



CITY OF LOS ANGELES
LARUCP ELECTRICAL
PLAN CHECK LIST



Plan Check No. _____ Plan Check Expiration Date _____
Job Address: _____
Square Footage _____ Use Zone _____ Fire Zone _____
Occ. Group _____ Type of Construction _____ No. of Stories _____
Applicant _____ Phone _____ E-Mail _____
Reviewed by _____ Date _____ Telephone _____
2nd Review by _____ Date _____ Telephone _____

Your application for a permit, together with plans and specifications, has been examined and the issuance of a permit is withheld for the reasons set forth. The approval of plans and specifications does not permit the violation of any section of the Building Code, or other local ordinance or state law.

NOTE: Numbers in parenthesis () refer to Code sections of the 2002 editions of the City of Los Angeles Electrical Code, Building Code (LABC), Mechanical Code (LAMC), 1999 National Fire Alarm Code (NFPA 72.) or 1999 Standard for Fire Pumps (NFPA 20).

INSTRUCTIONS:

- Corrections with circled item numbers apply to this plan check.
• In the left hand margin of the circled corrections, please indicate the sheet number and detail or note number on the plans where the corrections are made. Resubmit marked original plans and one corrected set of plans, calculations and this plan review list.
• Incomplete or unreadable drawings or calculations will not be accepted.
• Incorporate all comments as marked on the checked set of plans and calculations and this corrections sheet.
• Call the plan check engineer for appointment when the plans are ready for resubmittal. Appointments are required to schedule for conferences and verifications.

A. GENERAL REQUIREMENTS

1. The plans shall bear the signature and registration number of a State of a California authorized registered Engineer or a licensed Architect. (93.0206(a))
2. Plans shall be signed by a California Licensed Electrical contractor. (93.0206(a)Exp.)
3. Provide one set of corrected plan along with the original marked up plan prior to the plan's approval. (93.0206(c))
4. Indicate the occupancy and occupant load of each area.

(93.0207(n))
5. Provide a layout of the proposed electrical system including all required details. (93.0207)
6. Submit a separate plan check application for permitting of each building. (93.0210)
7. Provide single line diagram. (93.0207(n), 215-5)
8. Provide panel board(s), distribution board(s), motor control center(s), and switchboard load schedule(s).

(93.0207(l))
9. Indicate the job address on the plan(s). (93.0207(n))
10. Indicate circuit designations near outlets and identify all home-runs. (93.0207(n))
11. Correct the following inconsistencies:

(93.0207(n))
12. Show approximate feeder lengths on one line diagram for voltage drop calculations. (93.0207(d))
13. Indicate the existing loads on:

(93.0207(m))
14. Provide an elevation drawing of the service equipment. (93.0207(k))
15. Indicate scale used on drawings. (93.0206(e))
16. Submit the following information: _____

(93.0207(n))
17. Indicate electrical rating of transformer(s), bus(es), circuit breaker(s), panel board(s), motor(s) and _____ (93.0207(i),(j))
18. Additional plan check fees of \$ _____ are due. (93.0233)
19. Unless listed otherwise, the ampacity of 600 Volts or less conductors shall based on the terminals not exceed 60°C (140°F) for conductor size 14 through 1AWG or 75°C (167°F) for conductor sizes over 1 AWG. _____ (110-14(c))
20. Show movable and relocatable partitions, office modules and office furnishings which contain electric wiring, including lighting and receptacles, on the plan(s). (93.0207(n))
21. Electrical equipment shall be listed by a City of Los Angeles recognized electrical testing laboratory or approved by the Department. Provide a note on the plans. (93.0402)
22. Provide site plan. (93.0207(n))
23. Indicate service conductor routing from utility to service point. (93.0207(o)&(n))
24. Provide a copy of the building permit to verify number of stories and height of the building. (93.0207(n))
25. Provide fixture schedule. (93.0207(n))
26. Provide a symbol list. (93.0207(n))
27. Plans shall be legible. (93.0206(e))

28. Request the Department of Water and Power to forward the fault current report to this Department indicating the available fault current, voltage and phase at the service. (93.0207(n))
29. Specify the interrupting rating, withstand rating of devices, %impedance of transformer(s), and line impedance per ft. (93.0207, 110-9, 110-10)
30. No piping, ducts or equipment foreign to electrical equipment shall be permitted to be located within the dedicated space above the electrical equipment. Provide a note on the plans. _____ (110-26(f))
31. Indicate the provisions to insure the proper operation of G.F.I. equipment on a separately grounded service and generator system. (110-26)
32. Provide and maintain required work space, adequate illumination, access to work space and head room for and about electrical equipment. (110-26)
33. For electrical equipment rated 1200 amperes or more and over 6 feet (1.83 m) wide, there shall be one entrance not less than 24 inches (610 mm) wide and 6-1/2 feet (1.98 m) high at each end. _____ (110-27(b))
34. Provide protection from physical damage for switchboards, panelboards and other electrical equipment. _____ (110-27(b))
35. Equipment in a fan room shall only serve the load that are permitted in such rooms. _____ (300-22(b))

B. BRANCH CIRCUITS

1. Correct excessive voltage drop on branch circuit(s): _____ (93.0600, 210-19(a))
2. Provide a receptacle outlet within six feet (1.83 m) of any point along walls in livable rooms of dwelling occupancies. (210-52(a))
3. Provide ground fault circuit interrupter protection on receptacle(s) located in kitchens, bathrooms, garages, outdoors, crawl spaces, unfinished basements and wet bars of dwelling units and bathrooms and roof tops of any occupancy. _____ (210-8)
4. Provide ground fault circuit interrupter protection on receptacles located within 6 feet of wet bar in a dwelling unit(s). (210-8 (a)(7))
5. Provide show window lighting(s) and receptacle branch circuit(s) and outlets. _____ (210-62, 220-12)
6. A single receptacle installed on an individual branch circuit shall have an ampere rating of not less than that of the branch circuit. Indicate the receptacle rating. (210-21(b)(1))
7. Provide a dedicated circuit for receptacles in dwelling unit bathroom(s). (210-52(d))
8. Provide arc-fault circuit interrupter protection on receptacles in dwelling unit bedrooms. (210-12)

C. FEEDERS

1. Correct excessive voltage drop on feeder(s) _____ (93.0600,215-2(d))

D. BRANCH CIRCUITS & FEEDER CALCULATIONS

1. Branch circuits loads were incorrectly calculated or omitted: _____ (220-3)
2. Provide 150 VA loading for every 2 feet of track light. _____ (220-12(b))
3. Provide proper feeder, panel board and branch circuit ampacity for general lighting as required for the particular occupancy. (220-3(a) & 10, 215-2)

4. Provide a minimum of 1200 VA for exterior sign or outline lighting system branch circuit. (600-5(b)(3))
5. Provide a dedicated branch circuit for the light and air conditioning and heating sources for each elevator car. (620-22)
6. Feeder loads were incorrectly calculated or omitted:

(220-10)
7. Provide a minimum of 200 VA for each linear foot of show window. (220-12)
8. Feeder and branch circuit rating shall be based on not less than noncontinuous loads and 125% of continuous loads. (210-19(a), 215-2(a))
9. Provide 180 VA of load for each general use receptacle. (220-3(b)(9)&(11))
10. Small Appliance branch circuits shall be rated at 1500 VA each. (220-16(a))

E. SERVICES

1. Service disconnect(s) shall be located nearest the point of entrance of the service entrance conductors. (230-70(a))
2. No more than six service disconnecting means is permitted at any one location. (230-71(a))
3. No more than one service disconnecting means is permitted for motor control centers. (430-95)
4. The service equipment shall have a rating not less than the load served. This load shall be calculated per article 220. (230-79)
5. The two to six disconnects as permitted in section 230-71 shall be grouped. (230-72(a))
6. Ground fault protection is required on each 1000 amperes or more, 4W, 277/480 volts wiring system of a service or a feeder disconnecting means. (230-95,215-10)
7. A building or other structure shall be supplied by only one service. (230-2)
8. When more than one building or other structure is on the same property and under single management, each building or structure shall be provided with means for disconnecting all ungrounded conductors. (225-31)
9. Equipment shall not be connected to the supply side of the service disconnecting means. (230-82)
10. In a multiple occupancy building occupants shall have access to their service disconnecting means. (230-72(c))
11. Provide service load calculation. (230-42, 93.0207(n))
12. Provide service load calculations for 120/240 V, 3 phase, 4W, delta system in accordance with Los Angeles Electrical Code (Appendix). (93.0207(n))
13. Service and feeder demand load calculation shall be in accordance with article 220-35. (220-35)

F. OVERCURRENT PROTECTION AND SHORT CIRCUIT PROTECTION

1. Submit overcurrent coordination study. (240-12)
2. Provide proper overcurrent protection for conductors on circuits

(240-3)
3. Overcurrent devices shall be connected at the supply point of ungrounded conductors. (240-21)
4. Fuses shall be provided with rejection type fuse holders. (240-60(b))
5. Provide short circuit analysis including motor contribution. Fuse let-thru is not acceptable. (110-9 & 10, 93.0207)

6. Indicate the series combination interrupting rating of overcurrent devices. Identify the fuse class and the circuit breaker manufacturer, model designation, type and electrical rating used as part of series rating. (240-86, 110-9, 93.0402, UL Recognition Directory)
7. Series combination interrupting rating shall not be used when the second device in the series is subjected to a total connected full load motor current of more than 1% of it's AIC rating. (240-86, 110-3, 93.0402, UL Recognition Directory)
8. Motor circuit protectors shall not be used as part of a series combination interrupting rating. (110-3, 93.0402)
9. If series combination ratings are used, provide a cautionary label to the series rated device cover stating " Caution - Series Rated System _____ A available. Identified replacement component required." (240-86,110-22)

G. GROUNDING

1. Provide properly sized grounding electrode conductors for the service(s). (250-20, 250-26, 250-66)
2. Separately derived systems shall be separately grounded._____(250-20(d), 30)
3. Where more than one building is supplied by a service, the grounded conductor supplying each building shall be adequately sized and grounded at each building or an equipment grounding conductor shall be provided from the main service to each building. (250-32 & 50)
4. All services supplying a building shall have the same grounding electrode system. (250-58)
5. Provide properly sized grounding conductors for equipment and raceway systems. (250-122)
6. Cold water pipe ground shall be supplemented by an additional ground electrode. (250-50(a)(2))
7. All equipment fastened in place or connected by permanent wiring method shall be grounded. (250-110 & 112)

H. WIRING METHODS

1. Conductors rated over 600 volts shall not occupy the same wiring enclosure, raceway or cable with conductors of 600 volts or less. (300-3(c)(2))
2. Conduits entering/leaving an interior raceway system that are exposed to widely different temperatures, such as coolers, freezers or service entrance conductors, shall be sealed. (300-7(a))
3. Provide cable supports on vertical runs. (300-19)
4. Areas below access floors shall not be used as a plenum or for storage purposes. (P/BC 2001-18)
5. Rooms containing access floors shall have a smoke detection system. (645-2, P/BC 2001-18)
6. Wiring methods beneath the access floors shall comply with all requirements of Article 645 and P/BC 2001-18.
7. Provide a ground fault circuit interrupter on the pool light circuit. (680-20(a))
8. Provide an equipment grounding conductor between remote panel board and service. (680-25(d))
9. Provide an equipment grounding conductor for all pool related equipment. (680-25)
10. Patient care area receptacles shall be grounded by an insulated copper conductor. (517-13(a))

I. CONDUCTORS FOR GENERAL WIRING

1. Provide the proper wire type (temperature rating) for use in the following applications:

(310-13)

2. The following branch circuit/feeder conductors are improperly sized:
 _____ (310-15)
3. Where the number of conductors in a raceway or cable exceeds three, the allowable ampacity of each conductor shall be reduced per table 310-15 (b)(2)(a). (310-15(b)(2))
4. Types NM, NMC and NMS cable(s) cannot be used for _____ (336- 3 & 5)
5. Where the maximum ambient temperature is over 30°C, (86°F), the referenced correction factors shall apply to conductors. _____ (Table 310-16 to 19)

J. CONDUIT, RACEWAYS, J-BOXES, ETC.

1. Indicate the number of conductors in raceways _____ (300-17, Chapter 9, table 1)
2. Provide proper conduit size on _____ (Chapter 9, tables 4, 5 & 5A)
3. A separate grounding conductor shall be installed in non-metallic conduit runs. (347-4)
4. Exit signs shall not be used as J-boxes. Show location of required junction boxes. (700-9)
5. Indicate type of conduit(s) used. _____ (Chapter 9, table 4, Appendix C, 93.0207(n))
6. The following outlet, pull or junction boxes are inadequately sized:
 _____ (370-16, 370-28)

K. SWITCHES, PANELS, & ROOF EQUIPMENT

1. Provide permanent access to roof mounted equipment. (P/MC 2001-06, 380-8(a))
2. Switches, circuit breakers, etc. shall be readily accessible. (380-8(a))
3. Provide individual overcurrent protection on the supply side of each lighting and appliance branch circuit panel board. (384-16(a))
4. Provide weather proof G.F.C.I. protected outlets within 25 feet of roof mounted equipment. (210-63,210-8(b)(2))

L. FIRE PUMP

1. Fire pump circuit conduits shall be encased in no less than 2 inches of concrete. (695-6(b))
2. Overcurrent protection for fire pump services shall provide short circuit protection and shall be set to carry fire pump motor locked rotor current indefinitely. (695-4(b)(1))
3. Provide an emergency source of power for fire pump. (LABC 904.1.2, NFPA 20, 700-12)
4. No disconnecting means shall be installed within the fire pump feeder circuit. (695-4(a))
5. Transfer of power shall take place within the fire pump room. (LABC 904.1.2, NFPA 20, 6-6.5)

M. MOTORS

1. Provide the nameplate current rating of the following:
 - A. Locked-rotor current of Torque motors.
 - B. AC adjustable voltage motors.
 - C. Low Speed (1200 RPM or Less) motors.
 - D. Multi-speed motors.
 - E. Noncontinuous duty motors. (430-6,-22(b),Table 430-150)

2. Indicate the Duty-Cycle service and design of motors. These information should include the motors duty and time rating. (430-22,Table 430-22(b))
3. Provide proper conductor size for motor(s) _____ (430-22(a), -24)
4. Provide overload protection for motor(s) _____ (430-32)
5. Provide proper short circuit protection for motor(s). (specify breaker/fuse type). (430-52)
6. An individual branch circuit is required for each motor over one horsepower or 6 amperes of full load current. (430-53(a))
7. Provide properly located disconnects, types and size on motor(s) _____ (430-102, -103, -109, -110)

N. TRANSFORMERS

1. Provide overcurrent protection on the primary of the transformer. (450-3)
2. Provide overcurrent protection for the secondary conductors of transformer. (240-21)
3. Provide adequate ventilation in transformer room(s). _____ (450-9)
4. Indicate transformer(s) secondary tap length(s). (240-21)

O. CLINICS

1. Indicate type of clinic(s). (LABC 422A)
2. Provide a list of equipment to be installed. (93.0207)
3. Equipment classified for life-support purpose shall be supplied from an essential system as required per sections 517-31 through 517-35. (517-50(c)(1))
4. Indicate if the clinic is or will be licensed by the State of California. (LABC 422A.2)
5. Provide a generator to supply all the loads in the ambulatory surgical clinics. (517-50)
6. Wiring installation within an ambulatory surgical or hemodialysis clinics shall be in accordance with 517-50(d) and (e).
7. Provide a nurse call system in the birthing clinic. (LABC 422A.16)
8. Provide minimum of 100 fc at working surface in a birthing clinic. (LABC 422A.16)
9. Operating room of a surgical clinic shall include a clock and elapsed timer and an x-ray film illuminator. (LABC 422A.17.1)
10. If Ethylene Oxide sterilizers are on emergency power, the exhaust system shall also be supplied from the emergency power. (LABC 423A.4.4)
11. Provide an audible and visual alarm system to alert sterilizer operating personnel in the event of drop in air flow below the designed cubic feet per minute. (LABC 423A.4.5)
12. Provide two branch circuits at the patient bed location in a surgical clinic. One circuit shall be from a normal panel and the other from an emergency panel. (517-18(a.1) Exp. 2.1)

P. HAZARDOUS AREAS

1. Provide hazardous classification by class, division or zones and group, and show boundaries of the hazardous area(s). (Art. 500, 505)
2. Wiring in hazardous areas shall comply with the Code provisions for those areas. (Art. 500 thru 516)
3. Provide conduit seals at boundaries of hazardous areas. _____ (501-5, 502-5, 504-70, 513-8, 514-7, 515-6)

4. Maximum permitted cross-section fill of seals shall not exceed 25% of the cross-sectional area of a conduit of the same trade size unless specifically approved. _____ (501-5(c)(6))
5. Submit details of the natural or mechanical ventilation provided in garage area(s). _____ (511-3(a))
6. Provide GFCI protection for outlets in repair garages. _____ (511-10)
7. Classify the pits in the garage areas. (511-3(b))
8. A manually operated remote control installed at an approved location shall be provided to shut off fans or blower located in flammable vapor or dust systems. (LAMC 503.1)
9. Electrical located in operations that generate explosive or flammable vapors, fumes or dust shall be interlocked with the ventilation system so that the equipment can not be operated unless the ventilation fans are in operation. (LAMC 503.1)
7. Fire warning system conductors shall be installed in metal raceways unless they are specifically approved for exposed installation. (760-25, 30)
8. Power limited circuit conductors shall run separately from non power limited circuits. (760-54)
9. The fire warning system shall be checked and approved by the Fire Department before the approval of the final plans. (93.0206)
10. Provide a worst case DC voltage drop calculation using chapter 9, table 8 of NEC _____ (93.0600)
11. Indicate type of fire protective signaling systems. (Power or Non-Power limited) (760-15)
12. Fire protective signaling systems shall be equipped with approved control panel(s) and annunciator(s). (NFPA 72)
13. Provide battery load calculation. (NFPA 72-1999)
14. The secondary battery load calculation shall include the total system supervisory and alarm loads. (LABC 3505.1 Subsection 3-8.13.3.1)

Q. EMERGENCY SYSTEMS

1. Provide (a) properly sized emergency power source(s) for required emergency load(s). (700-5)
2. A completely independent raceway and wiring system shall be installed for emergency circuits. (700-9)
3. Emergency lights shall be provided in all means of exit and exit path ways. (LABC 1003.2.9)
4. Emergency lighting shall provide a uniformly distributed minimum of 1.0 fc illumination at floor level. Provide foot-candle calculation. _____ (LABC 1003.2.9.1)
5. Provide emergency exit illumination for space/area with occupant load of 100 or more. (LABC 1003.2.9.2)
6. Emergency exit illumination shall be supplied from a generator, storage battery or a unit equipment. (LABC 1003.2.8.5; 700-12)
7. Provide exit signs. (LABC 1003.2.8.2)
8. Provide low level exit path marking. (LABC 1007.2.8)
9. Provide battery calculation. (700-5, 12(a))
10. Storage batteries shall comply with article 480.
11. Provide seismic calculations for support of emergency equipment. (LABC 1632)
12. Exit signs shall be supplied by two circuits, one from normal source and one from emergency source. _____ (700-17, 700-3 & 110-3, LABC 1003.2.8.4)
13. Provide a lock-on device for circuits supplying emergency unit equipment. (700-12(e)Exception)
14. The branch circuit feeding the unit equipment shall be the same branch circuit as that serving the normal lighting in the area and connected ahead of any local switches. (700-12(e))

R. FIRE PROTECTIVE SIGNALING SYSTEMS

1. Submit a variance to separate fire warning system or correct the items circled below.
2. Provide a fire warning system. (LABC Chapters 3&4)
3. The fire warning system shall be supplied from an approved source. (NFPA 72-1999)
4. The fire warning panel shall be connected ahead of the main service disconnect. (230-82 Ex.4, 701-11(e), 240-21, NFPA 72-1999)
5. An individual multi-wire branch circuit is required to supply the fire warning system unless a primary battery supplies the trouble signal devices of the signaling system. (NFPA 72)
6. Fire warning equipment shall be listed by a city recognized testing laboratory and shall be approved by the State Fire Marshall. (93.0402)

S. MACHINERY ROOM

1. A readily accessible control switch shall be provided to shut off all electrically operated machinery in machinery room(s). (LAMC 1109.4)
2. No electrical equipment other than specified in section LAMC Sec. 1108 shall be located in machinery room(s). (LAMC Sec. 1109.1)
3. Purging fans and associated equipment in a refrigerant room containing refrigerants other than group A1 or B1 shall comply with the requirements of Article 500 Class I Division 1 area. (LAMC 1108.8)
4. Provide a readily accessible emergency ON-only fan control switch outside of machinery room(s). (LAMC 1109.4)
5. Provide a readily accessible machinery room fan ventilation system switch outside of the room's main entrance. (LAMC 1108.6)
6. Machinery rooms shall have approved refrigerant vapor detectors and shall activate visual and audible alarms when the concentration of refrigerant vapor exceeds 25 percent of the LFL. (LAMC 1106.4)
7. Refrigerant detection and alarm systems shall be powered and supervised as required for fire alarm systems in accordance with the Fire Code. (LAMC 1121.2)
8. The detection and alarm systems shall be annunciated at an approved location in accordance with the fire code. (LAMC 1121.3)
9. Provide sufficient illumination and service receptacles to safely perform required tasks in the machinery rooms. (LAMC 1106.4)

T. SMOKE DETECTORS

1. Permanently wired smoke detector with battery backup is required for the following: (LABC 310.9.1.4)
 - A. Sleeping rooms.
 - B. Area giving access to sleeping rooms.
 - C. Each level of stairways and basement.
 - D. Upper level of split story or basement floors.
 - E. Each level of split unit containing a lower level sleeping room.

- F. A room open to a hallway serving a bedroom, and the hallway, provided that the ceiling of the room exceeds the hallway by 24 inches.

U. OVER 600 VOLTS

1. Provide proper type and size of overcurrent protection for high voltage feeders. (240-100)
2. Medium voltage equipment shall be listed by a city recognized testing laboratory or approved by the Department. (110-2, 93.0402)
3. Provide detail and specifications for the following:
 - A. Cables.
 - B. Overcurrent protective devices (electrical ratings, listing, type, AIC rating, close-and-latch rating, breakers "K" factor, MVA rating, continuous current rating, fuse time-current curves, etc.)
 - C. Transformer(s) (rating, listing, etc.)
 - D. Raceway(s) (size, material, etc.)
 - E. Terminations and Splices.
 - F. Pull boxes and Manholes.
 - G. Disconnect devices (type, size, electrical rating, magnetizing current interrupting ratings, cable charging rating, fault close rating, etc.)
 - H. Switchgear(s), Substation(s), Unitsubstation(s).
 - I. Grounding Impedance(continues and watt rating, etc.)
 - J. Bracing. (110-8, 93.0207(n))
4. Clarify the grounding method used. Include information on size and termination method. (Art. 250, 93.0207(n))
5. Provide detail on high impedance grounding. (Art. 250, 93.0207(n))
6. Provide capacitive current charge calculation. (Art. 250, 250-6, 93.0207(n))
7. Provide detailed short circuit analysis including a coordination study. The analysis should reflect the three and single phase fault as well as ground fault and line to line to ground fault(when applicable). (110-9 & 10, 240-21, 93.0207(n))
8. Provide a coordinated protection for the motor circuit. This coordination shall include the fault current, overload, circuit conductors and motor control apparatus. (430-125)

V. LOW VOLTAGE POWER CIRCUITS

1. Identify all Class 2 and Class 3 circuits. (725-41)

W. STATE ENERGY REGULATIONS (Title 24, Part 6, California Code of Regulation)

1. Submit lighting calculations on approved lighting compliance forms for new office building or additions and alterations on existing building. (146)
2. The certificate of compliance shall be signed by the person responsible for its preparation prior to plan check approval. (10-103(a))
3. Electric resistance heating systems shall not be used for space heating. (144(g), 151(f)(7))
4. Certificate of compliance, form LTG-1 (Parts 1 & 2) shall be printed on plans. (10-103(a))
5. One or three lamp fluorescent luminaries within 10' shall be tandem wired. (132)

6. Lamps used in luminaries for general lighting in kitchens and bathroom shall have efficacy of not less than 40 lumens per watt. (130(b), 150(k))
7. Provide list of lighting mandatory measures on plans. (10-103(a))
8. Provide automatic shut-off control for lighting with override switching device. (131(d)1,2)
9. Provide an independent switching or control device for each area enclosed by ceiling-height partitions. (131(a))
10. Provide dual switching for the general lighting. (131(b))
11. Provide an independent control for at least 50% of the lights in daylight areas. (131(c))
12. The switching or control device shall be located so that a person using the device can see the lights or area controlled by that switch. (131(a))
13. Display lighting shall be separately switched on circuits that are 20 amperes or less. (131(e))
14. In office areas greater than 250 square feet with permanently installed lighting systems, a portable light power of 0.2 watts per square foot shall be included in calculation of actual lighting power density if the actual watts of the fixtures are not known. (146(a))

