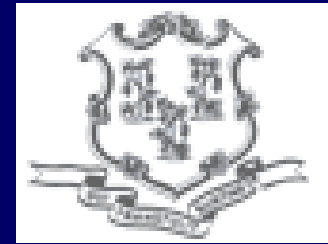


**Facilities Management
Council Program
Construction Institute
5/15/07**

Code Requirements &
Forthcoming Changes
By Ira Henowitz AIA
CT Dept. of Public Works

What Codes?



- State Building Code

Reg CGS 29-292-1d

New construction,
alterations, repairs,
additions,
demolition reqts.

- CT State Fire Safety Code

Reg CGS 29-292-
1e thru 25e

Construction,
operational &
maintenance reqts
for both new &
existing bldgs.

Code Changes in 2005



- From 1999 State Building & Fire Safety Codes Using Two Different Publishers
- No More “this meets the fire code, but you better check with the building official”
- Adopted ICC Family of Codes for New Construction – Comprehensive & Compatible
- ICC (Int’l. Code Council) – National Uniform System of Building Regulation
- Applies to all Building Permits applied for on or after 12/31/05

2005 State Building Code

2005 Connecticut Supplement – Eff. 12/31/05

- 2003 Int'l. Building Code (IBC)
- 2003 Int'l. Residential Code (IRC)
- 2003 Int'l. Existing Building Code (IEBC)
- 2003 Int'l. Mechanical Code (IMC)
- 2003 Int'l. Plumbing Code (IPC)
- 2003 Int'l. Energy Conservation Code (IECC)
- ICC/ANSI A117.1-2003 Access. & Usable Bldgs & Fac.
- 2005 National Electric Code (NFPA 70)

2005 Building Code Significant Changes



- IBC International Building Code-03
 - Allows bigger buildings for some uses
 - Sprinkler increase permits larger areas
 - Means of Egress co-ordinates w/ Fire Code
 - Structural Provisions – i.e. Special Inspection provisions expanded
 - Reference Standards updated

2005 Building Code Significant Changes



- IRC Int'l. Residential Code-03
 - 1 & 2 Family Dwellings
 - Bldg. Planning Reqts Expanded
i.e. high wind, seismic reqts.
 - Carb. Monox. Detector Reqts.
 - Reference Standards updated

2005 Building Code Significant Changes



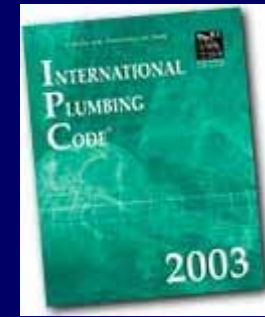
- Added IEBC-Int'l. Ex. Bldg. Code
 - alternative to IBC for alterations, additions (not likely), repairs, relocation & change of occupancy to existing
 - modeled after NJ Rehab Code
 - not a property maintenance code or a document for inspecting exist'g. bldgs.

2005 Building Code Significant Changes



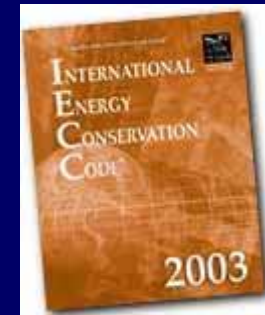
- Replaces '96 IMC with 2003 IMC-Int'l. Mechanical Code
 - With few exceptions, chapters have remained the same
 - 2003 IFGC-Int'l. Fuel Gas Code not adopted – comply w/CT Gas Equip. & Piping Code instead

2005 Building Code Significant Changes



- Replaces '97 IPC with 2003 IPC-Int'l. Plumbing Code
 - Also regulates medical gases, anesthetic, non-medical oxygen systems, vacuum piping
 - 2003 IFGC-Int'l. Fuel Gas Code not adopted, comply w/CT Gas Equip. & Piping Code instead
 - Expand Struct'l. Safety Appendix – cutting, notching & boring holes

2005 Building Code Significant Changes



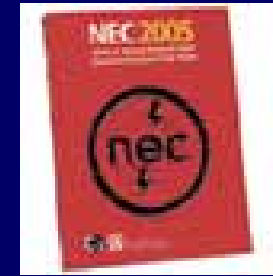
- 2003 Int'l. Energy Conservation Code (IECC) re-adopted w/changes
- 2004 CT Supplement adopted 2003 IECC so relatively few changes
- Min. Level of Energy Eff. In New Constr.
- Regulates design & selection of:
 - Bldg. Envelope
 - Mechanical & Electrical Systems
 - Service Water Heating Systems
- Comm. Bldgs. to comply w/ ASHRAE 90.1-2001

2005 Building Code Significant Changes



- Adopts ICC/ANSI A117.1-2003 Access. & Usable Bldgs & Fac. w/ CT Amdts.
- Replaces ANSI/CABO A117.1-1998 for new construction
- Updated so more in line with ADA

2005 Building Code Significant Changes



- Adopts National Electrical Code (NEC)
NFPA 70-2005 w/CT Amendments
- 2004 CT Supplement adopted 2002
NEC so relatively few changes

2005 CT State Fire Safety Code

2005 Connecticut Supplement – Eff. 12/31/05

5 Parts

- I Administration
- II General
- III New Construction, Renovations & Change of Use (IFC)
- IV Existing Buildings/Occupancies (NFPA 101)
- V Maintenance & Operational Issues for both new & ex. (NFPA 1)

2005 Fire Code Significant Changes

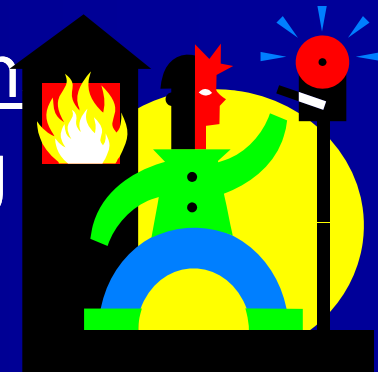


- Adopt portions for New constr, renov, alter & change of occup.
- Adopts portions for exist. occup. (ex.prior to this code adoption)
- Adopts portions for both New & Ex occup.

2005 Fire Code Changes



- Part III New Fire Protection System
- 901.5. Installation acceptance testing
Notify fire official prior to any testing
- 901.5.1 Occupancy
Unlawful to occupy any bldg portion until req'd fire protection systems have been tested & approved.
- 914 CO Detectors Req'd @ new 1 & 2 family dwellings, small resid. care + bed & bkfst.



2005 Fire Code Changes



- Horizontal Sliding Fire Doors now permitted
- Horizontal sliding doors in office areas serving 10 or < occupants



2005 Fire Code Changes



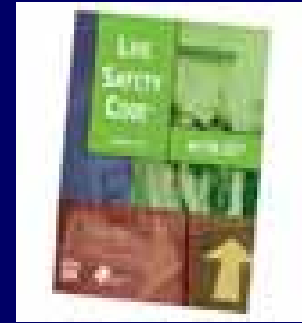
- Floor Proximity Exit Signs req'd. in new assemblies > 300, medical businesses, dorms, hotels & motels per IFC

1011.1.1

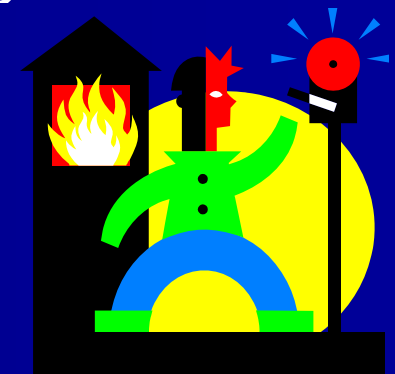
- on or adj. to exit door close to floor
- signs illuminated



2005 Fire Code Changes



- Part IV Existing Occupancies
- **Fire Watch** Def. Added
 - Person(s) assigned to an area to protect occupants from fire or sim. emergencies. Need not be a uniformed person. Notify F.D & occupants of an emerg., extinguish small fires, prevent fire from occurring.
- When req'd fire alarm or sprinklr system out of service for > 4 hrs in 24 hr period & want to continue to occupy-AHJ notified



2005 Fire Code Changes



- Emergency Lighting Reqts.
Now only needed ". . .where bldg. is required to have two or + means of egress" Part IV 7.9.1.1(1)
 - Rev. to coordinate with new constr.
- Also req'd at hi-rises, doors w/ delayed egress locks, underground structures

2005 Fire Code Changes

- 29-292-1e(d) Not Applicable to Grandstands & Bleachers providing seating for < 100 persons
- Bldg. Code exempts from permit -105.2 & 2007 Draft "when located outside of a building."



Technology Advances Impacting Code Reqts.

- Fire Rated Glass Reshaping Design



- Access Control /Safety & Security



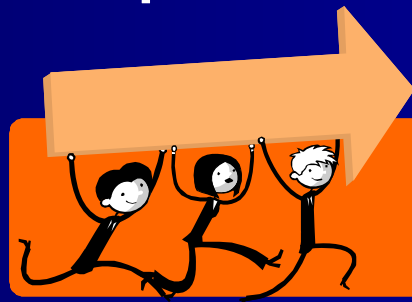
Contemplated Changes for 2007 & Beyond

- 2007 Amendments to Both 2005 State Building Code & State Fire Safety Code
- Legislation
- Going Green
- ADA
- NIST WTC Invest. Report



Proposed 2007 Amendments to 2005 Bldg & Fire Codes

- Mostly Clean Up, Editing & Coordination
- Added Exemption of Home Offices from Code Reqts.



Proposed 2007 Amendments to 2005 Bldg & Fire Codes

■ Floor Proximity Egress Path Marking Sec. 1026

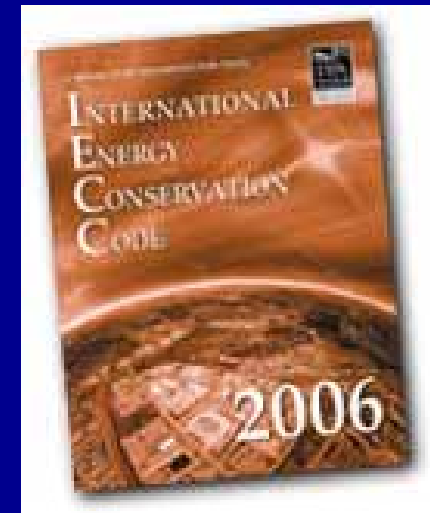
- Resp. to PA 06-162
- At Exit Access Corridors Serving > 30 @
- New Constr Only- Group:
 - A >300
 - B Medical
 - E
 - I-1 & 2 (Assisted Living, Hospitals, Nurs'g Homes, Group Homes)
 - Group R Hotels, Dorms

- Not Req'd in Ex. Bldgs. Undergoing Repair, Add, Alterations or Change of Occupancy



Proposed 2007 Amendments to 2005 Bldg. Code

- 2003 Int'l. Energy Conservation Code (IECC) deleted & substituted with 2006 IECC w/some revisions
- Comm. Bldgs. to comply w/ ASHRAE 90.1-2004 vs. 2001
- Greater Energy Efficiency Standards to comply with



Contemplated Changes for 2008 & Beyond

- State Fire Marshal working on a Fire Prevention Code:
 - Via Fire Code Part V
 - Will eliminate various statutes
 - Allow Hazard. Mat. Standards to be updated sooner



Legislation



- Growing Interest in Energy Conservation & Efficiency + Environmentally Friendly Construction, Sustainability/Going **Green**





Legislation



- PA 06-187 includes **Green** Bldg. Constr
 - Section 70 requires new constr. \$5 million or > @ state facilities comply with green bldg. standards per OPM
 - Consistent with silver bldg. rating of LEEDS
 - Exempts schools but may add in '07
 - OPM reviewing regs now



ADA Revisions



- DOJ evaluating revisions to accessibility guidelines (ADAAG) for alter. & new constr.
 - Greater Compatibility w/ IBC, UFAS reqts, & industry standards (i.e. handrails)
 - Current guidelines adopted by DOJ in '91 & amended thru '02 remain in effect until DOJ adopts revised guidelines by Jan. '09.
 - How will new guidelines be for ongoing obligation to remove barriers from ex. places of public accommodation?
 - May have exemption from some new reqts. for specific elements

World Trade Center Report



- ICC reviewing recommendations from Nat'l. Inst. Of Standards & Tech (NIST) Final Report of WTC Collapse
 - Spray Fireproofing: Test Methods & Standards So Performs As Expected
 - Fire Serv. Elevator/Emerg Evac w/Elev
 - Hi-rise Bldg. Burnout w/o Collapse

2007 + Beyond

