

415.8.2.1.2 Hazardous production materials. The maximum quantities of hazardous production materials (HPM) stored in a single fabrication area shall not exceed the maximum allowable quantities per *control area* established by Tables 307.1(1) and 307.1(2). [F]

415.8.2.2 Separation. Fabrication areas, whose sizes are limited by the quantity of hazardous materials allowed by Table 415.8.2.1.1, shall be separated from each other, from *corridors* and from other parts of the building by not less than 1-hour *fire barriers* constructed in accordance with Section 707 or *horizontal assemblies* constructed in accordance with Section 712, or both. [F]

Exceptions:

1. Doors within such *fire barrier* walls, including doors to *corridors*, shall be only self-closing *fire door assemblies* having a *fire protection rating* of not less than $\frac{3}{4}$ hour.
2. Windows between fabrication areas and corridors are permitted to be fixed glazing *listed* and labeled for a *fire protection rating* of at least $\frac{3}{4}$ hour in accordance with Section 715.

415.8.2.3 Location of occupied levels. Occupied levels of fabrication areas shall be located at or above the first *story above grade plane*. [F]

415.8.2.4 Floors. Except for surfacing, floors within fabrication areas shall be of noncombustible construction. [F]

Openings through floors of fabrication areas are permitted to be unprotected where the interconnected levels are used solely for mechanical equipment directly related to such fabrication areas (see also Section 415.8.2.5).

Floors forming a part of an occupancy separation shall be liquid tight.

415.8.2.5 Shafts and openings through floors. Elevator shafts, vent shafts and other openings through floors shall be enclosed when required by Section 708. Mechanical, duct and piping penetrations within a fabrication area shall not extend through more than two floors. The *annular space* around penetrations for cables, cable trays, tubing, piping, conduit or ducts shall be sealed at the floor level to restrict the movement of air. The fabrication area, including the areas through which the ductwork and piping extend, shall be considered a single conditioned environment. [F]

415.8.2.6 Ventilation. Mechanical exhaust ventilation at the rate of not less than 1 cubic foot per minute per square foot [$0.0051 \text{ m}^3/(\text{s} \cdot \text{m}^2)$] of floor area shall be provided throughout the portions of the fabrication area where HPM are used or stored. The exhaust air duct system of one fabrication area shall not connect to another duct system outside that fabrication area within the building. [F]

A ventilation system shall be provided to capture and exhaust gases, fumes and vapors at workstations.

Two or more operations at a workstation shall not be connected to the same exhaust