

# **eF Series® Installation Checklist and Venting Table**

**Important - Read the installation and operation manual before installing and operating this water heater.**

- ❑ **Product Handling** - Carefully uncrate the heater. Move in place with a hand truck (don't use the venting pipes for handles). A 2 inch (5 cm) high installation pad is recommended.
- ❑ **Electrical Requirements** - Make sure there is a dedicated 120 volts line voltage and line power is properly polarized. Proper ground is required to this water heater.
- ❑ **Venting Requirements** - All venting must stay within the required lengths and diameters (see chart below). Proper support of the venting pipe is a **MUST** (every 5 feet (1.5 m) vertical and 3 feet (.9 m) horizontal). Terminations must be located to prevent re-circulation. Medium to long sweep 90° elbows are recommended.
- ❑ **Gas Requirements** - Supply proper gas piping size to this water heater (¾ inch (1.9 cm) NPT or equivalent is required for models 300,000 btu/hr (87.8 kw) or less, 1 inch (2.5 cm) NPT or equivalent is required for 399,000 btu/hr (116.8 kw) model). Install a properly sized regulator to supply an adequate volume of gas. 7 inches (1741.9 Pa.) W.C. of gas is required when the water heater is operating. Gas pressure must stay below 14 inches (3483.8 Pa) W.C. when unit is not operating. Pressure drop between non-operating and operating pressures should be less than 3 inch (746.5 Pa) W.C.
- ❑ **Condensate Requirements** - Condensate line must be properly sized and sloped to a suitable drain (¼ inch per foot (.6 cm per .3 m)). A condensate trap must be constructed as close to the water heater as possible. Protect the condensate line from freezing conditions. If using more than one heater AND using a common condensate line, make sure that the condensate line is sized correctly.
- ❑ **Service / Mechanical Room** - Provide adequate space for servicing the heater. Leave room to get to the bottom pressure switch as well as enough overhead room to remove the anode rods for servicing (18 inch (45.7 cm) min.).

## **Maximum Venting Lengths (Combined)**

**(Max. Vent = Exhaust + Intake)**

<b><u>Model Numbers</u></b>	<b><u>2 inch (5.1 cm) PVC, ABS &amp; CPVC</u></b>	<b><u>3 inch (7.6 cm) PVC, ABS &amp; CPVC</u></b>	<b><u>4 inch (10.2 cm) PVC, ABS &amp; CPVC</u></b>
EFR-60T-120	60 feet (18.3 m)	120 feet (36.6 m)	170 feet (51.9 m)
EF-60T-125	30 feet (9.14 m)	120 feet (36.6 m)	170 feet (51.9 m)
EF-60T-150	30 feet (9.14 m)	100 feet (30.5 m)	150 feet (45.7 m)
EF-60T-199	30 feet (9.14 m)	80 feet (24.4 m)	130 feet (39.6 m)
EF-100T-150	30 feet (9.14 m)	120 feet (36.6 m)	170 feet (51.9 m)
EF-100T-199	30 feet (9.14 m)	100 feet (30.5 m)	150 feet (45.7 m)
EF-100T-250	N/A	80 feet (24.4 m)	130 feet (39.6 m)
EF-100T-300	N/A	60 feet (18.3 m)	110 feet (33.5 m)
EF-100T-399	N/A	50 feet (15.3 m)	100 feet (30.5 m)

**NOTE: 2 inch (5.1 cm), 3 inch (7.6 cm) & 4 inch (10.2 cm) 90° Elbows = 5 feet (1.5 m) of pipe  
2 inch (5.1 cm), 3 inch (7.6 cm) & 4 inch (10.2 cm) 45° Elbows = 2.5 feet (.7 m) of pipe**

**For more detailed information, read the installation and operation manual provided with this water heater.**

**Questions? Contact Bradford White Technical Service at (800) 334-3393.**