

# **The Original IDEX CA Prep Class**

## **California Building Standards Codes – Fire protection systems**

### **Fire extinguishers (906)**

- CA fire codes are the information source for fire alarms and detections systems – Part 9 of the CBSC
  - The fire code official shall approve any fire extinguishing systems installed as an alternative to the required automatic sprinkler systems
  - Fire alarm boxes are RED
- If the building is nonsprinklered, here are some specifics from that code:
- The maximum travel distance is 75 feet to a fire extinguisher (Table 906.3(1))
  - So a high-rise office building would require a fire extinguisher within 75 feet from any point in the building
- Fire extinguishers are required:
  - In new and existing buildings in most occupancies
  - Shall be installed in a conspicuous location in the normal path of travel
  - Shall be in areas where flammable or combustible liquids are stored, used or dispensed
  - Shall be installed on each floor of the structure under construction
  - Commercial cooking systems have specific requirements
    - A portable Type K fire extinguisher shall be located within 30 feet of commercial cooking equipment
  - Hand-held portable fire extinguishers under 40 lbs. shall be located 60 inches AFF to the top of the fire extinguisher (906.9)
- Hand-held portable fire extinguishers exceeding 40 lbs. shall be located 42 inches to the top of the fire extinguisher with a minimum clearance between the floor and the bottom of 4 inches (906.9)
- Manual fire alarm boxes are not required if the building has a monitored automatic fire sprinkler system
- If the building does not have a monitored automatic fire-system, then manual fire alarm boxes shall be installed
  - Manual fire alarm boxes shall be located not more than 5' from each exit
  - Additional manual fire alarm boxes shall be located so that travel distance to the nearest box does not exceed 200'
  - Mounting height shall be a minimum of 42" and a maximum of 48" from the floor level to the highest point of the activating handle or lever of the box
- **Fire alarm notification appliances (907)**
  - A fire alarm notification appliance may use audible, visible, or other stimuli to alert the occupants of a fire or other emergency condition requiring action – redundant cueing
  - Visible alarm notification appliances shall be provided in public and common use areas including but not limited to:
    - R-1 Sleeping accommodations (1111B) (transient boarding houses, hotels and motels)
    - Corridors
    - Gymnasiums
    - Music practice rooms

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- Multipurpose rooms
- Lobbies
- Meeting rooms
- Classrooms
- **Smoke detectors (907)**
  - Fire alarms could also require smoke detectors in most Occupancy Groups
  - Smoke alarms shall be installed in:
    - Sleeping rooms
    - Each story within the sleeping unit, including basements
    - Every room in the path of the means of egress from the sleeping area to the exit such as in hallways
    - And enclosed common stairwells of multiple-dwelling complexes
  - Power source (Part 9 - 401)
    - In new construction, smoke alarms shall receive their primary power from the building wiring with a battery back-up