hydromassage bathtubs, as defined in Article 100, as well as other bathtub types and shower areas.

See also

680.43 for installation requirements for spas and hot tubs installed indoors

(E) Luminaires in Indoor Sports, Mixed-Use, and All-Purpose Facilities. Luminaires subject to physical damage, using a mercury vapor or metal halide lamp, installed in playing and spectator seating areas of indoor sports, mixed-use, or all-purpose facilities shall be of the type that protects the lamp with a glass or plastic lens. Such luminaires shall be permitted to have an additional guard.

Accidental breakage of mercury or metal halide lamp outer jackets in open luminaires has occurred in sports facilities. If the lamp is damaged, glass shards can fall on players or spectators. If the envelope is damaged, the arc tube may continue to operate even if the outer jacket is cracked or missing.

(F) Luminaires Installed in or Under Roof Decking. Luminaires installed in exposed or concealed locations under roof decking where subject to physical damage shall be installed and supported so there is not less than 38 mm (1½ in.) measured from the lowest surface of the roof decking to the top of the luminaire.

Exception: The 38 mm (11/2 in.) spacing is not required where metal-corrugated sheet roof decking is covered with a minimum thickness 50 mm (2 in.) concrete slab, measured from the top of the corrugated roofing.

This requirement correlates with 300.4(E), which prohibits cables, raceways, and boxes from installation under metalcorrugated sheet roof decking. Exhibit 410.2 illustrates an installation in which the minimum clearance is not provided between the roof deck and the luminaire.

See also

300.4(E) and its commentary for more information

410.11 Luminaires Near Combustible Material. Luminaires shall be constructed, installed, or equipped with shades or guards



11/2 in. space not provided as required by 410.10(F)

Similar to 300.4(E), 410.10(F) requires luminaires installed under roof decking to have a minimum 11/2 in. between the top of the luminare and the deckina

EXHIBIT 410.2 A minimum 1½-inch clearance, which is necessary to prevent damage from nail penetration.

so that combustible material is not subjected to temperatures in excess of 90°C (194°F).

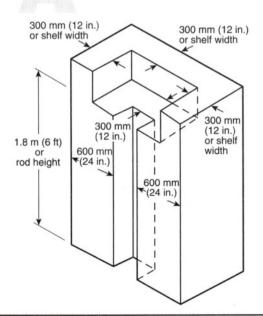
410.12 Luminaires over Combustible Material. Lampholders installed over highly combustible material shall be of the unswitched type. Unless an individual switch is provided for each luminaire, lampholders shall be located at least 2.5 m (8 ft) above the floor or shall be located or guarded so that the lamps cannot be readily removed or damaged.

Pendants and fixed lighting equipment may be installed above highly combustible material. If a lamp cannot be located out of reach, the requirement can be met by equipping the lamp with a suitable guard. Section 410.12 does not apply to portable lamps.

410.14 Luminaires in Show Windows. Chain-supported luminaires used in a show window shall be permitted to be externally wired. No other externally wired luminaires shall be used.

410.16 Luminaires in Clothes Closets.

(A) Clothes Closet Storage Space. The clothes closet storage space shall be the volume bounded by the sides and back closet walls and planes extending from the closet floor vertically to a height of 1.8 m (6 ft) or to the highest clothes-hanging rod and parallel to the walls at a horizontal distance of 600 mm (24 in.) from the sides and back of the closet walls, respectively. The volume extends vertically to the closet ceiling parallel to the walls at a horizontal distance of 300 mm (12 in.) or the width of the shelf, whichever is greater. For a closet that permits access to both sides of a hanging rod, the clothes closet storage space includes the volume below the highest rod extending 300 mm (12 in.) on either side of the rod on a plane horizontal to the floor extending the entire length of the rod. See Figure 410.16(A).



N FIGURE 410.16(A) Clothes Closet Storage Space.