



# PUBLIC CODE CHANGE PROPOSAL FORM FOR PUBLIC PROPOSALS IN THE INTERNATIONAL CODES

## 2006/2007 CODE DEVELOPMENT CYCLE

**CLOSING DATE: All Proposals Must Be Received by March 24, 2006**

The 2006/2007 Code Development Hearings are scheduled for  
September 20 to 30, 2006 in Orlando, FL

- 1) **Name:** William M. Connolly **Date:** March 21, 2006  
**Jurisdiction/Company:** State of New Jersey, Department of Community Affairs, Division of Codes and Standards  
**Submitted on Behalf of:** International Code Council Ad Hoc Committee on Terrorism Resistant Buildings  
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- 2) **\*Signature:** \_\_\_\_\_  
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**Signature for electronic submittal:** When submitting proposals electronically, to complete the submittal process, print a copy of the ICC Electronic [Copyright Release](http://www.iccsafe.org) form found at [www.iccsafe.org](http://www.iccsafe.org), fill in the requested information, send to ICC. One completed form is required. This must be done for each code change cycle and can be used for code changes and public comments.

- 3) Indicate appropriate International Code(s) associated with this Public Proposal – Please use Acronym: IBC  
 If you have also submitted a separate coordination change to another I-Code, please indicate the code: \_\_\_\_\_  
 (See section below for list of names and acronyms for the International Codes).

- 4) **Be sure to format your proposal and include all information as indicated on Page 2 of this form.**

- 5) Proposals should be sent to the following offices via regular mail or email. An e-mail submittal is preferred, including an electronic version, in either Wordperfect or Word. The only formatting that is needed is **BOLDING**, ~~STRIKEOUT~~ AND UNDERLINING. Please do not provide additional formatting such as tabs, columns, etc., as this will be done by ICC

Please use a separate form for each proposal submitted. Note: All code changes received will receive an acknowledgment.

Please check here if separate graphic file provided.

Graphic materials (Graphs, maps, drawings, charts, photographs, etc.) must be submitted as separate electronic files in .CDR,.IA,.TIF or .JPG format (300 DPI Minimum resolution; 600 DPI or more preferred) even though they may also be embedded in your Word or Wordperfect submittal.

<b>Code</b>	<b>Send to:</b>	<b>Acronym</b>	<b>ICC Code Name</b>
IBC	International Code Council	<b>IBC</b>	International Building Code
ICC EC	Chicago District Office	<b>ICC EC</b>	ICC Electrical Code–Administrative Provisions
IEBC	Attn: Diane Schoonover	<b>IECC</b>	International Energy Conservation Code
IFC	4051 West Flossmoor Road	<b>IEBC</b>	International Existing Building Code
IFGC	Country Club Hills, IL 60478-5795	<b>IFC</b>	International Fire Code
IPC	Fax: 708/799-0320	<b>IFGC</b>	International Fuel Gas Code
IPSDC	<a href="mailto:codechanges@iccsafe.org">codechanges@iccsafe.org</a>	<b>IMC</b>	International Mechanical Code
IPMC		<b>ICC PC</b>	ICC Performance Code
IWUIC		<b>IPC</b>	International Plumbing Code
IZC		<b>IPSDC</b>	International Private Sewage Disposal Code
		<b>IPMC</b>	International Property Maintenance Code
IECC	International Code Council	<b>IRC</b>	International Residential Code
ICC PC	Birmingham District Office	<b>IWUIC</b>	International Wildland-Urban Interface Code
IMC	Attn: Annette Sundberg	<b>IZC</b>	International Zoning Code
IRC	900 Montclair Road		
	Birmingham, AL 35213-1206		
	Fax: 205/592-7001		
	<a href="mailto:codechangesbhm@iccsafe.org">codechangesbhm@iccsafe.org</a>		

## CODE CHANGE PROPOSAL

Please provide all of the following items in your code change proposal. Your proposal may be entered on the following form, or you may attach a separate file. However, please read the instructions provided for each part of the code change proposal. The sections identified in parentheses are the applicable sections from CP #28 Code Development. The full procedures can be downloaded from [www.iccsafe.org](http://www.iccsafe.org).

**Code Sections/Tables/Figures Proposed for Revision (3.3.2): Section 403.12.1 (new); Section 707.14.1; Section 707.14.3 (new); Section 911.1; Section 911.2 (new); Section 911.3 (new); and Section 3006.4**

**Note:** If the proposal is for a new section, indicate (new).

**Name/Company/Representing (3.3.1): William M. Connolly, Chairman, International Code Council Ad Hoc Committee on Terrorism Resistant Buildings**

**Note:** You must indicate your name and the full name of who you are representing. Do not use acronyms.

### **Proposal:**

**(Revise as follows) 403.12.1 Stairway communication and monitoring systems.** The following stairway communication and monitoring systems shall be installed at every fifth floor of each required stairway and connected to an approved constantly attended station:-

1. ~~A telephone or other two-way communications system connected to an approved constantly attended station shall be provided where the doors to the stairway are locked;~~

2. Video cameras.

**(Revise as follows) 707.14.1 Elevator lobby.** An enclosed elevator lobby shall be provided at each floor where an elevator shaft enclosure connects more than three stories. The lobby shall separate the elevator shaft enclosure doors from each floor by fire partitions equal to the fire-resistance rating of the corridor and the required opening protection. Elevator lobbies shall have at least one means of egress complying with Chapter 10 and other provisions within this code. In buildings with an occupied floor more than 75 feet above the lowest level of fire department vehicle access, the elevator lobby shall be provided with video camera coverage.

Exceptions:

1. Enclosed elevator lobbies are not required at the street-floor, provided the entire street floor is equipped with an automatic sprinkler system in accordance with Section 903.3.1.1.

2. Elevators not required to be located in a shaft in accordance with Section 707.2 are not required to have enclosed elevator lobbies.

3. Where additional doors are provided in accordance with Section 3002.6. Such doors shall be tested in accordance with UL 1784 without an artificial bottom seal.

4. In other than Group I-3, and buildings having occupied floors more than 75 feet (22860 mm) above the lowest level of fire department vehicle access, enclosed elevator lobbies are not required where the building is protected by an automatic sprinkler system installed throughout in accordance with Section 903.3.1.1 or 903.3.1.2.

5. Smoke partitions shall be permitted in lieu of fire partitions to separate the elevator lobby at each floor level where the building is equipped throughout with an automatic sprinkler system installed in accordance with Sections 903.3.1.1 or 903.3.1.2

6. Enclosed elevator lobbies are not required where the elevator hoistway is pressurized in accordance with Section 707.14.2.

**707.14.2 Enclosed elevator lobby pressurization alternative. (No change.)**

**(Add new text as follows) 707.14.3 Elevator hoistway monitoring.** In buildings with an occupied floor more than 75 feet above the lowest level of fire department vehicle access, the elevator hoistway shall be provided with a video camera at the top of each elevator hoistway. Light shall be provided for cameras that are not capable of recording without light.

**(Revise as follows) 911.1 Features.** Where required by other sections of this code, ~~a fire~~ an emergency command center for ~~fire department~~ emergency operations shall be provided. The location and accessibility of the ~~fire~~ emergency command center shall be approved by the fire department. The ~~fire~~ emergency command center shall be separated from the remainder of the building by not less than a 1-hour fire-resistance-rated fire barrier constructed in accordance with Section 706 or horizontal assembly constructed in accordance with Section 711, or both, except for buildings more than 420 feet (128 m) in height as provided for in Section 911.3. The room shall be a minimum of 96 square feet (9m<sup>2</sup>) with a minimum dimension of 8 feet (2438 mm). A layout of the ~~fire~~ emergency command center and all features required by the section to be contained therein

shall be submitted for approval prior to installation. The ~~fire~~ emergency command center shall comply with NFPA 72 and shall contain the following features.

1. The emergency voice/alarm communication system unit.
2. The fire department communications unit.
3. Fire detection and alarm system annunciator unit.
4. Annunciator unit visually indicating the location of the elevators and whether they are operational.
5. Status indicators and controls for air-handling systems.
6. The firefighter's control panel required by Section 909.16 for smoke control systems installed in the building.
7. Controls for unlocking stairway doors simultaneously.
8. Sprinkler valve and water-flow detector display panels.
9. Emergency and standby power status indicators.
10. A telephone for fire department use with controlled access to the public telephone system.
11. Fire pump status indicators.
12. Building emergency resource manual approved by the fire department that includes emergency operation instructions and Schematic building plans indicating the typical floor plan and detailing the building core, means of egress, as well as the layout and operating instructions for the emergency aspects of fire protection systems, HVAC systems, elevator controls, communication systems, utilities, fire-fighting equipment and fire department access.
13. Worktable.
14. Generator supervision devices, manual start and transfer features.
15. Public address system, where specifically required by other sections of this code.
16. Video monitoring for video cameras required by this Code and any others used to monitor conditions or activities in the building.
17. Status indication of smoke detectors, temperature sensors, and video cameras for elevator machine rooms.
18. Controls and valve status indicators for remote control valves on sprinkler/standpipe vertical risers.

In buildings that are more than 420 feet (128 m) in height, systems and equipment for features 1, 2, 3, 4, 7, 15, and 18 shall be provided with redundant circuitry during normal and emergency operating modes and shall have the ability to transmit and communicate off-site including mobile access if required by the Fire Department.

**(Add new text as follows) 911.2 Location.** An emergency command center shall be located remote from uncontrolled building entrances and loading docks, shall not be visible from the street, and shall be at a location approved by the Fire Department and other emergency management agencies having jurisdiction.

**(Add new text as follows) 911.3 Buildings more than 420 feet in height.** In buildings that are more than 420 feet (128 m) in height, the emergency command center shall be separated from the remainder of the building by not less than a 2-hour fire-resistance-rated fire barrier and the enclosure wall surfaces from the top of the floor to the underside of the floor above and connections to supporting members shall be capable of resisting uniform pressure of not less than 2 pounds per square inch (psi) applied perpendicular to the exterior face of the enclosure.

**(Revise as follows) 3006.4 Machine rooms and machinery spaces.** Elevator machine rooms and machinery spaces shall be enclosed with fire barriers with a fire-resistance rating not less than the required rating of the hoistway enclosure served by the machinery. Openings shall be protected with assemblies having a fire-resistance rating not less than that required for the hoistway enclosure doors. In buildings with an occupied floor more than 75 feet above the lowest level of fire department vehicle access, the machine room shall be provided with smoke detectors, temperature sensors and video cameras. Light shall be provided for cameras that are not capable of recording without light. In addition, cameras shall be positioned so that the entire machine room can be viewed.

**Supporting Information (3.3.4 & 3.4):**

This code change proposal is one of fourteen proposals being submitted by the International Code Council Ad Hoc Committee on Terrorism Resistant Buildings.

**Purpose:**

The purpose of this change is to increase the ability of firefighters, and other emergency responders, to develop a clear picture of conditions throughout the building which will enable them to better manage evacuation, fire suppression and other emergency response activities. The purpose is also to enhance the safety of emergency responders by enabling them to maintain better situational awareness.

**Reason:**

The National Institute of Standards and Technology's (NIST) report on the World Trade Center (WTC) tragedy amply documented the tactical and informational difficulties experienced by emergency responders and occupants during the WTC event. Similar difficulties occur in much smaller events and they place lives at risk.

The Code already requires many systems which enhance emergency responder and occupant awareness. Their use can be improved and they can be further supplemented. Recommendations 13, 14, and 15 of the WTC Report outline a number of valuable measures which are reasonable and practical. To the extent appropriate, this proposal seeks to incorporate those provisions into the Code.

**Substantiation:**

This proposal seeks to improve responder awareness of conditions in the building to assist in management of an incident, improve the existing fire command center to enhance its value, require the off-site transmission of the key data available in the center, require redundancy of key emergency circuits and improve the robustness and the location of the center.

Awareness is improved by requiring control center monitoring of:

1. Video cameras in stairway shafts, elevator lobbies, elevator hoistways, and elevator machine rooms as well as any other video in the building,
2. Remote controls and status indicators for the looped and valved redundant sprinkler risers required by the proponents' recommended new Section 403.2.1, and
3. Status indicators for all smoke detectors and temperature sensors

The value of the fire control center already required by the Code is enhanced by the additional monitoring made possible, and a strengthened "Emergency Resource Manual" which will now include operating instructions for emergency systems as well as information on the emergency aspects of HVAC systems, elevator controls, communication systems and utilities. The center is retitled the emergency command center to reflect its role in managing emergencies other than fire emergencies.

New language at the end of amended Section 911.1 requires the ability to transmit the information available in the center to off-site fire command facilities including mobile facilities.

A new Section 911.2 improves the robustness of the fire command center by requiring that it be designed to the same 2 psi over-pressure requirement as the proponents have proposed for exit stairway enclosures and have a 2-hour rating. New language at the end of amended Section 911.1 requires redundancy of circuits serving to connect the command center with key sensors or controls.

**Bibliography:**

National Institute of Standards and Technology. Final Report of the National Construction Safety Team on the Collapses of the World Trade Center Towers. United States Government Printing Office: Washington, D.C. September 2005.

**Referenced Standards (3.4 & 3.6):**

None.

**Cost Impact (3.3.4.6):**

**Costs:**

This proposal will increase the cost of the construction.