

# Garage Safety

An attached garage is a garage that is physically attached to a house. Fires that begin in attached garages are more likely to spread to living areas than fires that originate in detached garages. For this reason, combined with the multitude of flammable materials commonly found in garages, attached garages should be adequately sealed from living areas. A properly sealed attached garage will ideally restrict the potential spread of fire long enough to allow the occupants time to escape the home and hopefully long enough for the fire department to extinguish the fire before spreading to the living areas.

Water heaters are commonly placed in the garage and in older homes, furnaces also. Oil or gasoline may leak from your automobile, stored items such as gasoline, charcoal lighter fluid, paints, varnishes, degreasers, etc. may off-gas or leak and cause a build-up of flammable vapors. These vapors may then ignite from the flames in the water heater or furnace and possibly from electrical problems in automobiles. Additionally, electrical issues in automobiles are sometimes responsible for resting automobile fires.

To help guard against these hazards, there are a number of requirements a builder has for homes with an attached vehicle garage. Finished drywall has to be installed with a thickness of 1/2 to 5/8 inch (depending on which wall or ceiling), which is normally thicker than what is used in the rest of the home. The door to the living spaces has to be fire-rated and the opening has to have weather-stripping that completely seals around the door to help prevent vapors and automobile emissions from entering the home's interior.

Fire-rated requirements also apply to any breaches in the drywall (fire wall/ceiling) but are seldom if ever called out by the building departments. If your garage has a pull-down stair, consider having the thin wood panel covered with a fire-rated material such as 5/8 inch thick drywall. Any openings around water, lines, gas lines etc. should be sealed. Anytime the drywall becomes damaged, it needs to be repaired.

If you want to add (or already have) HVAC ducts installed to heat and cool your garage, consider that this will allow whatever is in the garage air to mix with the conditioned air in the interior spaces. And the duct system compromises the integrity of the firewall/ceiling.

Many home with basements have a roll-up door and the area is sometimes referred to as a boat garage. This is a convenient place for storage of lawn equipment, gas cans and many other materials. Builders usually do not finish these garages and often times do not install interior doors or fire-rated doors. Consider that all of the bad things the vehicle garage is preventing are not being prevented in this garage. Additionally detached garages that are near the home may also prevent a fire hazard to the home if fire-rated elements were not installed.

Please consider how your garage is built, how it is being used and make changes if necessary to improve the safety of you and your family. Unhealthy air (from off-gassing) and fires are preferably restricted to a detached garage or shed.