

## **Why Trust Anyone Else?**

### **Properly connecting a dryer to an outside vent terminal is not as simple as it might seem....**

You need to be concerned with the total length of run of the pipe, the type of pipe you use, how many bends are in the pipe, and the design/shape of vent terminal at the end of the pipe.



The dryer blower only produces so much energy. This energy is offset by friction within the vent pipe. This is why you must be concerned with the total length of the pipe. Ninety degree angles also create friction. Each bend equals the friction the air would encounter if it ran through an additional 10 feet of straight pipe. Smooth metal pipe offers less friction than flexible pipe with lots of little ridges within the pipe. The vent cover shape and design is important as it also acts as a partial dam or blockage to the exiting air. A vent with a wide mouth opening say four inches or so or one with the little louver doors that swing wide open offer the least resistance. The smaller the vent opening the greater the amount of final resistance.

Use these clothes dryer vent tables to determine maximum potential distance between your dryer and the clothes dryer vent to overcome friction. Properly connecting a dryer to an outside vent terminal requires attention to the type and length of the pipe, the number of pipe bends and the shape of the dryer vent terminal.

### **Pay attention to the type of pipe you have and the vent configuration!**

*Use the tables below to calculate how far your vent can be from the dryer.*

#### **Vent cap with wide four inch opening or mini-louvers and smooth metal pipe**

- Total Pipe length can be 44 feet with 2 bends
- Total Pipe length can be 35 feet with 3 bends
- Total Pipe length can be 27 feet with 4 bends

#### **Vent cap with wide four inch opening or mini-louvers and flexible ribbed pipe**

- Total Pipe length can be 27 feet with 2 bends
- Total Pipe length can be 25 feet with 3 bends
- Total Pipe length can be 23 feet with 4 bends

#### **Vent cap with narrow 2.5 inch opening and smooth metal pipe**

- Total Pipe length can be 27 feet with 2 bends
- Total Pipe length can be 25 feet with 3 bends
- Total Pipe length can be 23 feet with 4 bends

#### **Vent cap with narrow 2.5 inch opening and flexible ribbed pipe**

- Total Pipe length can be 19 feet with 2 bends
- Total Pipe length can be 17 feet with 3 bends
- Total Pipe length can be 15 feet with 4 bends

The International Building Code and Underwriter Laboratories, limit the length of a dryer vent to a maximum of 25 feet. Every 45-degree bend in the vent reduces the total allowable length by 2 ½ feet; and every 90-degree bend reduces the allowable length by 5 feet. However, some dryers may have rated lengths that exceed those established by this standard, so it is best to check the manual for each dryer to determine the maximum allowable length of the dryer vent. There are also maximum allowable height requirements.

**Honest Home Inspection cares about you, your family, your home and your health. That is why we have provided this material.**

***Scott C. LeMarr***  
**Honest Home Inspections, LLC**