

ORDINANCE NO. 2008-4-10

AN ORDINANCE OF THE CITY OF PLANO, TEXAS AMENDING ORDINANCE NO. 2001-6-7, SECTION 6- 468 (EXEMPTIONS) OF ARTICLE XI (OUTDOOR LIGHTING), CHAPTER 6 OF CITY OF PLANO CODE OF ORDINANCES PROVIDING A REPEALER CLAUSE, A SEVERABILITY CLAUSE, A PENALTY CLAUSE, A SAVINGS CLAUSE, AND AN EFFECTIVE DATE.

WHEREAS, on June 11, 2001, by Ordinance No. 2001-6-7, the City Council of the City of Plano codified regulations on outdoor lighting as Article XI (Outdoor Lighting), Sections 4-466 through 4-473 of Chapter 6 of the City of Plano Code of Ordinances; and

WHEREAS, the City Council of the City of Plano finds it is necessary and in the best interest of the City and its citizens to amend a section in the existing ordinance; and

WHEREAS, The City Council hereby finds that it is necessary and in the best interest of the City and its citizens to amend Ordinance 2001-6-7 by amending Section 6-468. (Exemptions) of Article XI (Outdoor Lighting), Chapter 6 of the City of Plano Code of Ordinances; and

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF PLANO, TEXAS, THAT:

Section I. Ordinance No. 2001-6-7 duly passed and approved by the City Council of the City of Plano, Texas on June 11, 2001, and codified as Article XI (Outdoor Lighting), Chapter 6 of the Code of Ordinances of the City of Plano has been heretofore amended.

Section II. Section 6-468 (Exemptions) of Article XI (Outdoor Lighting), Chapter 6 of the Code of Ordinances of the City of Plano, Texas, is hereby amended to read as follows:

Sec. 6-468. Exemptions and exceptions.

- a. Lighting installed by a governmental agency for public benefit on public rights-of-way, parks, and public recreation areas.
- b. Lighting installed on single-family or two family properties.
- c. Navigation and airport lighting required by the FAA for operation of airplanes.
- d. Emergency lighting by police, fire, and/or municipal, state, or federal government authorities.
- e. Temporary special effects of holiday lighting.

f. All public school and private school ball fields are exempt from the general standards of this ordinance. Lighting for these outdoor recreational uses shall be shielded to comply with the *Limitations on neighboring property* found in section 6-470, (d) Limitations.

Section IV. All other portions Article XI (Outdoor Lighting), Chapter 6 of the City of Plano Code of Ordinances shall remain in full force and effect.

Section V. Any person violating any of the provisions or terms of this Ordinance shall be subject to a penalty as provided for in Section 6-467, Penalty, of Article XI, Outdoor Lighting, of the City of Plano Code of Ordinance.

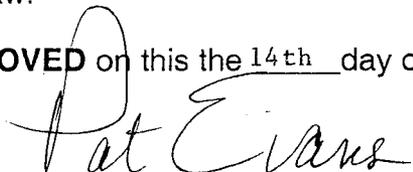
Section VI. All provisions of the Ordinances of the City of Plano, codified or uncodified, in conflict with the provisions of this ordinance are hereby repealed, and all other provisions of the Ordinances of the City of Plano, codified or uncodified, not in conflict with the provisions of this Ordinance, shall remain in full force and effect.

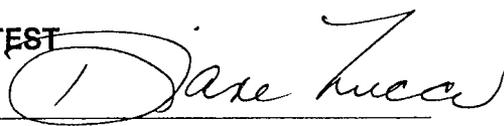
Section VII. It is the intention of the City Council that this Ordinance, and every provision hereof, shall be considered severable, and the invalidity or unconstitutionality of any section, clause, provision or portion of this Ordinance shall not affect the validity or constitutionality of any section, clause, provision or portion of this Ordinance shall not affect the validity or constitutionality of any other portion of this Ordinance.

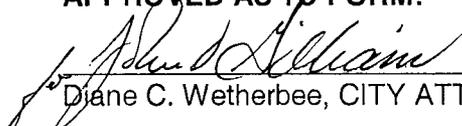
Section VIII. The correction of any ordinance or part of any ordinance affected by the enactment of this Ordinance shall not be construed as abandoning any action now pending under or by virtue of such ordinance or as discontinuing, abating, modifying, or altering any penalty accruing or to accrue, or as affecting any rights of the municipality under any section or provisions of any ordinances at the time of passage of this Ordinance.

Section IX. This Ordinance shall become effective from and after its passage and publication as required by law.

DULY PASSED AND APPROVED on this the 14th day of April, 2008.


Pat Evans, MAYOR

ATTEST

Diane Zucco, CITY SECRETARY

APPROVED AS TO FORM:

Diane C. Wetherbee, CITY ATTORNEY

ARTICLE XI. OUTDOOR LIGHTING**Sec. 6-466. Definitions.**

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Building official means the chief building official for the city of Plano, or his designee, having responsibility to enforce and administer this article.

Bulb or lamp means the source of electric light. To be distinguished from the whole assembly, lamp is used to denote the bulb and its housing.

Candela means the unit of luminous intensity in a given direction. It is commonly called one (1) candlepower.

Class I lighting means all outdoor lighting used for, but not limited to outdoor sales areas, recreational facilities and assembly areas, eating areas, repair areas, advertising displays, billboards and other signs and similar applications when color rendition is important.

Class II lighting means all other outdoor lighting including, but not limited to illumination for walkways, roadways, equipment yards, parking areas, outdoor security and similar application when color rendition is not important.

Cutoff fixture means a fixture that provides a cutoff (shielding) of the light emitted.

Diffusing luminaire means one that scatters light substantially in all directions as contrasted with a directional luminaire which confines its light principally in an angle of less than one hundred eighty (180) degrees.

Floodlight means a luminaire designed to project its light in a well-defined area. It is directional in character.

Floodlight beam means the angular spread of light between two (2) orthogonal planes each of which equal ten (10) percent of the maximum candlepower within the beam.

Footcandle means the amount of illumination provided by one (1) lumen uniformly distributed on one (1) square foot of surface.

Footlambert means the luminance of a surface uniformly emitting, transmitting, or reflecting one (1) lumen per square foot of surface.

Fixture means the assembly that holds the lamp in a lighting system. It includes the elements designed to give light output control, such as a reflector (mirror) or defractor (lens), the ballast, housing and the attachment parts.

Full cutoff fixture means a fixture that allows no emission above a horizontal plane through the fixture.

Fully shielded means light fixtures that are constructed so all light rays emitted by the fixture are projected below the horizontal plane passing through the lowest point on the fixture from

which light is emitted, nearly one-hundred (100) percent cut-off type, as evidenced by the manufacturers photometric data.

Glare means direct lighting emitted from a luminaire that causes reduced vision or temporary blindness.

High pressure sodium (HPS) means a high intensity discharge lamp where radiation is produced from sodium vapor at relatively high partial pressures (100 torr). HPS is essentially point source light.

Horizontal plane means a line horizontal to the lowest point on the fixture from which light is emitted.

Illumination means the density of the luminous flux (lumens) incident on a surface. It is the quotient of the luminous flux divided by the area of the surface, expressed in footcandles.

Incandescent lamp means any lamp that produces light by heating a filament through use of an electric current.

Installed means the attachment, or assembly fixed in place, whether or not connected to a power source, or any outdoor light fixture.

Kilowatt (kwh) means a unit of energy equal to the work done by one (1) kilowatt (1000 watts) of power acting for one (1) hour.

Light source means a device (such as a lamp) which produces visible energy as distinguished from devices or bodies which reflect or transmit light such as a luminaire.

Light trespass means light falling outside the boundary of property for which it was originally intended or needed. Also referred to as spillover light or obtrusive light.

Low pressure sodium (LPS) means a discharge lamp where the light is produced by radiation from sodium vapor at a relatively low partial pressure (about 0.001 torr). LPS is a "tube source" monochromatic light.

Lumen means the quantity of luminous flux intercepted by a surface of one (1) square foot, all

points of which are one (1) foot from a uniform source of one (1) candela. A one-candela source provides 12.57 lumens.

Luminaire means a device or fixture containing a light source and means for directing and controlling the distribution of light from the source.

Luminance means the luminous intensity per unit projected area of a given surface viewed from a given direction for purposes of this article expressed in candelas divided by distance squared.

Mercury lamp means a high intensity discharge lamp where light is produced by radiation from mercury vapor.

Metal halide lamp means a high intensity discharge lamp where light is produced by radiation from metal halide vapor.

Outdoor lighting fixture means an outdoor artificial illumination device, whether permanent or portable, used for illumination outdoors and shall include but not be limited to devices used for search, spot, flood and area lighting for buildings and structures, recreational facilities, parking areas, landscape lighting, outdoor advertising displays, billboards, signs, public and private street lighting and walkway lighting.

Partially shielded means shielding so that the lower edge of the shield is at or below the centerline of the light source or lamp so as to minimize light transmission above the horizontal plane, or at least ninety (90) percent of the emitted light projects below the horizontal plane as evidenced by the manufacturer's photometric data.

Photometric means quantitative measurements of light levels and distribution.

Shielding means a physical structure intended to restrict emitted light.
(Ord. No. 85-5-27, § I, 5-13-85; Ord. No. 2000-4-16, § II, 4-24-2000)

Sec. 6-467. Penalty.

Any person violating any provision of this article shall be deemed guilty of a misdemeanor and upon conviction thereof, shall be fined in an amount not less than one dollar (\$1.00) nor more than two thousand dollars (\$2,000.00) for each

violation, and each and every day any such violation shall continue shall be deemed to constitute a separate offense.

(Ord. No. 85-5-27, § VII, 5-13-85; Ord. No. 2000-4-16, § III, 4-24-2000)

Cross reference—General penalty, § 1-4.

Sec. 6-468. Exemptions.

Lighting installed on single-family or two-family property, and lighting installed by a governmental agency for public benefit on public rights-of-way and parks shall be exempt from the provisions of this article. Temporary special effects of holiday lighting shall be exempt from the provisions of this article. Other temporary lighting effects may be used if approved by the city council.

(Ord. No. 85-5-27, § V, 5-13-85)

Sec. 6-469. Enforcement.

(a) *Illumination in excess of limitation.* If the illumination, as measured or calculated, exceeds the limitations shown in section 6-470(d), the illumination shall be reduced until the illumination is equal to or less than that prescribed in the aforementioned section 6-470(d). This may be accomplished by reduction in the quantity of luminaries, reduction of the wattage of the lamps, shielding the luminaries, or by reaiming of the luminaries.

(b) *Luminance in excess of limitation.* If the luminance of a luminaire, as calculated, exceeds the limitations shown in section 6-471(c), the luminance shall be reduced until it is equal to or less than that prescribed in section 6-471(c). This may be accomplished by reduction of the wattage of the lamps, shielding the luminaire or by reaiming of the luminaries.

(c) *Shielding.* Luminaries which are directed toward a viewer shall be aimed in such a manner that the viewer's eye, at least five (5) feet above ground at or beyond the property line, shall not be exposed to fixture luminance within the floodlight beam of the luminary.

(Ord. No. 85-5-27, § IV, 5-13-85; Ord. No. 2000-4-16, § IV, 4-24-2000)

Sec. 6-470. Illumination.

(a) *Metering equipment.* Lighting levels of outdoor lighting shall be measured in footcandles with a direct reading portable light meter with a color and cosine corrected sensor with multiple scales. The meter shall read within an accuracy of plus or minus five (5) percent. It shall have been tested and calibrated by an independent commercial photometric laboratory or the manufacturer within one (1) year of date of use as attested to by a certificate issued by such laboratory.

(b) *Horizontal method of measurement.* The meter sensor shall be mounted not more than six (6) inches above ground level in a horizontal position. Readings shall be taken only after the cell has been exposed to provide a constant reading. Measurements shall be made when the meteorological optical range is six (6) miles or further such that measurements will not be adversely affected by atmospheric scatter. Measurements shall be made after dark with the existing questioned light sources on, then with the same sources off. The difference between the two (2) readings shall be compared to the footcandle ratings listed in subsection (d). This procedure eliminates the effects of moonlight and other ambient light.

(c) *Vertical method of measurement.* The meter sensor shall be mounted at least five (5) feet above ground level in a vertical position, perpendicular to the property line and facing the outdoor lighting in question.

(d) *Limitations.*

(1) *Limitations on neighboring property.* The limit of illumination on neighboring property from one (1) establishment shall be by zoning of the neighboring property. Maximum computed or measured footcandles at the neighboring property line shall not exceed:

	Footcandles	
	Horizontal	Vertical
a. Single-family and two-family residential districts	0.2	0.5
b. Multiple-family residential districts	0.5	0.5
c. Nonresidential districts, streets	3.0	3.0

	Footcandles	
	Horizontal	Vertical
d. Light industrial districts	5.0	5.0

Exception: Illumination at interior property lines on contiguous lots in a multi-tenant, non-residential development may exceed the above criteria when necessary to provide constant lighting levels of adjoining parking areas, fire lanes and interior access roadways as determined by the building official.

(2) *Limitations on establishment property.* The maximum outdoor initial computed or measured illuminance level on the establishment property shall not exceed twenty-five (25) footcandles outdoors at any point, except that lighting under canopies (such as service stations) shall not exceed forty (40) footcandles.

(e) *Computation of illumination.* Illumination at a point may be computed in lieu of measurement. Computation methods shall consist of a generally accepted Illuminating Engineering Society method, using certified photometric data furnished by the fixture manufacturer, lamp manufacturer, photometric laboratory, or other reliable authority satisfactory to the city. Computations shall be based on new, properly seasoned lamps, new and clean fixtures, and at rated voltage and wattage, with ballasts, lenses, shields, diffusers, and other appurtenances in place, and with proper regard taken for mounting height, relative elevation, natural and manmade objects. (Ord. No. 85-5-27, § II, 5-13-85; Ord. No. 2000-4-16, § V, 4-24-2000; Ord. No. 2001-6-7, § II, 6-11-01)

Sec. 6-471. Luminance.

(a) *Calculations generally.* If illumination measurements are not practical and no other means of measuring fixture luminance is immediately available, a computational method as defined in section 6-471(b) for measuring luminance may be used to determine compliance with this article.

(b) *Luminance calculations using luminaire photometric data.* For the purpose of this article, the luminance shall be computed by the formula:

$$L = \frac{I}{(d^2 + h^2)}$$

where I is the fixture candlepower in candelas in the direction of the point from which the calculations are to be made, d is the shortest distance in feet measured horizontally from the property line to a point directly under the luminaire, and h is the height of the luminaire above the eye level as explained in Figure A below.

Factors For Luminance Determination

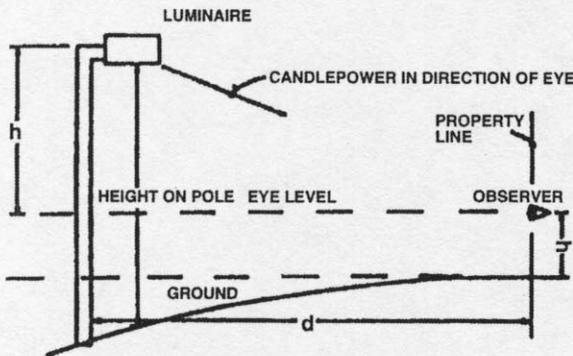


Figure A

(c) *Luminance limitations.* The luminance on neighboring property from one establishment shall be by zoning of the neighboring property. The luminance as calculated in subsection (b) shall not exceed the value by zoning as follows:

Luminance

- (1) Single-family and two-family residential districts 0.02
 - (2) Multiple-family residential districts 0.05
 - (3) Nonresidential districts, streets 0.30
 - (4) Light industrial districts 0.50
- (Ord. No. 85-5-27, § III, 5-13-85; Ord. No. 2000-4-16, § VI, 4-24-2000)

Sec. 6-472. Existing lighting.

When outdoor lighting does not conform to the provisions of this article and lawfully exists on April 24, 2000, it shall be deemed a lawful use. Any substantial change or addition to existing lighting system shall, however, comply with the provisions of this article.
(Ord. No. 85-5-27, § VI, 5-13-85; Ord. No. 2000-4-16, § VII, 4-24-2000)

Sec. 6-473. Effective outdoor lighting.

The purpose of the effective outdoor lighting section is to minimize glare, sky glow, light trespass and excessive energy consumption through use of appropriate lighting fixtures, practices and systems, while maintaining safety, security and productivity and curtailing degradation of the nighttime visual environment.

- (a) Requirements:
 - (1) Shielding shall be required in all outdoor lighting installations as specified below:

Lamp Type	Class I Lighting-Color Rendition Important	Class II Lighting-Color Rendition Not Important
Low Pressure Sodium (LPS)	Fully Shielded	Fully Shielded
High Pressure Sodium (HPS)	Fully Shielded	Fully Shielded
Metal Halide	Fully Shielded	Fully Shielded
Mercury Vapor	Prohibited	Prohibited
Fluorescent	Partially or Fully Shielded	Fully Shielded
Incandescent (over 150 watts/fixture)	Partially or Fully Shielded	Prohibited
Incandescent (under 150 watts/fixture)	Partially or Fully Shielded	Partially or Fully Shielded

<i>Lamp Type</i>	<i>Class I Lighting-Color Rendition Important</i>	<i>Class II Lighting-Color Rendition Not Important</i>
Any light source 50 watts and under	Unshielded Permitted	Unshielded Permitted
Low intensity Neon, Krypton or Argon Discharge Tubes	Unshielded Permitted	Unshielded Permitted

- (2) Hours of operation shall be complied with in all installations, except as specified in paragraph (8).
- (3) Outdoor advertising, displays, and signs not exclusively illuminated internally, may only utilize illuminating devices mounted on the top and pointing downward on the advertising display structure. All such installations shall comply with all other provisions of this article.
- (4) Glare exterior outdoor lights shall be constructed and installed in a manner consistent with this article and shall be located so as not to produce direct illumination across the building property line.
- (5) Sky glow external outdoor lights shall be constructed and installed in a manner so as to conform with requirements in section 6-473(a)(1).
- (6) Light trespass external outdoor lights shall be constructed and installed in a manner so as to conform with requirements in section 6-470(d)(1).
- (7) Outdoor advertising signs constructed of translucent materials and wholly illuminated from within do not require shielding.
- (8) Class I lighting used for illumination of:
 - (a) Outdoor sales and eating areas, on-site advertising, assembly areas, repair areas and businesses may be operated during the hours that the facility is open to the public.
 - (b) Off-site advertising displays and billboards or signs may be operated from dusk to 11:00 p.m.
- (c) only, unless fully shielded and pointing downwards from the horizontal.
- (c) Recreational and sporting areas may operate from dusk to 11:00 p.m. except to conclude a specific recreational or sporting event, tournament or similar activity which was in progress prior to 11:00 p.m. For facilities owned, leased or otherwise controlled by the City of Plano, light usage may be extended to allow activities to begin after 11:00 p.m. with approval of the parks and recreation department. For approval, activity must be part of a league, season or tournament which has an immediate completion deadline.
- (9) Permitted Class II lighting may be operated anytime (walkways, roadways, equipment yards, parking areas and outdoor security).
- (10) Laser source light and strobe lights in addition to other high intensity light sources for advertising or entertainment shall not be projected above the horizontal plane, unless a permit is obtained for specific events and timeframes.
- (11) Searchlights are prohibited unless required in an emergency as declared by the city.
- (b) Exemptions:
 - (1) Permanent exemptions:
 - (a) Lighting fixtures installed and operated prior to the date of this ordinance are exempt from

the requirements of this article except that they must comply with paragraphs (8)(a), 8(b), 8(c) and 9.

- (b) Navigation and airport lighting required by the FAA for operation of airplanes are exempt from this article.
 - (c) Emergency lighting by police, fire and/or other municipal, state or federal government authorities are exempt from this article.
 - (d) Seasonal decorative street lighting is exempt from this article.
- (2) Temporary exemptions:
- (a) The building inspections department, the city manager or city manager's designee may approve temporary exemptions from the requirements of this article provided the duration of the approval is not more than fourteen (14) days from the date of approval. Temporary exemptions may be granted for two (2), two-week periods each calendar year per legal business. A two-week period will commence on the day the exemption is approved. The two (2), two-week periods shall not occur in the same or consecutive months. A legal business shall include any commercial, industrial, or institutional use for which a certificate of occupancy is issued.
 - (b) Any person may submit a written request, on a form prepared by the city, to the building official for a temporary exemption request. The request shall contain the following information:
 - i. Specific exemption(s) requested;
 - ii. Type/use of outdoor lighting fixture involved;
 - iii. Duration of time requested;
 - iv. Type of lamp and calculated footcandles;
 - v. Total wattage of lamp(s);
 - vi. Proposed location of fixtures;
 - vii. Previous temporary exemption requests;
 - viii. Physical side of fixtures and type of shielding provided;
 - ix. Such other data or information as may be required by the building official.
 - (c) The building official shall have five (5) working days from the date of the submission request to act, in writing, on the request.
 - (d) Requests for renewal or exemptions shall be processed in the same way as the original request. Each renewal shall be valid for not more than fourteen (14) days.
 - (e) Approval for temporary exemptions will be based on the effect of location and use of outdoor lighting fixtures.
- (3) Roadway lighting is not eligible for exemption.
- (c) Submission of plans and evidence of compliance.
- (1) The applicant for any permit required by any provision of the laws of this city in connection with the proposed work involving outdoor lighting fixtures shall submit (as part of the application for a building permit) evidence that the proposed work will comply with this Code. The submission shall contain but shall not necessarily be limited to the following, all or part of which may be part or, in addition to, the information

required elsewhere in the laws of the city upon application for the required permit:

- (a) Plans indicating the location on the premises, and the type of illuminating devices, fixtures, lamps, supports, reflectors and other devices;
 - (b) Description of the illuminating devices, fixtures, lamps, supports, reflectors and other devices may include, but is not limited to, catalog cuts by manufacturers and drawings (including sections where required);
 - (c) Photometric data, such as that furnished by manufacturers, or similar data showing the angle of cut off or light emissions.
- (2) The above required plans, description and data shall be sufficiently complete to enable the plans examiner to readily determine whether compliance with the requirements of this Code will be secured. If such plans, descriptions and data cannot enable this ready determination, by reason of the nature of configuration of the devices, fixtures or lamps proposed, the applicant shall additionally submit as evidence of compliance to enable such determination such certified reports of tests as will do so provided that these tests shall have been performed and certified by a recognized testing laboratory. Projects with site plans and/or engineering plans approved prior to adoption of [Ord. No. 2000-4-16] are subject to lighting requirements in effect at the time of plan approval.
- (3) If any subdivision proposes to have installed street or other common public area outdoor lighting, the site plan shall contain a statement certifying that the applicable provisions of the City of Plano Outdoor Lighting Code will be adhered to.

- (4) Should any outdoor light fixture or the type of light source be changed therein after the permit has been issued, a change request must be submitted to the building official for his approval, together with the adequate information to assure compliance with this Code, which must be received prior to substitution.
- (d) Appeal. Appeals to any decision made by the building official with regard to any component of the effective outdoor lighting section of this chapter will be heard by the building standards commission. Commission decisions will be final.
(Ord. No. 2000-4-16, § VIII, 4-24-2000)

Secs. 6-474—6-485. Reserved.

ARTICLE XII. PROPERTY CODE*

DIVISION 1. GENERALLY

Sec. 6-486. Title.

These regulations shall be known as the "Plano Property Code," may be cited as such and will be referred to herein as "this code."
(Ord. No. 90-10-25, § I(Art. I, § 1), 10-22-90)

Sec. 6-487. Purpose.

The purpose of this code is to provide minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the use and occupancy, location and maintenance of all residential buildings, structures and property within this jurisdiction. The purpose of this code is not to create or otherwise establish or designate any particular class or group of persons who will or should be especially protected or benefited by the terms of this code.
(Ord. No. 90-10-25, § I(Art. I, § 2), 10-22-90)

***Editor's note**—Ord. No. 90-10-25, § I, adopted Oct. 22, 1990, amended Art. XII of this chapter, relative to housing code, in its entirety, in effect repealing former §§ 6-486—6-488 and enacting new provisions, codified as set out in Art. XII, Divs. 1—4. Formerly, §§ 6-486—6-488 derived from Ord. No. 89-4-12, §§ I—III, adopted Apr. 10, 1989.

Sec. 6-488. Scope.

The provisions of this code shall apply to all buildings or portions thereof used or designed or intended to be used for human habitation and their accessory structures. Such occupancies in existing buildings may be continued as provided in section 104(c) of the building code, except such structures as are found to be substandard as defined in this code. Where any building or portion thereof is used or intended to be used as a combination apartment house/hotel, the provisions of this code shall apply to the separate portions as if they were separate buildings. Every roominghouse or lodginghouse shall comply with all the requirements of this code for dwellings. (Ord. No. 90-10-25, § I(Art. I, § 3), 10-22-90)