



QUIK•VENT™ Tables For 1- and 2-Stage, Category I Fan-Assisted Furnaces

Installation Instructions

NOTE: Before beginning the installation, read the entire instruction manual along with those provided in the literature packet carefully and completely.

NOTE: Category I furnaces operate with a nonpositive vent static pressure to limit the potential for vent gas leakage, and operate with a vent gas temperature of at least 140° F above the vent gas dew point to limit the potential for condensation in the venting system.

INTRODUCTION

This information supplements the information found in the Installation, Start-Up, and Operating Instructions provided with this furnace.

All venting instructions for 1-Stage and 2-Stage, Category I fan-assisted or induced-draft appliances are included in these instructions.

Refer to the QUIK•VENT™ Table Application Chart located on page 4 to determine the appropriate table to use for the furnace type and vent type.

References made in this publication to the National Fuel Gas Code NFPA 54-1992/ANSI Z223.1-1992 (NFGC) apply to installations in the United States of America. References made to the National Standard of Canada Natural Gas and Propane Installation Codes CAN/CGA-B149.1-M91 and .2-M91 and Amendment No. 1 (NSCNGPIC) apply to installations in Canada. Venting systems for Carrier fan-assisted furnaces shall be made in accordance with 1 of the above codes and all authorities having jurisdiction.

GENERAL INSTRUCTIONS

These instructions are for fan-assisted furnaces classified as Category I furnaces in accordance with ANSI Z21.47b-1992.

Type-B connector and vent pipe, single-wall metal connector pipe, and/or lined masonry chimneys shall be used to vent Category I furnaces in accordance with these venting instructions. Chimneys shall conform to ANSI/NFPA 211-1992 in the United States and to a Provincial or Territorial Building Code in Canada (in its absence, the National Building Code of Canada).

A clay tile chimney liner in poor condition can be relined in lieu of repairing or rebuilding if the rest of the chimney is in good condition. If the rest of the chimney is in poor condition, repairing or rebuilding is required. UL listed (ULC listed in Canada) metal liner or a UL listed Type-B vent pipe shall be used for relining. Rebuilding and repairing shall conform to ANSI/NFPA 211-1992.

A chimney without a clay tile liner, which is otherwise in good condition, shall be rebuilt to conform to ANSI/NFPA 211-1992 or be lined with a UL listed (ULC listed in Canada) metal liner or UL listed Type-B vent. Relining with a listed metal liner or Type-B vent is considered to be a vent-in-a-chase.

If a metal liner or Type-B vent is used to line a chimney, no appliance shall be vented into the annular space between the chimney and the metal liner.

Clay tile-lined chimneys exposed to the outdoors below the roof line may require relining with a listed metal liner to reduce vent gas condensation in cold climates. Experience in local areas with standard draft-hood-equipped furnaces will indicate whether exposed tile-lined chimneys have condensation problems. Fan-assisted furnaces installed in accordance with these instructions will not have chimney condensation problems, if standard gas-fired draft-hood-equipped furnaces installed in accordance with the NFGC or NSCNGPIC have not experienced condensation problems in exposed tile-lined chimneys.

APPLIANCE APPLICATION REQUIREMENTS

Appliance operation has a significant impact on the performance of the venting system. If the appliances are sized, installed, adjusted, and operated properly, the venting system and/or the appliances should not suffer from condensation and corrosion.

The venting system and all appliances shall be installed in accordance with applicable listings, standards, and codes.

1. The furnace should be sized to provide 100 percent of the design heating load requirement plus any margin that occurs because of furnace model size capacity increments. Heating load estimates can be made using approved methods available from Carrier, Air Conditioning Contractors of America (Manual J), American Society of Heating, Refrigerating, and Air-Conditioning Engineers, or others. Excessive oversizing of the furnace could cause the furnace and/or vent to fail prematurely.
2. When a metal vent or metal liner is used, the vent must be in good condition and be installed in accordance with the vent manufacturer's instructions.
3. When a masonry chimney is used, chimney construction must conform to ANSI/NFPA 211 1992 and must be in good condition. Inspections before the sale and at the time of installation will determine the acceptability of the chimney or the need for repair and/or (re)lining. An inspection chart is included on page 3. If the inspection of a previously used tile-lined chimney:
 - a. Shows signs of vent gas condensation, the chimney should be relined in accordance with these venting tables with a listed metal liner or Type-B vent to reduce condensation. If a condensate drain is required by local code, refer to the National Fuel Gas Code, Section 7.9 for additional information on condensate drains.
 - b. Indicates the chimney exceeds the maximum permissible size in these tables, the chimney should be rebuilt or relined to conform to these instructions.
4. The return-air temperature must be at least 60°F db except for brief periods of time during warm-up from setback when the temperature can be no lower than 55°F db, or during initial start-up from a standby condition.
5. The furnace shall be adjusted according to the Installation, Start-Up, and Operating Instructions provided with the furnace for the following:

- a. Gas input rate—Insufficient gas input rate can cause low vent gas temperatures and, thus, condensation and corrosion in the furnace and/or venting system. Derating is permitted only for altitudes above 2000 ft.
 - b. Mid-point of the air temperature rise range. Low air temperature rise can cause low vent gas temperature.
 - c. Thermostat heat anticipation or cycle rate to reduce short cycling.
6. Air for combustion must not be contaminated by halogen compounds, which include chlorides, fluorides, bromides, and iodides. These compounds are found in many common home products such as detergent, paint, glue, aerosol spray, bleach, cleaning solvent, salt, and air freshener, and can cause corrosion of furnaces and vents. Avoid using such products in the combustion air supply.
- Furnace use during construction of the building could cause the furnace to be exposed to halogen compounds, causing premature corrosion failure of the furnace or venting system.
7. Vent dampers on any appliance connected to the common vent can cause condensation and corrosion in the venting system. Do not use vent dampers on appliances common-vented with this furnace. These venting tables apply only to appliances without vent dampers.

VERTICAL VENT OR CHIMNEY SIZING AND INSTALLATION

1. The *QUIK•VENT™* Tables found on the following pages are based on the GAMA Venting Tables, the NFGC, and the NSCNPGIC. *QUIK•VENT™* Tables are designed to be used with only Category I fan-assisted furnaces. The *QUIK•VENT™* Tables provide a simple method to size typical vent and chimney installations without referring to the GAMA Venting Tables, the NFGC, and the NSCNPGIC. Additional venting and chimney configurations are possible by using the GAMA Venting Tables, the NFGC, or the NSCNPGIC.
2. Refer to the Installation Instructions titled VENTING TABLES CATEGORY I CENTRAL FURNACES, A.G.A., GAMA for full information concerning the requirements to use metal vents and masonry chimneys for these furnaces.

The following information and warning must be considered in addition to the requirements defined in the GAMA Venting Tables Section III General Venting Requirements, the NFGC, and the NSCNPGIC:

If a vent (common or dedicated) becomes blocked, the furnace will be shut off by the draft safeguard switch located on the inducer assembly.

⚠ WARNING

Do not bypass the draft safeguard switch, as an unsafe condition could exist which must be corrected. Failure to follow this warning could result in a build-up of carbon monoxide and lead to personal injury or death.

REMOVAL OF EXISTING FURNACES FROM COMMON VENT SYSTEM

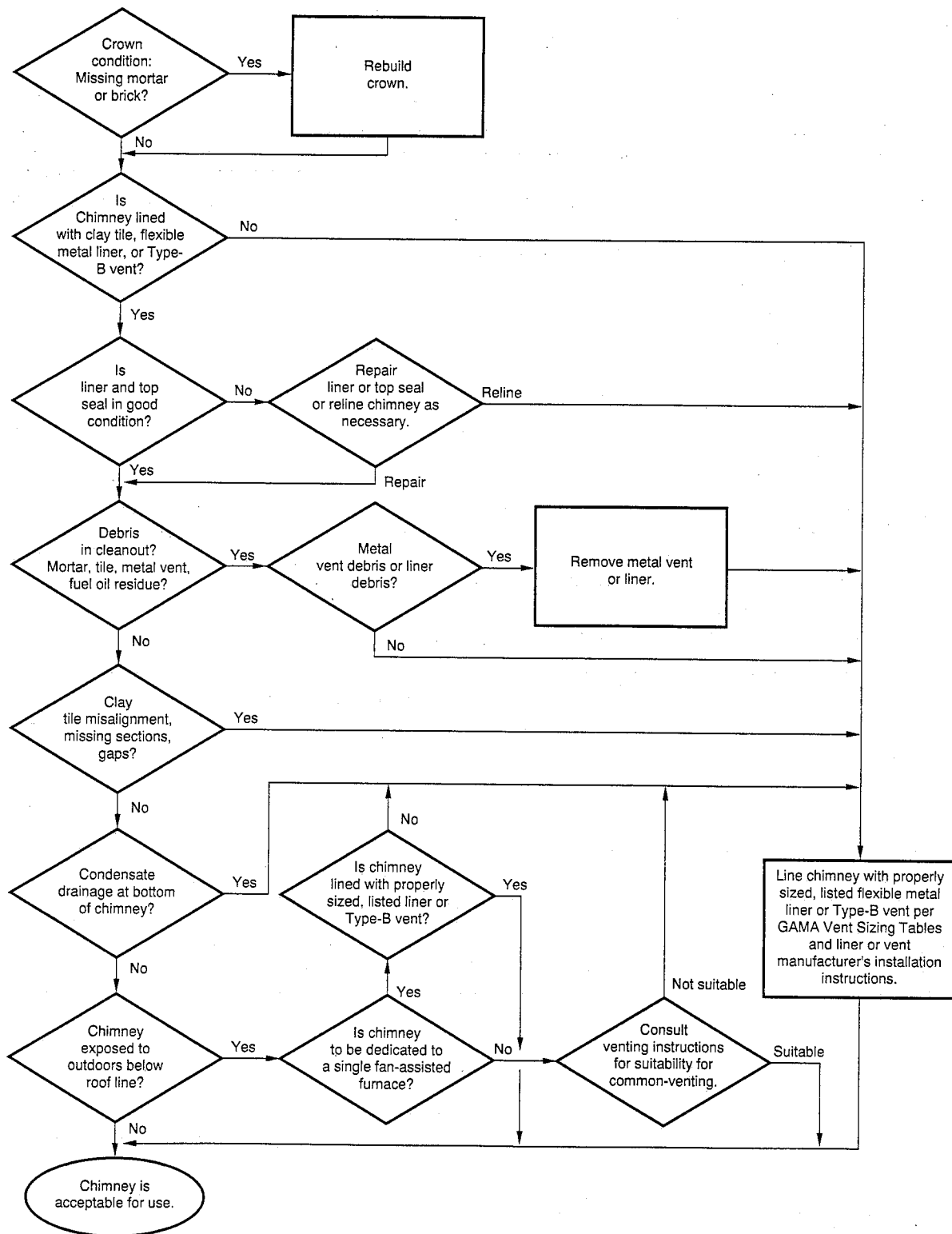
1. In replacement installations where an existing vent system may be used, inspect the vent system for condition, size, type of material, and height to meet the appliance application requirements. If it is oversized, condensation could corrode the venting system. Installation of a new venting system may be required.
2. When removing an existing furnace from a venting system serving other appliances, the vent system is likely to be too large to vent the remaining attached appliances properly.

The following steps shall be followed with each appliance remaining connected to the common venting system placed in operation, while the other appliances remaining connected to the common venting system are not in operation.

- a. Seal any unused openings in the common venting system.
- b. Visually inspect the venting system for proper size and horizontal pitch and determine there is no blockage or restriction, leakage, corrosion and other deficiencies which could cause an unsafe condition.
- c. Insofar as is practical, close all building doors and windows and all doors between space in which appliances remaining connected to the common venting are located and other spaces of the building. Turn on clothes dryers and any appliance not connected to the common venting system. Turn on any exhaust fans, such as range hoods and bathroom exhausts, so they will operate at maximum speed. Do not operate a summer exhaust fan. Close fireplace dampers.
- d. Follow the lighting instructions. Place the appliance being inspected in operation. Adjust thermostat so appliance will operate continuously.
- e. Test for spillage at the drafthood relief opening after 5 minutes of main burner operation. Use the flame of a match or candle.
- f. After it has been determined that each appliance remaining connected to the common venting system properly vents when tested as outlined above, return doors, windows, exhaust fans, fireplace dampers and any other gas-burning appliance to their previous conditions of use.
- g. If improper venting is observed during any of the above tests, the common venting system must be corrected. The vent system or vent connectors may need to be resized according to these instructions to approach the minimum size using the appropriate GAMA Venting Tables, Part 7 of the National Fuel Gas Code NFPA 54-1992/ANSI Z223.1-1992 in the United States or Part 7 of the Natural Gas or Propane Installation Code CAN/CGA-B149.1-M91 or .2-M91 and Amendment No. 1 in Canada, and all authorities having jurisdiction.

CHIMNEY INSPECTION CHART

For additional requirements refer to the National Fuel Gas Code NFPA 54-1992/ANSI Z223.1-1992 and ANSI/NFPA 211-1992 Chimneys, Fireplaces, Vents, and Solid Fuel Burning Appliances in the U.S.A. or to the Canadian Installation Codes CAN/CGA-B149.1M91 and .2M91 Amendment No. 1 in Canada.



QUIK•VENT™ TABLE APPLICATION REQUIREMENTS

The use of these tables is restricted as follows:

1. NR = not recommended (vent pressurization or condensation may occur).
2. For connector or vent configurations between table entries, such as vent heights, connector rises, and/or laterals.
 - a. Connector size—choose the larger of the connector sizes.
 - b. Minimum vent size (Tables 1, 2, 3, 10, 11, 12, 13, 16, and 17)—choose the larger of the vent sizes.
 - c. Maximum vent size (Tables 10, 11, 16, and 17)—choose the smaller of the vent sizes.

If 1 of the sizes is NR, the GAMA Venting Tables may give a usable size.

See **EXAMPLE 2: INTERPOLATION BETWEEN TABLE ENTRIES** on page 19.

3. Installations may be up to 10,000 ft altitude. See tables for altitudes at which the common vent connectors or dedicated (single-appliance) vents may be installed. No altitude limitation is required for a common vent or chimney, or for draft-hood-equipped water heater connector. Although appliance input shall be derated 4 percent per 1000 ft above sea level starting at 2000 ft altitude, use the sea level input in **QUIK•VENT™** Tables. In Tables 1 through 17 (except Table 9), the code letters indicate the highest altitudes at which connectors or dedicated vents shall be installed.
4. A vent or chimney may be offset as noted in the table below and as shown in Fig. 1, 2, 6, 7, or 8.
5. For chimneys exposed to the outdoors, refer to venting General Instruction section.
6. For common-vented appliances only:
 - a. One Carrier Category I fan-assisted furnace with 1 Category I draft-hood-equipped, 50 MBH input or less water heater.
 - b. Size common vent and furnace connectors per **QUIK•VENT™** Tables 1 through 8 and 12 through 15. Size the connector and vent (chimney) from the same **FURNACE INPUT** column.

NOTE: Common vent tables with single-wall furnace connectors are not provided for 2-stage furnaces because single-wall connectors are not recommended for use with 2-stage furnaces.

- c. For water heater connectors, refer to **QUIK•VENT™** Table 9 for 1- and 2-stage furnaces.
- d. Vent connectors may be manifolded (common-vented below the vent) as noted in the second table below and as shown in Fig. 5. A manifolded connector shall be sized as a common vent (not a connector) with the same table used to size the connectors and common vent. If the vent or furnace connector is Type-B, the manifolded connector shall also be Type-B. For a chimney sized with Table 7 or 8, single-wall pipe may be used for a manifolded connector, but Type-B is recommended.
- e. Vent dampers shall not be used on water heaters.
7. Size dedicated-vent furnaces per **QUIK•VENT™** Tables 10, 11, 16, and 17.
8. Use the GAMA venting tables for additional configurations.
9. For additional requirements refer to the NFGC Part 7 in the U.S.A. and the NSCNPGIC Part 7 in Canada.

NOTE: **QUIK•VENT™** Tables are based on the GAMA Venting Tables, the NFGC Part 7 in the U.S.A., and the NSCNPGIC Part 7 in Canada. CAN/CGA-B149.1-M91 and .2-M91..

**QUIK•VENT™
Table Application Chart**

VENT AND CONNECTOR TYPES		USE TABLE NO.		
		1-Stage Furnace	2-Stage Furnace	Water Heater
COMMON VENT				
Type-B Vent	Type-B Connector	1 or 2	12 or 13	9
	Single-Wall Connector	3 or 4	NR	9
Masonry Chimney	Type-B Connector	5 or 6	14 or 15	9
	Single-Wall Connector	7 or 8	NR	9
DEDICATED VENT				
Type-B Vent	Type-B Connector	10	16	N/A
	Single-Wall Connector	11	17	N/A
Masonry Chimney	Type-B Connector	NR	NR	N/A
	Single-Wall Connector	NR	NR	N/A

Manifolded Connector and Offset Vent (or Chimney) Application Requirement

CONNECTOR OR VENT INSIDE DIA (IN.)	4	5	6	7	8	9	10
RECTANGULAR LINER OUTSIDE DIMENSIONS (in.)	4 X 8	N/A	N/A	N/A	8 X 8	8 X 12	12 X 12
L—Maximum Horizontal Length (ft)	6	7.5	9	10.5	12	13.5	15

N/A—Not Applicable

NOTE: Use as shown in Fig. 1, 2, 5, 6, 7, and 8.

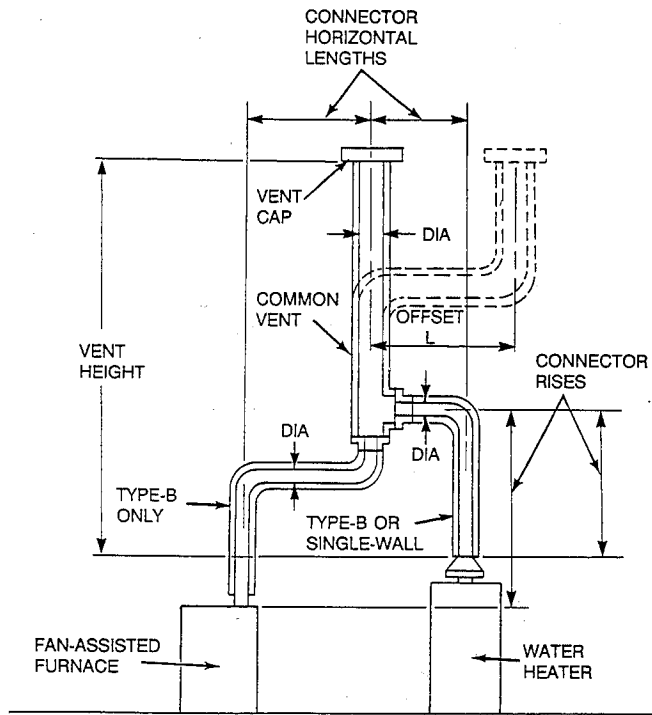


Fig. 1—Use With Tables 1, 2, 12 and 13 A91200

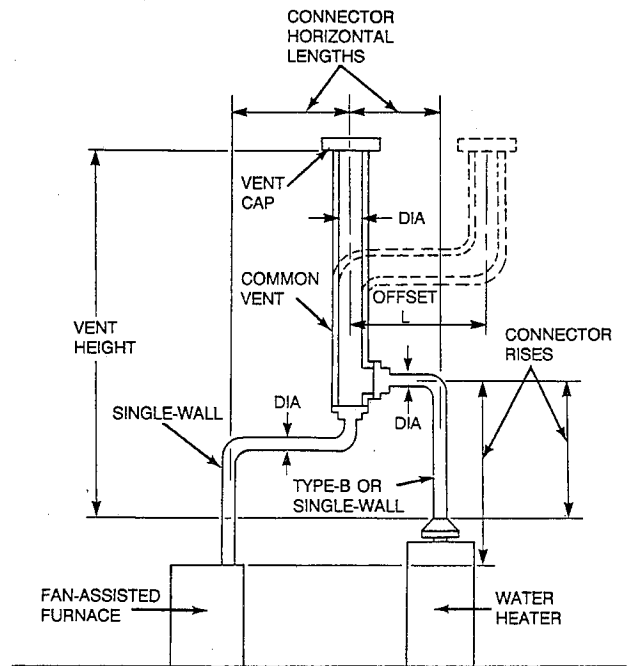


Fig. 2—Use With Tables 3 and 4 A91201

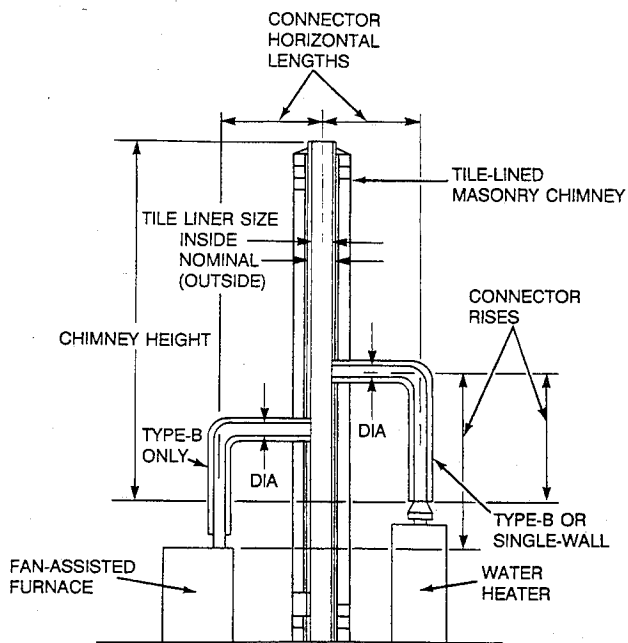


Fig. 3—Use With Tables 5, 6, 14 and 15 A91202

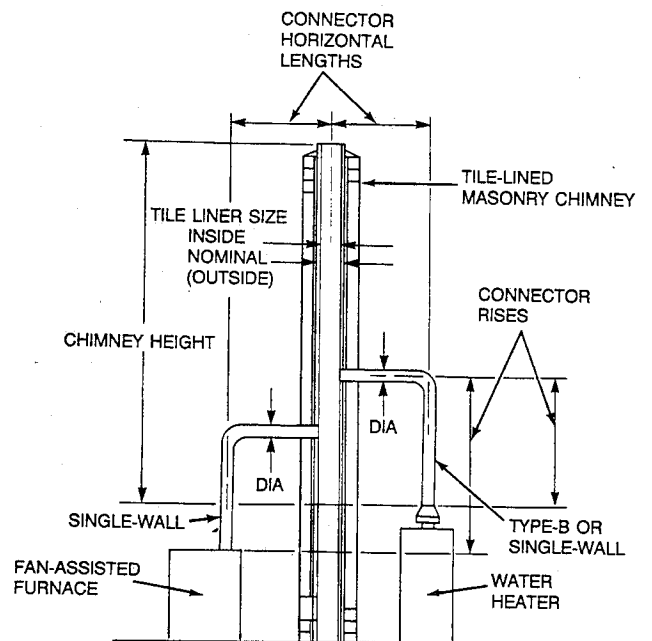
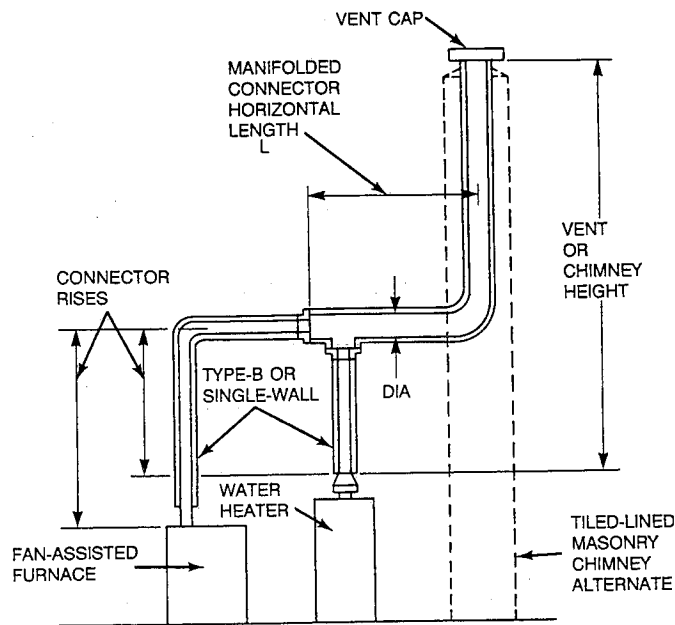
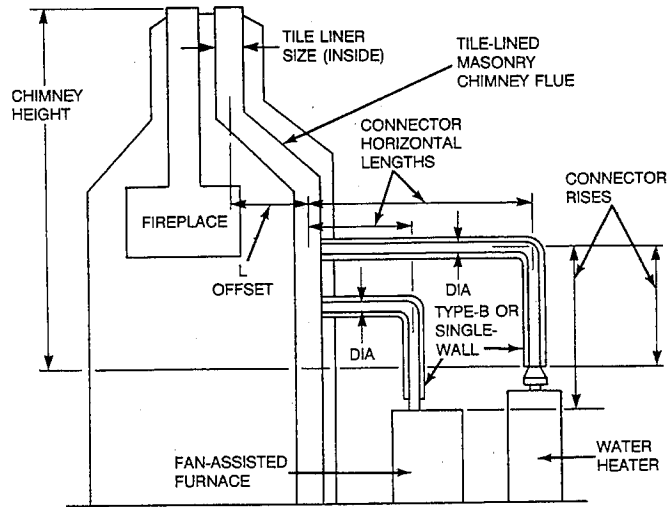


Fig. 4—Use With Tables 7 and 8 A91203



A91311

Fig. 5—Manifolded Vent Connectors for Use With Tables 1 through 8, and 12 through 15



A91312

Fig. 6—Masonry Chimney Offset for Use With Tables 5 through 8, 14 and 15

1-Stage Furnace

QUIK-VENT™ Table—1
Type-B Common Vent
Type-B Connector For Up To 2 Elbows

FURNACE INPUT (MBH)		42-46			63-69			84-92			105-115			126-138			147-154		
FLUE COLLAR SIZE (in.)		4			4			4			4			5			5		
CONNECTOR HORIZONTAL LENGTH (ft)		0 to 4.5	4.5 to 9	9 to 13.5	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 7.5	7.5 to 15	15 to 22.5	0 to 7.5	7.5 to 15	15 to 22.5
Vent Height (ft)	Connector Rise (ft)	Fan-Assisted Furnace, Type-B Connector Inside Diameter (in.) With Up To 2 Elbows Common Vented With 1 Drafthood-Equipped Water Heater With Up To 50 MBH Input																	
10	1	4 D	4 D	4* D	4 J	4* J	NR	5 J	5* J	NR	5 J	6* H	NR	6 J	6* J	NR	6 J	6* J	NR
	2	4 B	4 B	4* B	4 J	4* J	NR	5 H	5* H	NR	5 J	5* J	NR	6 J	6* J	NR	6 J	6* J	NR
	3	4 B	4 B	4* B	4 J	4* J	NR	4 J	5* J	NR	5 J	5* J	NR	5 J	6* J	NR	6 J	6* J	NR
20	1	3 J	4 D	4 D	4 J	4 J	4 J	4 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J	6† J	5 J	6 J	6† J
	2	3 J	4 D	4 D	4 J	4 J	4 J	4 J	4 J	5 J	5 J	5 J	5 J	5 J	5 J	6† J	5 J	6 J	6† J
	3	3 J	3 J	4 C	4 J	4 J	4 J	4 J	4 J	5 J	5 J	5 J	5 J	5 J	5 J	5† J	5 J	5 J	6† J
30	1	3 J	3 J	4 E	4 J	4 J	4 J	4 J	4 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J	6 J
	2	3 J	3 J	4 D	4 J	4 J	4 J	4 J	4 J	4 J	4 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J	6 J
	3	3 J	3 J	3 J	4 J	4 J	4 J	4 J	4 J	4 J	4 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J
Vent Height (ft)		TYPE-B DOUBLE-WALL COMMON VENT INSIDE DIAMETER (in.)																	
		Minimum																	
10		4 ‡			5 ‡			6 ‡			6 ‡			6 ‡			7		
20		4 ‡			4 ‡			5 ‡			5 ‡			6 ‡			6 ‡		
30		4			4 ‡			5			5 ‡			5 ‡			6		
Water Heater Drafthood Outlet Dia	3 in. 4,5,6 in.	Maximum																	
		7			7			7			7			7			7		
		10			10			10			10			10			10		

QUIK-VENT™ Altitude Code Letters Table

MAXIMUM ALTITUDE ABOVE SEA LEVEL (FT)	0 TO 2000	3000	4000	5000	6000	7000	8000	9000	10,000
Letter Code	A	B	C	D	E	F	G	H	J

NOTE: The letter codes next to the connector sizes indicate the highest altitudes at which each connector shall be installed. See Application Requirement No. 3 and the Altitude Code Letters Table.

NOTE: Refer to the QUIK-VENT™ Table Application Requirements in front of these tables for other application requirements.

*Connector horizontal length shall not exceed 10 ft.

†Connector horizontal length shall not exceed 20 ft.

‡Increase the common vent by 1 table size for manifolded connector and/or common vent offset. See Application Requirements No. 4 and 6. d.

QUIK-VENT™ Table—2
Type-B Common Vent
Type-B Connector For 3 Elbows

1-Stage Furnace

FURNACE INPUT (MBH)		42-46			63-69			84-92			105-115			126-138			147-154		
FLUE COLLAR SIZE (in.)		4			4			4			4			5			5		
CONNECTOR HORIZONTAL LENGTH (ft)		0 to 4.5	4.5 to 9	9 to 13.5	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 7.5	7.5 to 15	15 to 22.5	0 to 7.5	7.5 to 15	15 to 22.5
Vent Height (ft)	Connector Rise (ft)	Fan-Assisted Furnace, Type-B Connector Inside Diameter (in.) With 3 Elbows Common Vented With 1 Drafthood-Equipped Water Heater With Up To 50 MBH Input																	
10	1	4 D	4 D	4* D	4 J	5* D	NR	5 J	5* J	NR	6 H	6* H	NR	6 H	6* J	NR	6 J	7* H	NR
	2	4 B	4 B	4* B	4 J	4* J	NR	5 H	5* H	NR	5 J	6* H	NR	6 H	6* J	NR	6 J	6* J	NR
	3	4 B	4 B	4* B	4 J	4* J	NR	5 J	5* J	NR	5 J	5* J	NR	6 J	6* J	NR	6 J	6* J	NR
20	1	4 D	4 D	4 D	4 J	4 J	4 J	5 J	5 J	5 J	5 J	5 J	6 J	5 J	6 J	6† J	6 J	6 J	6† J
	2	4 D	4 D	4 D	4 J	4 J	4 J	4 J	5 J	5 J	5 J	5 J	5 J	5 J	6 J	6† J	6 J	6 J	6† J
	3	3 J	4 C	4 C	4 J	4 J	4 J	4 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J	6† J	5 J	6 J	6† J
30	1	3 J	4 E	4 E	4 J	4 J	4 J	4 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J	6 J	5 J	6 J	6 J
	2	3 J	4 D	4 D	4 J	4 J	4 J	4 J	4 J	5 J	5 J	5 J	5 J	5 J	5 J	6 J	5 J	6 J	6 J
	3	3 J	3 J	4 D	4 J	4 J	4 J	4 J	4 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J	6 J
Vent Height (ft)		TYPE-B DOUBLE-WALL COMMON VENT INSIDE DIAMETER (in.)																	
		Minimum																	
10		4 ‡			5 ‡			6 ‡			6 ‡			6 ‡			7		
20		4 ‡			4 ‡			5 ‡			6			6 ‡			6 ‡		
30		4			4 ‡			5			5 ‡			6			6		
Water Heater Drafthood Outlet Dia		Maximum																	
3 in. 4.5,6 in.		7			7			7			7			7			7		
		10			10			10			10			10			10		

QUIK-VENT™ Table—3
Type-B Common Vent
Single-Wall Connector For Up To 2 Elbows

1-Stage Furnace

FURNACE INPUT (MBH)		42-46			63-69			84-92			105-115			126-138			147-154		
FLUE COLLAR SIZE (in.)		4			4			4			4			5			5		
CONNECTOR HORIZONTAL LENGTH (ft)		0 to 4.5	4.5 to 9	9 to 13.5	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 7.5	7.5 to 15	15 to 22.5	0 to 7.5	7.5 to 15	15 to 22.5
Vent Height (ft)	Connector Rise (ft)	Fan-Assisted Furnace, Single-Wall Metal Connector Inside Diameter (in.) With Up To 2 Elbows Common Vented With 1 Drafthood-Equipped Water Heater With Up To 50 MBH Input																	
6	1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	2	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	3	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
15	1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5 A	NR	NR	NR	NR	NR
	2	NR	NR	NR	NR	NR	NR	4 A	NR	NR	NR	NR	NR	5 A	NR	NR	NR	NR	NR
	3	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5 B	NR	NR
30	1	NR	NR	NR	NR	NR	NR	4 A	NR	NR	NR	NR	NR	5 A	5* A	NR	5 D	5 D	NR
	2	NR	NR	NR	NR	NR	NR	4 A	NR	NR	4 D	NR	NR	5 A	5* A	NR	5 D	5 D	NR
	3	NR	NR	NR	NR	NR	NR	NR	NR	NR	4 C	NR	NR	5 A	5* A	NR	5 C	5 C	NR
Vent Height (ft)		TYPE-B DOUBLE-WALL COMMON VENT INSIDE DIAMETER (in.)																	
		Minimum																	
6		NR			NR			NR			NR			NR			NR		
15		NR			NR			5†			NR			6†			6†		
30		NR			NR			5†			5†			5†			6†		
Water Heater Drafthood Outlet Dia		Maximum																	
3 in. 4,5,6 in.		NR			NR			7			7			7			7		
		NR			NR			10			10			10			10		

QUIK-VENT™ Altitude Code Letters Table

MAXIMUM ALTITUDE ABOVE SEA LEVEL (FT)	0 TO 2000	3000	4000	5000	6000	7000	8000	9000	10,000
Letter Code	A	B	C	D	E	F	G	H	J

NOTE: The letter codes next to the connector sizes indicate the highest altitudes at which each connector shall be installed. See Application Requirement No. 3 and the Altitude Code Letters Table.

NOTE: Refer to the QUIK-VENT™ Table Application Requirements in front of these tables for other application requirements.

*Connector horizontal length shall not exceed 10 ft.

†Connector horizontal length shall not exceed 20 ft.

‡Increase the common vent by 1 table size for manifolded connector and/or common vent offset. See Application Requirements No. 4 and 6. d.

1-Stage Furnace

QUIK-VENT™ Table—4
Type-B Common Vent
Single-Wall Connector For 3 Elbows

FURNACE INPUT (MBH)		42-46			63-69			84-92			105-115			126-138			147-154		
FLUE COLLAR SIZE (in.)		4			4			4			4			5			5		
CONNECTOR HORIZONTAL LENGTH (ft)		0 to 4.5	4.5 to 9	9 to 13.5	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 7.5	7.5 to 15	15 to 22.5	0 to 7.5	7.5 to 15	15 to 22.5
Vent Height (ft)	Connector Rise (ft)	Fan-Assisted Furnace, Single-Wall Metal Connector Inside Diameter (in.) With 3 Elbows Common Vented With 1 Drafthood-Equipped Water Heater With Up To 50 MBH Input																	
6	1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	2	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	3	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
15	1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	2	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	3	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
30	1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5 A	NR	NR	5 A	NR
	2	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5 A	NR	NR	5 A	NR
	3	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5 A	NR	NR	5 A	NR
Vent Height (ft)		TYPE-B DOUBLE-WALL COMMON VENT INSIDE DIAMETER (in.)																	
		Minimum																	
6		NR			NR			NR			NR			NR			NR		
15		NR			NR			NR			NR			NR			NR		
30		NR			NR			NR			NR			5†			6†		
Water Heater Draft Hood Outlet Dia		Maximum																	
	3 in.	NR			NR			NR			NR			7			7		
	4.5, 6 in.	NR			NR			NR			NR			10			10		

†Increase the common vent by 1 table size for manifolded connector and/or common vent offset. See Application Requirements No. 4 and 6, d.

1-Stage Furnace

QUIK-VENT™ Table—5
Tile-Lined Masonry Chimney Common Vented
Type-B Connector For Up To 2 Elbows

FURNACE INPUT (MBH)		42-46			63-69			84-92			105-115			126-138			147-154		
FLUE COLLAR SIZE (in.)		4			4			4			4			5			5		
CONNECTOR HORIZONTAL LENGTH (ft)		0 to 4.5	4.5 to 9	9 to 13.5	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 7.5	7.5 to 15	15 to 22.5	0 to 7.5	7.5 to 15	15 to 22.5
Chimney Height (ft)	Connector Rise (ft)	Fan-Assisted Furnace, Type-B Connector Inside Diameter (in.) With Up To 2 Elbows Common Vented With 1 Drafthood-Equipped Water Heater With Up To 50 MBH Input																	
15	1	NR	NR	NR	4 J	4 J	NR	4 J	5 H	NR	5 J	5 J	NR	5 J	5 J	NR	5 J	6 J	NR
	2	3 J	NR	NR	4 H	4 H	NR	4 J	4 J	NR	5 J	5 J	NR	5 J	5 J	NR	5 J	5 J	NR
	3	3 H	3 H	NR	4 G	4 G	NR	4 J	4 J	NR	4 J	5 J	NR	5 J	5 J	NR	5 J	5 J	NR
30	1	3 J	NR	NR	4 J	4 J	4 J	4 J	4 J	5 H	5 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J	6 J
	2	3 J	3 J	NR	4 J	4 J	4 J	4 J	4 J	4 J	4 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J
	3	3 H	3 H	NR	4 H	4 H	4 H	4 J	4 J	4 J	4 J	4 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J
50	1	3 J	NR	NR	4 J	4 J	4 J	4 J	4 J	4 J	4 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J
	2	3 J	3 J	NR	4 J	4 J	4 J	4 J	4 J	4 J	4 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J
	3	3 H	3 H	NR	4 H	4 H	4 H	4 J	4 J	4 J	4 J	4 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J
Clay-Tile Chimney Liner		LINER NOMINAL RECTANGULAR DIMENSIONS (OUTSIDE) OR CIRCULAR INSIDE DIAMETER (in.)																	
		Minimum																	
		8 X 8 or 6 Dia*			8 X 8 or 6 Dia*			8 X 8 or 6 Dia*			8 x 8 or 7 Dia*			8 X 8 or 7 Dia*			8 X 8 or 7 Dia*		
Water Heater Drafthood Outlet Dia		Maximum																	
		3 in.		8 X 8 or 7 Dia			8 X 8 or 7 Dia			8 X 8 or 7 Dia			8 X 8 or 7 Dia			8 X 8 or 7 Dia			
		4.5, 6 in.		12 X 12 or 10 Dia			12 X 12 or 10 Dia			12 X 12 or 10 Dia			12 X 12 or 10 Dia			12 X 12 or 10 Dia			

*8 X 12 or 8-in. diameter at 50-ft height.

QUIK-VENT™ Altitude Code Letters Table

MAXIMUM ALTITUDE ABOVE SEA LEVEL (FT)	0 TO 2000	3000	4000	5000	6000	7000	8000	9000	10,000
Letter Code	A	B	C	D	E	F	G	H	J

NOTE: The letter codes next to the connector sizes indicate the highest altitudes at which each connector shall be installed. See Application Requirement No. 3 and the Altitude Code Letters Table.

NOTE: Refer to the QUIK-VENT™ Application Requirements in front of these tables for other application requirements.

QUIK-VENT™ Table—6
Tile-Lined Masonry Chimney Common Vented
Type-B Connector For 3 Elbows

1-Stage Furnace

FURNACE INPUT (MBH)		42-46			63-69			84-92			105-115			126-138			147-154		
FLUE COLLAR SIZE (in.)		4			4			4			4			5			5		
CONNECTOR HORIZONTAL LENGTH (ft)		0 to 4.5	4.5 to 9	9 to 13.5	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 7.5	7.5 to 15	15 to 22.5	0 to 7.5	7.5 to 15	15 to 22.5
Chimney Height (ft)	Connector Rise (ft)	Fan-Assisted Furnace, Type-B Connector Inside Diameter (in.) With 3 Elbows Common Vented With 1 Drafthood-Equipped Water Heater With Up To 50 MBH Input																	
15	1	NR	NR	NR	4 J	4 J	NR	5 H	5 H	NR	5 J	5 J	NR	5 J	6 J	NR	6 J	6 J	NR
	2	NR	NR	NR	4 H	4 H	NR	4 J	5 G	NR	5 J	5 J	NR	5 J	5 J	NR	5 J	6 J	NR
	3	3 H	NR	NR	4 G	4 G	NR	4 J	4 J	NR	5 J	5 J	NR	5 J	5 J	NR	5 J	6 J	NR
30	1	NR	NR	NR	4 J	4 J	5 C	4 J	5 H	5 H	5 J	5 J	5 J	5 J	5 J	6 J	5 J	6 J	6 J
	2	3 J	NR	NR	4 J	4 J	4 J	4 J	4 J	5 H	5 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J	6 J
	3	3 H	NR	NR	4 H	4 H	4 H	4 J	4 J	5 G	4 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J
50	1	NR	NR	NR	4 J	4 J	4 J	4 J	4 J	5 H	5 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J	6 J
	2	3 J	NR	NR	4 J	4 J	4 J	4 J	4 J	5 H	5 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J
	3	3 H	NR	NR	4 H	4 H	4 H	4 J	4 J	4 J	4 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J	5 J
Clay-Tile Chimney Liner		LINER NOMINAL RECTANGULAR DIMENSIONS (OUTSIDE) OR CIRCULAR INSIDE DIAMETER (in.)																	
		Minimum																	
		8 X 8 or 6 Dia*			8 X 8 or 6 Dia*			8 X 8 or 6 Dia*			8 X 8 or 7 Dia*			8 X 8 or 7 Dia*			8 X 8 or 7 Dia*		
Water Heater Drafthood Outlet Dia	3 in. 4,5,6 in.	Maximum																	
		8 X 8 or 7 Dia			8 X 8 or 7 Dia			8 X 8 or 7 Dia			8 X 8 or 7 Dia			8 X 8 or 7 Dia			8 X 8 or 7 Dia		
		12 X 12 or 10 Dia			12 X 12 or 10 Dia			12 X 12 or 10 Dia			12 X 12 or 10 Dia			12 X 12 or 10 Dia			12 X 12 or 10 Dia		

QUIK-VENT™ Table—7
Tile-Lined Masonry Chimney Common Vented
Single-Wall Connector For Up To 2 Elbows

1-Stage Furnace

FURNACE INPUT (MBH)		42-46			63-69			84-92			105-115			126-138			147-154		
FLUE COLLAR SIZE (in.)		4			4			4			4			5			5		
CONNECTOR HORIZONTAL LENGTH (ft)		0 to 4.5	4.5 to 9	9 to 13.5	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 7.5	7.5 to 15	15 to 22.5	0 to 7.5	7.5 to 15	15 to 22.5
Chimney Height (ft)	Connector Rise (ft)	Fan-Assisted Furnace, Single-Wall Metal Connector Inside Diameter (in.) With Up To 2 Elbows Common Vented With 1 Draft-Hood-Equipped Water Heater With Up To 50 MBH Input																	
15	1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	2	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	3	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
30	1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	2	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	3	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
50	1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	2	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	3	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Clay-Tile Chimney Liner		LINER NOMINAL RECTANGULAR DIMENSIONS (OUTSIDE) OR CIRCULAR INSIDE DIAMETER (in.)																	
		Minimum																	
		NR			NR			NR			8 X 8 or 7 Dia*			8 X 8 or 7 Dia*			8 X 8 or 7 Dia*		
Water Heater Draft-Hood Outlet Dia	3 in. 4,5,6 in.	Maximum																	
		NR			NR			NR			8 X 8 or 7 Dia			8 X 8 or 7 Dia			8 X 8 or 7 Dia		
		NR			NR			NR			12 X 12 or 10 Dia			12 X 12 or 10 Dia			12 X 12 or 10 Dia		

QUIK-VENT™ Altitude Code Letters Table

MAXIMUM ALTITUDE ABOVE SEA LEVEL (FT)	0 TO 2000	3000	4000	5000	6000	7000	8000	9000	10,000
Letter Code	A	B	C	D	E	F	G	H	J

NOTE: The letter codes next to the connector sizes indicate the highest altitudes at which each connector shall be installed. See Application Requirement No. 3 and the Altitude Code Letters Table.

NOTE: Refer to the QUIK-VENT™ Application Requirements in front of these tables for other application requirements.
 *8 X 12 or 8 in. diameter at 50-ft height.

1-Stage Furnace

QUIK-VENT™ Table—8
Tile-Lined Masonry Chimney Common Vented
Single-Wall Connector For 3 Elbows

FURNACE INPUT (MBH)		42-46						63-69						84-92						105-115						126-138						147-154					
FLUE COLLAR SIZE (in.)		4						4						4						4						5						5					
CONNECTOR HORIZONTAL LENGTH (ft)		0 to 4.5	4.5 to 9	9 to 13.5	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 7.5	7.5 to 15	15 to 22.5	0 to 7.5	7.5 to 15	15 to 22.5															
Chimney Height (ft)	Connector Rise (ft)	Fan-Assisted Furnace, Single-Wall Metal Connector Inside Diameter (in.) With 3 Elbows Common Vented With 1 Drafthood-Equipped Water Heater With Up To 50 MBH Input																																			
15	1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR															
	2	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR															
	3	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR															
30	1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5 B	NR	NR															
	2	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5 A	NR	NR															
	3	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5 A	NR	NR															
50	1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5 B	NR	NR															
	2	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5 A	NR	NR															
	3	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	4 A	NR	NR	NR	NR	NR	5 A	NR	NR															
Clay-Tile Chimney Liner		LINER NOMINAL RECTANGULAR DIMENSIONS (OUTSIDE) OR CIRCULAR INSIDE DIAMETER (in.)																																			
		Minimum																																			
		NR				NR				NR				8 X 8 or 7 Dia*				NR				8 X 8 or 7 Dia*															
Water Heater Drafthood Outlet Dia	3 in. 4,5,6 in.	Maximum																																			
		NR				NR				NR				8 X 8 or 7 Dia				NR				8 X 8 or 7 Dia															
		NR				NR				NR				12 X 12 or 10 Dia				NR				12 X 12 or 10 Dia															

*8 X 12 or 8 in. diameter at 50-ft height.

QUIK-VENT™ Altitude Code Letters Table

MAXIMUM ALTITUDE ABOVE SEA LEVEL (FT)	0 TO 2000	3000	4000	5000	6000	7000	8000	9000	10,000
Letter Code	A	B	C	D	E	F	G	H	J

NOTE: The letter codes next to the connector sizes indicate the highest altitudes at which each connector shall be installed. See Application Requirement No. 3 and the Altitude Code Letters Table.

NOTE: Refer to the QUIK-VENT™ Application Requirements in front of these tables for other application requirements.

1-Stage and 2-Stage Furnaces

QUIK-VENT™ Table—9
Connector For Water Heater Up To 50 MBH Input

WATER HTR INPUT (MBH)		30									40									50								
MAX NUMBER OF ELBOWS		2			3			4			2			3			4			2			3			4		
CONNECTOR HORIZONTAL LENGTH (ft)		0 to 4.5	4.5 to 9	9 to 13	0 to 4.5	4.5 to 9	9 to 13	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18
Chimney Height (ft)	Connector Rise (ft)	Draffhood-Equipped Water Heater, Single-Wall or Type-B Double-Wall Metal Connector Inside Diameter (in.)																										
		Common Vented With 1 Fan-Assisted Furnace																										
6	1	4	NR	NR	4	NR	NR	4	NR	NR	4	NR	NR	4	NR	NR	4	NR	NR	4	NR	NR	4	NR	NR	4	NR	NR
	2	4	NR	NR	4	NR	NR	4	NR	NR	4	NR	NR	4	NR	NR	4	NR	NR	4	NR	NR	4	NR	NR	4	NR	NR
	3	3*	NR	NR	3*	NR	NR	4	NR	NR	4	NR	NR	4	NR	NR	4	NR	NR	4	NR	NR	4	NR	NR	4	NR	NR
15	1	4	4	4	4	4	4	4	4	5†	4	5	5†	5	5	5†	5	5	5†	5	5	5†	5	5	5†	5	5	6†
	2	3*	4	4	4	4	4	4	4	4†	4	4	4†	4	4	4†	4	4	4†	4	4	4†	4	4	4†	4	4	5†
	3	3*	3*	4	3*	4	4	4	4	4†	4	4	4†	4	4	4†	4	4	4†	4	4	4†	4	4	4†	4	4	5†
30	1	4	4	4	4	4	4	4	4	5	4	4	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5	6
	2	3*	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5
	3	3*	3*	4	3*	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5
50	1	4	4	4	4	4	4	4	4	5	4	4	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5	6
	2	3*	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5
	3	3*	3*	4	3*	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5

NOTE: Refer to the QUIK-VENT™ Application Requirements in front of these tables for other application requirements.

*Three-in. diameter connectors are permitted only with water heaters which have 3-in. diameter draffhood outlets. Do not connect a 3-in. diameter connector to a 4-in. diameter or larger draffhood outlet.

†Connector horizontal length shall not exceed 15 ft.

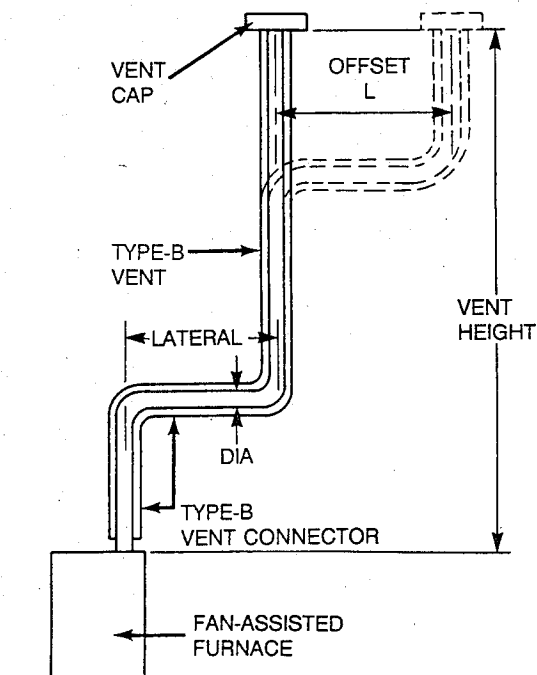


Fig. 7—Use With Tables 10 and 16

A91204

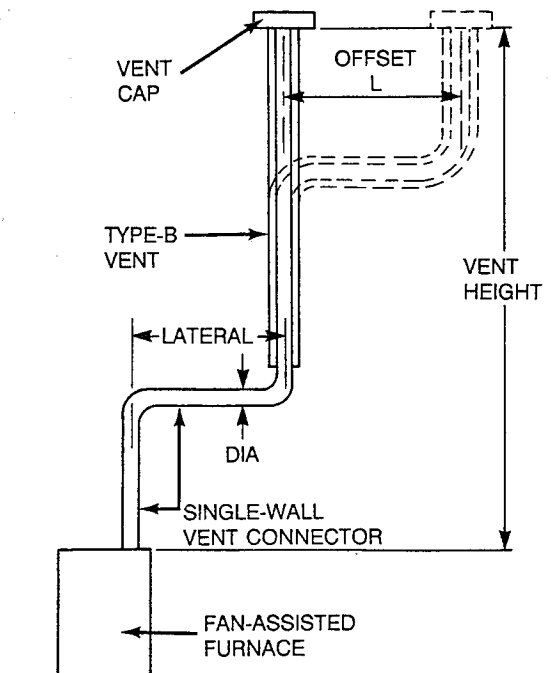


Fig. 8—Use With Tables 11 and 17

A91205

1-Stage Furnace

QUIK-VENT™ Table—10
Dedicated Vent
Type-B Vent and Type-B Connector For Fan-Assisted Furnace

FURNACE INPUT (MBH)		42-46					63-69					84-92					105-115					126-138					147-154				
FLUE COLLAR SIZE (in.)		4					4					4					4					5					5				
TOTAL MAX NO. OF ELBOWS IN VENT AND CONNECTOR (No Elbows with Zero Lateral)		2	3	4	5	Max Vent Dia (in.)	2	3	4	5	Max Vent Dia (in.)	2	3	4	5	Max Vent Dia (in.)	2	3	4	5	Max Vent Dia (in.)	2	3	4	5	Max Vent Dia (in.)	2	3	4	5	Max Vent Dia (in.)
Vent Height (ft)	Lateral (ft)	3J	3J	3J	4J	4J	3J	3J	3J	4J	4J	3J	3J	3J	4J	4J	3J	3J	3J	4J	4J	3J	3J	3J	4J	4J	3J	3J	3J	4J	4J
10	0	8J	7A	4J	4J	4J	8J	9A	4J	4J	4J	10J	10C	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J
	2	3J	3J	3J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J
	5	3J	4E	4E	4E	5A	4J	4J	4J	4J	4J	8A	6C	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J
	10	3F	4A	4A	4A	4A	4G	4G	4G	4G	4G	6D	5J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J
20	0	3J	3J	3J	4J	4J	3J	3J	3J	4J	4J	10J	10A	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J
	2	3J	3J	3J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J
	5	3J	3J	3J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J
	10	3G	3G	3G	4A	4A	4A	4A	4A	4A	4A	7A	6A	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J
	15	3D	3D	3D	NR	NR	NR	NR	NR	NR	NR	6B	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J
	20	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B
30	0	3J	3J	3J	3J	3J	8J	7H	4J	4J	4J	10J	10H	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J
	2	3J	3J	3J	3J	3J	3J	3J	3J	3J	3J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J
	5	3J	3J	3J	3J	3J	3J	3J	3J	3J	3J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J
	10	3H	3H	3H	4B	4B	4B	4B	4B	4B	4B	6A	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J
	15	3D	3D	3D	NR	NR	NR	NR	NR	NR	NR	6C	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J	4J
	20	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	4C	4C	4C	4C	4C	4C	4C	4C	4C	4C	4C	4C	4C	4C	4C	4C	4C	4C	4C	4C
	30	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B	4B

QUIK-VENT™ Altitude Code Letters Table

Letter Code	0 TO 2000	3000	4000	5000	6000	7000	8000	9000	10,000
	A	B	C	D	E	F	G	H	J

NOTE: The letter codes next to the connector sizes indicate the highest altitudes at which each vent shall be installed. See Application Requirement No. 3 and the Altitude Code Letters Table.

NOTE: Refer to the QUIK-VENT™ Application Requirements in front of these tables for other application requirements.

1-Stage Furnace

QUIK-VENT™ Table—11
Dedicated Vent
Type-B Vent and Single-Wall Connector For Fan-Assisted Furnace

FURNACE INPUT (MBH)		42-46				63-69				84-92				105-115				126-138				147-154			
FLUE COLLAR SIZE (in.)		4				4				4				4				5				5			
TOTAL MAX NO. OF ELBOWS IN VENT AND CONNECTOR (No Elbows with Zero Lateral)		Conn Dia and Min Vent Dia (in.)				Conn Dia and Min Vent Dia (in.)				Conn Dia and Min Vent Dia (in.)				Conn Dia and Min Vent Dia (in.)				Conn Dia and Min Vent Dia (in.)				Conn Dia and Min Vent Dia (in.)			
Vent Height (ft)	Lateral (ft)	2	3	4	5	2	3	4	5	2	3	4	5	2	3	4	5	2	3	4	5	2	3	4	5
10	0	3B	—	—	—	3B	—	—	—	4G	—	—	—	4J	—	—	—	4J	—	—	—	4J	—	—	—
	2	3A	3A	NR	NR	3A	4A	4A	4A	4F	4F	4F	5A	4J	5D	5D	5D	5G	5G	5G	6A	5J	5J	5J	6C
	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	4A	4A	5A	5A	5A	5A	5A	5C	5C	5C	5C	5F	5F	5F	6C
	10	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5A	5A	5A	5A
20	0	3C	—	—	—	3C	—	—	—	4H	—	—	—	4J	—	—	—	4J	—	—	—	4J	—	—	—
	2	3B	3B	NR	NR	3B	4A	4A	4A	4G	4G	4G	4G	4J	4J	4J	5E	5H	5H	5H	5H	5J	5J	5J	6D
	5	NR	NR	NR	NR	NR	NR	NR	NR	4B	4B	4B	4B	4F	4F	4F	5A	5A	5A	5A	5D	5D	5D	5D	6A
	10	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	4A	4A	4A	NR	4A	4A	5A	5A	5A	5B	5B	5G
	15	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
30	20	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	0	3D	—	—	—	3D	—	—	—	4C	—	—	—	4J	—	—	—	4J	—	—	—	4J	—	—	—
	2	3B	3B	3B	NR	3B	4B	4B	4B	4G	4G	4G	4G	4J	4J	4J	5F	5F	5F	5F	5J	5J	5J	5J	7A
	5	NR	NR	NR	NR	NR	NR	NR	NR	4B	4B	4B	4B	4F	4F	4F	5A	5A	5A	5A	5D	5D	5D	5D	7A
	10	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	4B	4B	4B	NR	4B	4B	5A	5A	5A	5A	5A	6A
	15	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5C
	20	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	30	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

QUIK-VENT™ Altitude Code Letters Table

MAXIMUM ALTITUDE ABOVE SEA LEVEL (FT)	0 TO 2000	3000	4000	5000	6000	7000	8000	9000	10,000
Letter Code	A	B	C	D	E	F	G	H	J

NOTE: The letter codes next to the connector sizes indicate the highest altitudes at which each vent shall be installed. See Application Requirement No. 3 and the Altitude Code Letters Table.

NOTE: Refer to the QUIK-VENT™ Application Requirements in front of these tables for other application requirements.

2-Stage Furnace

QUIK-VENT™ Table—12
Type-B Common Vent
Type-B Connector For Up To 2 Elbows

FURNACE INPUTS (MBH) LOW-HEAT AND HIGH-HEAT				26 AND 40			39 AND 60			52 AND 80			65 AND 100			78 AND 120			91 AND 140		
FLUE COLLAR SIZE (in.)				4			4			4			4			5			5		
CONNECTOR HORIZONTAL LENGTH (ft)				0 to 4.5	4.5 to 9	9 to 13.5	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 7.5	7.5 to 15	15 to 22.5	0 to 7.5	7.5 to 15	15 to 22.5
Vent Height (ft)		Connector Rise (ft)		Fan-Assisted Furnace, Type-B Connector Inside Diameter (in.) With Up To 2 Elbows Common Vented With 1 Drafthood-Equipped Water Heater With Up To 50 MBH Input																	
10	1	NR	NR	NR	4 B	4 B*	NR	5 A	5 A*	NR	5 E	5 E*	NR	5 H	6 C*	NR	6 F	6 F*	NR		
	2	3 A	NR	NR	4 A	4 A*	NR	4 F	5 A*	NR	5 D	5 D*	NR	5 G	5 G*	NR	6 E	6 E*	NR		
	3	3 A	3 A	NR	4 A	4 A*	NR	4 F	4 F*	NR	5 D	5 D*	NR	5 G	5 G*	NR	5 J	6 E*	NR		
20	1	3 C	3 C	NR	4 B	4 B	4 B	4 H	4 H	5 A	5 F	5 F	5 F	5 J	5 J	5 J†	5 J	5 J	6 F†		
	2	3 B	3 B	3 B	4 B	4 B	4 B	4 G	4 G	4 G	4 J	5 E	5 E	5 H	5 H	5 H†	5 J	5 J	6 F†		
	3	3 A	3 A	3 A	4 A	4 A	4 A	4 G	4 G	4 G	4 J	5 D	5 D	5 G	5 G	5 G†	5 J	5 J	5 J†		
30	1	3 D	3 D	3 D	4 D	4 D	4 D	4 J	4 J	4 J	4 J	4 J	5 F	5 J	5 J	5 J	5 J	5 J	5 J		
	2	3 C	3 C	3 C	4 B	4 B	4 B	4 H	4 H	4 H	4 J	4 J	5 E	5 H	5 H	5 H	5 J	5 J	5 J		
	3	3 B	3 B	3 B	4 B	4 B	4 B	4 G	4 G	4 G	4 J	4 J	5 E	5 H	5 H	5 H	5 J	5 J	5 J		
Vent Height (ft)		TYPE-B DOUBLE-WALL COMMON VENT INSIDE DIAMETER (in.)																			
		Minimum																			
10		4‡			5‡			5‡			6‡			6‡			7‡				
20		4†			4‡			5‡			5‡			5‡			6‡				
30		4†			4‡			4‡			5‡			5‡			5‡				
Water Heater Drafthood Outlet Dia		3 in. 4,5,6 in.		Maximum																	
		7			7			7			7			7			7				
		10			10			10			10			10			10				

QUIK-VENT™ Altitude Code Letters Table

MAXIMUM ALTITUDE ABOVE SEA LEVEL (FT)	0 TO 2000	3000	4000	5000	6000	7000	8000	9000	10,000
Letter Code	A	B	C	D	E	F	G	H	J

NOTE: The letter codes next to the connector sizes indicate the highest altitudes at which each connector shall be installed. See Application Requirement No. 3 and the Altitude Code Letters Table.

NOTE: Refer to the QUIK-VENT™ Table Application Requirements in front of these tables for other application requirements.

*Connector horizontal length shall not exceed 10 ft.

†Connector horizontal length shall not exceed 20 ft.

‡Increase the common vent by 1 table size for manifolded connector and/or common vent offset. See Application Requirements No. 4 and 6. d.

QUIK-VENT™ Table—13
Type-B Common Vent
Type-B Connector For 3 Elbows

2-Stage Furnace

FURNACE INPUTS (MBH) LOW-HEAT AND HIGH-HEAT		26 AND 40			39 AND 60			52 AND 80			65 AND 100			78 AND 120			91 AND 140		
FLUE COLLAR SIZE (in.)		4			4			4			4			5			5		
CONNECTOR HORIZONTAL LENGTH (ft)		0 to 4.5	4.5 to 9	9 to 13.5	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 7.5	7.5 to 15	15 to 22.5	0 to 7.5	7.5 to 15	15 to 22.5
Vent Height (ft)	Connector Rise (ft)	Fan-Assisted Furnace, Type-B Connector Inside Diameter (in.) With 3 Elbows Common Vented With 1 Drafthood-Equipped Water Heater With Up To 50 MBH Input																	
10	1	NR	NR	NR	4 B	4 B*	NR	5 A	5 A*	NR	5 E	6 A*	NR	6 C	6 C*	NR	6 F	6 F*	NR
	2	NR	NR	NR	4 A	4 A*	NR	5 A	5 A*	NR	5 D	5 D*	NR	5 G	6 B*	NR	6 E	6 E*	NR
	3	3 A	NR	NR	4 A	4 A*	NR	4 F	5 A*	NR	5 D	5 D*	NR	5 G	6 A*	NR	6 E	6 E*	NR
20	1	3 C	NR	NR	4 B	4 B	4 B	4 H	4 H	5 A	5 F	5 F	5 F	5 J	5 J	6 D†	5 J	6 F	6 F†
	2	3 B	3 B	3 B*	4 B	4 B	4 B	4 G	4 G	5 A	5 E	5 E	5 E	5 H	5 H	6 C†	5 J	6 F	6 F†
	3	3 A	3 A	3 A*	4 A	4 A	4 A	4 G	4 G	5 A	5 D	5 D	5 D	5 G	5 G	5 G†	5 J	5 J	6 E†
30	1	3 D	3 D	3 D	4 D	4 D	4 D	4 J	4 J	5 B	4 J	5 F	5 F	5 J	5 J	5 J	5 J	5 J	6 G
	2	3 C	3 C	3 C	4 B	4 B	4 B	4 H	4 H	4 H	4 J	5 E	5 E	5 H	5 H	5 H	5 J	5 J	6 F
	3	3 B	3 B	3 B	4 B	4 B	4 B	4 G	4 G	4 G	4 J	5 E	5 E	5 H	5 H	5 H	5 J	5 J	5 J
Vent Height (ft)		TYPE-B DOUBLE-WALL COMMON VENT INSIDE DIAMETER (in.)																	
		Minimum																	
10		4 ‡			5 ‡			5 ‡			6 ‡			6 ‡			6 ‡		
20		4 ‡			4 ‡			5 ‡			5 ‡			5 ‡			6 ‡		
30		4			4 ‡			4 ‡			5 ‡			5 ‡			5 ‡		
Water Heater Drafthood Outlet Dia		Maximum																	
3 in.		7			7			7			7			7			7		
4,5,6 in.		10			10			10			10			10			10		

NOTE: Refer to the QUIK-VENT™ Table Application Requirements in front of these tables for other application requirements.

*Connector horizontal length shall not exceed 10 ft.

†Connector horizontal length shall not exceed 20 ft.

‡Increase the common vent by 1 table size for manifolded connector and/or common vent offset. See Application Requirements No. 4 and 6. d.

2-Stage Furnace

QUIK-VENT™ Table—14
Tile-Lined Masonry Chimney Common Vented
Type-B Connector For Up To 2 Elbows

FURNACE INPUTS (MBH) LOW-HEAT AND HIGH-HEAT		26 AND 42			39 AND 63			52 AND 84			65 AND 105			78 AND 126			91 AND 147		
FLUE COLLAR SIZE (in.)		4			4			4			4			5			5		
CONNECTOR HORIZONTAL LENGTH (ft)		0 to 4.5	4.5 to 9	9 to 13.5	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 7.5	7.5 to 15	15 to 22.5	0 to 7.5	7.5 to 15	15 to 22.5
Chimney Height (ft)	Connector Rise (ft)	Fan-Assisted Furnace, Type-B Connector Inside Diameter (in.) With Up To 2 Elbows Common Vented With 1 Drafthood-Equipped Water Heater With Up To 50 MBH Input																	
15	1	3 A	NR	NR	4 A	4 A	4 A*	4 E	4 E	NR	5 C	5 C	5 C*	5 F	5 F	NR	5 J	6 D	NR
	2	3 A	3 A	NR	4 A	4 A	4 A*	4 E	4 E	4 E*	4 J	5 B	5 B*	5 F	5 F	NR	5 H	5 H	NR
	3	3 A	3 A	3 A	NR	NR	NR	4 D	4 D	4 D*	4 H	4 H	5 B*	5 E	5 E	NR	5 H	5 H	NR
30	1	3 A	3 A	NR	4 A	4 A	4 A	4 F	4 F	4 F	4 J	4 J	5 D	5 G	5 G	5 G	5 J	5 J	5 J
	2	3 A	3 A	3 A	4 A	4 A	4 A	4 E	4 E	4 E	4 J	4 J	5 C	5 F	5 F	5 F	5 J	5 J	5 J
	3	3 A	3 A	3 A	NR	NR	NR	4 D	4 D	4 D	4 H	4 H	4 H	5 F	5 F	5 F	5 H	5 H	5 H
50	1	3 A	3 A	NR	4 A	4 A	4 A	4 F	4 F	4 F	4 J	4 J	5 D	5 G	5 G	5 G	5 J	5 J	5 J
	2	3 A	3 A	3 A	4 A	4 A	4 A	4 F	4 F	4 F	4 J	4 J	4 J	5 G	5 G	5 G	5 J	5 J	5 J
	3	3 A	3 A	3 A	4 A	4 A	4 A	4 E	4 E	4 E	4 J	4 J	4 J	4 J	5 F	5 F	5 H	5 H	5 H
Clay-Tile Chimney Liner		LINER NOMINAL RECTANGULAR DIMENSIONS (OUTSIDE) OR CIRCULAR INSIDE DIAMETER (in.)																	
		Minimum																	
		8 X 8 or 6 Dia†			8 X 8 or 6 Dia†			8 X 8 or 6 Dia†			8 X 8 or 6 Dia†			8 X 8 or 7 Dia†			8 X 8 or 7 Dia†		
Water Heater Drafthood Outlet Dia		Maximum																	
		8 X 8 or 7 Dia			8 X 8 or 7 Dia			8 X 8 or 7 Dia			8 X 8 or 7 Dia			8 X 8 or 7 Dia			8 X 8 or 7 Dia		
		12 X 12 or 10 Dia			12 X 12 or 10 Dia			12 X 12 or 10 Dia			12 X 12 or 10 Dia			12 X 12 or 10 Dia			12 X 12 or 10 Dia		

*Connector horizontal length shall not exceed 15 ft.

†8 X 12 or 8-in. dia at 50 ft height.

QUIK-VENT™ Altitude Code Letters Table

MAXIMUM ALTITUDE ABOVE SEA LEVEL (FT)	0 TO 2000	3000	4000	5000	6000	7000	8000	9000	10,000
Letter Code	A	B	C	D	E	F	G	H	J

NOTE: The letter codes next to the connector sizes indicate the highest altitudes at which each connector shall be installed. See Application Requirement No. 3 and the Altitude Code Letters Table.

NOTE: Refer to the QUIK-VENT™ Application Requirements in front of these tables for other application requirements.

QUIK-VENT™ Table—15
Tile-Lined Masonry Chimney Common Vented
Type-B Connector For 3 Elbows

2-Stage Furnace

FURNACE INPUTS (MBH) LOW-HEAT AND HIGH-HEAT		26 AND 40			39 AND 60			52 AND 80			65 AND 100			78 AND 120			91 AND 140		
FLUE COLLAR SIZE (in.)		4			4			4			4			5			5		
CONNECTOR HORIZONTAL LENGTH (ft)		0 to 4.5	4.5 to 9	9 to 13.5	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 6	6 to 12	12 to 18	0 to 7.5	7.5 to 15	15 to 22.5	0 to 7.5	7.5 to 15	15 to 22.5
Chimney Height (ft)	Connector Rise (ft)	Fan-Assisted Furnace, Type-B Connector Inside Diameter (in.) With 3 Elbows Common Vented With 1 Drafthood-Equipped Water Heater With Up To 50 MBH Input																	
15	1	NR	NR	NR	4 A	4 A	4 A*	4 E	NR	NR	5 C	5 C	5 C*	5 F	5 F	NR	6 D	6 D	NR
	2	3 A	NR	NR	4 A	4 A	4 A*	4 E	4 E	NR	5 B	5 B	5 B*	5 F	5 F	NR	5 H	6 C	NR
	3	3 A	3 A	NR	NR	NR	NR	4 D	4 D	4 D*	4 H	5 B	5 B*	5 E	5 E	NR	5 H	5 H	NR
30	1	3 A	NR	NR	4 A	4 A	4 A	4 F	4 F	5 A	4 J	5 D	5 D	5 G	5 G	5 G	5 J	5 J	6 E
	2	3 A	3 A	NR	4 A	4 A	4 A	4 E	4 E	4 E	4 J	5 C	5 C	5 F	5 F	5 F	5 J	5 J	5 J
	3	3 A	3 A	NR	NR	NR	NR	4 D	4 D	4 D	4 H	4 H	5 B	5 F	5 F	5 F	5 H	5 H	5 H
50	1	3 A	NR	NR	4 A	4 A	4 A	4 F	4 F	4 F	4 J	5 D	5 D	5 G	5 G	5 G	5 J	5 J	5 J
	2	3 A	3 A	NR	4 A	4 A	4 A	4 F	4 F	4 F	4 J	4 J	5 C	5 G	5 G	5 G	5 J	5 J	5 J
	3	3 A	3 A	NR	4 A	4 A	4 A	4 E	4 E	4 E	4 J	4 J	5 B	5 F	5 F	5 F	5 H	5 H	5 H
Clay-Tile Chimney Liner		LINER NOMINAL RECTANGULAR DIMENSIONS (OUTSIDE) OR CIRCULAR INSIDE DIAMETER (in.)																	
		Minimum																	
		8 X 8 or 6 Dia†			8 X 8 or 6 Dia†			8 X 8 or 6 Dia†			8 X 8 or 6 Dia†			8 X 8 or 7 Dia†			8 X 8 or 7 Dia†		
Water Heater Drafthood Outlet Dia		Maximum																	
		8 X 8 or 7 Dia			8 X 8 or 7 Dia			8 X 8 or 7 Dia			8 X 8 or 7 Dia			8 X 8 or 7 Dia			8 X 8 or 7 Dia		
		12 X 12 or 10 Dia			12 X 12 or 10 Dia			12 X 12 or 10 Dia			12 X 12 or 10 Dia			12 X 12 or 10 Dia			12 X 12 or 10 Dia		

*Connector horizontal length shall not exceed 15 ft.

†8 X 12 or 8-in. dia at 50 ft height.

QUIK-VENT™ Altitude Code Letters Table

MAXIMUM ALTITUDE ABOVE SEA LEVEL (FT)	0 TO 2000	3000	4000	5000	6000	7000	8000	9000	10,000
Letter Code	A	B	C	D	E	F	G	H	J

NOTE: The letter codes next to the connector sizes indicate the highest altitudes at which each vent shall be installed. See Application Requirement No. 3 and the Altitude Code Letters Table.

NOTE: Refer to the QUIK-VENT™ Application Requirements in front of these tables for other application requirements.

2-Stage Furnace

QUIK-VENT™ Table—16

Dedicated Vent

Type-B Vent and Type-B Connector For Fan-Assisted Furnace

FURNACE INPUTS (MBH) LOW-HEAT AND HIGH-HEAT		26 AND 40					39 AND 60					52 AND 80					65 AND 100					78 AND 120					91 AND 140				
FLUE COLLAR SIZE (in.)		4					4					4					4					5					5				
TOTAL MAX NO. OF ELBOWS IN VENT AND CONNECTOR (No Elbows with Zero Lateral)		2	3	4	5	Max Vent Dia (in.)	2	3	4	5	Max Vent Dia (in.)	2	3	4	5	Max Vent Dia (in.)	2	3	4	5	Max Vent Dia (in.)	2	3	4	5	Max Vent Dia (in.)	2	3	4	5	
Vent Height (ft)	Lateral (ft)	Conn Dia and Min Vent Dia (in.)					Conn Dia and Min Vent Dia (in.)					Conn Dia and Min Vent Dia (in.)					Conn Dia and Min Vent Dia (in.)					Conn Dia and Min Vent Dia (in.)					Conn Dia and Min Vent Dia (in.)				
		3J	3J	3J	4G	8J	3J	4J	4J	4J	6G	4J	4J	4J	4J	8A	4J	4J	4J	5J	10J	4J	5J	5J	5J	5J	10J	4J	5J	5J	6J
10	0	3J	---	---	---	8J	3J	---	---	---	8J	4J	---	---	---	4J	4J	---	---	---	4J	5J	5J	5J	5J	10J	4J	---	---	---	---
	2	3J	3J	3J	4G	6A	4J	4J	4J	4J	6G	4J	4J	4J	4J	9B	4J	4J	5J	5J	9B	5J	5J	5J	5J	10J	4J	5J	5J	6J	10E
	5	3A	3A	3A	NR	3A	4C	4C	4C	4C	4C	4H	4H	4H	5D	6A	4J	4J	5H	5H	6A	5J	5J	5J	7B	7B	5J	5J	5J	6J	8A
	10	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	4D	4D	4D	NR	4D	4H	5C	5C	5C	5C	5F	5F	5F	5F	6G	5J	5J	5J	6E	7A
20	0	3J	---	---	---	8J	3J	---	---	---	8J	3J	---	---	---	10J	4J	---	---	---	10J	4J	---	---	---	10J	4J	---	---	---	---
	2	3C	3J	3J	3J	6D	3J	3J	4J	4J	7B	4J	4J	4J	4J	10A	4J	4J	4J	4J	10A	4J	5J	5J	5J	10J	4J	5J	5J	5J	12A
	5	3C	3C	3C	3C	3C	3J	4E	4E	4E	5A	4J	4J	4J	4J	7A	4J	4J	4J	4J	7A	4J	5J	5J	5J	8A	5J	5J	5J	5J	9A
	10	NR	NR	NR	NR	NR	4A	4A	4A	4A	4A	4E	4E	4E	4E	6A	4J	4J	4J	5D	6A	4G	5G	5G	5G	6D	5J	5J	5J	5J	7A
30	15	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	4A	4A	4A	4A	5A	4F	4F	5A	5A	5A	5E	5E	5E	5E	6A	5G	5G	5G	5G	6C
	20	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	4B	4B	4B	NR	4B	4B	5A	5A	5A	5A	5A	5E	5E	5E	5E	6A
	0	3J	---	---	---	8J	3J	---	---	---	8J	3J	---	---	---	10J	4J	---	---	---	10J	4J	---	---	---	10J	4J	---	---	---	---
	2	3J	3J	3J	3J	6F	3J	3J	4J	4J	8B	4J	4J	4J	4J	10C	4J	4J	4J	4J	10C	4J	4J	5J	5J	10J	4J	5J	5J	5J	12C
30	5	3C	3C	3C	3C	3C	3J	3J	4F	4F	6B	4J	4J	4J	4J	7A	4J	4J	4J	4J	7A	4J	4J	5J	5J	8A	4J	5J	5J	5J	9A
	10	NR	NR	NR	NR	NR	3F	4A	4A	4A	4A	4F	4F	4F	4F	6A	4J	4J	4J	4J	6A	4J	4J	5H	5H	7A	5J	5J	5J	5J	8A
	15	NR	NR	NR	NR	NR	NR	NR	NR	NR	4B	4B	4B	4B	4B	5B	4J	4J	4J	5E	6A	5H	5H	5H	5H	6A	5H	5H	5H	5H	7A
	20	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	4C	4C	4C	NR	4C	4C	5B	5B	5B	5B	5B	5B	5E	5E	5E	5E
30	30	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5A	5A	5A	5A	5A

QUIK-VENT™ Altitude Code Letters Table

MAXIMUM ALTITUDE ABOVE SEA LEVEL (FT)	0 TO 2000	3000	4000	5000	6000	7000	8000	9000	10,000
Letter Code	A	B	C	D	E	F	G	H	J

NOTE: The letter codes next to the connector sizes indicate the highest altitudes at which each vent shall be installed. See Application Requirement No. 3 and the Altitude Code Letters Table.

NOTE: Refer to the QUIK-VENT™ Application Requirements in front of these tables for other application requirements.

2-Stage Furnace

QUIK-VENT™ Table—17
Dedicated Vent

Type-B Vent and Single-Wall Connector For Fan-Assisted Furnace

FURNACE INPUTS (MBH) LOW-HEAT AND HIGH-HEAT		26 AND 40					39 AND 60					52 AND 80					65 AND 100					78 AND 120					91 AND 140																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
FLUE COLLAR SIZE (in.)		4					4					4					4					5					5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
TOTAL MAX NO. OF ELBOWS IN VENT AND CONNECTOR		2	3	4	5	Max Vent Dia (in.)	2	3	4	5	Max Vent Dia (in.)	2	3	4	5	Max Vent Dia (in.)	2	3	4	5	Max Vent Dia (in.)	2	3	4	5	Max Vent Dia (in.)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Zero Lateral)		Conn Dia and Min Vent Dia (in.)					Conn Dia and Min Vent Dia (in.)					Conn Dia and Min Vent Dia (in.)					Conn Dia and Min Vent Dia (in.)					Conn Dia and Min Vent Dia (in.)					Conn Dia and Min Vent Dia (in.)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
Vent Height (ft)	Lateral (ft)	NR	—	NR	NR	NR	3A	NR	NR	NR	NR	NR	NR	NR	NR	NR	4B	4A	NR	NR	NR	4E	NR	NR	NR	NR	4H	—	—	—	—	5A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
10	0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

QUIK-VENT™ Altitude Code Letters Table

MAXIMUM ALTITUDE ABOVE SEA LEVEL (FT)	0 TO 2000	3000	4000	5000	6000	7000	8000	9000	10,000
Letter Code	A	B	C	D	E	F	G	H	J

NOTE: The letter codes next to the connector sizes indicate the highest altitudes at which each vent shall be installed. See Application Requirement No. 3 and the Altitude Code Letters Table.

NOTE: Refer to the QUIK-VENT™ Application Requirements in front of these tables for other application requirements.

EXAMPLE 1: COMMON VENTING INTO A MASONRY CHIMNEY

See Fig. 6. An 88,000 Btu/hr 1-stage fan-assisted furnace with a 4-in. diameter flue collar is to be common vented with a 40,000 Btu/hr draft-hood-equipped water heater with a 4-in. diameter draft-hood outlet. The common vent is an existing 25 ft tall masonry chimney with 2 flues. The gas appliance flue is an 8 X 12 in. nominal size clay-tile liner with a 3 ft offset above the fireplace. The chimney flue is 6 ft from the water heater draft-hood outlet. The furnace flue is 3 ft from the chimney flue. The headroom above the furnace and water heater is 5 ft and 3 ft, respectively. Including entrance into the chimney, 3 elbows will be required to route each connector to the chimney.

CONNECTOR RISE: Try to size single-wall connectors with tile-lined masonry chimney from Table 8. When trying to enter the table at 25 ft Chimney Height, the table skips from 15 to 30 ft. See Table Application Requirement No. 2 on page 4. Try 15 ft Chimney Height with 3 ft Connector Rise, and try 30 ft Chimney Height with 3 ft Connector Rise. Move across the table to the Furnace Input column 84–92 MBH and the Connector Horizontal Length column 0 to 6 ft. The connector sizes shown are NR and NR, which means that single-wall pipe is not recommended for this application.

Try Type-B connector pipe. Enter Table 6 in the same way as Table 8. At 15 ft Chimney Height, 3 ft of Connector Rise, and at 30 ft Chimney Height, 3 ft of Connector Rise for 84–92 MBH Furnace Input, and 0 to 6 ft of Connector Horizontal Length, Table 6 requires 4-in. and 4-in. Type-B connectors respectively. A 4-in. Type-B connector should be used because the entries above and below the 25 ft Chimney Height are both 4-in. connectors.

ALTITUDE LIMITATION: The code letter J next to the connector size 4 indicates the maximum altitude. If the gas input rate is properly derated, the Altitude Code Letters Table at bottom of page 9 indicates the maximum altitude at which this furnace connector size shall be used (10,000 ft above sea level in this instance).

MASONRY CHIMNEY: Continue down the same column to the Clay-Tile Chimney Liner Minimum and Maximum sizes, 8 X 8 and 12 X 12 in., respectively. The 8 X 12-in. nominal liner fits within that range. Check the table titled Manifolded Connector and

Offset Vent (or Chimney). See table on page 4 for L-Maximum Horizontal Length in the 8 X 12-in. column. The 3 ft offset is less than the maximum horizontal length, 13.5 ft. If the connectors are joined before they enter the chimney flue (see Fig. 5), L-Maximum Manifolded Horizontal Connector Length is 9 ft for a 6-in. Type-B manifolded connector in the same table. Select the manifolded connector diameter, 6 in. from Table 6, Clay-Tile Chimney Liner Minimum and Maximum Circular Inside Diameter in the 84–92 MBH column, which permits 6- to 10-in. diameters.

WATER HEATER CONNECTOR: Enter Table 9 at 30 ft Chimney Height, 2 ft of Connector Rise, 40 MBH Water Heater Input, 3 Elbows, and 0 to 6 ft Connector Horizontal Length. A 4-in. diameter connector is required. Type-B and single-wall connector pipe are permitted.

No altitude restrictions apply to vent connectors for draft-hood-equipped water heaters or to common vents with a draft-hood-equipped water heater.

EXAMPLE 2: INTERPOLATION BETWEEN TABLE ENTRIES

Use the same installation as in Example 1 except when furnace connector rise is 1 ft instead of 3 ft. Determine the furnace connection size.

Enter Table 6. When trying to enter the table at 25 ft Chimney Height, the table skips from 15 to 30 ft. See Table Application Requirement No. 2 on page 4. Try 15 ft Chimney Height with 1 ft of Connector Rise, and try 30 ft Chimney Height with 1 ft of Connector Rise. Move across the table to the Furnace Input column 84–92 MBH and the Connector Horizontal Length column 0 to 6 ft. The connector sizes shown are 5 in. and 4 in., respectively. A 5-in. connector should be used because the Table Application Requirement No. 2.a. indicates to choose the larger of the connector sizes.

The code letters H and J next to connector sizes 5 and 4 indicate the maximum altitudes. Use the altitude code letter H for the chosen connector size (in this instance, 5 in.).

Installation Check Sheet

A. Pre-Installation

1. Proper Furnace Size

House heating load _____ Btu/hr
Furnace output capacity (high-heat for 2-stage furnaces) _____ Btu/hr

2. Chimney Inspection

Chimney condition _____
Chimney size _____
Common vent ☐
Dedicated vent ☐
Signs of condensation ☐
Tile lined if masonry ☐

3. Vent and Connector Sizing

Furnace input (low- and high-heat for 2-stage furnaces) _____ Btu/hr
Furnace connector size/type Table _____ in./_____
Water heater less than 50 MBH ☐
Water heater draft hood outlet diameter _____ in.
Water heater connector size/type (Table 9) _____ in./_____
Manifolded connector size/type (if required) _____ in./_____
Manifold length (if required) _____ ft
Offset length (if required) _____ ft
Vent size/type _____ in./_____

B. Post-Installation

1. Gas Input Rate Adjusted (low- and high-input for 2-stage furnaces) _____ Btu/hr

2. Temperature Rise Set (low- and high-heat for 2-stage furnaces)

Rating plate mid-point _____ F/_____ F
Furnace setting _____ F/_____ F

3. Thermostat Heat Anticipator (Low-Heat Only for 2-Stage Furnaces)

Setting amps _____
Three cycles per hr on electronic ☐

4. Self-Test Operation OK

☐

