

SPECIAL DETAILED REQUIREMENTS BASED ON OCCUPANCY AND USE

[F] 415.8.5 Waterproof room. Rooms or areas used for the storage of water-reactive solids and liquids shall be constructed in a manner that resists the penetration of water through the use of waterproof materials. Piping carrying water for other than *approved automatic sprinkler systems* shall not be within such rooms or areas.

[F] 415.9 Group H-2. Occupancies in Group H-2 shall be constructed in accordance with Sections 415.9.1 through 415.9.3 and the *International Fire Code*.

[F] 415.9.1 Flammable and combustible liquids. The storage, handling, processing and transporting of flammable and combustible liquids in Group H-2 and H-3 occupancies shall be in accordance with Sections 415.9.1.1 through 415.9.1.9, the *International Mechanical Code* and the *International Fire Code*.

[F] 415.9.1.1 Mixed occupancies. Where the storage tank area is located in a building of two or more occupancies and the quantity of liquid exceeds the maximum allowable quantity for one *control area*, the use shall be completely separated from adjacent occupancies in accordance with the requirements of Section 508.4.

[F] 415.9.1.1.1 Height exception. Where storage tanks are located within a building not more than one story above grade plane, the height limitation of Section 504 shall not apply for Group H.

[F] 415.9.1.2 Tank protection. Storage tanks shall be noncombustible and protected from physical damage. *Fire barriers* or *horizontal assemblies* or both around the storage tanks shall be permitted as the method of protection from physical damage.

[F] 415.9.1.3 Tanks. Storage tanks shall be *approved* tanks conforming to the requirements of the *International Fire Code*.

[F] 415.9.1.4 Leakage containment. A liquid-tight containment area compatible with the stored liquid shall be provided. The method of spill control, drainage control and secondary containment shall be in accordance with the *International Fire Code*.

Exception: Rooms where only double-wall storage tanks conforming to Section 415.9.1.3 are used to store Class I, II and IIIA flammable and combustible liquids shall not be required to have a leakage containment area.

[F] 415.9.1.5 Leakage alarm. An *approved* automatic alarm shall be provided to indicate a leak in a storage tank and room. The alarm shall sound an audible signal, 15 dBA above the ambient sound level, at every point of entry into the room in which the leaking storage tank is located. An *approved* sign shall be posted on every entry door to the tank storage room indicating the potential hazard of the interior room environment, or

**[F] TABLE 415.6.2
DETACHED BUILDING REQUIRED**

| A DETACHED BUILDING IS REQUIRED WHERE THE QUANTITY OF MATERIAL EXCEEDS THAT LISTED HEREIN | | | |
|---|---------------------------|---|------------------------------------|
| Material | Class | Solids and Liquids (tons) ^{a, b} | Gases (cubic feet) ^{a, b} |
| Explosives | Division 1.1 | Maximum Allowable Quantity | Not Applicable |
| | Division 1.2 | Maximum Allowable Quantity | |
| | Division 1.3 | Maximum Allowable Quantity | |
| | Division 1.4 | Maximum Allowable Quantity | |
| | Division 1.4 ^c | Maximum Allowable Quantity | |
| | Division 1.5 | Maximum Allowable Quantity | |
| | Division 1.6 | Maximum Allowable Quantity | |
| Oxidizers | Class 4 | Maximum Allowable Quantity | Maximum Allowable Quantity |
| Unstable (reactives) detonable | Class 3 or 4 | Maximum Allowable Quantity | Maximum Allowable Quantity |
| Oxidizer, liquids and solids | Class 3 | 1,200 | Not Applicable |
| | Class 2 | 2,000 | Not Applicable |
| Organic peroxides | Detonable | Maximum Allowable Quantity | Not Applicable |
| | Class I | Maximum Allowable Quantity | Not Applicable |
| | Class II | 25 | Not Applicable |
| | Class III | 50 | Not Applicable |
| Unstable (reactives) nondetonable | Class 3 | 1 | 2,000 |
| | Class 2 | 25 | 10,000 |
| Water reactives | Class 3 | 1 | Not Applicable |
| | Class 2 | 25 | Not Applicable |
| Pyrophoric gases | Not Applicable | Not Applicable | 2,000 |

For SI: 1 ton = 906 kg, 1 cubic foot = 0.02832 m³, 1 pound = 0.454 kg.

- For materials that are detonable, the distance to other buildings or lot lines shall be in accordance with Section 415.6 of this code or Chapter 56 of the *International Fire Code* based on trinitrotoluene (TNT) equivalence of the material, whichever is greater.
- "Maximum Allowable Quantity" means the maximum allowable quantity per control area set forth in Table 307.1(1).
- Limited to Division 1.4 materials and articles, including articles packaged for shipment, that are not regulated as an explosive under Bureau of Alcohol, Tobacco, Firearms and Explosives (BATF) regulations or unpackaged articles used in process operations that do not propagate a detonation or deflagration between articles, provided that the net explosive weight of individual articles does not exceed 1 pound.