

Don't start a fire**Clean your dryer vent line regularly**

I have a background in hydraulic & pneumatic systems. I have worked on numerous dryer vent lines, which has led me to 2 important conclusions:

- Most vent lines have been installed by building contractors, *who have no concept of what an efficient vent line looks like.*

For a clothes dryer to work efficiently (= short drying cycle, little lint deposit and minimal energy consumption), the vent line should be:

- As straight as possible,
 - No more than 30 feet total length.
 - With maximum 3 elbows (*each elbow shortens overall length allowed by 4 feet!*).
- Rigid (hard) duct is preferred.
 - Flexible duct is acceptable, provided that it cannot be crushed when dryer is moved.
 - Aluminum foil or plastic duct expanded with a coil **should NEVER be used.**

If the vent line is too long, has too many elbows, or flexible tubing that is sagging, or partially crushed, this restricts the air flow, increases lint deposit and impacts negatively on dryer efficiency (= **higher energy costs**)

- Little thought has been given to how the vent line should be cleaned, **which is required regularly.**

Cleaning the dryer vent line requires:

1. Pulling the dryer out, **so I can access the rear.**
2. Detaching the vent line.
3. Removing the outside flap or louvers covering the exit point.
4. Running a rotating brush through the vent line.

In some cases, I need to attach a shopvac to the outlet, in order to remove all the lint.

If the dryer/washer are installed in an alcove with limited space, to clean the vent line, it is usually necessary to move the washer first (heavy, 2-man job!) in order to disconnect the dryer from the vent line. This increases the time required, and thus the cost significantly.

If there are no complications, this typically takes ½-1½ hours, depending upon ease of access.

However, most houses in this area were built prior to 1930, **and washers/dryers were added later.** As a result, I have encountered many poor, or outright dangerous, installations of vent lines. When such are encountered, I recommend an upgrade according to the principles outlined above

The ideal dryer vent line has no elbows, and goes straight through the wall to the outside. This provides maximum velocity in the vent line, which not only minimizes the drying time (= energy savings), but also largely eliminates the settling of lint in the vent line.

When the dryer is installed in the basement, this is not possible. In this case, the vent line should be designed with as few turns as possible, and using only long radius elbows ('sweeps').

If part of the vent line is to be hidden behind the walls in a finished basement, it is critical that it be designed so that it can be cleaned with a rotating brush (also see page 2).

Foil covered vents with spiral spring

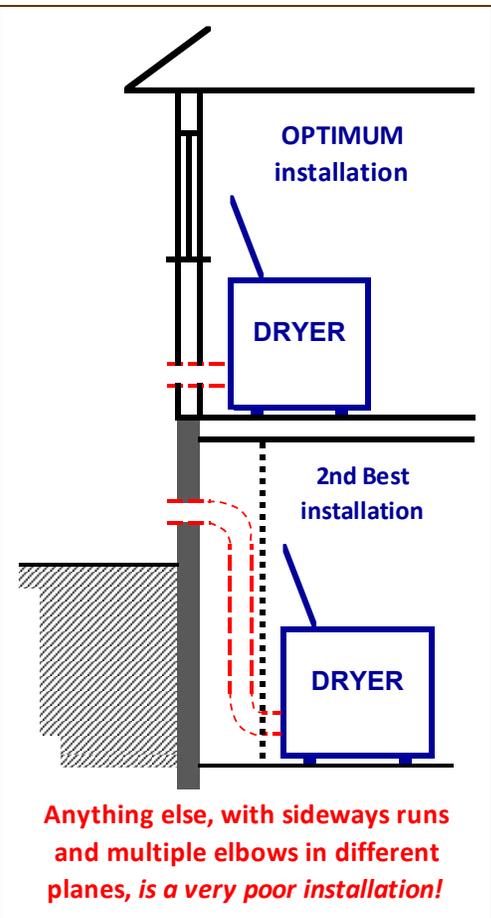
These should be avoided at all costs. They not only rip during cleaning, but they are easily damaged during installation. **Should never be used behind walls.**

The white plastic film version is against code in most (all?) towns by now. I don't know whether the foil type is still allowed, **but I decline to work on them** (*other than replacing them with rigid or semi-rigid ducts*).

While the foil covered flexible line is super flexible:

1. It is easily crushed, when you push the dryer back towards the wall.
2. It easily rips during installation.
3. It easily rips during cleaning.

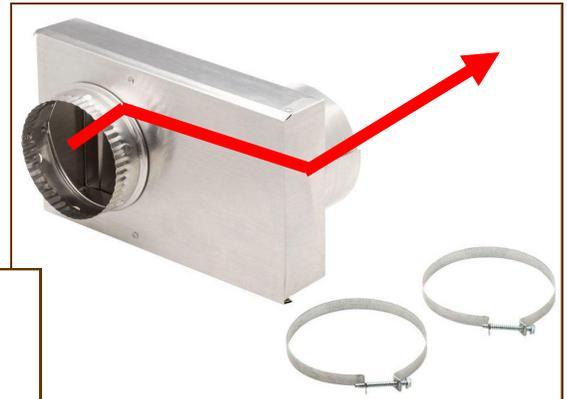
If you have one of these devices in your dryer vent line, it must be replaced with hard or semi-rigid duct components.





#1: Vent line was crushed behind the dryer, AND attached with duct tape (NOT acceptable), which ripped as dryer was pushed back towards the wall.

Avoid 'space saving' fittings behind finished walls (they can't be cleaned without breaking the wall open!).



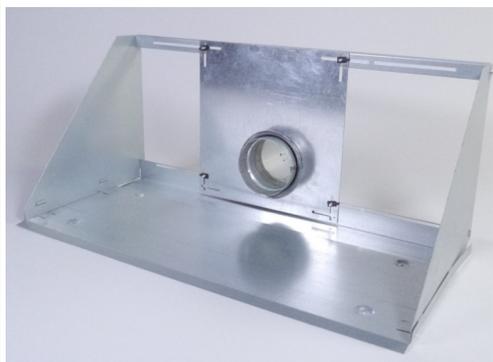
#2: This vent line ripped, where it was pulled behind the gas line (presumably to hold it in place).

Correct materials to replace it: \$35 (in 2019).



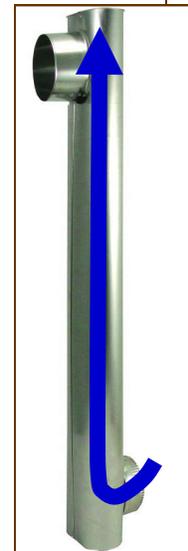
#3: Don't start a fire. Clean your dryer vent line.

To minimize the distance from the wall to the dryer, consider installing a 'Hard Duck' adaptor behind the dryer (see www.hardduck.com).



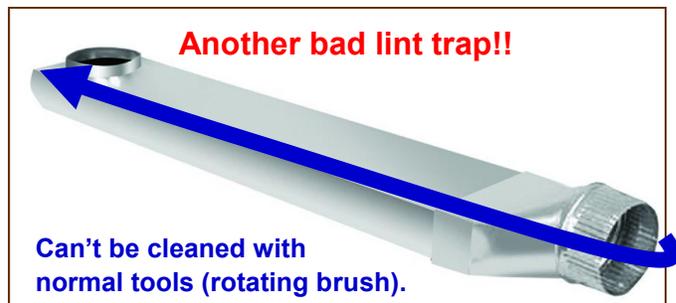
This kit allows access to the vent line by pulling the dryer straight out (without having to move the washer).

With this option, cleaning the vent line becomes a 10-15 minute job.



'Skinny Duct Vent'
Bad lint trap!!

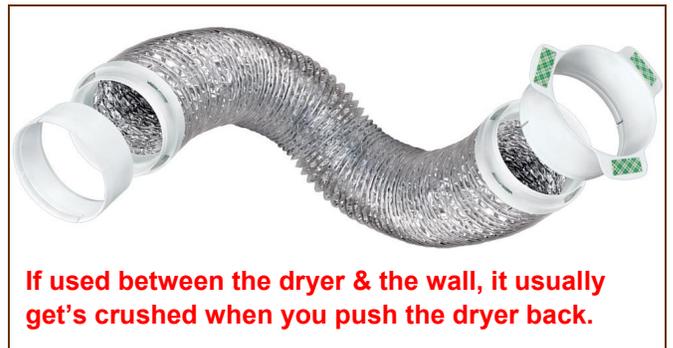
The rotating cleaning brush goes up, and gets stuck in the dead end (there is no way to get the brush to make a hard 90° turn).



Another bad lint trap!!

Can't be cleaned with normal tools (rotating brush).

Avoid the flexible tubes with spiral reinforcement:



If used between the dryer & the wall, it usually gets crushed when you push the dryer back.

What you spend on a hard duct (& possibly Hard Duck) installation, comes back as savings when you clean the vent line in 15 minutes each year.