

install bumper strips at the level of truck platforms and truck push bars (Fig 21-7) Strips should be made of oak, ash, hickory, or similar tough, resilient wood and should be at least 1½ in thick, and 2 in thick where heavy trucks are used Steel channels are also effective

Strips should be wide enough to match all heights of platforms and pushbars of trucks that are transported in the elevator

Painting the inside of the car a flat black, from the floor to the top of the upper guard strip, will make bumps and scrapes less conspicuous If the sides above the top strip are painted aluminum, the high reflectance value of the paint will help overall illumination

**Top covers** Freight elevator cars may have either solid or openwork top covers If openwork is used, the "Elevator Code" requires that the openings be small enough to reject a ball 1½ in in diameter, some companies, however, recommend ¾-in openings

Wire mesh is recommended for openwork covers, because it combines maximum strength with minimum weight and offers little interference with light and air Not less than No 10 gauge steel wire should be used

The cover should be strong enough to sustain a load of 300 pounds on any square area 2 ft on a side or of 100 pounds applied at any one point

In the top of every elevator car there should be an emergency exit of at least 400 sq in area, providing an unobstructed passageway to permit easy escape if the car becomes stalled between floors or some other emergency arises

The exit cover should open outward and be so hinged or attached that it can be opened easily from the top of the car only A heavy cover should be counterweighted or divided into several hinged sections, which should be kept down except when being used

**Doors or gates** To conform to "Elevator Code" requirements for new installations, a car door or gate must be provided at each entrance to the car If the elevator is electrically operated, the car door or gate should have electric contacts that will prevent movement of the car unless the door or gate is within 2 in of the fully closed position

On existing elevator cars having more

than one opening, it is recommended that each entrance be equipped with a car gate The gate should be provided with a contact to prevent its being opened when the car is in motion When closed, the gate should guard the full width and height of the opening (except for vertically sliding gates, which should extend from a point not more than 1 in above the car floor to a height of at least 6 ft) Collapsible gates, when fully expanded, should reject a ball 3 in in diameter They should have convenient handles with guards for protection of the operator's fingers

**Floors** of cars should be kept in good condition Ordinary metal sheets should not be used for surfacing or repairing floors because they soon become smooth and slick In time, even sheet metal with raised surface markings may wear smooth and then should be replaced

Neither the edge of the car platform nor the edge of the landing should be permitted to become slippery or badly worn Cast iron and steel sills at such points are slipping hazards unless provided with antislip surfaces Abrasive strips or welded beading may be applied to eliminate slipperiness

**Loads** The safe working load (or rated capacity) of an elevator includes a safety factor, but nevertheless it should not be exceeded The rated safe load should be indicated by a conspicuous sign Metal signs with stamped, etched, or raised letters and figures not less than ¼-in high are satisfactory for passenger elevators, and with 1-in high letters and figures for freight elevators

To find the maximum number of passengers allowable under emergency conditions, common practice is to divide the rated safe capacity load in pounds by 150

**Lighting.** The "Elevator Code" requires that all cars and landings be well lighted at all times when in use Code requirements are minimum and should be exceeded if necessary for easy visibility

A car should have at least two lights that provide minimum illumination of 5 foot-candles for passenger elevators and 2½ foot-candles for freight elevators at the landing edge of the car platform when the car and loading doors are open

On freight elevators with perforated car