

SECTION P – LIGHTING

REFERENCES (Chapter 511-6-1)

.07 Physical Facilities. (2) Design, Construction, and Installation. (i) Light Bulbs, Protective Shielding. 1, 2 & 3.
.07 Physical Facilities. (3) Design, Construction, and Installation. (f) Lighting Intensity 1, 2 & 3.

I. General Requirements:

1. The *light intensity* shall be at least 108 lux (*10 foot candles*) at a distance of 75 cm (30 inches) *above the floor, in walk-in refrigeration units and dry food storage areas and in other areas and rooms during periods of cleaning.*
2. The *light intensity* shall be at least 215 lux (*20 foot candles*) at a surface where food is provided for consumer self-service such as buffets and salad bars or where fresh produce or packaged foods are sold or offered for consumption; inside equipment such as reach-in and under-counter refrigerators; at a distance of 75 cm (30 inches) above the floor in areas used for handwashing, warewashing, and equipment and utensil storage, and in toilet rooms.
3. The *light intensity* shall be at least 540 lux (*50 foot candles*) at a surface where a food employee is working with food or working with utensils or equipment such as knives, slicers, grinders, or saws *where employees' safety is a factor.*
4. *Darker colored walls and floors may require additional lighting.*
5. *Shielding* such as plastic shields, plastic sleeves with end caps, shatterproof bulbs and/or other approved devices *shall be provided for all artificial lighting fixtures located in areas where there is exposed food; clean equipment, utensils, and linens; or unwrapped single- service and single-use articles. See Illustrations P-1 and P-2.*
6. *Shielding, coated, or otherwise shatter-resistant bulbs need not be used in areas used only for storing food in unopened packages, if:*
 - A. *The integrity of the packages can not be affected by broken glass falling onto them; and*
 - B. *The packages are capable of being cleaned of debris from broken bulbs before the packages are opened.*

- C. *To clarify this exception to #6 above, this means that it would only apply to dry storage rooms where food and single-service and single-use articles are still within their original, unopened packaging and are sealed in such a way that none of the broken glass can get to the packaging contents. This exception would not apply to any area where food and or single-service and single-use articles packaging have been opened or the contents have been removed to other containers nor where food or such articles are on display or otherwise, being prepared or handled.*
7. *Heat lamps, where permitted, shall be protected against breakage by a shield surrounding and extending beyond the bulb, leaving only the face of the bulb exposed. See Illustration P-2.*

ILLUSTRATION P-1
Lighting Fixture Shielding



Light bulbs must be shielded in all food service establishment except as provided for in DPH Rule 511-6-1-.07(2)(i)2. Note that the light bulbs on the left have protective sleeves over each bulb, but the bulbs on the right do not. Shields help prevent breakage caused from mop and broom handles hitting the bulbs. Shields also prevent broken glass from falling when florescent bulbs burst. In this way, food, utensils, single-service and single-use articles are protected from physical hazards. Employees and consumers are protected from injury as well.

ILLUSTRATION P-2
Shielded Light Fixtures and Equipment



Ceiling Mounted Heat



Carving Station



Hot Food Display Heat
Note that the shield
extends beyond exposed
end of heat lamp bulb



Fluorescent Bulb Protective Sleeves and End Caps



Typical Fluorescent Fixture



Vapor Lock Globe Typically Found in Walk-in
Coolers/Freezers and Exhaust Hoods on Cook-Lines



Plastic Coated, Shatter Proof Bulb