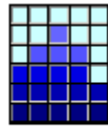


**Standard Compared
2012 Changes of the
International Building Code and
National Fire Protection Association- 101**

**For the Florida Building Commission
And the Fire Code Advisory Council**



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Introduction

The scope of this project is to review the 2012 changes to the International Building Code (IBC) and compare them to the 2012 edition of the National Fire Protection Association – 101 and to review the 2012 changes to the National Fire Protection Association -101 and compare them to the 2012 International Building Code (IBC) to determine if any conflicts exist due to the changes in either of the codes. The review includes comparing edition dates of the referenced standards in both codes. A conflict for the purpose of this study is defined as a requirement or construction specification in one code such as a dimension that would prevent compliance with the other code. Additionally a review was done of the current (2010 FBC- Building, Existing, and Mechanical) Florida specific changes “fire and life safety code correlation “modifications” against the 2012 National Fire Protection Association (NFPA) 101 changes and the 2012 International Building Code changes to determine whether an existing correlation is not covered by the updated codes and should be proposed for the 2013 FBC. The matrix was created from the Significant Code Changes published by the International Code Council and the National Fire Protection Association. The corresponding code section from either the IBC or NFPA 101 was added to the matrix and then these code changes were reviewed to determine if a conflict existed and the result of this review and possible recommendations or comments are provided in the matrix column titled “Recommendation”. No direct comparison of the 2012 International Building Code to the 2012 National Fire Protection Association (NFPA) 101 was made to identify conflicts or differences in the codes. Only the changes to each code were compared to the other code. The Life Safety Modifications were not reviewed to the 2012 codes, but were reviewed only to the 2012 changes for each code. The Life Safety Modifications reviewed were the ones highlighted in yellow that have been carried over from edition to edition and not those changes made during the last code cycle or so-called glitches.

Five matrixes were created for this project. The matrix’s are 1) 2012 changes to the International Building Code compared to the 2012 NFPA 101; 2) 2012 changes to NFPA 101 compared to the 2012 IBC; 3) 2012 Referenced Standards of the NFPA 101 compared to the 2012 IBC Referenced Standards; 4) Current Life Safety Modifications in the 2010 Florida Building Code – Building compared to the changes to the 2012 IBC and the changes to the 2012 NFPA 101 and; 5) Current Life Safety Code Modifications in the 2010 Florida Building Code – Mechanical and the 2010 Florida Building Code – Existing compared to the changes to the 2012 IMC and 2012 IEBC and the changes to the 2012 NFPA 101.

There were differences in the codes, but there were no identified conflicts based on the definition of a conflict by the Department. The current Florida Life Safety Code Modifications were made to change the codes to coordinate them, but these modifications do not meet the present definition of a conflict and therefore they should be eliminated.

NFPA Standard	IBC Standard If Different	Recommendation
2.2* NFPA Publications. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.		
NFPA 10, <i>Standard for Portable Fire Extinguishers</i> , 2010 edition.	Same	NA
NFPA 11, <i>Standard for Low-, Medium-, and High-Expansion Foam</i> , 2010 edition.	Same	NA
NFPA 12, <i>Standard on Carbon Dioxide Extinguishing Systems</i> , 2011 edition.	Same	NA
NFPA12A, <i>Standard on Halon 1301 Fire Extinguishing Systems</i> , 2009 edition.	Same	NA
NFPA13, <i>Standard for the Installation of Sprinkler Systems</i> , 2010 edition.	Same	NA
NFPA13D, <i>Standard for the Installation of Sprinkler Systems in One and Two-Family Dwellings and Manufactured Homes</i> , 2010 edition.	Same	NA
NFPA 13R, <i>Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height</i> , 2010 edition.	Same	NA
NFPA 14, <i>Standard for the Installation of Standpipe and Hose Systems</i> , 2010 edition.	Same	NA
NFPA 15, <i>Standard for Water Spray Fixed Systems for Fire Protection</i> , 2012 edition.	Same	NA
NFPA 16, <i>Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems</i> , 2011 edition.	Same	NA

NFPA Standard	IBC Standard If Different	Recommendation
NFPA 17, <i>Standard for Dry Chemical Extinguishing Systems</i> , 2009 edition.	Same	NA
NFPA 17A, <i>Standard for Wet Chemical Extinguishing Systems</i> , 2009 edition.	Same	NA
NFPA 25, <i>Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems</i> , 2011 edition.	_____	NA
NFPA 30, <i>Flammable and Combustible Liquids Code</i> , 2012 edition.	Same	NA
NFPA30B, <i>Code for the Manufacture and Storage of Aerosol Products</i> , 2011 edition.	_____	NA
NFPA 31, <i>Standard for the Installation of Oil-Burning Equipment</i> , 2011 edition.	2006	AMEND CODE
NFPA 40, <i>Standard for the Storage and Handling of Cellulose Nitrate Film</i> , 2011 edition.	Same	NA
NFPA 45, <i>Standard on Fire Protection for Laboratories Using Chemicals</i> , 2011 edition.	_____	NA
NFPA 54, <i>National Fuel Gas Code</i> , 2012 edition.	_____	NA
NFPA 58, <i>Liquefied Petroleum Gas Code</i> , 2011 edition.	Same	NA
NFPA 70®, <i>National Electrical Code®</i> , 2011 edition.	Same	NA
NFPA72®, <i>National Fire Alarm and Signaling Code</i> , 2010 edition.	Same	NA
NFPA 80, <i>Standard for Fire Doors and Other Opening Protectives</i> , 2010 edition.	Same	NA
NFPA 82, <i>Standard on Incinerators and</i>	Same	NA

NFPA Standard	IBC Standard If Different	Recommendation
<i>Waste and Linen Handling Systems and Equipment</i> , 2009 edition.		
NFPA 88A, <i>Standard for Parking Structures</i> , 2011 edition.	_____	NA
NFPA90A, <i>Standard for the Installation of Air-Conditioning and Ventilating Systems</i> , 2012 edition.	_____	NA
NFPA 90B, <i>Standard for the Installation of Warm Air Heating and Air-Conditioning Systems</i> , 2012 edition.	_____	NA
NFPA91, <i>Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids</i> , 2010 edition.	_____	NA
NFPA 92, <i>Standard for Smoke Control Systems</i> , 2012 edition.	2009	AMEND CODE
NFPA 96, <i>Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations</i> , 2011 edition.	_____	NA
NFPA 99, <i>Health Care Facilities Code</i> , 2012 edition.	Same	NA
NFPA101A, <i>Guide on Alternative Approaches to Life Safety</i> , 2010 edition.	_____	NA
NFPA 105, <i>Standard for Smoke Door Assemblies and Other Opening Protectives</i> , 2010 edition.	Same	NA
NFPA 110, <i>Standard for Emergency and Standby Power Systems</i> , 2010 edition.	Same	NA
NFPA 111, <i>Standard on Stored Electrical Energy Emergency and</i>	Same	NA

NFPA Standard	IBC Standard If Different	Recommendation
<i>Standby Power Systems</i> , 2010 edition.		
NFPA 160, <i>Standard for the Use of Flame Effects Before an Audience</i> , 2011 edition.	_____	NA
NFPA170, <i>Standard for Fire Safety and Emergency Symbols</i> , 2009 edition.	Same	NA
NFPA204, <i>Standard for Smoke and Heat Venting</i> , 2012 edition.	_____	NA
NFPA 211, <i>Standard for Chimneys, Fireplaces, Vents, and Solid Fuel–Burning Appliances</i> , 2010 edition.	Same	NA
NFPA 220, <i>Standard on Types of Building Construction</i> , 2012 edition.	_____	NA
NFPA 221, <i>Standard for High Challenge Fire Walls, Fire Walls, and Fire Barrier Walls</i> , 2012 edition.	2009	AMEND CODE
NFPA 241, <i>Standard for Safeguarding Construction, Alteration, and Demolition Operations</i> , 2009 edition.	_____	NA
NFPA 251, <i>Standard Methods of Tests of Fire Resistance of Building Construction and Materials</i> , 2006 edition.	_____	NA
NFPA 252, <i>Standard Methods of Fire Tests of Door Assemblies</i> , 2008 edition.	2012	AMEND CODE
NFPA 253, <i>Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source</i> , 2011 edition.	Same	NA
NFPA 257, <i>Standard on Fire Test for Window and Glass Block Assemblies</i> , 2007 edition.	2012	AMEND CODE

NFPA Standard	IBC Standard If Different	Recommendation
NFPA 259, <i>Standard Test Method for Potential Heat of Building Materials</i> , 2008 edition.	Same	NA
NFPA 260, <i>Standard Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture</i> , 2009 edition.	_____	NA
NFPA261, <i>Standard Method of Test for Determining Resistance of Mock-Up Upholstered Furniture Material Assemblies to Ignition by Smoldering Cigarettes</i> , 2009 edition.	_____	NA
NFPA 265, <i>Standard Methods of Fire Tests for Evaluating Room Fire Growth Contribution of Textile or Expanded VinylWall Coverings on Full Height Panels and Walls</i> , 2011 edition.	Same	NA
NFPA 271, <i>Standard Method of Test for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter</i> , 2009 edition.	_____	NA
NFPA 286, <i>Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth</i> , 2011 edition.	Same	NA
NFPA 288, <i>Standard Methods of Fire Tests of Floor Fire Door Assemblies Installed Horizontally in Fire Resistance-Rated Floor Systems</i> , 2007 edition.	2012	AMEND CODE
NFPA 289, <i>Standard Method of Fire Test for Individual Fuel Packages</i> , 2009 edition.	Same	NA

NFPA Standard	IBC Standard If Different	Recommendation
NFPA 415, <i>Standard on Airport Terminal Buildings, Fueling Ramp Drainage, and Loading Walkways</i> , 2008 edition.	_____	NA
NFPA 418, <i>Standard for Heliports</i> , 2011 edition.	Same	NA
NFPA 701, <i>Standard Methods of Fire Tests for Flame Propagation of Textiles and Films</i> , 2010 edition.	Same	NA
NFPA 703, <i>Standard for Fire Retardant–Treated Wood and Fire-Retardant Coatings for Building Materials</i> , 2012 edition.	Same	NA
NFPA 720, <i>Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment</i> , 2012 edition.	2009	AMEND CODE
NFPA 750, <i>Standard on Water Mist Fire Protection Systems</i> , 2010 edition.	_____	NA
NFPA 914, <i>Code for Fire Protection of Historic Structures</i> , 2010 edition.	_____	NA
NFPA 1124, <i>Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles</i> , 2006 edition.	Same	NA
NFPA 1126, <i>Standard for the Use of Pyrotechnics Before a Proximate Audience</i> , 2011 edition.	_____	NA
NFPA 2001, <i>Standard on Clean Agent Fire Extinguishing Systems</i> , 2012 edition.	2008	AMEND CODE
2.3.1 ACI Publications. American Concrete Institute, P.O. Box 9094, Farmington Hills, MI 48333. www.concrete.org		
ACI 216.1/TMS 0216.1, <i>Code</i>	Same	NA

NFPA Standard	IBC Standard If Different	Recommendation
<i>Requirements for Determining Fire Resistance of Concrete and Masonry Construction Assemblies, 2008.</i>		
2.3.2 ANSI Publications. American National Standards Institute, Inc., 25 West 43rd Street, 4th floor, New York, NY 10036		
ANSI A14.3, <i>Safety Requirements for Fixed Ladders, 1992.</i>	_____	NA
ICC/ANSI A117.1, <i>American National Standard for Accessible and Usable Buildings and Facilities, 2009.</i>	Same	NA
ANSI/BHMAA156.3 <i>Exit Devices, 2008.</i>	_____	NA
BHMA/ANSI A156.19, <i>American National Standard for Power Assist and Low Energy Power Operated Doors, 2007.</i>	_____	NA
ANSI Z22-3.1, <i>National Fuel Gas Code, 2006.</i>	Same	NA
2.3.3 ASCE Publications. American Society of Civil Engineers, 1801 Alexander Bell Drive, Reston, VA 20191-4400. www.asce.org		
ASCE/SFPE 29, <i>Standard Calculation Methods for Structural Fire Protection, 2005.</i>	Same	NA
2.3.4 ASME Publications. American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016-5990. www.asme.org		
ASME A17.1/CSA B44, <i>Safety Code for Elevators and Escalators, 2007.</i>	Same	NA
ASME A17.3, <i>Safety Code for Existing Elevators and Escalators, 2008.</i>	_____	NA
ASME A17.7/CSA B44.7, <i>Performance-Based Safety Code for</i>	_____	NA

NFPA Standard	IBC Standard If Different	Recommendation
<i>Elevators and Escalators, 2007.</i>		
2.3.5 ASSE Publications. American Society of Safety Engineers, 1800 East Oakton Street, Des Plaines, IL 60018.		
ANSI/ASSE A1264.1, <i>Safety Requirements for Workplace Floor and Wall Openings, Stairs and Railing Systems, 2007.</i>	—————	NA
2.3.6 ASTM Publications. ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959. www.astm.org		
ASTM C 1629/C 1629M, <i>Standard Classification for Abuse- Resistant Nondecorated Interior Gypsum Panel Products and Fiber-Reinforced Cement Panels, 2006.</i>	Same	NA
ASTM D 1929, <i>Standard Test Method for Determining Ignition Temperatures of Plastic, 1996 (2001e1).</i>	Same	NA
ASTM D 2859, <i>Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials, 2006.</i>	Same	NA
ASTM D 2898, <i>Standard Test Methods for Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing, 2010.</i>	2004	AMEND CODE
ASTM E 84, <i>Standard Test Method for Surface Burning Characteristics of Building Materials, 2010.</i>	2009	AMEND CODE
ASTM E 108, <i>Standard Test Methods for Fire Tests of Roof Coverings, 2010a.</i>	2007	AMEND CODE
ASTM E 119, <i>Standard Test Methods for Fire Tests of Building Construction and Materials, 2010b.</i>	2008	AMEND CODE

NFPA Standard	IBC Standard If Different	Recommendation
ASTM E 136, <i>Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C</i> , 2009b.	_____	NA
ASTM E 648, <i>Standard Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source</i> , 2010.	_____	NA
ASTM E 814, <i>Standard Test Method for Fire Tests of Through- Penetration Fire Stops</i> , 2010.	2008	AMEND CODE
ASTM E 1352, <i>Standard Test Method for Cigarette Ignition Resistance of Mock-Up Upholstered Furniture Assemblies</i> , 2008a.	_____	NA
ASTM E 1353, <i>Standard Test Methods for Cigarette Ignition Resistance of Components of Upholstered Furniture</i> , 2008a(e1).	_____	NA
ASTM E 1354, <i>Standard Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter</i> , 2009.	Same	NA
ASTM E 1537, <i>Standard Test Method for Fire Testing of Upholstered Furniture</i> , 2007.	_____	NA
ASTM E 1590, <i>Standard Test Method for Fire Testing of Mattresses</i> , 2007.	_____	NA
ASTM E 1591, <i>Standard Guide for Obtaining Data for Deterministic Fire Models</i> , 2007.	_____	NA
ASTM E 1966, <i>Standard Test Method for Fire-Resistive Joint Systems</i> , 2007.	Same	NA

NFPA Standard	IBC Standard If Different	Recommendation
ASTM E 2072, <i>Standard Specification for Photoluminescent (Phosphorescent) Safety Markings</i> , 2010.	2004	AMEND CODE
ASTM E 2074, <i>Standard Test Method for Fire Tests of Door Assemblies, Including Positive Pressure Testing of Side-Hinged and Pivoted Swinging Door Assemblies</i> , 2000, Revised 2004.	_____	NA
ASTM E 2307, <i>Standard Test Method for Determining Fire Resistance of Perimeter Fire Barrier Systems Using Intermediate-Scale, Multi-Story Test Apparatus</i> , 2010.	2004	AMEND CODE
ASTM E 2404, <i>Standard Practice for Specimen Preparation and Mounting of Textile, Paper or Vinyl Wall or Ceiling Coverings to Assess Surface Burning Characteristics</i> , 2008.	_____	NA
ASTM E 2573, <i>Standard Practice for Specimen Preparation and Mounting of Site-Fabricated Stretch Systems to Assess Surface Burning Characteristics</i> , 2007a.	Same	NA
ASTM E 2599, <i>Standard Practice for Specimen Preparation and Mounting of Reflective Insulation Materials and Radiant Barrier Materials for Building Applications to Assess Surface Burning Characteristics</i> , 2009.	Same	NA
ASTM E 2652, <i>Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750 Degrees C</i> , 2009a.	_____	NA

NFPA Standard	IBC Standard If Different	Recommendation
ASTM F 851, <i>Standard Test Method for Self-Rising Seat Mechanisms</i> , 1987 (2005).	_____	NA
ASTM F 1577, <i>Standard Test Methods for Detention Locks for Swinging Doors</i> , 2005.	Same	NA
ASTM G 155, <i>Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials</i> , 2005a.	_____	NA
2.3.7 FMGR Publications. FM Global Research, FM Global, 1301 Atwood Avenue, P.O. Box 7500, Johnston, RI 02919. www.fmglobal.com		
ANSI/FM 4880, <i>American National Standard for Evaluating Insulated Wall or Wall and Roof/Ceiling Assemblies, Plastic Interior Finish Materials, Plastic Exterior Building Panels, Wall/Ceiling Coating Systems, Interior or Exterior Finish Systems</i> , 2007.	2005	AMEND CODE
FM Approval Standard 6921, <i>Containers for Combustible Waste</i> , 2004.	_____	NA
UL 300, <i>Standard for Fire Testing of Fire Extinguishing Systems for Protection of Commercial Cooking Equipment</i> , 2005.	_____	NA
2.3.8 NEMA Publications. National Electrical Manufacturers Association, 1300 North 17th Street, Suite 1847, Rosslyn, VA 22209.		
NEMA SB 30, <i>Fire Service Annunciator and Interface</i> , 2005.	_____	NA
2.3.9 UL Publications. Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook, IL 60062-2096. www.ul.com		

NFPA Standard	IBC Standard If Different	Recommendation
ANSI/UL 9, <i>Standard for Fire Tests of Window Assemblies</i> , 2009.	Same	NA
ANSI/UL 10B, <i>Standard for Fire Tests of Door Assemblies</i> , 2008, Revised 2009.	Same	NA
ANSI/UL 10C, <i>Standard for Positive Pressure Fire Tests of Door Assemblies</i> , 2009.	Same	NA
ANSI/UL 263, <i>Standard for Fire Tests of Building Construction and Materials</i> , 2007.	Same	NA
ANSI/UL 294, <i>Standard for Access Control System Units</i> , 1999, Revised 2010.	Same	NA
UL 300A, <i>Extinguishing System Units for Residential Range Top Cooking Surfaces</i> , 2006.	2005	AMEND CODE
ANSI/UL 305, <i>Standard for Safety Panic Hardware</i> , 1997.	Same	NA
ANSI/UL 555, <i>Standard for Fire Dampers</i> , 2006, Revised 2010.	Same	NA
ANSI/UL 555S, <i>Standard for Smoke Dampers</i> , 1999, Revised 2010.	Same	NA
ANSI/UL 723, <i>Standard for Test for Surface Burning Characteristics of Building Materials</i> , 2008, Revised 2010.	2008	AMEND CODE
ANSI/UL 790, <i>Test Methods for Fire Tests of Roof Coverings</i> , 2004, Revised 2008.	Same	NA
ANSI/UL 924, <i>Standard for Emergency Lighting and Power Equipment</i> , 2006, Revised 2009.	Same	NA

NFPA Standard	IBC Standard If Different	Recommendation
ANSI/UL 1040, <i>Standard for Fire Test of Insulated Wall Construction</i> , 1996, Revised 2007.	Same	NA
ANSI/UL 1315, <i>Standard for Safety for Metal Waste Paper Containers</i> , 2007.	_____	NA
ANSI/UL 1479, <i>Standard for Fire Tests of Through-Penetration Firestops</i> , 2003, Revised 2010.	Same	NA
ANSI/UL 1715, <i>Standard for Fire Test of Interior Finish Material</i> , 1997, Revised 2008.	Same	NA
ANSI/UL 1784, <i>Standard for Air Leakage Tests for Door Assemblies</i> , 2001, Revised 2009.	Same	NA
ANSI/UL 1975, <i>Standard for Fire Tests for Foamed Plastics Used for Decorative Purposes</i> , 2006.	Same	NA
ANSI/UL 1994, <i>Standard for Luminous Egress Path Marking Systems</i> , 2004, Revised 2010.	Same	NA
ANSI/UL 2079, <i>Standard for Tests for Fire Resistance of Building Joint Systems</i> , 2004, Revised 2008.	Same	NA
2.3.10 U.S. Government Publications. U.S. Government Printing Office, Washington, DC 20402. www.access.gpo.gov		
Title 16, <i>Code of Federal Regulations</i> , Part 1500 and Part 1507.	_____	NA
Title 16, <i>Code of Federal Regulations</i> , Part 1632, “Standard for the Flammability of Mattresses and Mattress Pads” (FF 4-72).	_____	NA
2.3.11 Other Publication.		

NFPA Standard	IBC Standard If Different	Recommendation
<i>Merriam-Webster's Collegiate Dictionary</i> , 11th edition, Merriam-Webster, Inc., Springfield, MA, 2003.	_____	NA
NFPA 88A, <i>Standard for Parking Structures</i> , 2011 edition.	_____	NA
NFPA 252, <i>Standard Methods of Fire Tests of Door Assemblies</i> , 2008 edition.	2012	AMEND CODE
NFPA 288, <i>Standard Methods of Fire Tests of Floor Fire Door Assemblies Installed Horizontally in Fire Resistance-Rated Floor Systems</i> , 2007 edition.	2012	AMEND CODE
NFPA 301, <i>Code for Safety to Life from Fire on Merchant Vessels</i> , 2008 edition.	_____	NA
NFPA 415, <i>Standard on Airport Terminal Buildings, Fueling Ramp Drainage, and Loading Walkways</i> , 2008 edition.	_____	NA
NFPA 914, <i>Code for Fire Protection of Historic Structures</i> , 2010 edition.	_____	NA
NFPA 921, <i>Guide for Fire and Explosion Investigations</i> , 2011 edition.	_____	NA
ASCE/SEI 7, <i>Minimum Design Loads for Buildings and Other Structures</i> , 2010.	Same	NA