

classified as a Group H-2 occupancy shall be enclosed with fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both. The fire-resistance rating of the enclosure shall be not less than 2 hours where the area is not more than 3,000 square feet (279 m<sup>2</sup>), and not less than 4 hours where the area is greater than 3,000 square feet (279 m<sup>2</sup>).

**[F] 426.1.3 Conveyors.** Conveyors, chutes, piping and similar equipment passing through the enclosures of rooms or spaces shall be constructed dirt tight and vapor tight, and be of *approved* noncombustible materials complying with Chapter 30.

**[F] 426.1.4 Explosion control.** Explosion control shall be provided as specified in the *International Fire Code*, or spaces shall be equipped with the equivalent mechanical *ventilation* complying with the *International Mechanical Code*.

**[F] 426.1.5 Grain elevators.** Grain elevators, malt houses and buildings for similar occupancies shall not be located within 30 feet (9144 mm) of interior *lot lines* or structures on the same *lot*, except where erected along a railroad right-of-way.

**[F] 426.1.6 Coal pockets.** Coal pockets located less than 30 feet (9144 mm) from interior lot lines or from structures on the same lot shall be constructed of not less than Type IB construction. Where more than 30 feet (9144 mm) from interior *lot lines*, or where erected along a railroad right-of-way, the minimum type of construction of such structures not more than 65 feet (19 812 mm) in *building height* shall be Type IV.

**[F] 426.1.7 Tire rebuilding.** Buffing operations shall be located in a room separated from the remainder of the building housing the tire rebuilding or tire recapping operation by a 1-hour *fire barrier*.

**Exception:** Buffing operations are not required to be separated where all of the following conditions are met:

1. Buffing operations are equipped with an *approved* continuous automatic water-spray system directed at the point of cutting action.
2. Buffing machines are connected to particle-collecting systems providing a minimum air movement of 1,500 cubic feet per minute (cfm) (0.71 m<sup>3</sup>/s) in volume and 4,500 feet per minute (fpm) (23 m/s) in-line velocity.
3. The collecting system shall discharge the rubber particles to an *approved* outdoor noncombustible or fire-resistant container, which is emptied at frequent intervals to prevent overflow.

## SECTION 427 MEDICAL GAS SYSTEMS

**[F] 427.1 General.** Medical gases at health care-related facilities intended for patient or veterinary care shall comply with Sections 427.2 through 427.2.3 in addition to requirements of Chapter 53 of the *International Fire Code*.

**[F] 427.2 Interior supply location.** Medical gases shall be located in areas dedicated to the storage of such gases without other storage or uses. Where containers of medical gases in quantities greater than the permitted amount are located inside the buildings, they shall be located in a 1-hour exterior room, 1-hour interior room or a gas cabinet in accordance with Section 427.2.1, 427.2.2 or 427.2.3, respectively. Rooms or areas where medical gases are stored or used in quantities exceeding the maximum allowable quantity per control area as set forth in Tables 307.1(1) and 307.1(2) shall be in accordance with Group H occupancies.

**[F] 427.2.1 One-hour exterior room.** A 1-hour exterior room shall be a room or enclosure separated from the remainder of the building by fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both, with a fire-resistance rating of not less than 1 hour. Openings between the room or enclosure and interior spaces shall be provided with self-closing smoke- and draft-control assemblies having a fire protection rating of not less than 1 hour. Rooms shall have not less than one exterior wall that is provided with not less than two vents. Each vent shall have a minimum free air opening of not less than 36 square inches (232 cm<sup>2</sup>) for each 1,000 cubic feet (28 m<sup>3</sup>) at normal temperature and pressure (NTP) of gas stored in the room and shall be not less than 72 square inches (465 cm<sup>2</sup>) in aggregate free opening area. One vent shall be within 6 inches (152 mm) of the floor and one shall be within 6 inches (152 mm) of the ceiling. Rooms shall be provided with not fewer than one automatic fire sprinkler to provide container cooling in case of fire.

**[F] 427.2.2 One-hour interior room.** Where an exterior wall cannot be provided for the room, a 1-hour interior room or enclosure shall be provided and separated from the remainder of the building by fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both, with a fire-resistance rating of not less than 1 hour. Openings between the room or enclosure and interior spaces shall be provided with self-closing smoke- and draft-control assemblies having a fire protection rating of not less than 1 hour. An automatic sprinkler system shall be installed within the room. The room shall be exhausted through a duct to the exterior. Supply and exhaust ducts shall be enclosed in a 1-hour rated shaft enclosure from the room to the exterior. Approved mechanical ventilation shall comply with the *International Mechanical Code* and be provided with a minimum rate of 1 cubic foot per minute per square foot (0.00508 m<sup>3</sup>/s/m<sup>2</sup>) of the area of the room.

**[F] 427.2.3 Gas cabinets.** Gas cabinets shall be constructed in accordance with Section 5003.8.6 of the *International Fire Code* and shall comply with the following:

1. Cabinets shall be exhausted to the exterior through a dedicated exhaust duct system installed in accordance with Chapter 5 of the *International Mechanical Code*.
2. Supply and exhaust ducts shall be enclosed in a 1-hour rated shaft enclosure from the cabinet to the exterior. The average velocity of ventilation at the face of access