Ordinance No. 3840
(Amending or Repealing Ordinances)

CFN=205 – Uniform Fire Codes
Passed – 5/15/2007
2006 International Fire Code – City of Kent Local Amendments
(amending Ch. 13.01)

Amends Ords. 3691;3810

Amended by Ord. 3957
ORDINANCE NO. 3840

AN ORDINANCE of the city council of the city of Kent, Washington, amending various provisions of Chapter 13.01 of the Kent City Code to adopt the 2006 edition of the International Fire Code and to make other housekeeping amendments.

RECITALS

A. In response to legislative amendments adopted by the State of Washington, the Kent City Council enacted Ordinance No. 3691 on May 4, 2004, which adopted the 2003 edition of the International Fire Code. The state recently adopted the 2006 edition of this code, which takes effect and applies to all cities in the state on July 1, 2007. Therefore, it is necessary to amend the Kent City Code to formally adopt the same.

B. In addition to adopting the 2006 code edition, this ordinance also makes other housekeeping amendments, including repealing some local amendments the city previously enacted which are now reflected in the 2006 code and are thus no longer necessary.

THE CITY COUNCIL OF THE CITY OF KENT, WASHINGTON, DOES HEREBY ORDAIN AS FOLLOWS:

1 2006 International Fire Code- City of Kent Local Amendments
ORDINANCE

SECTION 1. - Amendment. Chapter 13.01 of the Kent City Code, entitled “Fire Codes,” is amended as follows:

CHAPTER 13.01
FIRE CODES

Sec. 13.01.010. Fire code – Adopted. In accordance with Ch. 19.27 RCW, the International Fire Code, 2006 edition, published by the International Code Council, Inc., together with any additions, deletions, and exceptions currently enacted or as may be amended from time to time by the State of Washington through its Building Code Council pursuant to the Washington Administrative Code (“WAC”), and as further amended in this chapter, is hereby adopted and incorporated by this reference.

One (1) copy of the International Fire Code and the appendices adopted in KCC 13.01.030(A) below are on file with the City’s fire code official.

Sec. 13.01.020. Code conflicts. To the extent allowed by RCW 19.27 040, if a conflict exists between the provisions of the International Fire Code adopted and amended by the Washington State Building Code Council and the provisions of Chapter 13.01 of the Kent City Code, the Kent City Code provisions shall govern.

Sec. 13.01.030. Amendments to the International Fire Code - Chapter 1, Administration. The following local amendments to Chapter 1 of the International Fire Code, entitled “Administration,” are hereby adopted and incorporated into the International Fire Code:

A. General - Fire code appendices adopted. Section 101 of the International Fire Code, entitled “General,” is amended by adding the following new subsection 101.6:

Sec. 101.6. Fire code appendices adopted. Appendices B, C, D, E, F, and G to the International Fire Code are hereby adopted.
B. General authority and responsibilities - Retained authority. Section 104 of the International Fire Code, entitled "General Authority and Responsibilities," is amended by adding the following new subsection 104.1.1:

Sec. 104.1.1. Retained authority - Additional conditions. The fire code official retains the authority to impose additional conditions where the official determines it necessary to mitigate identified fire protection impacts. These conditions may include, by way of example and without limitation, increased setbacks, use of fire retardant materials, installation of standpipes, fire sprinkler and fire alarm systems.

C. General authority and responsibilities - Lot lines and setback lines. Section 104 of the International Fire Code, entitled "General Authority and Responsibilities," is amended by adding the following new subsection 104.12:

Sec. 104.12. Lot lines and setback lines. Notwithstanding the authority of the fire code official to administer and enforce the fire code, the fire code official shall have no duty to verify or establish lot lines or setback lines. No such duty is created by this code and none shall be implied.

D. Permits - Fees. Section 105 of the International Fire Code, entitled "Permits," is amended by adding the following new subsection 105.1.4:

Sec. 105.1.4. Fees. The fire code official shall prepare a resolution establishing a schedule of fees for council consideration, which fees shall include the cost involved in the processing, issuance, and renewal of permits and certificates. Any fee schedule adopted by resolution shall govern the fee amount to be assessed for any permit or certificate and the fire code official shall collect those fees as a condition to issuance or renewal of any permit or certificate. Failure to pay for either an original permit or the required renewal within 30 days of the date notice is given, shall result in the City’s termination of the permit or certificate application.

E. Permits - Term. Section 105 of the International Fire Code, entitled "Permits," is amended by adding the following new subsection 105.1.5:

Sec. 105.1.5. Term. Permits and certificates issued in accordance with this code shall be valid for a 12 month period and are renewable at the end of that 12 month term.
F. **Permits - Expiration of project permit application.** Section 105 of the International Fire Code, entitled "Permits," is amended by substituting subsection 105.2.3 with the following:

**Sec. 105.2.3. Expiration of project permit application.**
Project permit applications that are subject to Ch. 12.01 KCC or that require SEPA review are subject to those deadlines. All other project permit applications shall expire by limitation if no permit is issued 180 days after the determination that a fully complete project permit application has been submitted, unless that application has been pursued in good faith. The fire code official may extend the time for action on the permit application for one or more periods, each period not exceeding 90 days, upon written request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. If an application has expired, plans and other data previously submitted for review may thereafter be returned to the applicant or destroyed by the fire code official. In order to renew action on an expired application, the applicant shall resubmit plans and pay a new review fee.

G. **Board of appeals.** Section 108 of the International Fire Code, entitled "Board of appeals," is amended by substituting section 108 with the following:

**Sec. 108. Board of appeals.** The City of Kent hearings examiner is designated as the board of appeals in order to hear and decide appeals of orders, decisions, or determinations made by the fire code official relative to the suitability of alternate materials, designs, and methods of construction and appeals of the reasonable application and interpretation of the building codes. Appeals shall be made as set forth in section 13 01.120 of the Kent City Code.

H. **Violation penalties.** Section 109 of the International Fire Code, entitled "Violations," is amended by substituting subsection 109.3 with the following:

**Sec. 109.3. Violation penalties.** Any person who violates a provision of this code or fails to comply with any of its requirements or who erects, constructs, alters, or repairs a building or structure in violation of (a) the approved construction documents, (b) a directive of the fire code official, or (c) a permit or certificate issued under the provisions of this code, shall be subject to penalties as set forth in Ch. 13.02 of the Kent City Code or as otherwise provided by law.
Sec. 13.01.040. Amendments to the International Fire Code - Chapter 2, Definitions. The following local amendments to Chapter 2 of the International Fire Code, entitled "Definitions," are hereby adopted and incorporated into the International Fire Code:

A. General definitions. Section 202 of the International Fire Code is amended to add the following four general definitions:

- **APWA** is the American Public Works Association.
- **AWWA** is the American Water Works Association.
- **PRIVATE HYDRANT** is a fire hydrant situated and maintained to provide water for firefighting purposes with restrictions as to use.
- **PUBLIC HYDRANT** is a fire hydrant situated and maintained to provide water for firefighting purposes without restrictions as to use for that purpose and is accessible for immediate use at all times.

Sec. 13.01.050. Amendments to the International Fire Code - Chapter 3, General Precautions Against Fire. The following local amendment to Chapter 3 of the International Fire Code, entitled "General Precautions Against Fire," is hereby adopted and incorporated into the International Fire Code:

A. Vacant premises - Fire protection systems. Section 311 of the International Fire Code, entitled "Vacant Premises," is amended by substituting subsection 311.2.2 with the following:

**Sec. 311.2.2. Fire protection.** Fire alarm, sprinkler, and standpipe systems shall be maintained in an operable condition at all times.

**Exception:** If, in the opinion of the fire code official, the premises (a) has been cleared of all combustible materials and debris, (b) is of the type of construction with sufficient fire separation distance so as to not create a fire hazard, (c) has been secured to prohibit entry by unauthorized persons, and (d) has buildings that will not be heated, potentially exposing fire protection systems to freezing temperatures, then the fire code official may allow fire alarm and sprinkler systems to be placed...
out of service and may allow standpipes to be maintained as dry systems (without an automatic water supply).

Sec. 13.01.060. Amendments to the International Fire Code - Chapter 5, Fire Service Features. The following local amendments to Chapter 5 of the International Fire Code, entitled "Fire Service Features," are adopted and incorporated into the International Fire Code:


B. Fire apparatus access roads - Dimensions. Section 503 of the International Fire Code, entitled "Fire Apparatus Access Roads," is amended by substituting subsection 503.2.1 with the following:

Sec. 503.2.1. Dimensions. The following minimum dimensions shall apply for fire apparatus access roads:
1. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), except for approved security gates in accordance with section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).
2. In the immediate vicinity of any building or portion thereof in excess of 28 feet in height, the fire apparatus access road shall have an unobstructed width of not less than 26 feet (7924 mm) and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).
3. At least one of the required fire apparatus access roads shall be located a minimum of 15 feet and a maximum of 25 feet from each building on the premises and shall be positioned parallel to one entire side of each building. The measurement for this requirement shall be taken from the exterior wall of the building to the nearest edge of the fire apparatus access road.

C. Fire apparatus access roads - Bridges and elevated surfaces. Section 503 of the International Fire Code, entitled "Fire Apparatus Access Roads," is amended by substituting subsection 503.2.6 with the following:

Sec. 503.2.6. Bridges and elevated surfaces. Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge or elevated surface shall be constructed and maintained in accordance with specifications established by the fire code official and the City's public works director, or their designees, at a minimum, however, the bridge or elevated
surface shall be constructed and maintained in accordance with AASHTO Standard Specifications for Highway Bridges. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of a 30 or more ton fire apparatus, the total imposed load to be determined by the fire code official. Vehicle load limits shall be posted at both entrances to bridges when required by the fire code official. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for that use, approved barriers or approved signs, or both, shall be installed and maintained, if required by the fire code official.

D. Fire apparatus access roads - Marking. Section 503 of the International Fire Code, entitled "Fire Apparatus Access Roads," is amended by substituting subsection 503.3 with the following:

**Sec. 503.3. Marking.** Fire apparatus access roads shall be marked whenever necessary to maintain the unobstructed minimum required width of roadways. Subject to the fire code official's prior written approval, marked fire apparatus access roads, or "fire lanes" as defined in section 502.1 of the code, may be established or relocated at the time of plan review, pre-construction site inspection, and/or post construction site inspection as well as any time during the life of the occupancy. Only those fire apparatus access roads established by the fire code official can utilize red marking paint and the term "fire lane." Fire lanes shall be marked as directed by the fire code official with one or more of the following types of marking:

**503.3.1. Type 1.** Type 1 marking shall be installed to identify fire lanes on commercial and multi-family developments or as directed by the fire code official. The following shall apply to Type 1 marking:

1. Curbs shall be identified by red traffic paint with a 6 inch wide stripe on the top and front, extending the length of the designated fire lane.

   **Exception:** Fire lanes installed prior to July 1, 2004, with yellow paint.

2. Rolled curbs shall be identified by red traffic paint with a 6 inch wide stripe on upper most portion of the curb, extending the length of the designated fire lane.

3. Lanes without curbs shall be identified by red traffic paint with a 6 inch wide stripe on the pavement, extending the length of the designated fire lane.

4. The words "NO PARKING - FIRE LANE" shall be in 3 inch stroke white letters 18 inches in height, and placed 8 inches measured perpendicular from the red paint stripe on the pavement. Locations and intervals will be designated by the fire
503.3.2. Type 2. Type 2 marking shall be installed to identify fire lanes in one- and two-family dwelling developments; cul-de-sac turnarounds as required by Appendix D of the Fire Code; or as directed by the fire code official. The following shall apply to Type 2 marking:

1. Type 2 marking requires metal signs stating "NO PARKING - FIRE LANE" to be installed at intervals or locations designated by the fire code official; signage will not to exceed 150 feet apart.
2. The signs shall measure 12 inches in width and 18 inches in height and have red letters on a white background.
3. A metal sign shall be installed on both sides of the post to face traffic to ensure high visibility for motorists. Signs shall be installed as required by current City of Kent Construction Standards.

Exception: On construction sites, approved portable or temporary sign posts and bases may be used.

4. Where fire lanes are adjacent to buildings or structures and when approved or directed by the fire code official, the signs may be placed on the face of the building or structure.

503.3.3 Type 3. The following shall apply to Type 3 marking:

1. Where directed by the fire code official, specific areas shall be designated and those areas are to be marked with diagonal stripping across the width of the fire lane. Diagonal marking shall be used in conjunction with painted curbs and/or edge striping and shall run at an angle of 30 to 60 degrees from one side to the other. These diagonal lines shall be in red traffic paint, parallel with each other, at least 6 inches in width, and 24 inches apart. Lettering shall occur as with Type 1 marking.

503.3.4. Yellow Paint Exception Repealed. Effective July 1, 2008, the yellow paint exception in 503.3.1(1) is repealed.
E. Access to building openings and roofs — Required access. Section 504 of the International Fire Code, entitled “Access to Building Openings and Roofs,” is amended by substituting subsection 504.1 with the following:

Sec. 504.1. Required access. The following points of access must be provided:
1. Exterior doors and openings required by this code or the International Building Code shall be maintained readily accessible for emergency access by the fire department.
2. Each tenant space provided with a secondary exit to the exterior or exit corridor shall be provided with tenant identification by business name and/or address. Letters and numbers shall be posted on the corridor/external side of the door, be plainly legible, and shall contrast with their background.
3. An approved access walkway shall be provided to connect fire apparatus access roads to exterior openings.
4. All rescue windows shall be accessible by a 35-foot ground extension ladder placed so that the inclination of the ladder does not exceed 70 degrees. An area of discharge, 36 inches in all directions around the base of the ladder, shall be provided. Ladders and associated areas of discharge shall be located within the property lines.
5. All occupancies shall be required to provide approved life safety rescue access, as defined in section 902 of this code.

Exception: Group U occupancies.

6. The provisions of this subsection shall apply if, at the time of the first permit application, the county assessed valuation for the building(s) subject to the permit application will increase by more than 50 percent due to alterations or repairs to the building(s) within any 70-month time period. Additions to an existing structure shall be considered new construction and subject to the provisions of this section. If additions to an existing structure cause a building to meet the area, number of floor levels, or units that would subject a new building to the requirements of this section, the entire building will then be required to comply with this section.

F. Fire protection water supplies — Installation requirements. Section 508 of the International Fire Code, entitled “Fire Protection Water Supplies,” is amended by substituting subsection 508.5.7 with the following:

Sec. 508.5.7. Installation requirements. All fire hydrants shall be installed in accordance with the specifications established by the fire code official or his or her designee, or at
a minimum, in accordance with the latest NFPA, APWA, or AWWA standards. In addition, unless modified by written
decision of the fire code official, the following requirements shall
apply to all building construction projects:
1. All fire hydrant piping, valves, and related appurtenances
   shall be approved by the City's public works department.
2. The fire hydrant installation and its attendant water
   system connection shall conform to the City's specifications and
design and construction standards.
3. An auxiliary gate valve shall be installed at the main line
tee to permit the repair and replacement of the hydrant without
disruption of water service.
4. All hydrants shall be plumb, plus or minus 3 degrees, to
   be set to finished grade with the bottom flange 2 inches above
   the ground or curb grade and have no less than 36 inches in
diameter of clear area around the hydrant for the clearance of
   hydrant wrenches on both outlets and the operating nut.
5. The largest port shall face the most likely direction of
   approach and location of the fire apparatus while pumping as
determined by the fire code official. Distance from the pumper
   port to the street curb shall be no further than 10 feet.
6. The lead from the service main to the hydrant shall be no
   less than 6 inches in diameter. Any hydrant leads over 50 feet
   in length from the water main to hydrant shall be no less than 8
   inches in diameter.
7. All hydrants installed in single family residential areas
   shall be supplied by not less than 6 inch mains and shall be
   capable of delivering 1,000 gpm fire flow over and above
   average maximum demands at the farthest point of the
   installation.
8. All hydrants shall have at least 5 inch minimum valve
   openings, "O" ring stem seal, two 2½ inch national standard
   thread hose ports, one 4½ inch steamer port with national
   standard threads or otherwise determined by the fire code
   official. In addition, all hydrants shall meet AWWA standards for
   public hydrants and be of a type approved for use in the City by
   the City's public works department.
9. All pipe shall meet the City standards as determined by
   the public works department. Piping located entirely within
   private property and maintained by the property owner shall
   meet the requirements and be approved by the fire code official.
   The fire code official may approve any piping material that has
   been tested and approved by a nationally recognized testing
   laboratory.
10. The maximum distance between hydrants in single family
    use district zones shall be 600 feet.
11. The maximum distance between hydrants in commercial,
    industrial, and apartment (including duplex) use zones shall be
    300 feet.
12. Lateral spacing of hydrants shall be predicated on
    hydrants being located at street intersections.
13. The appropriate water authority and the fire department shall be notified in writing of the anticipated date the hydrant installation and its attendant water connection system will be available for use.

G. Fire protection water supplies – Notification. Section 508 of the International Fire Code, entitled "Fire Protection Water Supplies," is amended by adding a new subsection 508.6 as follows:

Sec. 508.6. Notification. The owner of property on which private hydrants are located and the public agencies that own or control public hydrants must provide the fire code official with the following written service notifications:

Sec. 508.6.1. In-service notification. The fire code official shall be notified when any newly installed hydrant or main is placed into service.

Sec. 508.6.2. Out-of-service notification. Where any hydrant is out of service or has not yet been placed in service, the hydrant shall be identified as being out of service and shall be appropriately marked as out of service, by a method approved by the fire code official.

H. Fire protection water supplies – Dead-end mains prohibited. Section 508 of the International Fire Code, entitled "Fire Protection Water Supplies," is amended by adding a new subsection 508.7 as follows:

Sec. 508.7. Dead-end mains prohibited. When appropriate, all water mains in any project shall be looped.

I. Fire protection water supplies – Building permit requirements. Section 508 of the International Fire Code, entitled "Fire Protection Water Supplies," is amended by adding a new subsection 508.8 as follows:

Sec. 508.8. Building permit requirements. No building permit shall be issued until all plans required by this section have been submitted and approved in accordance with the provisions of this section. No construction beyond the foundation shall be allowed until all hydrants and mains required by this section are in place and approved.
J. Fire department access to equipment - Identification. Section 510 of the International Fire Code, entitled "Fire Department Access to Equipment," is amended by substituting subsection 510.1 with the following:

Sec. 510.1. Identification. The following identification requirements shall apply to access to equipment.

1. Fire protection equipment and fire hydrants shall be clearly identified in an approved manner to prevent parking and/or other obstructions.
2. Entrances to rooms containing controls for air-conditioning systems, sprinkler risers and valves, or other fire detection, suppression, or control elements shall be identified for the use of the fire department.
3. Approved signs are required to identify fire protection equipment and equipment location. Signs shall be constructed of durable materials, permanently installed, and readily visible.
4. All fire department connections shall have a sign approved by the fire code official.


A. Fire protection systems - Scope and application. Section 901 of the International Fire Code, entitled "General," is amended by supplementing subsection 901.1 with the following:

Sec. 901.1. Scope and application. The provisions of this chapter shall apply to all occupancies and buildings, shall specify where fire protection systems are required, and shall apply to the design, installation, inspection, operation, testing, and maintenance of all fire protection systems; however, nothing contained in this chapter shall diminish or reduce the requirements of any duly adopted building codes, including state and local amendments, or other City ordinances, resolutions, or regulations. In the event of any conflict in requirements among these codes, ordinances, resolutions, or regulations, the more stringent provision shall apply.
B. **Fire protection systems—Alterations and additions.** Section 901 of the International Fire Code, entitled "General," is amended by adding a new subsection 901.1.1 as follows:

**Sec. 901.1.1. Alterations and additions.** The provisions of this chapter shall apply to additions and substantial alterations to existing buildings regardless of use when such addition or substantial alteration plus the existing gross floor area equals 10,000 or greater square feet. For purposes of this section, a substantial alteration shall be defined as an alteration that costs 50 percent or more of the current assessed value of the structure and impacts more than 50% of the gross floor area.

GB. **Fire protection systems - Standards.** Section 901 of the International Fire Code, entitled "General," is amended by supplementing subsection 901.6.1 and Table 901.6.1 with the following:

**Sec. 901.6.1. Standards.** Fire protection systems shall be inspected, tested, and maintained in accordance with the National Fire Protection Association ("NFPA") standards listed in Table 901.6.1 below.

**Table 901.6.1**

**FIRE PROTECTION SYSTEM MAINTENANCE STANDARDS**

<table>
<thead>
<tr>
<th>SYSTEM</th>
<th>STANDARD</th>
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<tr>
<td>Carbon dioxide fire-extinguishing systems</td>
<td>NFPA 12</td>
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<tr>
<td>Clean agent fire-extinguishing systems</td>
<td>NFPA 2001</td>
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<td>Dry chemical fire-extinguishing systems</td>
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<td>Emergency power systems</td>
<td>NFPA 110 &amp; NFPA 111</td>
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<td>Underground fire lines and hydrants</td>
<td>NFPA 25</td>
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<td>Water-based fire protection systems</td>
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<td>Water-mist systems</td>
<td>NFPA 750</td>
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<tr>
<td>Wet chemical fire-extinguishing systems</td>
<td>NFPA 17A</td>
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</table>
D. Fire protection systems – Records. Section 901 of the International Fire Code, entitled “General,” is amended by supplementing subsection 901.6.2 with the following:

Sec. 901.6.2. Records. Records of all system inspections, tests, and maintenance will be maintained by the building owner as required by the International Fire Code and the referenced standards. A copy of each inspection, test, or maintenance record shall be forwarded to the fire code official within 30 days of the date the inspection, test, or maintenance occurred.

E. Fire Protection Systems – Definitions. Section 902 of the International Fire Code, entitled “Definitions,” is amended by adding the following three definitions:

FIRE FLOW. A measure of the sustained flow of available water for firefighting at a specific building or within a specific area at 20 pounds-per-square-inch residual pressure.

FIRE WALL. An approved wall of not less than 4 hour fire-resistant construction with no openings, which extends vertically from the foundation to terminate in a parapet not less than 30 inches above the roof, and which extends horizontally to the furthest projection of any portion of the building or to a point 30 inches beyond the intersecting exterior wall, whichever is furthest. As an alternative to the horizontal requirements, such fire wall may be extended a minimum of 30 inches along both sides of the intersecting exterior wall, provided there are no projections beyond the intersecting exterior wall.

LIFE SAFETY RESCUE ACCESS. Unobstructed access to all floor levels and each roof level of a building on not less than 20 percent of the building perimeter by utilizing a 35 foot ladder. An alternate method would be at least 1 stairway enclosure with exit doorways from each floor level and with a door opening onto each roof level which conforms to the requirements of the International Building Code.

D. Automatic sprinkler systems – General. Section 903 of the International Fire Code, entitled “Automatic Sprinkler Systems,” is amended by substituting 903.1 with the following:

Sec. 903.1. General. Automatic sprinkler systems shall comply with this section and shall be considered a fire alarm system.
FE. Automatic sprinkler systems - Where required. Section 903 of the International Fire Code, entitled "Automatic Sprinkler Systems," is amended by supplementing subsection 903.2 with the following:

Sec. 903.2. Where required. Approved fire sprinkler systems shall be installed as follows:
1. In all buildings without adequate fire flow as required by this code.

Exception: Group U Occupancies.

2. All new buildings and structures regulated by the International Building Code requiring 2,000 gallons per minute or more fire flow, or with a gross floor area of 10,000 or more square feet (929 m²), or where this code provides a more restrictive floor/fire area requirement, and shall be provided in all locations or where described by this code.

Exception: Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries, and standby engines, provided those spaces or areas are equipped throughout with an automatic fire alarm system and are separated from the remainder of the building by a wall with a fire-resistance rating of not less than 1 hour and a floor/ceiling assembly with a fire-resistance rating of not less than 2 hours.

3. Where this code requires the installation of an automatic sprinkler system to protect an occupancy within an otherwise non-sprinklered building, then automatic sprinkler protection will be required throughout the entire building.

4. When the required fire apparatus access roadway grade is 12 percent or greater.

GE. Automatic sprinkler systems - Group A-3. Section 903 of the International Fire Code, entitled "Automatic Sprinkler Systems," is amended by supplementing subsection 903.2.1.3 with the following:

Sec. 903.2.1.3. An automatic sprinkler system shall be provided for Group A-3 occupancies where one of the following conditions exists:
1. The fire area exceeds 12,000 square feet (1115 m²).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than the level of exit discharge.
4. Dance halls where the total gross floor area exceeds 5,000 square feet (465 m²).
Automatic sprinkler systems – Speculative use warehouses. Section 903 of the International Fire Code, entitled “Automatic Sprinkler Systems,” is amended by adding the following new subsection 903.2.8.3:

Sec. 903.2.8.3. Speculative use warehouses. Where the occupant, tenant, or use of the building or storage commodity has not been determined or it is otherwise a speculative use warehouse or building, the automatic sprinkler system shall be designed and installed in accordance with the following:

1. The design area shall be not less than 5,600 square feet (520 m²).
2. The density shall be not less than that for class IV non-encapsulated commodities on wood pallets, with no solid, slatted, or wire mesh shelving, and with aisles that are 8 feet or more in width and up to 20 feet in height.

Automatic sprinkler systems – Alarms. Section 903 of the International Fire Code, entitled “Automatic Sprinkler Systems,” is amended by supplementing subsection 903.4.2 with the following:

Sec. 903.4.2. Alarms – Exterior notification. Approved audible alarm devices. A water-motor gong shall be connected to every automatic sprinkler system. Such sprinkler water flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Alarm devices shall be water-motor operated. The water motor gong shall be provided on the exterior of the building in an approved location at each riser or riser group.

Exception: NFPA 13D and NFPA 13R sprinkler systems may utilize an electrically operated alarm bell on the exterior of the building in an approved location at each riser or riser group, provided that the electrically operated alarm bell cannot be silenced during water flow.

903.4.2.1 Alarms – Interior notification. Actuation of the automatic sprinkler system shall actuate interior audible/visual notification appliances as outlined in the International Fire Code section 907.10. in NFPA 72 at all exits from all floors or where a fire alarm system is installed. The fire alarm system notification circuits shall provide the interior notification.
If an existing non-conforming system's control panel or communicator is replaced, the replacement system must meet this requirement when installed.

Exception: Structures under 7,000 square feet unless otherwise required by the International Fire Code.

I. Automatic sprinkler systems - Existing buildings. Section 903 of the International Fire Code, entitled "Automatic Sprinkler Systems," is amended by supplementing subsection 903.6 with the following:

**Sec. 903.6.1. Alterations and additions.** The provisions of this chapter shall apply to additions and substantial alterations to existing buildings regardless of use when such addition or substantial alteration plus the existing gross floor area equals 10,000 or greater square feet. For purposes of this section, a substantial alteration shall be defined as an alteration that costs 50 percent or more of the current assessed value of the structure and impacts more than 50% of the gross floor area.

**Sec. 903.6.2. Pyroxylin plastics.** All structures occupied for the manufacture or storage of articles of cellulose nitrate (pyroxylin) plastic shall be equipped with an approved automatic fire-extinguishing system. Vaults located within buildings for the storage of raw pyroxylin shall be protected with an approved automatic sprinkler system capable of discharging 1.66 gallons per minute per square foot (68 L/min/m²) over the area of the vault.

J. Automatic sprinkler systems - Riser room access. Section 903 of the International Fire Code, entitled "Automatic Sprinkler Systems," is amended by adding a new subsection 903.7 as follows:

**Sec. 903.7. Riser Room Access.** All risers shall be located in a dedicated room with an exterior door, lighting and heat.

K. Fire alarm and detection systems - General. Section 907 of the International Fire Code, entitled "Fire Alarm and Detection Systems," is amended by supplementing subsection 907.1 with the following:

**Sec. 907.1.2. Equipment.** Systems and their components shall be listed and approved for the purpose for which they are
installed. All new alarm systems shall be addressable. Each device shall have its own address and shall annunciate individual addresses at a UL Central Station.

Sec. 907.1.3. Fire detection system. In addition to any requirement of subsection 907.2 or 907.3, all occupancies exceeding 7,000 square feet gross floor area shall be required to provide an approved automatic fire detection system. Fire walls as noted in the International Building Code shall not be considered to separate a building to enable deletion of the required fire detection system unless the fire walls are as defined in section 902 of this code.

Exceptions:
1. Group U Occupancies.
2. Occupancies protected throughout by an approved/monitored automatic sprinkler system can delete heat detectors from the system.
3. One and two family residences.

L. Fire alarm and detection systems – Panel Upgrades. Section 907 of the International Fire Code, entitled “Fire Alarm and Detection Systems,” is amended by adding a new subsection 907.3.3 as follows:

Sec. 907.3.3. Panel upgrade. If an existing fire alarm control panel is replaced, the replacement must meet the requirements of 907.1.2.

Exception: Structures under 7,000 square feet unless otherwise required by the International Fire Code.

M. Fire alarm and detection systems – Alarm notification appliances. Section 907 of the International Fire Code, entitled “Fire Alarm and Detection Systems,” is amended by supplementing subsection 907.10 with the following:

Sec. 907.10.1. Visible alarms. Visible alarm notification appliances shall be provided in accordance with Sections 907.10.1.1 through 907.10.1.3

Exceptions:
1. Visible alarm notification appliances are not required in alterations, except where an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed.
2. Visible alarm notification appliances shall not be required in exits defined in Section 1002.1.
3. Visible alarm notification appliances shall not be required in non-public accessible storage areas in S-1 and S-2 occupancies or other approved area.

**Sec. 907.10.1.1. Public, common and employee work areas.** Public, common and employee work areas shall be provided with visible notification appliances.

**Sec. 907.10.1.2. Groups I-1 and R-1.** Groups I-1 and R-1 sleeping units in accordance with Table 907.10.1.1 shall be provided with a visible alarm notification appliance, activated by both the in-room smoke alarm and the building fire alarm system.

<table>
<thead>
<tr>
<th>Number of sleeping units</th>
<th>Sleeping accommodations with visible and audible alarms</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 to 25</td>
<td>2</td>
</tr>
<tr>
<td>26 to 50</td>
<td>4</td>
</tr>
<tr>
<td>51 to 75</td>
<td>7</td>
</tr>
<tr>
<td>76 to 100</td>
<td>9</td>
</tr>
<tr>
<td>101 to 150</td>
<td>12</td>
</tr>
<tr>
<td>151 to 200</td>
<td>14</td>
</tr>
<tr>
<td>201 to 300</td>
<td>17</td>
</tr>
<tr>
<td>301 to 400</td>
<td>20</td>
</tr>
<tr>
<td>401 to 500</td>
<td>22</td>
</tr>
<tr>
<td>501 to 1,000</td>
<td>5% of the total</td>
</tr>
<tr>
<td>1,001 and over</td>
<td>50 plus 3 each 100 over 1,000</td>
</tr>
</tbody>
</table>

**Sec. 907.10.1.3. Group R-2.** In Group R-2 occupancies required by Section 907 to have a fire alarm system, all dwelling units and sleeping units shall be provided.

**N. Fire alarm and detection systems - Duct smoke detectors.** Section 907 of the International Fire Code, entitled “Fire Alarm and Detection Systems,” is amended to repeal Exception 1 in subsection 907.12. The amended subsection 907.12 reads as follows:

**Sec. 907.12. Duct smoke detectors.** Duct smoke detectors shall be connected to the building’s fire alarm control panel when a fire alarm system is provided. Activation of a duct smoke detector shall initiate a visible and audible supervisory trouble signal at a constantly attended location. Duct smoke
detectors shall not be used as a substitute for required open area detection.

**Exception:** In occupancies not required to be equipped with a fire alarm system, actuation of a **duct** smoke detector shall activate a visible and an audible signal in an approved location. Smoke detector trouble conditions shall activate a visible or audible signal in an approved location and shall be identified as air duct detector trouble.

Q. **Fire alarm and detection systems – Locked Alarms.** Section 907 of the International Fire Code, entitled “Fire Alarm and Detection Systems,” is amended by adding a new subsection 907.21 as follows:

**Sec. 907.21. Locked Alarms.** All signals shall be automatically “locked in” at the alarm panel until their operated devices are returned to normal condition, and the alarm panel is manually reset.

P. **Fire alarm and detection systems – Resetting.** Section 907 of the International Fire Code, entitled “Fire Alarm and Detection Systems,” is amended by adding a new subsection 907.22 as follows:

**Sec. 907.22. Resetting.** All fire alarm panels shall be reset only by an approved person.

**Sec. 907.22.1. Reset Code.** The reset code for the fire alarm panel or keypad shall be 3-7-1-2-3-4. The reset code shall not be changed without approval of the Fire Marshal.

Q. **Fire alarm and detection systems – Fire Alarm Control Panel Location.** Section 907 of the International Fire Code, entitled “Fire Alarm and Detection Systems,” is amended by adding a new subsection 907.23 as follows:

**Sec 907.23. Fire Alarm Control Panel Location.** All fire alarm control panels shall be located in the riser room designed and installed in accordance with Section 903.7 or an approved location.

**Sec. 13.01.080. Amendments to the International Fire Code - Chapter 14, Fire Safety During Construction and Demolition.** The following local amendment to Chapter 14 of the International Fire Code, entitled “Fire Safety
During Construction and Demolition,” is hereby adopted and incorporated into the International Fire Code as if fully set forth therein.

A. Water supply for fire protection – When required. Section 1412 of the International Fire Code, entitled “Water Supply for Fire Protection,” is amended by supplementing subsection 1412.1 with the following:

**Sec 1412.1. When required.** An approved water supply for fire protection shall be made available as soon as combustible material arrives on the site.

**Sec. 13.01.090. Amendments to the International Fire Code – Appendix B, Fire-Flow Requirements for Buildings.** The following local amendments to Appendix B to the International Fire Code, entitled “Fire-Flow Requirements for Buildings,” are hereby adopted and incorporated into the International Fire Code as if fully set forth herein.


**Sec. B105.1.1. Accessory Group U buildings.** Section B105.2 will not apply to accessory group U buildings if all of the following conditions apply:

1. The residence and accessory group U building aggregate gross floor area does not exceed 3600 square feet.
2. The residence meets the fire flow requirements of section B105.1.
3. The residence and accessory group U building meet the requirements of sections 503.1.1 and 508.1.1.
4. The location of the accessory group U building is at least 10’ from any building and at least 5’ from the property line.

**Sec. 13.01.095. Amendments to the International Fire Code – Appendix C, Fire Hydrant Location and Distribution.** The following local amendments to Appendix C to the International Fire Code, entitled “Fire Hydrant Location and Distribution,” are hereby adopted and incorporated into the International Fire Code as if fully set forth herein.
A. *Number and Distribution of Fire Hydrants.* Section C105 of the International Fire Code, entitled “Distribution of Fire Hydrants,” is amended by substituting Table C105.1 with the following:

**TABLE C105.1**

<table>
<thead>
<tr>
<th>FIRE-FLOW REQUIREMENT (gpm)</th>
<th>MINIMUM NUMBER OF HYDRANTS</th>
<th>AVERAGE SPACING BETWEEN HYDRANTS&lt;sup&gt;b, b, c&lt;/sup&gt; (feet)</th>
<th>MAXIMUM DISTANCE FROM ANY POINT ON STREET OR ROAD FRONTAGE TO A HYDRANT&lt;sup&gt;g&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,750 or less</td>
<td>1</td>
<td>600</td>
<td>300</td>
</tr>
<tr>
<td>2,000-2,250</td>
<td>2</td>
<td>450</td>
<td>225</td>
</tr>
<tr>
<td>2,500</td>
<td>3</td>
<td>450</td>
<td>225</td>
</tr>
<tr>
<td>3,000</td>
<td>3</td>
<td>400</td>
<td>225</td>
</tr>
<tr>
<td>3,500-4,000</td>
<td>4</td>
<td>350</td>
<td>210</td>
</tr>
<tr>
<td>4,500-5,000</td>
<td>5</td>
<td>300</td>
<td>180</td>
</tr>
<tr>
<td>5,500</td>
<td>6</td>
<td>300</td>
<td>180</td>
</tr>
<tr>
<td>6,000</td>
<td>6</td>
<td>250</td>
<td>150</td>
</tr>
<tr>
<td>6,500-7,000</td>
<td>7</td>
<td>250</td>
<td>150</td>
</tr>
<tr>
<td>7,500 or more</td>
<td>8 or more&lt;sup&gt;e&lt;/sup&gt;</td>
<td>200</td>
<td>120</td>
</tr>
</tbody>
</table>

For SI: 1 foot = 304.8 mm, 1 gallon per minute = 3.785 L/m

a. Reduce by 100 feet for dead-end streets or roads.

b. Where streets are provided with median dividers which can be crossed by fire fighters pulling hose lines, or where arterial streets are provided with four or more traffic lanes and have a traffic count of more than 30,000 vehicles per day, hydrant spacing shall average 500 feet on each side of the street and be arranged on an alternating basis up to a fire-flow requirement of 7,000 gallons per minute and 400 feet for higher fire-flow requirements.

c. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at spacing not to exceed 1,000 feet to provide for transportation hazards.

d. Reduce by 50 feet for dead-end streets or roads.

e. One hydrant for each 1,000 gallons per minute or fraction thereof.

**Sec. 13.01.100. Amendments to the International Fire Code – Appendix D, Fire Apparatus Access Roads.** The following local amendments to Appendix D to the International Fire Code, entitled “Fire Apparatus Access Roads,” are hereby adopted and incorporated into the International Fire Code as if fully set forth therein.
A. **Required access - Access and loading.** Section D102 of the International Fire Code, entitled "Required Access," is amended by substituting subsection D102.1 with the following:

**Sec. D102.1. Access and loading.** Facilities, buildings, or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with asphalt, concrete, or other approved driving surface capable of supporting the imposed load of fire apparatus weighing at least 30 tons (27,240 kg).

B. **Minimum specifications - Access road width with a hydrant.** Section D103 of the International Fire Code, entitled "Minimum specifications," is amended by substituting subsection D103.1 with the following:

**Sec D103.1. Access road width with a hydrant.** Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet (7925 mm) for 20 feet on both sides of the operating nut and may be marked as a fire lane per Section 503.3

C. **Minimum specifications - Dead-end fire apparatus access road turnaround - Figure D103.1.** Figure D103.1, entitled "Dead-end fire apparatus access road turnaround," which is included within Appendix D to the International Fire Code is hereby repealed.

D. **Minimum specifications - Grade.** Section D103 of the International Fire Code, entitled "Minimum specifications," is amended by substituting subsection D103.1 with the following:

**Sec. D103.2. Grade.** Fire apparatus access roads shall not exceed 15 percent longitudinal and/or 6 percent laterally in grade. Approach and departure angle for fire apparatus access shall be as determined by the fire code official.

E. **Minimum specifications - Turning radius.** Section D103 of the International Fire Code, entitled "Minimum specifications," is amended by substituting subsection D103.3 with the following:
Sec D103.3. **Turning radius.** The fire apparatus access road shall have a 30 foot minimum inside turning radius and a 50 foot minimum outside turning radius. The radius must be measured from the travel lane edge, unless otherwise approved.

F. **Minimum specifications – Requirements for dead-end fire apparatus access roads.** Section D103 of the International Fire Code, entitled "Minimum Specifications," is amended by substituting Table D103.4 with the following:

<table>
<thead>
<tr>
<th>LENGTH (feet)</th>
<th>WIDTH (feet)</th>
<th>TURNAROUNDS REQUIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-150</td>
<td>20</td>
<td>None required</td>
</tr>
<tr>
<td>151-500</td>
<td>20</td>
<td>140-foot Hammerhead, 60-foot &quot;Y&quot; or 90-foot-diameter cul-de-sac</td>
</tr>
<tr>
<td>501-750</td>
<td>26</td>
<td>140-foot Hammerhead, 60-foot &quot;Y&quot; or 90-foot-diameter cul-de-sac</td>
</tr>
<tr>
<td>Over 750</td>
<td></td>
<td>Special approval required</td>
</tr>
</tbody>
</table>

G. **Aerial fire apparatus access roads – Where required.** Section D105 of the International Fire Code, entitled "Aerial fire apparatus access roads," is amended by substituting subsection D105.1 with the following:

**Sec. D105.1. Where required.** Buildings or portions of buildings or facilities exceeding 28 feet (8535 mm) in height above the lowest level of fire department access shall be provided with approved fire apparatus access roads that are capable of accommodating fire department aerial apparatus.

**Sec. D105.2. Width.** Fire apparatus access roads shall have a minimum unobstructed width of 26 feet (7925 mm) in the immediate vicinity of any building or portion of building more than 28 feet (8335 mm) in height.

**Sec. D105.3. Proximity to building.** At least one of the required access routes meeting this condition shall be located within a minimum of 15 feet (4572 mm) and a maximum of 30 feet (9144 mm) from the building, and shall be positioned...
parallel to one entire side of the building. The parallel access route shall be on an approved side of the building.

Sec. 13.01.110. Fire codes - Fees. The City Council shall, by resolution, establish the fees to be assessed for the fire codes adopted in this title.

Sec. 13.01.120. Appeals.
A. Appeals to the hearing examiner.
   1. Jurisdiction. In order to hear and decide appeals of orders, determinations, or decisions made by the fire code official relative to the suitability of alternate materials, designs, and methods of construction, and to provide for reasonable application and interpretation of the provisions of the International Fire Code, the City of Kent hearings examiner is hereby designated as the board of appeals created pursuant to section 108 of the International Fire Code adopted in KCC 13.01.030 for all matters concerning the application of the fire codes. The City hearings examiner, however, shall have no authority relative to interpretation of the administrative provisions of these codes, nor shall the City hearings examiner be empowered to waive requirements of these codes.

   2. Filing. Appeals shall be filed with the hearings examiner by 5:00 p.m. of the fourteenth (14th) calendar day following the date of the order, determination, or decision being appealed. When the last day of the appeal period so computed is a Saturday, Sunday, or federal or City holiday, the period shall run until 5:00 p.m. on the next business day. The appeal shall be accompanied by payment of the filing fee. Specific objections to the fire code official's decision and the relief sought shall be stated in the written appeal.

   3. Standing. Standing to bring an appeal under this chapter is limited to the following persons:

   a. The applicant and the owner of property to which the permit decision is directed.

   b. Another person aggrieved or adversely affected by the order, determination, or decision, or who would be aggrieved or adversely affected by a reversal or modification of the order, determination, or decision. A person who is aggrieved or adversely affected within the meaning of this section only when all of the following conditions are present:
i. The order, determination, or decision has prejudiced or is likely to prejudice that person;

ii. A judgment in favor of that person would substantially eliminate or redress the prejudice to that person caused or likely to be caused by the order, determination, or decision; and

iii. The appellant has exhausted his or her administrative remedies to the extent required by law.

B. Appeals to superior court. Appeals to the hearings examiner shall be made pursuant to Ch. 2.32 KCC. The decision of the hearings examiner shall be final and conclusive unless within twenty-one (21) calendar days of the hearings examiner's decision an appeal is filed with the superior court. When the last day of the appeal period so computed is a Saturday, Sunday, or federal or City holiday, the period shall run until the next business day.

SECTION 2. - Savings. The existing chapters and sections of the Kent City Code, which are repealed, replaced, and/or amended by this ordinance, shall remain in full force and effect until the effective date of this ordinance.

SECTION 3. - Severability. If any one or more section, subsections, or sentences of this ordinance are held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portion of this ordinance and the same shall remain in full force and effect.

SECTION 4. - Effective Date. This ordinance shall take effect and be in force on July 1, 2007.

Suzette Cooke, Mayor

Brenda Jacober, City Clerk
APPROVED AS TO FORM:

TOM BRUBAKER, CITY ATTORNEY

PASSED: 15 day of May, 2007.
APPROVED: 15 day of May, 2007.
PUBLISHED: 23 day of May, 2007.

I hereby certify that this is a true copy of Ordinance No. 3840 passed by the city council of the city of Kent, Washington, and approved by the mayor of the city of Kent as hereon indicated.

BRENDA JACOBER, CITY CLERK

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