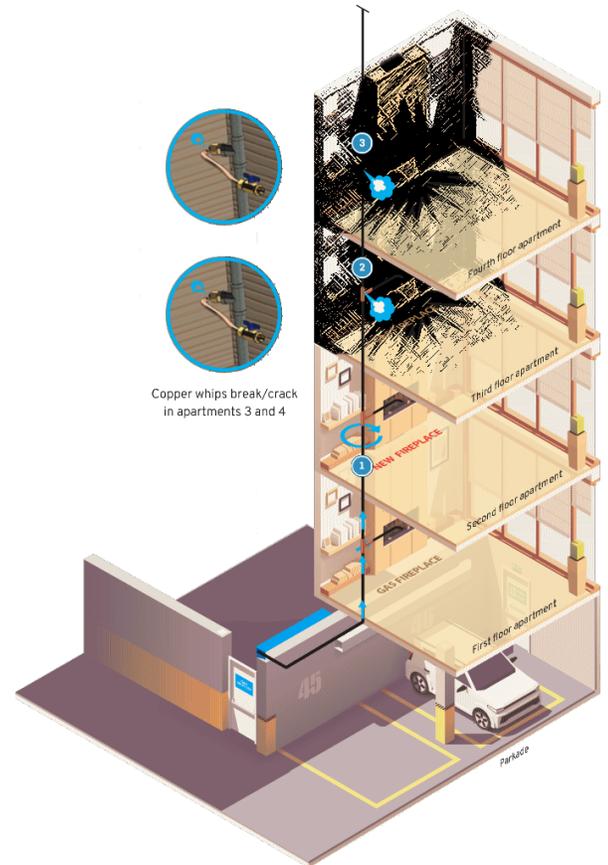


Richmond Apartment Explosion Incident Investigation

An explosion and fire caused by unsafe work practices resulted in an apartment building being evacuated. The incident took place on the second floor of a four-story apartment complex, where a homeowner had hired licensed gas contractors to replace an older natural draft gas fireplace with a new, more energy-efficient direct vent variety.

Natural gas supply in the building is distributed through a gas piping system in the lower level parkade, which is then branched to a number of vertical gas pipes known as risers which provide gas to the individual suites, including the fireplaces.



Each of the fireplaces in the building is connected to the gas riser using a narrow copper pipe known as a “whip”, attached to a T-fitting in the riser. To accommodate the configuration of the new fireplace, the contractors working on the fireplace retrofit turned the gas riser pipe and T-fitting and pushed them out of the way. This caused the copper whips attached in the third and fourth floor suites to break/crack.

Because the gas fitters had not turned off the gas supply serving the riser, gas then leaked out of the broken/cracked whips and was ignited by a fireplace pilot light in a suite on the fourth floor, resulting in an explosion in suites on the third and fourth floor.

Luckily no one was seriously injured but the building had to be evacuated while the fire department extinguished the fire and there was significant damage to several suites and to common areas of the building.

Read the [Richmond Gas Explosion Incident Investigation](#) report.