



EXHIBIT 520.3 A stage lighting hoist. (Courtesy of Electronic Theatre Controls, Inc.)

branch circuit supplying such equipment carries a load exceeding 20 amperes.

(B) Circuits Rated Greater Than 20 Amperes. Where only heavy-duty lampholders are used, such circuits shall be permitted to comply with Article 210 for circuits supplying heavy-duty lampholders.

In accordance with 210.23(C) and (D), 30-, 40-, or 50-ampere branch circuits are permitted if heavy-duty lampholders, such as medium- or mogul-base Edison screw shell types, are used for fixed lighting.

520.42 Conductor Insulation. Foot, border, proscenium, or portable strip lights and connector strips shall be wired with conductors that have insulation suitable for the temperature at which the conductors are operated, but not less than 125°C (257°F). The ampacity of the 125°C (257°F) conductors shall be that of 60°C (140°F) conductors. All drops from connector strips shall be 90°C (194°F) wire sized to the ampacity of 60°C (140°F) cords and cables with no more than 150 mm (6 in.) of conductor extending into the connector strip. Section 310.15(C) (1) shall not apply.

Informational Note: See Table 310.4(1) for conductor types.

The 125°C minimum temperature rating is due to the heat from the lamps raising the ambient temperature where the wiring is located. Drops from connector strips usually are flexible cord. The derating factor for more than three current-carrying conductors may not be necessary if the conductors are (1) not all energized at one time or are not often energized at full intensity (dimmed) and (2) not energized continuously.

520.43 Footlights.

(A) Metal Trough Construction. Where metal trough construction is employed for footlights, the trough containing the

circuit conductors shall be made of sheet metal not lighter than 0.81 mm (0.032 in.) and treated to prevent oxidation. Lampholder terminals shall be kept at least 13 mm (½ in.) from the metal of the trough. The circuit conductors shall be soldered to the lampholder terminals.

(B) Other-Than-Metal Trough Construction. Where the metal trough construction specified in 520.43(A) is not used, footlights shall consist of individual outlets with lampholders wired with rigid metal conduit, intermediate metal conduit, or flexible metal conduit, Type MC cable, or mineral-insulated, metal-sheathed cable. The circuit conductors shall be soldered to the lampholder terminals.

(C) Disappearing Footlights. Disappearing footlights shall be arranged so that the current supply is automatically disconnected when the footlights are replaced in the storage recesses designed for them.

Historically, the footlights described in 520.43(A) and (B) were built in the field. Modern footlights are compartmentalized, factory-wired assemblies for field installation and may be permanently exposed or be of the disappearing type. Disappearing footlights must automatically disconnect the current supply when the footlights are in the closed position, thereby preventing heat entrapment that could cause a fire. Disconnection is accomplished by switches in the terminal compartment.

520.44 Borders, Proscenium Sidelights, Drop Boxes, and Connector Strips.

(A) General. Borders and proscenium sidelights shall be as follows:

- (1) Constructed as specified in 520.43
- (2) Suitably stayed and supported