



URBANA FIRE RESCUE SERVICES

Fire Prevention Bureau

m e m o r a n d u m

TO: Building Safety Code Board of Appeals
FROM: Michael Phillips, Fire Inspector
DATE: March 31, 2011
SUBJECT: Significant changes to the International Fire Code

1. Appendices:

The 2009 International Fire Code provides appendices with supplemental information and requirements. Appendices B, C, D, E, & F are all currently enforced under separate city ordinances. We have chosen to include these in our changes to simplify and combine them for one easy reference document.

2. Operator Responsibility:

Chapter 4 Emergency Planning and Preparedness lays out the frame work for the owners requirements for safety planning. We have added this section to require that the operators of such businesses be accountable for certain requirements as well when the owner of the business is not present. We find many times during fire inspections that the owners of the businesses are frequently absent. We frequently find egress components not in service and when we question the employees; we get a common response that they lack the knowledge. This now requires that the operators of businesses ensure all required egress components be operational prior to operating business.

3. Locks:

This section is amended to allow the Fire Code Official to require that a certain type of lock be used on non-motorized gates where fire department access is needed. These locks will be the same key as the required Knox Box® system the city currently has in place. This minimizes time delays and damage to the owner's property.

4. New Construction (Knox Box®)

We add this section to minimize the past confusion of who is required to have these boxes in place. Past ordinance allows for the Fire Code Official to require a box on any property they feel necessary. The wording in that was poor and confusing. We now require all new construction to have these boxes installed as a requirement of occupancy. Single family

residential is excluded from this requirement. Existing buildings will continue to fall under the previous requirements of the Fire Code Official determination. Specific wording on existing buildings is provided in our changes.

5. Motorized Gates:

In the City of Urbana we have many types of devices being used to operate electric gates. Electric gates cause significant delays in the fire departments response. Some gates in our community have no means for FD access, some have key pad entry codes, some use the Knox® key system and some keep a key in their required key box for emergency access. There are multiple cons with each of these systems. The most common is no other emergency service providers have access. All of the various types listed above require the use of a Knox Box® to gain entry. The fire department is the only department allowed to have access to the boxes. Many times the FD is called to assist the ambulances into secured properties on calls the FD would not have normally responded on. This also applies to the FD assisting the police department in gaining access to the properties. Each of these two issues requires the FD to have a fire unit go out of service to assist these agencies, thus reducing the level of fire protection in the city. The common item all of these agencies have in place are their sirens. There are products on the market now that allow the gates to be open automatically by the use of their siren. As most electric gates work on a magnetic style system for activation, this system works off of decibels only an emergency vehicle siren can meet.

6. Existing Gates:

This requires all motorized gates in the city be provided with this new system by July 2012 to eliminate the life safety issues involved.

7. Connection to Public Water System:

Illinois American Water Co. now requires all water lines used for the purpose of fire protection systems be metered. Meters require valve assemblies, NFPA 13 requires valves be monitored. These meters will be installed on the exterior of the structures at the property line. The FD recognizes the cost associated with having these valves monitor by their system and the potential maintenance issues of low voltage wiring in non-climate controlled environments. To trade this issue off, the fire department will require the meter be located in a secured vault. A key to this vault shall be provided to the FD and it will be located in the buildings required key box. In addition, to provide the utmost security to these valves, the FD will require the valve be locked in the open position using a Knox® keyed padlock which the FD will be the only ones approve to unlock these valves. This system has been approved by Illinois American Water Co.

8. Locks and Latches:

The code allows egress doors in assembly occupancies of less than 300 be equipped with keyed locks on the egress side permitting several exceptions are met. There is a lot of room for human error with the exception and we choose to require that panic hardware be installed to eliminate the potential human error.

9. Floor Identification Signs:

The Cities of Urbana and Champaign fire departments have indentified all high-rise buildings as “Target Hazards”. Target hazard occupancies automatically receive fire companies from both cities when a fire is reported. This requires a joint policy on our operations. The two cities have combined a taskforce to enhance our operations in high-rise incidents. This task force has adopted a plan that is used by many larger cities that deal with high-rise buildings daily. This change requires that egress stairways have specific signage. This signage allows for a more understandable system that is used by the occupants and by the FD. During these operations, the FD must establish an egress stairway for the occupants and an attack stairway for FD operations. This helps eliminate occupants from entering a stairway that is in use by the FD filled with smoke from the fire fighting operations. The code does not require the two separate stairways be defined, i.e. north stairway or second stairway. This system has proved successful and is currently in operation in the City of Champaign. It is critical to our joint operations for our requirements to match.

10. Fireworks

This section has amended the definition of fireworks to match that of the State of Illinois’ definition of fireworks.

11. NFPA 101

The NFPA 101 is the State of Illinois “minimum” fire code. There are many sections of this code that are more stringent then the requirements of the IFC. The State of Illinois tasks the fire Chief with enforcing this law. The more restrictive of the two will be enforced. Home Rule communities are not exempt from this requirement.