

Section 4.10. Distilleries

4.10.1. Scope

4.10.1.1. Application

- 1) This Section applies only to those areas or *buildings* in *distilleries* where *distilled beverage alcohols* are concentrated, blended, mixed, stored or packaged. (See Note A-4.10.1.1.(1).)
- 2) The storage, handling and use of *flammable liquids* or *combustible liquids* other than *distilled beverage alcohols* in a *distillery* shall conform to Part 4.
- 3) Where there is a conflict between the requirements of this Section and other requirements in Part 4, this Section shall govern.

4.10.2. General

4.10.2.1. Building Classification

- 1) Except as provided in Sentence (2), *buildings* or parts of *buildings* in which *distilled beverage alcohol* is distilled, processed or stored in bulk shall be classified as *high-hazard industrial occupancies*.
- 2) *Buildings* or parts of *buildings* used for the storage of *closed containers* of *distilled beverage alcohols* shall be classified as *medium-hazard industrial occupancies*.

4.10.3. Storage Tanks and Containers

4.10.3.1. Design, Fabrication and Testing

- 1) *Storage tanks*, wooden vats, barrels, drums or containers used for the storage or processing of *distilled beverage alcohols* shall be designed, fabricated and tested for the anticipated maximum working pressure, operating temperature, internal corrosion conditions and structural stresses to which they could be subjected.

4.10.3.2. Supports, Foundations and Anchorage

(See Note A-4.10.3.2.)

- 1) Supports, foundations and anchorage of *storage tanks* shall comply with Subsection 4.3.3., except that timber supports shall be permitted.
- 2) *Storage tank* supports having less than a 2 h *fire-resistance rating* shall be protected by an automatic fire suppression system.
- 3) The area underneath any *storage tank* greater than 1.2 m in diameter shall be protected by an automatic fire suppression system.

4.10.3.3. Storage Tank Vents

- 1) Normal and emergency vents shall be provided on *storage tanks* in conformance with good engineering practice. (See Note A-4.10.3.3.(1).)

4.10.4. Storage

4.10.4.1. Storage Tanks, Drums and Barrels

- 1) Where more than 25 000 L of *distilled beverage alcohol* in *storage tanks*, drums or barrels are stored inside *buildings*, such *buildings* shall be *sprinklered*.

4.10.4.2. Closed Containers and Storage Aids

- 1) Storage of *closed containers* of *distilled beverage alcohols*, packaging materials and empty bottles, drums, barrels and pallets shall be in conformance with Part 3.

4.10.5. Piping and Pumping Systems

4.10.5.1. Design and Installation

1) The design, fabrication, assembly and inspection of piping and pumping systems containing *distilled beverage alcohols* shall be suitable for the anticipated maximum working pressures, operating temperatures, internal corrosion conditions and structural stresses to which they could be subjected. (See Note A-4.10.5.1.(1).)

4.10.6. Ventilation

4.10.6.1. Ventilation

1) Natural or mechanical ventilation shall be provided for all areas where alcohol vapours are released from *storage tanks* or process equipment under normal operating conditions, to prevent the concentration of vapours from exceeding 25% of the *lower explosive limit*, measured 1.5 m from any equipment or from any opening subject to vapour release.

4.10.7. Spill Control

4.10.7.1. Spill Control

1) Emergency drainage systems shall be provided to direct any spilled or leaked *distilled beverage alcohol* to a safe location.

4.10.8. Fire Protection

4.10.8.1. Portable Extinguishers

1) Except as permitted in Sentence (2), in maturing warehouses, at least one portable extinguisher having a rating of 4-A:30-B:C shall be located adjacent to each *exit*.

2) Hose stations are permitted to be installed in lieu of portable extinguishers at locations required in Sentence (1), and spaced so that the travel distance to the nearest hose is not greater than 25 m.

3) At least one portable extinguisher having a rating of 30-B:C shall be located on each industrial lift truck.

4.10.8.2. Standpipe and Hose Systems

1) Except as provided in Sentence (2), standpipe and hose systems shall be provided and installed in *distilleries* in conformance with Article 2.1.3.1.

2) Where a *building* is *sprinklered* in conformance with Sentence 2.1.3.1.(1), small hose (38 mm) stations are permitted to be supplied from interior sprinkler piping.