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).
SPRINKLER PROTECTION BASICS:
HAZARD CLASSIFICATION

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
SPRINKLER PROTECTION BASICS:
HAZARD CLASSIFICATION

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
### SPRINKLER PROTECTION BASICS: HAZARD CLASSIFICATION

### HAZARD CLASSIFICATION SUMMARY:

<table>
<thead>
<tr>
<th>HAZARD CLASSIFICATION</th>
<th>QUANTITY OF COMBUSTIBLES</th>
<th>COMBUSTIBILITY</th>
<th>RATE OF HEAT RELEASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIGHT</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>ORD., GROUP 1</td>
<td>Moderate</td>
<td>Low</td>
<td>Moderate</td>
</tr>
<tr>
<td>ORD., GROUP 2</td>
<td>Moderate/High</td>
<td>Moderate/High</td>
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<tr>
<td>EXTRA, GROUP 1</td>
<td>Very High</td>
<td>Very High</td>
<td>High</td>
</tr>
<tr>
<td>EXTRA, GROUP 2</td>
<td>Very High</td>
<td>Very High</td>
<td>High</td>
</tr>
</tbody>
</table>
SPRINKLER PROTECTION BASICS:
HAZARD CLASSIFICATION

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.
SPRINKLER PROTECTION BASICS:
HAZARD CLASSIFICATION

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)
  - 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)
  - Soiled linen rooms

¹ Meeting the criteria for quantity/combustibility of contents for an ordinary, group 1 hazard.
SPRINKLER PROTECTION BASICS:
HAZARD CLASSIFICATION

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.
SPRINKLER PROTECTION BASICS: HAZARD CLASSIFICATION

HAZARD CLASSIFICATION EXAMPLES:

RESTAURANT:

- Light Hazard:
  - Dining Room (seating area)

- Ordinary Hazard, Group 1
  - Kitchen
  - Storage areas (ceiling heights of 8 feet or less)

- 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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