

U.S. Fire Administration / National Fire Academy

Coffee Break Training

Topic: Liquefied Petroleum Gas (LPG) Cylinder Exchange Storage

Learning objective: The student shall be able to identify the minimum safety distances required for liquefied petroleum gas (LPG) cylinders in storage as part of a cylinder exchange program.

LPG cylinder exchange stands have become a popular feature in the last several years. One can hardly visit a motor vehicle service station, convenience store, home improvement store, or supermarket without seeing the caged cylinders in a conspicuous spot.

In addition to the usual restrictions on ignition control, security, and warning signs in the area, the fire codes require specific distances between these storage cabinets and other exposures.

When the total quantity of LPG is 720 pounds (28.8 kg) or less, the *International Fire Code*[®] and NFPA 1, *Uniform Fire Code*[™] require cylinders awaiting resale be at least 5 feet (1524 mm) from openings into buildings and LPG dispensing facilities, 10 feet (3048 mm) from any combustible material and 20 (6096 mm) feet from motor vehicle fuel dispensers. Both allow storage within 5 feet (1524 mm) of any doorway or building opening when occupants have access to two means of egress, or 10 feet (3048 mm) if only a single exit exists.



This LPG cylinder exchange rack should be at least 20 feet (6096 mm) from the dispensing equipment.

If the amount of LPG exceeds 720 pounds (28.8 kg), the separation distances increase proportionally with the amount of fuel. Both codes have tables that provide specific distances from exposures.

For additional information, refer to *International Fire Code*[®], Chapter 38; NFPA 1, *Uniform Fire Code*[™], Chapter 69; or NFPA 58, *Liquefied Petroleum Gas Code*.