

Table 3-2.1

|   | Light<br>(Low)<br>Hazard<br>Occupancy | Ordinary<br>(Moderate)<br>Hazard<br>Occupancy | Extra<br>(High)<br>Hazard<br>Occupancy |
|---|---------------------------------------|---|--|
| Minimum rated single extinguisher       | 2-A                                   | 2-A   | 4-A                                    |
| Maximum floor area per unit of A        | 3,000 sq. ft.                         | 1,500 sq. ft.                                 | 1,000 sq. ft.                          |
| Maximum floor area for extinguisher     | 11,250 sq. ft.                        | 11,250 sq. ft.                                | 11,250 sq. ft.                         |
| Maximum travel distance to extinguisher | 75 ft.                                | 75 ft.  | 75 ft.                                 |

\*Two 2½ gal water type extinguishers can be used to fulfill the requirements of one 4-A rated extinguisher.

A 52.07 (11) ACCEPTANCE OF THE ATRIUM SMOKE CONTROL SYSTEM. The following is a reprint of an approved test procedure:

Acceptance test procedure for the atrium smoke management system.

1. All testing shall be in the presence of a representative from the department.
2. All exhaust and supply-air systems shall be operationally balanced and tested. Complete air-balance reports shall be recorded on each piece of equipment, all exhaust inlets, and all supply outlets.
3. Each automatic initiating device shall be tripped to observe proper function. This test shall be performed on both normal and emergency power.
4. Each manual switch and override shall be tripped to observe proper function. This test shall be performed on both normal and emergency power.
5. All indicator lights shall display the appropriate detection and operating status.
6. Select a location on the first floor approximately 5 ft. outside the perimeter of the atrium opening. The location shall be acceptable to the department's representative.
7. Prepare three two-minute smoke bombs.
8. Ignite all three smoke bombs. When they become fully active, manually activate the atrium smoke-management system.
9. Observe and record the results.
10. After all smoke has been cleared, select an additional location on an upper level acceptable to the department's representative.
11. Prepare three more two-minute smoke bombs.
12. Ignite all three smoke bombs. When they become fully activated, again manually activate the atrium smoke-management system.
13. Observe and record the results.
14. Acceptable performance shall be movement of the smoke from the source into the atrium and out through exhaust at the top of the atrium. Smoke migration down the corridors shall be limited to no more than a light haze at a point 25 ft from the source. Furthermore, the balconies around the perimeter of the atrium shall maintain a smoke-free zone.
15. Upon the successful completion of these tests, a signed and dated copy of the department's acceptance shall be filed with the test records and a copy shall be maintained with the quarterly test log.
16. A copy of this acceptance test procedure and all plans, specifications, and calculations for the building shall be maintained with the quarterly test log.

*Should be on 430*

## Appendix A

A52.015 FIRE CLASSIFICATIONS. The following information is provided to assist building owners and designers in determining the fire classifications of typical building usage or occupancy:

| FIRE CLASSIFICATION | DESCRIPTION OF FUEL LOAD   | TYPICAL EXAMPLES  |
|---------------------|--|---|
| Low Hazard          | Buildings or structures used for the manufacture or storage of noncombustible or low hazard materials, that do not ordinarily burn rapidly, such as but not limited to asbestos, chalk, non-alcoholic beverages, brick and masonry, ceramic products, gypsum, food products, glass and metals.   | Metal fabricating and assembly; offices; foundries; water pumping and waste water treatment plants; schoolrooms; churches; assembly halls; telephone exchanges; and similar occupancies with slight combustibles.   |
| Moderate Hazard     | Buildings and structures used for the manufacture or storage of moderate hazard materials, which are likely to burn with moderate rapidity, but which do not produce either poisonous gases, fumes or explosives, such as but not limited to: cloth, burlap and paper bags; bamboo and rattan; canvas and leather belting; baskets; books and paper in rolls or packs; boots and shoes; buttons; cardboard and cardboard boxes; clothing; cordage; furniture; furs; glue, mucilage, paste and size; linoleum; silk; soap; sugar; tobacco, cigars, cigarettes and snuff; and wax candles. | Mercantile storage and display; auto showrooms; aircraft storage; light manufacturing; warehouses not classified as low or high hazard; school shop areas; leather enameling or japanning operations; livestock shelters; lumber yards; motor vehicle repair shops; petroleum warehouses for storage of lubricating oils with a flash point of 200°F. or higher; photo engraving operations; public garages; stables; and upholstering and mattress manufacturing.  |
| High Hazard         | Buildings and structures used for the storage, manufacture or processing of; highly combustible or explosive products or materials, which are likely to burn with extreme rapidity or which may produce poisonous fumes or explosions; highly corrosive, toxic or noxious alkalies, acids or other liquids or chemicals producing flame, fumes, poisonous, irritant or corrosive gases; materials producing explosive mixtures or dusts or which result in the division of matter into fine particles subject to spontaneous ignition.   | Woodworking; aircraft servicing; warehouses with material piled 15 feet or higher in solid piles or 12 feet or higher in piles with horizontal channels; ammunition, explosive and firework manufacture; artificial flowers and synthetic leather manufacture; acetylene gas and gases under pressure of 15 pounds or more and in quantities of greater than 2500 cubic feet; celluloid and celluloid products; cereal; feed, flour and grist mills; cotton batting and waste processes; cotton apparel making; dry cleaning establishments using or storing more than 3 gallons of gasoline or flammable liquids with a flash point under 100°F. or more than 60 gallons of flammable liquids with a flash point between 100°F. and 140°F.; feather renovating; fruit ripening processes; grain elevators; hydrogenation processes; industries employing solids or substances which ignite or produce flammable gases on contact with water; storage of kerosene, fuel, lubricating oils and combustible liquids with a flash point under 200°F.; match manufacture and storage; metal enameling and japanning; nitrocellulose film exchanges and laboratories; paint and varnish manufacture; petroleum manufacture; processing of paper or cardboard in loose form; pyroxylin product storage and manufacture; and smoke houses. |