



## **Installation Guidelines - FCX Heating System**

- Heat loss calculation (manual J) should be performed to insure that the heating system is able to handle the load required.
- Rated output is 76,000 BTU – **DO NOT** try to increase nozzle size or increase pump pressure in order to obtain higher BTU output. Recommended nozzle is a Danfoss .50 – 80°-AS
- 10 micron (Garber style) oil filter is required due to small nozzle size.
- Unit is not meant to be installed with an outdoor reset control. Boiler is meant to maintain temperature, otherwise condensing may occur in the primary heat exchanger causing early heat exchanger failure.
- Venting should be concentric or direct vent – do not vent into a natural draft chimney.
- Condensate drain should have an inline trap, otherwise exhaust gases may escape through the condensate drain.
- Maximum supply water temperature is 175°F – do not attempt to install in applications requiring higher water temperature
- When using the Heatwise burner maximum vent length is 16.4 feet (5m) equivalent length - must take into account 90 degree elbow 3.28 ft (1m) and a 45 degree elbow 1.64 ft (0.5m)
- When using longer than 16.4 vent run, please order the Beckett NX that has been OEM designed for use with the FCX.
- Choose proper location for venting, do not place in an area of high winds which could cause back pressure on the exhaust
- Try not to place below windows where exhaust odors could become an issue
- Expansion tank that comes supplied with the unit will only handle up to 26 gallons of water. When system has higher water content an external expansion tank must be installed.
- After installation is complete, a complete combustion analysis should be performed, as well as pump pressure and fuel line vacuum should be checked.
- Unit should be installed by a qualified professional. Regular yearly maintenance is required to keep the heating system operating efficiently.

**Note: These are major items to consider before buying and installing FCX heating system.**

\*Monitor Products, Inc. will not take any responsibilities for the product performance and reliabilities and the limited warranty will not be applied unless the above guidelines are followed.