and Facilities (National Fire Protection Association).

Moving Walks

A moving passenger-carrying device, on which persons stand or walk and in which the passenger-carrying surface remains parallel to its direction of motion and is uninterrupted, is called a moving walk

Criteria for the design, construction, installation, operation, inspection and testing of moving walks installed for the purpose of transporting passengers are set forth in the Elevator Code, part IX

Moving walks may operate in a horizontal plane or in a slope up to a maximum of 15 degrees Operating speed and treadway width are governed by the slope

Comments as to protection of passengers, found in the previous Escalators section of this chapter, apply also to moving walks

Manlifts

The following are the principal hazards in the use of manlifts

1 The rider may be carried over the top

2 He may be unable to make an emergency stop

3 He may jump on or off after the step has passed the floor

4 His head or shoulders may strike the edges of floor openings

5 He may be unable to reach the landing because of power failure and belt stoppage

6 Parts of the manlift may fail or operate unsafely

Construction

Manlifts should be constructed, maintained, and operated in strict compliance with the recommendations of American National Standard A90 1, *Safety Code for Manlifts* A safety factor of 6 (based on a 200-pound load, on each step, on both the up and down runs) should be used, and all equipment should be braced securely at top, bottom, and intermediate landings Steps should be nonslip The entire manlift should be suspended from the top to prevent bending or buckling of the rails

Handholds (either open or closed type) should be painted a conspicuous color, such as orange or yellow They should be not less than 48 in nor more than 56 in above each step, and steps should not be less than 16 ft apart

Floor landings or emergency landings should be provided for each 25 ft of manlift travel Clearance between the surface of any landing and the lower edge of the conical guard suspended from the ceiling should be at least 7½ ft The minimum clearance between the center of the head pulley and the roof or other construction should be 5 ft

The bottom landing on the up side should have steps to a platform, level with the manlift step as it rises to a horizontal position

Floor openings and shear guards. At floor landings, standard 42-in guard rails and 4-in toeboards should be provided around floor openings in such a way as to permit a landing space at least 2 ft wide Rails or guards should have maze or staggered openings or self-closing gates that open away from the manlift (Fig 28–11) At each floor opening on the upside, funnel-shaped (conical) guards should be installed (Fig 28–12)

Brakes, safety devices, and ladders

A brake, designed to be applied automatically when the power is shut off, should be installed on the motor shaft for direct-connected units and on the input shaft for belt-driven units The brake should get its power or force from an external source The brake must be capable of quickly stopping the manlift and holding it when the down side is loaded with 250 pounds on each step It should be electrically released

A control rope, not less than ⅜ in , or a rod should be provided within easy reach of both the up and down runs When pulled in the direction of belt travel, the rope or rod should cut off the power and apply the brake A mechanical-electrical device that will automatically shut off the motor power supply and apply an electric brake, if the rider fails to alight at the top landing, should be installed