

New York State Technical Subcommittee of the Fire Code of New York State

Summary of committee activities as of November 29th, 2012

Committee Membership

Daniel E. Nichols, P.E.	Fire Protection Engineer, NYS Department of State, DCEA
Thomas Romanowski	Code Compliance Specialist, NYS Department of State, DCEA
Jonathan Worden	Fire Protection Engineer, NYS DHSES, Office of Fire Prevention and Control
William Freer	Fire Protection Specialist, NYS DHSES, Office of Fire Prevention and Control
Richard Magee	Assistant Chief Fire Marshal, Nassau County Fire Marshal's Office Member, Association of Fire District of New York State
Steven Myers, P.E.	Director of Code Compliance, Town of Clifton Park Member, New York State Association of Fire Chiefs
Chris Smith	Fire Protection Engineer, GHP/RobsonWoese Engineers, Rochester, NY
Steven Van Buren	Fire Inspector, Town of Fishkill Deputy Fire Coordinator, Dutchess County Dept. of Emergency Response

Interested Parties

The committee has been joined by several interested parties during some or most of our deliberations and we appreciate their input:

Jody Nolan	Rochester Institute of Technology
Al Mignone	Village of Scarsdale
Thomas Parsons	Fire Chief, City of Ithaca
Michael Gagliardi	Town of Smithtown

Overview

The committee has worked to provide a wholesale review of the two additions of the International Fire Code (2009 and 2012 editions) as well as to revalidate the need for the modifications entered as part of previous work of the Fire Code Technical Subcommittee.

To fully review the work, it is important to recognize some of the major changes of the International Fire Code insofar as the arrangement of the documents. In the 2009 edition, a sweeping change was adopted that moved all of the retroactive construction requirements within the IFC to a single chapter, known as Chapter 45 in the 2009 IFC. In the 2012 edition, the IFC was completely reorganized by recreating the entire chapter structure. As an example, retroactive requirements for fire alarm systems (which NYS modifies to only apply under a trigger by the Existing Building Code) was in Section 907 in the 2010 FCNYS, moved to Chapter 45 in the 2009 IFC, and moved again to Chapter 11 in the 2012 IFC. Similarly, regularly used chapters, like LPG (propane), now appear in Chapter 61 instead of Chapter 38.

To provide guidance, staff create several charts for committee members to be able to walk through a code change and be able to follow its roots in the 2010 FCNYS, regardless if it was created in either the 2 code development cycles that created the 2009 IFC or the single code development cycle that created the 2012 IFC.

The main workbook is entitled 'ICC Code Changes- Committee Workbook'. This workbook contains 5 sections-

1. Introduction and wayfinding page
2. Substantial changes
3. Combined changes of the 2009 and 2012 IFC
4. 2012 IFC
5. 2009 IFC

To best describe how the charts work, please look at them from a 'back to front' approach. First, the 2009 and 2012 documents were created separately to show how each code section was affected by each ICC code change proposal. The inclusion of the actual code change proposal numbers allows the committee to research a code change if it is not clear why the change was made as well as to provide information for documents concerning the code update.

The 'Combined changes of the 2009 and 2012 IFC' is a correlation of the 2009 and 2012 documents. This was needed to address code sections and topics that were changed in both cycles; either as a further modified or completely contradictory. As an example, the 2010 FCNYS could say 'fire hydrants are purple' and the 2009 IFC could have modified to 'fire hydrants are light purple.' If the 2012 edition modified this section; it could have changed it back to 'purple' which is no change for our review, changed it to 'dark purple' which leaves the committee with contemplating 'dark' purple, or could have kept light purple and also allow for school bus yellow, of which the committee needs to contemplate the light purple of 2009 and the school bus yellow of the 2012 edition. In short, the combined chart is a deliverable of what all of the changes are if we compared the 2012 edition (which contains all of the 2009 info) with the 2010 FCNYS and didn't need to understand the sources of all of the code changes.

The 'Substantial Changes' chart is what staff believed, out of the 'combined changes' chart, that the committee should have, at least, a brief discussion on.

The other chart that the committee utilized is the 'NYS modification chart'. This chart listed the 38 substantial modifications that are currently in the 2010 FCNYS that were not part of the 2006 IFC review. This chart listed the 38 modifications that comprise of 5 modifications that are now within the 2012 IFC, 10 modifications that are based on other State Laws or regulations, 13 modifications that are more restrictive than the 2012 IFC, and the 10 modifications that are less restrictive than the 2012 IFC.

ICC review

With the workbook, the committee members reviewed every code change that was on the significant list and created a position on every one of those items. The discussion (and color coding) is on the workbook sheet for the 'significant changes'. Outstanding topics include:

1. How to handle emergency responder radio coverage- particularly when the systems are required and who is able to perform the testing of the system to demonstrate compliance.
2. Hazardous building placards- Based on our 2 year experience, several members believe this section should get less restrictive or more narrowly scoped, rather than widened. Alternatives, should be considered.
3. Requirements for emergency power for fire pumps- committee members feel that the departure from standby power to emergency power is not warranted since the difference is the available time to provide power.
4. Two-way communication for schools- The committee feels that two-way communication in classrooms of Group E buildings is more appropriate than manual pull boxes and is not necessarily needed to be regulated as an NFPA 72 emergency communications system.
5. Third-party inspection of fire and smoke doors- Whereas the committee did not have an issue with requiring passive fire protection to be inspected, it feels that it is over burdensome for fire and smoke doors to be tested by a certified person; which is a person that is factory-certified. This seems excessive for smaller occupancies and does not address when a CEO completes their own testing of 1 or 2 doors in a small establishment.
6. Restriction of DOT cylinders- The committee feels the language regarding the use of ASME cylinders, rather than both ASME or DOT cylinders, is unwarranted and has significant affects on the commercial gas business without any substantiation.
7. Other State agencies- Staff is working with NYS DEC on a couple of coordination issues regarding dry cleaning operations and open burning prohibitions.

Committee members were also asked to review the 900+ code changes on the 'combined changes' list. Several members did bring items forward but all were quickly resolved with a connection to the information in the monographs or by other committee members.

NYS Modification Review

The committee undertook a review of all of the substantial NYS modifications that currently exist within the current Fire Code of New York State (FC). This review is being done to evaluate the validity of these modifications as well as to bolster the substantiation of each or, in the alternative, modify or delete such modifications in a future recommendation to the Codes Council. The chart 'NYS Fire Code modifications'

addresses these in four groupings; more restrictive than the 2012 IFC (red), less restrictive than the 2012 IFC (green), NYS modifications that are within the 2012 IFC (yellow), and code requirements that are required or influenced by State Statute or other State agencies (orange).

The committee has generally agreed that the less restrictive items should remain, as many of these items provide a more applicable requirement to the specific issues within the State, compared to the IFC. These items include the requirements for driveways for one- and two-family dwellings (rather than a fire apparatus access road), use of the rural water supply standard for firefighting operations outside areas with a municipal water system, and certain manual pull box requirements in sprinkler protected buildings.

The committee has agreed that any current NYS modifications that have been adopted into the 2012 IFC are appropriate and should remain. This includes the prohibition of propane storage on roofs and requirements for firefighters from rooftop obstructions.

The committee has taken no action on the requirements required or influenced by State agencies or Statutes; mainly due to the position that most of these are outside the control of the committee.

The committee has taken a position that the following more restrictive modifications should remain:

1. Automatic smoke detection systems should remain a requirement for assembly occupancies. This requirement should remain for two main reasons. First, sprinkler thresholds allow for smaller assembly occupancies to not be protected with an automatic fire protection system. Second, the committee acknowledges the proven performance of fire sprinklers but is still concerned about the far superior occupant warning capability of a smoke detection system for the more common smoldering-type fire found in a majority of assembly occupancy fires.
2. The sprinkler threshold for the height of a building should remain at 30 feet above the level of fire department vehicle access. Fire departments within the State are held to an evaluation by the Insurance Services Organization, of which this evaluation scores the capability of the fire department based on certain capabilities. For buildings over 30 feet in height, unsprinklered buildings are used to determine the need for additional resources and can adversely affect the evaluation score. From a practical standpoint, fires in buildings that are more than four stories create additional fire service limitations due to issues of access and remoteness from fire pumpers.
3. Sprinkler thresholds for A-1 and A-2 occupancies should remain at 100 persons. NY as well as the nation has seen the need for the threshold to remain for occupancies that are used for performances, nightclubs, food establishments, and taverns. The IFC already contains this requirement for A-2, but not for A-1.
4. The allowance for up to 300 pounds of propane within factory buildings should remain prohibited. The committee generally feels that the use of this much product for factory operations should be purveyed to equipment and processes by fixed piping systems installed by the Fuel Gas Code and NFPA 58. Further, it is the opinion of the committee that such operations of such high quantities would be in violation of OSHA workplace safety regulations.

5. The limitation of 300 feet from a fire apparatus road to an unsprinklered buildings with an alternative fire protection feature should remain. The limitation of 300 feet should remain, as the section only allows use due to topography or other physical barriers. The committee feels that fire department access should be provided to a minimal level and gives flexibility by allowing local discretion on alternatives.
6. The requirements for Group B fire evacuation plans and drills should remain. Based on the change from Group A to Group B on classrooms, hi-rises, and college buildings, it is prudent to require such fire preparedness measures. Further, the fire safety planning of Group B occupancies is part of OSHA workplace safety requirements.
7. The requirements for the prohibition of portable fuel-fired heaters in Group B and M should remain. These occupancies should be provided with adequate heat to meet the minimum temperature requirements of the Property Maintenance Code without these type of units. Field observations show that portable space heaters powered by electricity, even when listed to the latest requirements, are often found without appropriate separation from combustibles. Since the kerosene type heaters do not have such shutdowns and tip-over safety devices, the fire hazard associated with these units should be minimized.
8. The requirement for smoke or heat detection systems in Groups B and M should remain. With the number of accessory assembly spaces found in these types of buildings as well as the number of occupants that a building could have prior to a sprinkler system requirement (24,000 square feet for Group M, unlimited for Group B), a smoke or heat detection system requirement is appropriate to maintain.

The committee has taken the position that the following items are no longer required as NYS modifications:

1. Limitations on industrial trucks within buildings should be removed. This requirement is from the Title 9 edition of the Uniform Code and was based on an archaic NFPA standard. With the safety requirements of OSHA and fuel requirements of NFPA 58, this limitation is adequately handled in other documents.
2. The prohibition of hold-open devices on motor-fuel pump nozzles should be removed. Besides voiding the listing of a tested product, the highest exposure of a motor fuel dispensing operation is being connected to the fueling operation. By prohibiting hold-open devices, the FCNYS is requiring the public to be in contact with the source of the fuel vapors and, in turn, in direct contact with the fire source. Whereas spills can happen if a hold-open fails, the capability of the public to evacuate is faster if they are not holding the nozzle open.
3. The requirement of fire suppression systems for flammable motor-fueling operations should be removed. The listing criteria for the fire suppression system involves a test that evaluates the effectiveness of such systems extinguishing a ground fire without the obstruction of a vehicle over the fire. Based on the previous reasoning that the system is needed to protect persons fueling vehicles, the system activation time provides no protection to those fueling vehicles since the time to activate the system would be after most burn injuries occur. Further, fire data has shown that accidental system activations has caused the medical treatment of persons

within the coverage area due to inhalation of the dry powder chemical. NYS remains the only State that has a requirement for such systems and has been deliberated within the NFPA process without adoption.

The committee has taken no position on the following items:

1. Torches for paint removal
2. Evacuation notices on hotel room doors

The committee is proposing the following modifications:

1. Group A-3 and A-4 occupancies should have their sprinkler thresholds raised to 300 persons in certain circumstances. An item #4 should be added to 903.2.1.3 and 903.2.1.4:
 - a. Buildings containing assembly areas of 300 persons or more that do not have cooking facilities, stages, platforms, or are not used for dance halls or night clubs. (It should be noted that this change is for 'buildings', not 'fire areas')

Conclusion

In all, the committee unanimously supports almost every code change proposal that is in the 2009 and 2012 IFC, questioning only 6 out of the 900+ code changes. As far as NYS modifications, the continued participation of New Yorkers in the ICC code development process is further allowing the use of the IFC rather than maintaining NYS modifications.

Our outstanding issues to be completed in the next two meetings are:

1. Finalize positions on the ICC code changes that are still unresolved
2. Finalize positions and reason statements on the NYS modifications
3. Finalize the work that is going on amongst certain committee staff regarding the fire detection requirements for student housing
4. Provide direction on submission of NYS modifications that are being proposed to remain to the ICC for the 2015 IFC code development cycle which has a deadline of January 3, 2013.