

## Residential Technical Services: Service Tips Letter

Letter: STR-012-25

Date: October 24, 2025

To: S1 HVAC Branch and Distributor Principal, Sales Manager, Service Manager, Parts Manager, Warranty Manager, Training Manager, Delegated Administrator.  
Technical Services, Parts/S1, Account Representatives, Marketing, Sales, Warranty teams.

Subject: **Vent table update - Maximum equivalent pipe length**

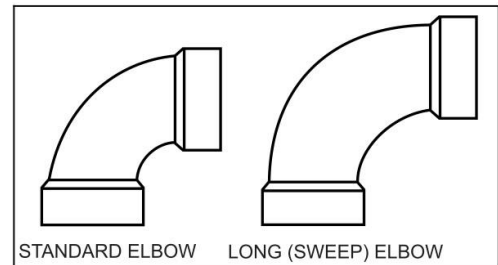
Product/s: Y91E, Z9ES, Y92E, Z9ET, Y92V, Z9VT.

Summary: Maximum equivalent pipe length data extrapolated for additional altitude ranges to allow greater vent pipe size flexibility.

Dear valued customer:

To provide greater flexibility regarding allowable vent pipe sizing and pipe length at higher altitudes, the maximum equivalent pipe length table will be updated in the furnace installation manual.

The maximum equivalent pipe length listed in the table is for the vent piping and the air intake piping separately. For example, if the table allows 65 equivalent feet for a particular model, then the vent can have 65 equivalent feet of pipe, and the combustion air intake can have another 65 equivalent feet of pipe. Three long sweep vent terminal elbows, two for the vent and one for the combustion air intake, are already accounted for and do not need to be included in the equivalent length calculation. However, all other fitting equivalent lengths must be accounted for and subtracted from the available maximum equivalent length of piping.



The use of long-sweep elbows is recommended. This will allow more of the allowable equivalent piping length to be used on straight piping. Reference the equivalent length of fittings table in the unit installation manual to find the equivalent length of the fittings to be used. Subtract the fitting lengths from the available equivalent vent piping length when selecting a vent piping size.

Fitting	Equivalent length
2 in. 90° sweep elbow	5 ft of 2 in. pipe
2 in. 45° sweep elbow	2 1/2 ft of 2 in. pipe
2 in. 90° standard elbow	7 ft of 2 in. pipe
2 in. 45° standard elbow	3 1/2 ft of 2 in. pipe
3 in. 90° sweep elbow	5 ft of 3 in. pipe
3 in. 45° sweep elbow	2 1/2 ft of 3 in. pipe
3 in. 90° standard elbow	7 ft of 3 in. pipe
3 in. 45° standard elbow	3 1/2 ft of 3 in. pipe
4 in. 90° elbow (sweep or standard)	5 ft of 4 in. pipe
4 in. 45° elbow (sweep or standard)	2 1/2 ft of 4 in. pipe



The maximum equivalent pipe length listed in the table below can be used for the above listed models effective immediately.

Furnace input rate in kBtu/h and size	Pipe size (in.)	Maximum equivalent pipe length (ft) by altitude (ft)				
		0 ft to 2,000 ft	2,001 ft to 3,600 ft	3,601 ft to 5,400 ft	5,401 ft to 7,800 ft	7,801 ft to 10,100 ft
26A08	2	65	50	43	35	25
	3	90	75	68	60	50
	4	150	140	130	125	115
40A10	2	65	65	65	65	65
	3	150	150	150	150	150
	4	200	200	200	200	200
60A10	2	65	65	65	65	65
	3	90	90	90	90	90
	4	150	150	150	150	150
60B12	2	65	65	65	65	65
	3	150	150	150	150	150
	4	200	200	200	200	200
80B12	2	55	39	20	20	10
	3	140	140	140	140	94
	4	190	190	190	190	120
80C16	2	65	53	40	25	20
	3	150	150	150	150	150
	4	200	200	200	200	200
80C20	2	65	53	40	25	20
	3	150	150	150	150	150
	4	200	200	200	200	200
100C16	2	20	20	20	20	—
	3	65	65	65	60	55
	4	130	130	130	130	130
100C20	2	20	20	20	20	—
	3	65	65	65	60	55
	4	130	130	130	130	130
120D20	2	—	—	—	—	—
	3	90	79	66	36	36
	4	150	138	125	95	95

Unit installation manuals will be updated with the new table. Inventory of existing installation manuals will be used for production. Updated installation manuals will be available on Solution Navigator as soon as possible.

If you have any questions regarding this, feel free to call Ducted Systems Technical Services at 1-877-UPG-SERV and speak with a technical support representative or contact your Regional Technical Service Manager.

Best regards,

Casey McConnaughy  
Regional Technical Service Manager  
Home Comfort

JC Residential and Light Commercial LLC | 3110 N Mead St | 67219 Wichita, KS | USA  
Tel. 877-874-7378