

U.S. Fire Administration / National Fire Academy

# Coffee Break Training

## Topic: Temporary Construction Heating

**Learning objective:** The student shall be able to explain the requirements for indoor liquefied petroleum gas (LPG) storage and use during construction.

During construction or cold weather, contractors often use portable LPG heating units to dry wallboard compound, interior finishes, or simply to keep their workers warm.

Since LPG is a fire hazard due to its flammability and vapor density (about 1.6 times heavier than air), LPG containers used indoors must be regulated for safety.

Cylinders used indoors must not exceed 245 pounds water capacity (about 100 pounds LPG capacity) each. The aggregate LPG amount is not regulated unless cylinders are manifolded to supply a single heater.

When used indoors, cylinders with propane capacities greater than 2 pounds water capacity must have a manual shutoff valve and an excess-flow valve for vapor release.

Cylinder valves must be protected from damage. Containers having water capacities greater than 2.7 pounds and connected for use should be located on a solid, level surface. If necessary, cylinders should be secured to prevent falling or tipping.

Cylinders must meet Federal Department of Transportation specifications, including marking with contents-identifying labels.



Cylinders and the valve-protecting devices should be arranged to minimize the likelihood that escaping gas from the pressure relief device will impinge on the cylinder or adjacent cylinders. Heating appliances must be at least 6 feet from any cylinder. Blower- or radiant-type heaters must not be directed toward any cylinder within 20 feet of the heat source.

For additional information, refer to NFPA 1, *Uniform Fire Code*<sup>™</sup>, Chapters 16 and 69; *International Fire Code*<sup>®</sup>, Chapter 14; and NFPA 58, *Liquefied Petroleum Gas Code*<sup>™</sup>.