Technical Bulletin-CPVC to PVC Venting

As per venting section 5.55 of the eco king manual, it is permitted to use PVC on the exhaust after 7 ft equivalent of CPVC venting.

Venting PART 5.55 The use of ULC S-636 approved PVC/CPVC venting for exhaust is permitted. In cases, where PVC/CPVC approved 636 venting is used, please follow the same vent length limits as for single wall PP. These lengths are posted in Table 3.1. Below outlines how to adapt from boiler connection to PVC/CPVC for exhaust and/or ABC, PVC, etc for air intake.

Adapters

Eco King Boilers are designed and shipped ideally for use with 80mm/125mm concentric, pipe in pipe, venting connection at the top of the boiler. In cases where twin pipe systems are used, a black O-ring seal on the concentric air intake portion must be used to block air intake. Then the white cap on the separate single pipe air intake must be removed from the boiler and an o-ring seal added. Now the boiler is ready to be used in a two pipe system(refer to Venting Part 3 above). Once these rules are followed, use any 80mm PP to PVC/CPVC adapter (for example, available through Eco King with part number EK PP-3PVC, M&G Duravent 3PPSAD-PVCor thru IPEX), to connect immediately onto the boiler. Pipe size can be reduced to 2" CPVC, but if done, care must be taken to ensure vent length does not exceed max lengths in chart shown in Table 3.1. Then connect the same adapter on air intake side and use ABS, PVC or CPVC for air intake vent run.

Vent/Air-Intake Pipe Length Determination

Use table 3.1 to determine the maximum pipe length that can be used. The table calculates pipe length with regard to use of 90° elbows, and 45° elbows of which both are equivalent to 5ft of straight length pipe. Allowable pipe lengths for vent and air-intake pipes are shown.

Table 3.1 Maximum Single Pipe length determination (combined lengths. Exhaust vent pipe should not exceed $\frac{1}{2}$ these distances, ie. 2" max length is 105 ft, so exhaust should not be longer then 52ft)

		Number of Elbows and Equivalent Feet									
Connection type	Length	1	2	3	4	5	6	7	8	9	10
2" (60mm) combined Vent Length	105 ft	100 ft	95 ft	90 ft	85 ft	80 ft	75 ft	70 ft	65 ft	60 ft	55 ft
3" (80mm) Combined vent length	164ft	159 ft	154 ft	149ft	144 ft	139 ft	134 ft	129 ft	124 ft	119 ft	114 ft

^{**}For installations using PVC exhaust vent, the first seven (7) equivalent feet of vent must be CPVC."

For questions or clarification, please contact King Heating Products;

King Heating Technical

Western Canada-604-385-3265

Eastern Canada-905-334-0651