VISIBLE ALARMS

1. Where fire alarm coverage required by CBC 907, identify location of visible alarms (strobe lights) in the following public- and common-use areas:
   Exception: In other than I-2 and I-2.1 occupancies, visible alarms not required in alterations unless fire alarm system is added, upgraded, or replaced
   Exception: Visible alarms not required in enclosed exit stairways, exterior exit stairs, or exterior exit ramps
   Exception: Visible alarms not required in elevator cars
   • Sanitary facilities including restrooms, bathrooms, and shower rooms
   • Corridors
   • Lobbies
   • Meeting and conference rooms
   • Filing, photocopy, and employee break rooms
   • Dining rooms and cafeterias
   • Multipurpose rooms
   • Classrooms
   • Gymnasiums
   • Locker rooms
   • Band and music practice rooms
   • Occupational shops
   • Other occupied rooms where ambient noise impairs hearing of fire alarm
   • Other public- or common-use areas

   CBC 907.5.2.3.1 and CBC 11B-215

2. Where employee work areas require audible alarm coverage, specify notification appliance circuits serving employee work areas shall be designed with minimum 20-percent spare capacity to support adding visible notification devices in future to accommodate any hearing-impaired employees.

   CBC 907.5.2.3.2 and CBC 11B-215.3

3. Visible alarms shall be provided in R-1 sleeping units per CBC Table 907.5.2.3.3.

   [F. TABLE 907.5.2.3.3 VISIBLE ALARMS]

<table>
<thead>
<tr>
<th>NUMBER OF SLEEP UNITS</th>
<th>SLEEPING ACCOMMODATIONS WITH VISIBLE ALARMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 to 25</td>
<td>2</td>
</tr>
<tr>
<td>26 to 50</td>
<td>4</td>
</tr>
<tr>
<td>51 to 75</td>
<td>7</td>
</tr>
<tr>
<td>76 to 100</td>
<td>9</td>
</tr>
<tr>
<td>101 to 150</td>
<td>12</td>
</tr>
<tr>
<td>151 to 200</td>
<td>14</td>
</tr>
<tr>
<td>201 to 300</td>
<td>17</td>
</tr>
<tr>
<td>301 to 400</td>
<td>20</td>
</tr>
<tr>
<td>401 to 500</td>
<td>22</td>
</tr>
<tr>
<td>501 to 1,000</td>
<td>5% of total</td>
</tr>
<tr>
<td>1,001 and over</td>
<td>50 plus 3 for each 100 over 1,000</td>
</tr>
</tbody>
</table>

   [SFM] Also see Chapter 11B, Section 11B-224.4 and Table 11B-224.4.

   CBC 907.5.2.3.3
4. Where fire alarm coverage required in R-2 occupancies by CBC 907, all dwelling units and sleeping units shall be provided with capability to support visible alarms, including potential for future interconnection of building fire alarm system with unit smoke alarms, replacement of audible appliances with combination audible/visible appliances, or future extension of existing wiring from unit smoke alarm locations to required locations for visible appliances.

CBC 907.5.2.3.4

**AUDIBLE ALARMS**

5. Where fire alarm coverage required by CBC 907, specify audible alarms complying with the following:

- **Exception:** Where average ambient noise great than 95 dBA, visible alarms shall be provided in lieu of audible alarms

  - **Exception:** In patient areas of I-2 occupancies, visible alarms may be provided in lieu of audible alarms
  - **Sound distinctive alert not used for any purpose other than fire alarm**
    - **Exception:** In patient areas of I-2 occupancies, audible alarms shall be only chimes or similar-sounding devices for alerting staff
    - **Exception:** Any audible alarms located in an occupant evacuation elevator lobby shall be connected to a separate notification zone for manual paging only
  - In every occupiable space within building, provide sound pressure level of 15 decibels above average ambient sound level or 5 decibels above maximum sound level having minimum 60-second duration, whichever is greater
  - Maximum sound pressure level of 110 decibels at minimum hearing distance from audible appliance
  - Audible signal shall be standard firm alarm evacuation signal, ANSI S3.41 Audible Emergency Evacuation Signal, “three pulse temporal pattern,” as described in NFPA 72

CBC 907.5.2.1 and CBC 907.5.2.5

**FIRE ALARM BOXES**

6. Where manual fire alarms required by CBC 907, specify alarm boxes and protective covers complying with the following:

- Highest point of activating handle or lever located minimum 42 inches and maximum 48 inches above floor
  - **Exception:** Existing manual fire alarm boxes
  - Operable with maximum 5 pounds of force
  - Operable with one hand and without tight grasping, pinching, or twisting of wrist

CBC 907.4.2, CBC 11B-205.1, and CBC 11B-309