

Clothes Dryer Safety

Tales From the Crawlspace

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Clothes dryers evaporate the water from wet clothing by blowing hot air past them while they tumble inside a spinning drum. Heat is provided by an electrical heating element or gas burner. Some heavy garment loads can contain more than a gallon of water which, during the drying process, will become airborne water vapor and leave the dryer and home through an exhaust duct (more commonly known as a dryer vent).

A vent that exhausts moist air to the home's exterior has a number of requirements:

1. It should be connected. The connection is usually behind the dryer but may be beneath it. Look carefully to make sure it's actually connected!
2. It should not be restricted. Dryer vents are often made from flexible plastic or metal duct, which may be easily kinked or crushed where they exit the dryer and enter the wall or floor. This is often a problem since dryers tend to be tucked away into small areas with little room to work. Vent hardware is available which is designed to turn 90° in a limited space without restricting the flow of exhaust air.



One of the reasons that restrictions are a potential fire hazard is that, along with water vapor evaporated out of wet clothes, the exhaust stream carries lint – highly flammable particles of clothing made of cotton and polyester. Lint can accumulate in an exhaust duct, reducing the dryer's ability to expel heated water vapor, which then accumulates as heat energy within the machine. As the dryer overheats, mechanical failures can trigger sparks, which can cause lint trapped in the dryer vent to burst into flames. This condition can cause the whole house to burst into flames! Fires generally originate within the dryer but spread by escaping through the ventilation duct, incinerating trapped lint, and following its path into the building wall.

House fires caused by dryers are very common. The National Fire Protection Agency states that fires caused by dryers in 2005 were responsible for approximately 13,775 house fires, 418 injuries, 15 deaths, and \$196 million in property damage. Most of these incidents occur in residences and are the result of improper lint cleanup and maintenance. Fortunately, these fires are very easy to prevent. Clean the duct, correct problems.

We often see many dryer vents terminate in crawlspaces or attics where they deposit moisture, which can encourage the growth of mold, wood decay, or other material problems. Sometimes they will terminate just beneath attic ventilators. This is a defective installation. They must

terminate at the exterior and away from a door or window! Also, screens may NOT be present at the duct termination; they can accumulate lint and should be removed.