

IR 30-1

ELEVATORS: BUILDING MATERIALS AND SYSTEMS

Division of the State Architect (DSA) documents referenced within this publication are available on the <u>DSA Forms</u> or <u>DSA Publications</u> webpages.

Disciplines:	Fire & Life Safety	History:	Revised 09/06/18
			Revised 11/03/10
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PURPOSE: The purpose of this Interpretation of Regulations (IR) is to clarify the requirements for the construction materials and the fire protection systems required for elevator hoist ways.

SCOPE: All elevators reviewed by DSA for applicable code compliance.

1. PROJECT DESIGN REQUIREMENTS:

- **1.1 Materials:** Elevator hoist ways shall either be constructed of noncombustible materials or the sides of the hoistway facing the elevator cab shall have a maximum flame spread rating of 25 and a maximum smoke developing rating of 50.
- **1.2 Electrical Wiring:** Electrical wiring shall meet or exceed the minimum requirements of the applicable California Electrical Code (CEC) for fire resistive construction, with membraneand through-penetration protection provided per the CBC and 2010/2016 CEC Section 620.21.
- **1.3 Automatic Fire Sprinkler Systems:** Buildings with required automatic fire sprinkler systems will have a "sidewall" type of sprinkler installed in hoist ways of combustible construction a maximum of two feet above the bottom of the hoist way. In no case shall the sprinkler be installed so as to be an obstruction to the elevator car (toe guard) at its lowest point of travel.

An automatic fire sprinkler is not required at the top of an elevator hoist way constructed of non-combustible materials.

- **1.4 Fire Alarm Requirements:** Smoke or heat detection is not required at the top of the elevator hoist way if there is no automatic fire sprinkler located at the top of the hoist way.
- **1.5 Elevator/Stairway Configuration:** Elevator cabs sized to accommodate ambulance gurneys are not required for two story buildings if the configuration of the stairways permits an ambulance gurney to be carried down the stairs by emergency personnel and is acceptable to the Local Fire Authority and DSA. (See *DSA Policy PL 09-05: Elevator Cab Sizes* deviation procedures).

REFERENCES:

 Title 24, CCR, Part 2 - California Building Code (CBC)

 2001 CBC: Table 6-A and Section 3003.5

 2007 CBC: Sections 707.14 and 3002

 2010 CBC: Sections 708 and 3002

 2016 CBC: Sections 714 and 3002

 Title 24, CCR, Part 3 - California Electrical Code (CEC)

 2004 CEC: Section 800.51

 2007, 2010, 2016 CEC: Article 620

This IR is intended for use by DSA staff and by design professionals to promote statewide consistency for review and approval of plans and specifications as well as construction oversight of projects within the jurisdiction of DSA, which includes State of California public schools (K–12), community colleges and state-owned or state-leased essential services buildings. This IR indicates an acceptable method for achieving compliance with applicable codes and regulations, although other methods proposed by design professionals may be considered by DSA.

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