

## Dryer Vents

According to the National Fire Protection Association (NFPA), it is estimated that there are over 13,800 home structure fires in the U.S. where a dryer was the source of ignition. Dryer fires cause an average of seven deaths, 344 injuries, and \$233 million in damage every year.

Over a quarter of dryer fires are attributable to a buildup of lint. Another quarter of the fires start in the clothing itself as the dryer got too hot inside. Both conditions can be due to the dryer not being vented properly.

It is important for the safety of your family or tenants that dryer ducts are installed correctly, cleaned consistently (including cleaning the lint filter in the dryer with every load), and that the vents are inspected regularly.

There are three parts to a dryer vent. Starting from the exterior of the building and working our way to the back of the dryer, they are:

**1. External vent** – Code requires that the dryer exhaust be vented to the outside air. It cannot be vented into an attic, the living space, the crawlspace, the garage or a laundry room. Venting hot moist air into those areas can encourage mold and dry rot. More importantly, if the clothes in the dryer or lint in the ductwork catch on fire, it is critical to keep the fire contained in the venting until the heat and flame can be exhausted outside.

The external vent should have a flapper door, or a series of movable louvers that can open when the dryer is running, and then automatically close to keep animals and backdrafts from entering the duct.

There are dryer vents being sold that not only have a flapper door, but also a plastic grid on the outside. The grid is removable and is intended as a guard against birds.

However, the guard is constructed with a small enough grid that it quickly becomes clogged with lint. The manufacturer advises cleaning them regularly, but in the case of a busy apartment laundry room, it might need to be cleaned out every few days.



**2. Through Pipe** – Where the vent goes through any wall, it must be constructed out of solid metal. It should be attached to both the external vent, and the flexible pipe using only duct tape or clamps. Building code prohibits using screws or other fastening means that extend into the duct, as they can catch lint and reduce the efficiency of the vent. The connection to the external vent is especially important. If the vent pipe separates, hot, moist air can be pumped directly into the wall cavity.

**3. Dryer Connection** – There are various styles of flexible hoses made for connecting dryers. Flexible hoses must not exceed 8 feet in length. If the run is longer than 8 feet, rigid pipe must be used.

**Best** – Rigid pipe, as it doesn't trap lint.

**Better** – Semi-rigid metal ducting. It can trap lint, but it resists crushing forces better than aluminum foil ducting and has a higher fire resistance.

**OK** – Aluminum foil ducting. It can trap lint, and it's easily crushed if routed too tightly or the dryer gets pushed back too far.

**DO NOT** use plastic or vinyl vent hose, it is not approved by state code, and it is a serious fire hazard.

By installing the right dryer vent components and keeping them clean, a dryer will perform more efficiently, and the risk of a dryer fire is significantly reduced.

Remember, removing lint from the system starts with cleaning out the dryer's lint filter with every load of laundry.

The full California mechanical code for dryer vents can be found in section 504.4.

<https://up.codes/viewer/california/ca-mechanical-code-2022/chapter/5/exhaust-systems#504.4>

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