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:** _____

** I hereby grant and assign to ICC all rights in copyright I may have in any authorship contributions I make to ICC in connection with this proposal. I understand that I will have no rights in any ICC publications that use such contributions in the form submitted by me or another similar form and certify that such contributions are not protected by the copyright of any other person or entity.*

Signature for electronic submittal: When submitting proposals electronically, to complete the submittal process, print a copy of the ICC Electronic Copyright Release form found at 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.

Code	Send to:
IBC ICC EC IEBC IFC IFGC IPC IPSDC IPMC IWUIC IZC	International Code Council Chicago District Office Attn: Diane Schoonover 4051 West Flossmoor Road Country Club Hills, IL 60478-5795 Fax: 708/799-0320 codechanges@iccsafe.org
IECC ICC PC IMC IRC	International Code Council Birmingham District Office Attn: Annette Sundberg 900 Montclair Road Birmingham, AL 35213-1206 Fax: 205/592-7001 codechangesbhm@iccsafe.org

Acronym	ICC Code Name
IBC	International Building Code
ICC EC	ICC Electrical Code–Administrative Provisions
IECC	International Energy Conservation Code
IEBC	International Existing Building Code
IFC	International Fire Code
IFGC	International Fuel Gas Code
IMC	International Mechanical Code
ICC PC	ICC Performance Code
IPC	International Plumbing Code
IPSDC	International Private Sewage Disposal Code
IPMC	International Property Maintenance Code
IRC	International Residential Code
IWUIC	International Wildland-Urban Interface Code
IZC	International Zoning Code

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.

Code Sections/Tables/Figures Proposed for Revision (3.3.2): Section 403.15 (new)

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:

(Add new text as follows) 403.15 Spray-Applied Fire Resistive Materials (SFRM). The bond strength of the SFRM shall be as follows:

Table 403.15 Minimum Bond Strength

Height of Building	SFRM Minimum Bond Strength
More than 75 feet and up to 420 feet	430 psf
More than 420 feet	1,000 psf

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 proposal is to increase the required adhesions of Spray Applied Fire Resistant Materials (SFRM).

Reason:
The National Institute of Standards and Technology's (NIST) investigation into the World Trade Center (WTC) tragedy documented that the proximate cause of the actual collapse was the action of a building contents fire on light steel members in the absence of spray applied fire resistant material, which had been dislodged. Events far less dramatic than an airplane attack have been known to dislodge SFRM. The initiating events can be as simple as elevator movement, building sway or maintenance activities.

Recommendation 6 of the NIST WTC Report calls for improvement of the in-place performance of SFRM. This proposal is one of three that seeks to achieve that objective. The other two are a proposal for a new Section 714.8 dealing with the application of SFRM and a strengthened Section 1704.10 dealing with special inspections of SRFM installations.

Substantiation:
The current code specifies a SFRM bond strength of 150 psf when tested in accordance with ASTM E736, no matter how large the building or how high the risk. This proposal requires the use of higher bond strength material for buildings over 75 feet in height and yet again higher strength for those that exceed 420 feet. These higher standards are warranted by the higher risk associated with taller buildings. Products that meet this standard are available in the marketplace.

Bond strength is not the only material characteristic that affects in-place durability. Density does as well. This proposal does not establish a separate density standard because density and bond strength are linked to one another. High bond strength entails high density.

Some might argue that more research is needed to establish appropriate bond strengths for different levels of risk. The proponents agree but believe something needs to be done now to improve the in-place durability of SFRM. This code provision will have that result. It should be recognized as a beginning, not an end.

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 construction but only marginally so. Many tall buildings already utilize these higher strength materials.