



1.1.21. TABLE 1: ALLOWABLE VENT LENGTHS

Vent Configuration	Pipe Size	Minimum Length Vertical and Horizontal per Vent Run	Max Equivalent length Vertical and Horizontal per vent run	Gas Type	Exhaust Vent	Intake Vent
Horizontal Co-axial vent S636 Polypropylene	80mm – 60mm	1 ft (0.3 m) + elbow	3.28 ft (1 m) + elbow	Natural or Propane	Polypropylene	Polypropylene
Horizontal Co-axial vent S636 Polypropylene	125mm – 80mm	3.3 ft (1 m) + elbow	16.4 ft (5 m) + elbow	Natural or Propane	Polypropylene	Polypropylene
Horizontal/ Vertical Co-linear Vent** (2 Separate pipes)	2" / 60mm	3.3 ft (1 m)	60 ft (18 m)*	Natural or Propane	PVC, CPVC, Polypropylene	PVC, CPVC, Polypropylene, ABS
Horizontal/ Vertical Co-linear Vent** (2 Separate pipes)	3" / 80 mm	3.3 ft (1 m)	85 ft (26 m)	Natural or Propane	PVC, CPVC, Polypropylene	PVC, CPVC, Polypropylene, ABS
Horizontal/ Vertical Co-linear Vent** (2 Separate pipes)	4" / 100 mm	3.3 ft (1 m)	150 ft (46 m)	Natural or Propane	PVC, CPVC, Polypropylene	PVC, CPVC, Polypropylene, ABS
Horizontal/ Vertical Forced Draft	2" / 60mm	1.6 ft (0.5 m)	60 ft (18 m)*	Natural or Propane	PVC, CPVC, Polypropylene	PVC, CPVC, Polypropylene, ABS
Horizontal/ Vertical Single Vent	3" / 80 mm	1.6 ft (0.5 m)	65 ft (20 m)	Natural or Propane	PVC, CPVC, Polypropylene	PVC, CPVC, Polypropylene, ABS
Horizontal/ Vertical Single Vent	4" / 100 mm	1.6 ft (0.5 m)	100 ft (30 m)	Natural or Propane	PVC, CPVC, Polypropylene	PVC, CPVC, Polypropylene, ABS

NOTE: In Canada, exhaust vent must be approved to ULC S636 standard.

Each 2"/ 3"/ 4"/60mm/80mm 45° elbow equates to 2.5 linear feet to vent pipe.

Each 2"/ 3"/ 4"/60mm/80mm 90° short radius elbow equates to 7.5 linear feet to vent pipe.

Each 2"/ 3"/ 4"/60mm/80mm 90° long radius elbow equates to 5 linear feet to vent pipe.

Each 125mm-80mm 45° elbow equates to 5 linear feet to vent pipe.

Each 125mm-80mm 90° short radius elbow equates to 16.4 linear feet to vent pipe.

Each 125mm-80mm 90° long radius elbow equates to 12 linear feet to vent pipe.

The total maximum equivalent vent pipe distance cannot exceed the maximum length listed for horizontal and vertical venting distance.

The maximum lengths are not including elbows unless otherwise stated.

Exceeding the maximum venting distances will cause the appliance to malfunction or cause an unsafe condition.

Gas Type	Minimum Heating Frequency (Hz)	Maximum Heating Frequency (Hz)
Gas A (Natural)	46	255 (270*)
Gas E (Propane)	47	251 (270*)

\* The frequency must be change to a value of 270 Hz only with 2" diameter pipe that has a total vent run of above 18 ft (5.5 m).

\*\* Vent run consists of allowable vent length for exhaust pipe and an additional allowable vent length for combustible air.