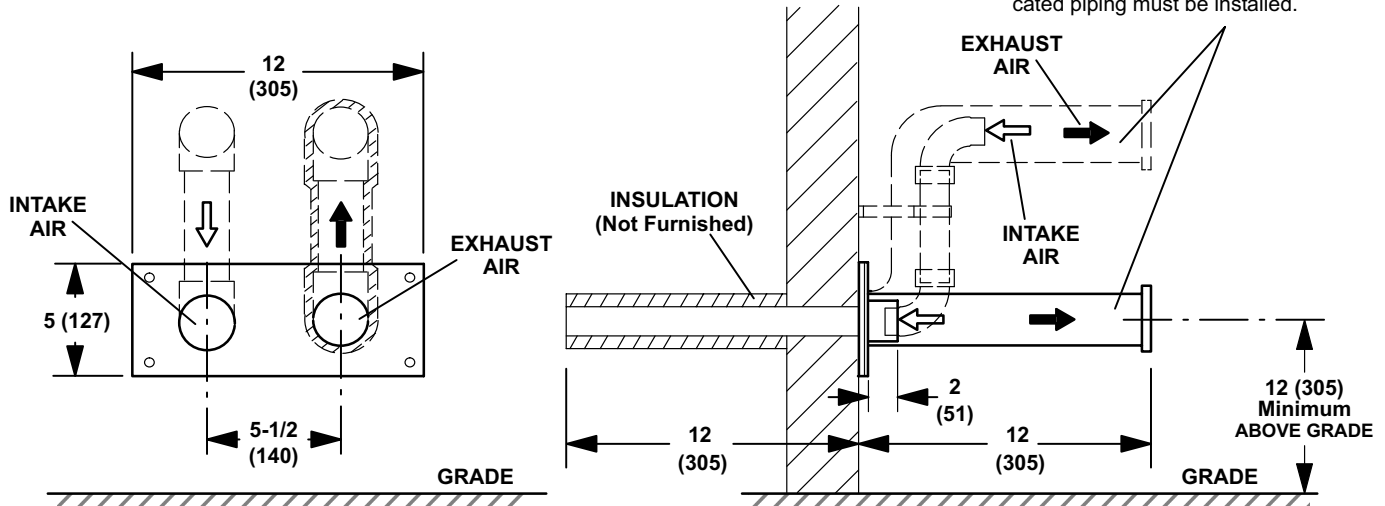
WALL TERMINATION KITS (CLOSE-COUPLE)

22G44 - 2 inch (51 mm)

44J40 - 3 inch (76 mm)

See Installation Instructions for specific usage.

If Intake and Exhaust Pipe is less than 12 in. (305 mm) above snow accumulation or other obstructions, field fabricated piping must be installed.



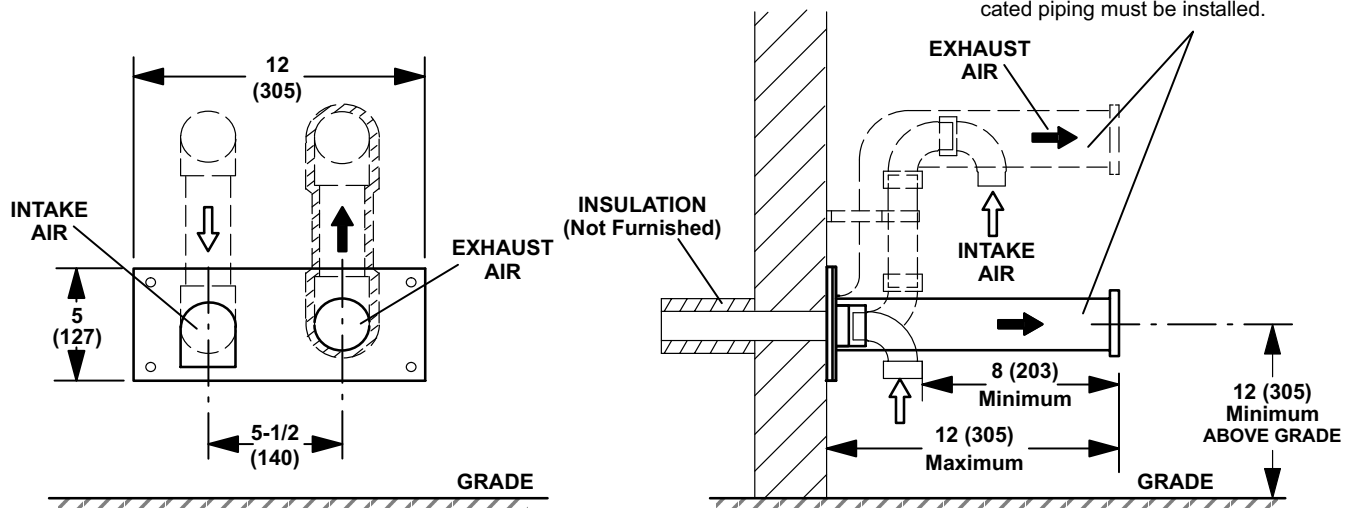
**DIRECT VENT APPLICATIONS
WTK WALL ASSEMBLY TERMINATION KIT
WITH FIELD FABRICATION ABOVE
GRADE EXTENDED CLEARANCE**

30G28 - 2 inch (51 mm)

81J20 - 3 inch (76 mm)

See Installation Instructions for specific usage.

If Intake and Exhaust Pipe is less than 12 in. (305 mm) above snow accumulation or other obstructions, field fabricated piping must be installed.



BLOWER/WATTS DATA

G51MP-24B-045 PERFORMANCE - SIDE RETURN AIR (14 x 23 in. Opening Size)

External Static Pressure		Air Volume / Watts at Different Blower Speeds								
in. w.g.	Pa	High			Medium			Low		
		cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
0	0	1020	480	416	885	420	370	705	335	296
0.10	25	995	470	401	870	410	360	700	330	290
0.20	50	960	455	390	855	405	347	685	325	283
0.30	75	930	440	376	830	390	334	670	315	275
0.40	100	890	420	361	800	380	323	645	305	263
0.50	125	845	400	348	760	360	307	615	290	255
0.60	150	775	365	329	710	335	293	575	270	242
0.70	175	725	340	315	655	310	279	540	255	233
0.80	200	660	310	299	600	280	266	495	235	221
0.90	225	580	275	281	535	250	253	415	195	206

NOTE - Actual air volume may vary on bottom return air applications.

G51MP-36B-045 PERFORMANCE (Less Filter)

External Static Pressure		Air Volume / Watts at Different Blower Speeds											
in. w.g.	Pa	High			Medium-High			Medium-Low			Low		
		cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
0.00	25	1555	735	630	1410	665	585	1190	560	520	1030	485	435
0.10	25	1515	715	605	1385	655	555	1190	560	485	1020	480	415
0.20	50	1470	695	580	1345	635	520	1170	550	455	1010	475	400
0.30	75	1410	665	555	1310	620	495	1155	545	440	1000	470	385
0.40	100	1350	640	535	1250	590	465	1120	530	410	980	465	360
0.50	125	1290	610	505	1205	570	450	1080	510	390	950	450	345
0.60	150	1220	575	485	1145	540	420	1020	480	365	905	430	320
0.70	175	1145	540	460	1080	510	400	975	460	345	860	405	300
0.80	200	1050	495	425	985	465	365	870	410	320	785	370	285
0.90	225	945	445	410	900	425	345	825	390	305	730	345	270

NOTES - All air data is measured external to unit without filter (not furnished - field provided).
Air volume based on bottom air return air. Actual air volume may vary on side return air applications.

G51MP-36B-070 PERFORMANCE - SIDE RETURN AIR (14 x 23 in. Opening Size)

External Static Pressure		Air Volume / Watts at Different Blower Speeds											
in. w.g.	Pa	High			Medium-High			Medium-Low			Low		
		cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
0	0	1400	660	583	1280	605	533	1100	520	465	925	435	397
0.10	25	1345	635	554	1240	585	504	1090	515	447	920	435	380
0.20	50	1295	610	535	1205	570	475	1070	505	427	915	430	366
0.30	75	1240	585	509	1160	545	456	1035	490	405	895	425	350
0.40	100	1180	555	487	1110	525	435	1005	475	384	870	410	332
0.50	125	1110	525	462	1050	495	408	945	445	357	825	390	313
0.60	150	1040	490	441	975	460	380	870	410	331	775	365	294
0.70	175	925	435	408	885	420	355	805	380	311	730	345	279
0.80	200	845	400	388	820	385	334	750	355	294	665	315	259
0.90	225	760	360	367	710	335	307	665	315	272	590	280	240

NOTE - Actual air volume may vary on bottom return air applications.

G51MP-36C-090 PERFORMANCE (Less Filter)

External Static Pressure		Air Volume / Watts at Different Blower Speeds											
in. w.g.	Pa	High			Medium-High			Medium-Low			Low		
		cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
0.00	0	1630	770	745	1360	640	635	1125	530	540	975	460	440
0.10	25	1620	765	715	1365	645	610	1160	545	515	1000	470	430
0.20	50	1590	750	680	1365	645	580	1160	545	495	990	465	405
0.30	75	1550	730	655	1355	640	565	1170	550	475	985	465	395
0.40	100	1520	715	630	1330	630	545	1160	545	460	980	460	380
0.50	125	1465	690	605	1300	615	515	1140	540	440	960	455	360
0.60	150	1415	670	570	1250	590	490	1095	515	420	940	445	350
0.70	175	1350	635	545	1215	575	470	1065	500	400	905	425	335
0.80	200	1260	595	510	1140	540	440	1005	475	375	850	400	310
0.90	225	1165	550	475	1035	485	395	900	425	335	730	345	285

NOTES - All air data is measured external to unit without filter (not furnished - field provided).
Air volume based on bottom air return air. Actual air volume may vary on side return air applications.

BLOWER/WATTS DATA

G51MP-48C-090 PERFORMANCE (Less Filter)

External Static Pressure		Air Volume / Watts at Different Blower Speeds											
		High			Medium-High			Medium-Low			Low		
in. w.g.	Pa	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
0.00	0	2180	1030	930	1835	865	790	1520	715	630	1280	605	510
0.10	25	2135	1005	885	1825	860	750	1510	710	610	1275	600	495
0.20	50	2085	985	840	1810	855	720	1505	710	580	1270	600	475
0.30	75	2030	955	800	1775	835	685	1500	705	565	1265	595	460
0.40	100	1940	915	760	1735	820	650	1480	700	535	1250	590	440
0.50	125	1865	880	725	1660	785	600	1430	675	505	1215	575	425
0.60	150	1740	820	670	1590	750	575	1380	650	475	1175	555	410
0.70	175	1645	775	640	1475	695	520	1290	610	450	1105	520	375
0.80	200	1540	725	600	1340	630	465	1175	555	405	1020	480	355
0.90	225	1335	630	540	1170	555	440	1070	505	375	950	450	330

NOTES - All air data is measured external to unit without filter (not furnished - field provided).
Air volume based on bottom air return air. Actual air volume may vary on side return air applications.

G51MP-48C-110 PERFORMANCE (Less Filter)

External Static Pressure		Air Volume / Watts at Different Blower Speeds											
		High			Medium-High			Medium-Low			Low		
in. w.g.	Pa	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
0.00	0	2160	1020	880	1880	890	755	1490	705	602	1235	580	485
0.10	25	2100	990	850	1855	875	730	1480	700	585	1230	580	475
0.20	50	2035	960	805	1815	860	690	1475	695	560	1225	580	460
0.30	75	1965	925	750	1755	830	650	1475	695	545	1220	575	445
0.40	100	1885	890	725	1715	810	625	1465	690	510	1215	575	430
0.50	125	1780	840	680	1630	770	580	1420	670	490	1150	540	400
0.60	150	1690	800	660	1550	735	550	1360	640	460	1110	525	380
0.70	175	1575	745	620	1410	665	505	1210	570	405	1035	490	350
0.80	200	1375	650	550	1230	580	450	1125	530	380	970	460	325
0.90	225	1225	580	520	1120	530	415	1050	495	365	885	420	310

NOTES - All air data is measured external to unit without filter (not furnished - field provided).
Air volume based on bottom air return air. Actual air volume may vary on side return air applications.

G51MP-60C-090 PERFORMANCE (Less Filter) - Single Side Return Air - Air volumes in bold require field fabricated transition to accommodate 20 x 25 x 1 in. (508 x 635 x 25 mm) air filter in order to maintain proper air velocity.

External Static Pressure		Air Volume / Watts at Different Blower Speeds											
		High			Medium-High			Medium-Low			Low		
in. w.g.	Pa	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
0.00	0	2835	1335	1495	2340	1105	1155	1800	850	895	1440	680	695
0.10	25	2785	1315	1475	2345	1105	1135	1805	855	865	1515	715	690
0.20	50	2715	1280	1435	2275	1075	1080	1825	860	845	1560	735	685
0.30	75	2620	1235	1380	2260	1065	1035	1840	870	825	1600	755	680
0.40	100	2550	1205	1350	2230	1055	1015	1845	870	815	1620	765	670
0.50	125	2450	1155	1305	2175	1025	990	1850	870	790	1615	765	655
0.60	150	2365	1115	1270	2130	1005	940	1830	865	775	1615	760	640
0.70	175	2240	1060	1205	2070	975	915	1815	855	760	1595	755	620
0.80	200	2185	1030	1190	1965	925	865	1775	840	745	1555	735	605
0.90	225	2015	950	1150	1820	860	820	1690	800	715	1440	680	580

NOTES - All air data is measured external to unit without filter (not furnished - field provided).

G51MP-60C-090 PERFORMANCE (Less Filter) - Bottom Return Air, Side Return Air with Optional RAB Return Air Base, Return Air from Both Sides or Return Air from Bottom and One Side.

External Static Pressure		Air Volume / Watts at Different Blower Speeds											
		High			Medium-High			Medium-Low			Low		
in. w.g.	Pa	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
0.00	0	2840	1340	1450	2345	1105	1105	1895	895	900	1515	715	700
0.10	25	2765	1305	1415	2365	1115	1080	1950	920	885	1580	745	700
0.20	50	2695	1270	1385	2345	1105	1050	1985	935	870	1620	765	695
0.30	75	2605	1230	1335	2315	1090	1030	1990	940	850	1645	775	690
0.40	100	2530	1195	1300	2265	1070	990	1990	940	825	1665	785	675
0.50	125	2420	1140	1260	2210	1045	955	1970	930	800	1675	790	665
0.60	150	2330	1100	1220	2145	1010	925	1930	910	775	1665	785	650
0.70	175	2250	1060	1190	2050	965	885	1875	885	745	1645	775	630
0.80	200	2135	1010	1140	2000	945	865	1810	855	715	1620	765	615
0.90	225	2030	960	1090	1885	890	830	1720	810	685	1560	735	590

NOTES - All air data is measured external to unit without filter (not furnished - field provided).

BLOWER/WATTS DATA

G51MP-60C-110 PERFORMANCE (Less Filter) - Single Side Return Air - Air volumes in bold require field fabricated transition to accommodate 20 x 25 x 1 in. (508 x 635 x 25 mm) air filter in order to maintain proper air velocity.

External Static Pressure		Air Volume / Watts at Different Blower Speeds											
in. w.g.	Pa	High			Medium-High			Medium-Low			Low		
		cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
0.00	0	2625	1240	1350	2310	1090	1080	1885	890	885	1515	715	700
0.10	25	2570	1215	1330	2325	1095	1060	1910	900	865	1575	745	700
0.20	50	2410	1135	1305	2285	1080	1035	1930	910	845	1620	765	690
0.30	75	2425	1145	1265	2230	1055	990	1925	905	825	1635	770	675
0.40	100	2335	1100	1220	2175	1025	950	1910	900	810	1640	775	660
0.50	125	2270	1070	1195	2120	1000	935	1895	895	785	1640	775	640
0.60	150	2170	1025	1155	2045	965	885	1860	875	765	1630	770	630
0.70	175	2110	995	1130	1950	920	855	1795	845	730	1590	750	610
0.80	200	2035	960	1090	1885	890	820	1745	825	705	1540	725	580
0.90	225	1900	895	1055	1760	830	780	1665	785	680	1470	695	565

NOTES - All air data is measured external to unit without filter (not furnished - field provided).

G51MP-60C-110 PERFORMANCE (Less Filter) - Bottom Return Air, Side Return Air with Optional RAB Return Air Base, Return Air from Both Sides or Return Air from Bottom and One Side.

External Static Pressure		Air Volume / Watts at Different Blower Speeds											
in. w.g.	Pa	High			Medium-High			Medium-Low			Low		
		cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
0.00	0	2720	1285	1385	2410	1135	1090	2055	970	935	1620	765	710
0.10	25	2665	1255	1355	2385	1125	1075	2025	955	885	1730	815	735
0.20	50	2585	1220	1315	2350	1110	1015	2030	955	865	1680	795	690
0.30	75	2505	1180	1275	2290	1080	990	2025	955	840	1695	800	675
0.40	100	2435	1150	1250	2235	1055	940	2030	960	830	1695	800	660
0.50	125	2350	1110	1205	2170	1025	930	1975	930	790	1735	820	665
0.60	150	2255	1065	1185	2100	990	895	1915	905	765	1720	810	650
0.70	175	2160	1020	1150	2005	945	840	1865	880	730	1680	795	635
0.80	200	2020	955	1090	1905	900	825	1810	855	710	1625	765	610
0.90	225	1910	900	1050	1820	860	795	1705	805	675	1540	725	590

NOTES - All air data is measured external to unit without filter (not furnished - field provided).

G51MP-60D-135 PERFORMANCE (Less Filter) - Single Side Return Air - Air volumes in bold require field fabricated transition to accommodate 20 x 25 x 1 in. (508 x 635 x 25 mm) air filter in order to maintain proper air velocity.

External Static Pressure		Air Volume / Watts at Different Blower Speeds											
in. w.g.	Pa	High			Medium-High			Medium-Low			Low		
		cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
0.00	0	2665	1260	1440	2325	1095	1100	1865	880	890	1410	665	690
0.10	25	2615	1235	1405	2310	1090	1065	1915	905	865	1465	690	685
0.20	50	2530	1195	1370	2280	1075	1055	1925	910	850	1570	740	675
0.30	75	2470	1165	1330	2235	1055	1015	1920	905	825	1590	750	670
0.40	100	2380	1125	1290	2175	1025	985	1910	900	805	1590	750	655
0.50	125	2310	1090	1265	2120	1000	965	1890	890	790	1595	755	645
0.60	150	2200	1035	1230	2055	970	935	1835	865	765	1580	745	630
0.70	175	2120	1000	1190	1970	930	900	1790	845	740	1545	730	605
0.80	200	2025	955	1160	1890	890	875	1720	810	710	1515	715	590
0.90	225	1930	910	1110	1800	850	835	1655	780	685	1440	680	570

NOTES - All air data is measured external to unit without filter (not furnished - field provided).

G51MP-60D-135 PERFORMANCE (Less Filter) - Bottom Return Air, Side Return Air with Optional RAB Return Air Base, Return Air from Both Sides or Return Air from Bottom and One Side.

External Static Pressure		Air Volume / Watts at Different Blower Speeds											
in. w.g.	Pa	High			Medium-High			Medium-Low			Low		
		cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
0.00	0	2730	1290	1465	2425	1145	1125	2055	970	915	1560	735	680
0.10	25	2670	1260	1440	2400	1135	1100	2065	975	890	1590	750	675
0.20	50	2600	1225	1400	2365	1115	1070	2045	965	865	1620	765	665
0.30	75	2525	1190	1360	2315	1095	1045	2035	960	845	1615	760	655
0.40	100	2445	1155	1325	2260	1065	1015	2020	955	820	1615	760	645
0.50	125	2360	1115	1280	2195	1035	985	1960	925	790	1610	760	635
0.60	150	2290	1080	1255	2130	1005	965	1900	895	755	1600	755	615
0.70	175	2205	1040	1220	2035	960	910	1825	860	730	1570	740	600
0.80	200	2110	995	1195	1945	915	880	1765	830	710	1540	725	580
0.90	225	1970	930	1120	1835	865	830	1680	795	690	1540	725	545

NOTES - All air data is measured external to unit without filter (not furnished - field provided).

(This bulletin contains special blower performance data for G51MP-24B-045 and G51MP-36B-070 with 1 in. pleated filter in place)