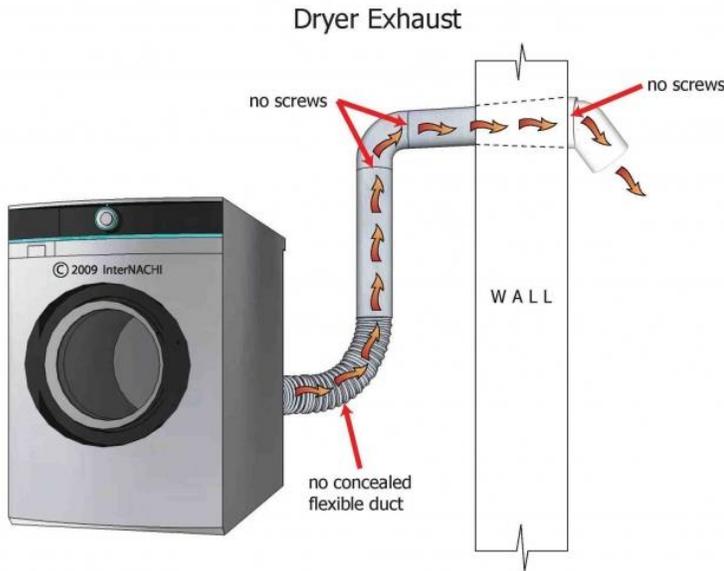


Clothe Dryer Exhaust

The clothes dryer must vent directly to the outdoors, unless it is a ventless dryer equipped with a condensate drain.

Devices that allow moisture and heat to vent back into the home should not be used. Dryer exhaust ducts must terminate at the exterior of the building.



Moisture

A clothes dryer will vent about a gallon of water for each load of laundry. If the dryer vent discharges into a crawlspace, attic, or other building cavity, the potential for moisture-related damage is significant. Clothes dryers must vent directly to the outside.

Dryers should use approved exhaust ducts. Ducts made of vinyl, nylon or foil are not recommended. If used, they will void the warranty of most dryers. Spiral-duct designs often trap lint, which can clog the duct, requiring the dryer to work harder and longer to dry clothes and causing it to increase the dryer's temperature. Not only is a poorly exhausting dryer less efficient, it can also be a fire hazard due to the flammability of the accumulated lint. The use of PVC pipe for dryer exhaust ducts is also not allowed by modern building standards.

Metal

According to the requirements of the 2009 International Residential Code (IRC) M1502, the clothes dryer exhaust duct should be made of metal, with No. 28-gauge thickness, a smooth interior finish, and a duct diameter of 4 inches.

Maximum Length

Short, straight, horizontal duct runs are the most efficient. The size and maximum length of the exhaust duct shall be determined by the dryer manufacturer's installation instructions.

One best practice is a duct length of no more than 25 feet from the wall to the outlet terminal, including the equivalent length for any fittings. The 2012 IRC M1502.4.4.1 allows a maximum length of 35 feet from the connection to the transition duct (from the dryer to the outlet terminal). The maximum length of the exhaust duct is reduced in accordance with the following:

DRYER EXHAUST DUCT FITTING TYPE	EQUIVALENT LENGTH
4-inch radius, mitered 45-degree elbow	2.5 feet
4-inch radius, mitered 90-degree elbow	5 feet

The maximum length of the exhaust duct does not include the transition duct. If the exhaust duct is concealed within the building's construction, the length of the exhaust duct should be identified on a permanent label or tag located within 6 feet of the exhaust duct connection.

Transition



The transition duct (the visible piece of duct connecting the dryer to the wall area) can be up to 8 feet long and should be listed in accordance with UL-2158A. There are some semi-rigid metal transition duct products that are UL-listed. Transition ducts must be visible and not concealed within construction.

Garage



Another best practice is to restrict the dryer exhaust duct from passing through an attached garage. Ducts in the garage or penetrating the walls or ceilings separating the dwelling from the garage must be constructed of minimum No. 26-gauge sheet steel or other approved material, having no openings into the garage.

Support

The duct should be secured in place and supported at intervals not to exceed 12 feet. One best practice recommends supports installed at 4-foot intervals. Sags in the duct must be avoided.

Termination



The exhaust duct should terminate outside the building at least 3 feet from any building opening, and at least 10 feet from an air conditioner or heat pump condenser. The duct termination should be fitted with a closeable gravity or automatic damper (a backdraft damper). A screen may not be installed at the duct terminus (2009 IRC M1502.3), as it can trap debris, which poses a fire hazard.

Hazards

The leading cause of fires from clothes dryers is the failure to clean the lint and other debris that can accumulate in and around them.

- Always use a lint filter or screen.
- Clean the lint filter before or after each load of laundry.
- Remove any visible lint within the dryer.
- At least once a year, have a professional technician clean the dryer exhaust pipe.
- Gas dryers should be cleaned and serviced regularly by a professional.
- Follow the manufacturer's operating instructions and don't overload the dryer. Also, don't attempt to dry soaking wet laundry that hasn't been properly wrung out or gone through a washing machine's spin cycle to remove excess moisture.
- Turn off the dryer when leaving home and before going to bed.
- Install a fire extinguisher in the laundry area.
- Install a smoke alarm in the laundry area.
- Install a CO alarm in the laundry area for a gas dryer.