

415.8.5 Storage of hazardous production materials. [F]

415.8.5.1 General. Storage of HPM in fabrication areas shall be within *approved* or *listed* storage cabinets or gas cabinets or within a workstation. The storage of HPM in quantities greater than those listed in Section 1804.2 of the *UAE Fire & Life Safety Code of Practice* shall be in liquid storage rooms, HPM rooms or gas rooms as appropriate for the materials stored. The storage of other hazardous materials shall be in accordance with other applicable provisions of this code and the *UAE Fire & Life Safety Code of Practice*.

415.8.5.2 Construction. [F]

415.8.5.2.1 HPM rooms and gas rooms. HPM rooms and gas rooms shall be separated from other areas by *fire barriers* constructed in accordance with Section 707 or *horizontal assemblies* constructed in accordance with Section 712, or both. The minimum *fire-resistance rating* shall be 2 hours where the area is 300 square feet (27.9 m²) or more and 1 hour where the area is less than 300 square feet (27.9 m²). [F]

415.8.5.2.2 Liquid storage rooms. Liquid storage rooms shall be constructed in accordance with the following requirements: [F]

1. Rooms in excess of 500 square feet (46.5 m²) shall have at least one exterior door *approved* for Civil Protection and Safety Department of Civil Defence access.
2. Rooms shall be separated from other areas by *fire barriers* constructed in accordance with Section 707 or *horizontal assemblies* constructed in accordance with Section 712, or both. The *fire-resistance rating* shall be not less than 1 hour for rooms up to 150 square feet (13.9 m²) in area and not less than 2 hours where the room is more than 150 square feet (13.9 m²) in area.
3. Shelving, racks and wainscoting in such areas shall be of noncombustible construction or wood of not less than 1-inch (25 mm) nominal thickness.
4. Rooms used for the storage of Class I flammable liquids shall not be located in a basement.

415.8.5.2.3 Floors. Except for surfacing, floors of HPM rooms and liquid storage rooms shall be of noncombustible liquid-tight construction. Raised grating over floors shall be of noncombustible materials. [F]

415.8.5.3 Location. Where HPM rooms, liquid storage rooms and gas rooms are provided, they shall have at least one *exterior wall* and such wall shall be not less than 30 feet (9144 mm) from *plot lines*, including *plot lines* adjacent to *public ways*. [F]

415.8.5.4 Explosion control. Explosion control shall be provided where required by Section 414.5.1. [F]

415.8.5.5 Exits. Where two exits are required from HPM rooms, liquid storage rooms and gas rooms, one shall be directly to the outside of the building. [F]

415.8.5.6 Doors. Doors in a *fire barrier* wall, including doors to *corridors*, shall be self-closing *fire door assemblies* having a *fire-protection rating* of not less than ³/₄ hour. [F]