

SPRINKLER PROTECTION BASICS: HAZARD CLASSIFICATION

LIGHT HAZARD:

- Quantity of combustibles is low (less than 10 pounds of wood equivalent per square foot) **and/or**
- Combustibility of contents is low **and**
- Low rates of heat release expected.
- Examples:
 - Church seating areas
 - Corridors
 - Office areas
 - Dwelling units
 - Combustible concealed spaces (not used for storage)

ORDINARY HAZARD, GROUP 1:

- Quantity of combustibles is moderate **and**
- Combustibility of contents is low **and**
- Storage heights are 8 feet or less **and**
- Moderate rates of heat release expected.
- Examples:
 - Parking garages
 - Kitchens
 - Mechanical rooms
 - Storage rooms with storage height of 8 feet or less (and meeting the above criteria for the quantity and combustibility of contents).

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ORDINARY HAZARD, GROUP 2:

- Quantity of combustibles is moderate to high **and**
- Combustibility of contents is moderate to high **and**
- Storage heights do not exceed 12 feet **and**
- Moderate to high rates of heat release expected.
- Examples:
 - Retail stores
 - Storage rooms with storage heights of 12 feet or less (and meeting the above criteria for the quantity and combustibility of contents)
 - Warehouses (and meeting the above criteria for the quantity and combustibility of contents)

EXTRA HAZARD, GROUP 1:

- Quantity of combustibles is very high **and**
- Combustibility of contents is very high **and**
- High rates of heat release expected **and**
- Small quantities of flammable/combustible liquids present.
- Examples:
 - Saw mills
 - Plywood/particle board manufacturing
 - Furniture upholstering using foam plastics

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EXTRA HAZARD, GROUP 2:

- Quantity of combustibles is very high and
- Combustibility of contents is very high and
- High rates of heat release expected.
- Flammable/combustible liquids in moderate to large quantities present or
- Contents are shielded.
- Examples:
 - Flammable liquid spraying
 - Mobile home manufacturing

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HAZARD CLASSIFICATION SUMMARY:

HAZARD CLASSIFICATION	QUANTITY OF COMBUSTIBLES	COMBUSTIBILITY	RATE OF HEAT RELEASE
LIGHT	Low	Low	Low
ORD., GROUP 1	Moderate	Low	Moderate
ORD., GROUP 2	Moderate/High	Moderate/High	Moderate/High
EXTRA, GROUP 1	Very High	Very High	High
EXTRA, GROUP 2	Very High	Very High	High

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HAZARD CLASSIFICATION EXAMPLES:

OFFICE BUILDING:

- Light Hazard:
 - Office areas
 - Corridors
 - Toilet rooms
 - Break rooms

- Ordinary Hazard, Group 1:
 - Mechanical rooms
 - Electrical rooms
 - Elevator machine rooms
 - Storage rooms (ceiling height 8 feet or less)¹

- Ordinary Hazard, Group 2:
 - Storage rooms (ceiling height 12 feet or less)

¹ Meeting the criteria for quantity/combustibility of contents for an ordinary, group 1 hazard.

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HAZARD CLASSIFICATION EXAMPLES:

HOSPITAL:

- Light Hazard:
 - Patient rooms
 - Corridors
 - Offices
 - Chapels
 - Dining areas

- Ordinary Hazard, Group 1
 - Mechanical rooms
 - Electrical rooms
 - Kitchens
 - Storage rooms (ceiling height 8 feet or less)¹
 - Soiled utility rooms
 - Clean utility rooms
 - Laboratories (hazard classification will depend upon the amounts of flammable and combustible liquids used and stored in the laboratories)

- Ordinary Hazard, Group 2
 - Storage rooms (ceiling height 12 feet or less)¹
 - Soiled linen rooms

¹ Meeting the criteria for quantity/combustibility of contents for an ordinary, group 1 hazard.

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HAZARD CLASSIFICATION EXAMPLES:

HOTEL:

- Light Hazard:
 - Hotel guest rooms
 - Corridors
 - Toilet rooms
 - Lobby
 - Dining room seating areas
 - Meeting rooms
 - Ballrooms (not used for exhibitions)

- Ordinary Hazard, Group 1
 - Mechanical rooms
 - Electrical rooms
 - Elevator machine rooms
 - Kitchens
 - Storage rooms (ceiling height 8 feet or less)¹
 - Parking garages

- Ordinary Hazard, Group 2
 - Storage rooms (ceiling height 12 feet or less)
 - Ballrooms used for exhibition purposes

¹ Meeting the criteria for quantity/combustibility of contents for an ordinary, group 1 hazard.

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HAZARD CLASSIFICATION EXAMPLES:

RESTAURANT:

- Light Hazard:
 - Dining Room (seating area)
- Ordinary Hazard, Group 1
 - Kitchen
 - Storage areas (ceiling heights of 8 feet or less)¹
- Ordinary Hazard, Group 2
 - Storage areas (ceiling heights of 12 feet or less)

¹ Meeting the criteria for quantity and combustibility of contents for an ordinary, group 1 hazard.

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