

SERVICE AND APPLICATION NOTES

October 31, 2015

H-15-04

Uninsulated Vent Length Tables With Innoflue® by Centrotherm

Lennox is pleased to update our uninsulated vent length tables with the addition of Polypropylene vent manufacturers. Lennox has already been approved for use with Polypro® by Duravent and is now approved for use with Innoflue® by Centrotherm. Use the column labeled PP for these lengths. Some lengths have changed so be aware moving forward. These new tables will be available in our Installation Manuals soon, but please use this Service and Application Note until that time. If you have any questions, please contact Lennox Technical Support (800)453-6669.

TABLE 1
Maximum Allowable Exhaust Vent Pipe Length (in ft.) Without Insulation In Unconditioned Space For Winter Design Temperatures Single - Stage High Efficiency Furnace

Winter Design Temperatures ¹ °F (°C)	Vent Pipe Diameter	Unit Input Size									
		045		070		090		110		135	
		PVC	² PP	PVC	² PP	PVC	² PP	PVC	² PP	PVC	² PP
32 to 21 (0 to -6)	2 in.	18	16	31	28	50	48	30	30	N/A	N/A
	2-1/2 in.	13	N/A	24	N/A	42	N/A	56	N/A	N/A	N/A
	3 in.	9	9	18	18	35	35	47	47	52	52
20 to 1 (-7 to -17)	2 in.	9	8	18	16	32	29	30	30	N/A	N/A
	2-1/2 in.	5	N/A	13	N/A	24	N/A	34	N/A	N/A	N/A
	3 in.	N/A	N/A	8	8	19	19	26	26	30	30
0 to -20 (-18 to -29)	2 in.	5	N/A	12	10	22	19	30	27	N/A	N/A
	2-1/2 in.	N/A	N/A	7	N/A	15	N/A	22	N/A	N/A	N/A
	3 in.	N/A	N/A	N/A	N/A	10	10	16	16	18	18

¹Refer to 99% Minimum Design Temperature table provided in the current edition of the ASHRAE Fundamentals Handbook.

²Poly-Propylene vent pipe (PP) by Duravent and Centrotherm.

NOTE - Concentric terminations are the equivalent of 5' and should be considered when measuring pipe length.

NOTE - Maximum uninsulated vent lengths listed may include the termination(vent pipe exterior to the structure) and cannot exceed 5 linear feet or the maximum allowable intake or exhaust vent length listed in the maximum vent length tables found in the unit Installation Instruction which ever is less.



TABLE 2
Maximum Allowable Exhaust Vent Pipe Length (in ft.) Without Insulation In Unconditioned Space For
Winter Design Temperatures Two - Stage High Efficiency Furnace

Winter Design Temperatures ¹ °F (°C)	Vent Pipe Diameter	Unit Input Size									
		045		070		090		110		135	
		PVC	² PP	PVC	² PP	PVC	² PP	PVC	² PP	PVC	² PP
32 to 21 (0 to -6)	2 in.	21	18	33	30	46	42	30	30	N/A	N/A
	2-1/2 in.	16	N/A	26	N/A	37	N/A	36	N/A	N/A	N/A
	3 in.	12	12	21	21	30	30	29	29	42	42
20 to 1 (-7 to -17)	2 in.	11	9	19	17	28	25	27	24	N/A	N/A
	2-1/2 in.	7	N/A	14	N/A	21	N/A	20	N/A	N/A	N/A
	3 in.	N/A	N/A	9	9	16	16	14	14	23	23
0 to -20 (-18 to -29)	2 in.	6	4	12	10	19	16	18	15	N/A	N/A
	2-1/2 in.	N/A	N/A	7	N/A	13	N/A	12	N/A	N/A	N/A
	3 in.	N/A	N/A	N/A	N/A	8	8	7	7	13	13

¹Refer to 99% Minimum Design Temperature table provided in the current edition of the ASHRAE Fundamentals Handbook.

² Poly-Propylene vent pipe (PP) by Duravent and Centrotherm.

NOTE - Concentric terminations are the equivalent of 5' and should be considered when measuring pipe length.

NOTE - Maximum uninsulated vent lengths listed may include the termination(vent pipe exterior to the structure) and cannot exceed 5 linear feet or the maximum allowable intake or exhaust vent length listed in the maximum vent length tables found in the unit Installation Instruction which ever is less.

TABLE 3
Maximum Allowable Vent Pipe Length (in ft.) Without Insulation In Unconditioned Space For
Winter Design Temperatures Modulating High Efficiency Furnace

Winter Design Temperatures ¹ °F (°C)	Vent Pipe Diameter	Unit Input Size							
		070		090		110		135	
		PVC	² PP	PVC	² PP	PVC	² PP	PVC	² PP
32 to 21 (0 to -6)	2 in.	11	9	14	12	18	15	N/A	N/A
	2-1/2 in.	7	N/A	10	N/A	12	N/A	N/A	N/A
	3 in.	N/A	N/A	6	6	8	8	13	13
20 to 1 (-7 to -17)	2 in.	N/A	N/A	6	4	8	6	N/A	N/A
	2-1/2 in.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3 in.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
0 to -20 (-18 to -29)	2 in.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2-1/2 in.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3 in.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

¹Refer to 99% Minimum Design Temperature table provided in the current edition of the ASHRAE Fundamentals Handbook.

² Poly-Propylene vent pipe (PP) by Duravent and Centrotherm.

NOTE - Concentric terminations are the equivalent of 5' and should be considered when measuring pipe length.

NOTE - Maximum uninsulated vent lengths listed may include the termination(vent pipe exterior to the structure) and cannot exceed 5 linear feet or the maximum allowable intake or exhaust vent length listed in the maximum vent length tables found in the unit Installation Instruction which ever is less.