The Wisconsin Department of Commerce proposes an order to repeal chs. Comm 2.36, Comm 61.03 (14) (d) and (e), Comm 61.30 (1) (b) 2. and 3. and Table 61.30-2, Comm Table 61.30-3, Comm 61.34, Comm 62.0402, Comm 62.0414, Comm 62.0703, Comm 62.0903 (1), Comm 62.0903 (6) (b) and Table 62.0903, Comm 62.0903 (6m) (b) 1. and 2., Comm 62.0903 (8) to (10), Comm 62.0903 (14) (b), Comm 62.0907 (2) to (4), Comm 62.0909 (7), Comm 62.1007, Comm 62.1009 and 62.1016, Comm 62.1019 (2), Comm 62.1020, Comm 62.1103 (1), Comm 62.1110 (2) (b) Note, Comm 62.1407, Comm 62.1603 (title), (1), (3), (4) and (6), Comm 62.1604 (title) and (1), Comm 62.1607 (2), Comm 62.1612, Comm 62.1613 (1) and (2), Comm 62.1802, Comm 62.1810, Comm 62.1808 (4) and (6), Comm 62.1901 to 62.1908, Comm 62.1915 and 62.2101, Comm 62.2105, Comm 62.2109 (2) and Table 62.2109-1, Comm 62.2206, Comm 62.3001 (1), Comm 62.3500 (3) (a), Comm 63.0402, Comm 63.0403 (3), Comm 63.0502, Comm 63.0503 (3) to (6) and Tables 503.2.3 (1) and 503.2.3 (2), Comm 63.0503 (8), (9) and Table 63.0503, Comm 63.0505 (1), (2) (a) 3. and (3), Comm 64.0101, Comm 64.0403 (6) (c) 4., Comm 64.0403 (9), Comm 64.0702 and 64.0710, Comm 64.0801 (3), Comm 64.0918 (2), Comm 65.0610 and Comm 82.40 (3) (e) 2. b. to 2. d.;

to renumber Comm 61.30 (1) (b) 1., Comm 61.30 (4), Comm 62.0903 (2) to (4), Comm 62.0903 (6) (a) and (d) 4., Comm 62.0903 (6m) (a), (b) 3. to 5. and (c), Comm 62.0903 (12), Comm 62.0903 (14), Comm 62.0903 (15), Comm 62.1103 (2) (a) and (b), Comm 62.1603 (2), Comm 62.1604 (2), Comm 62.1613 (3), Comm Table 62.2109-2, Comm 62.3001 (3), Comm 63.0503 (7), Comm 63.0505 (4), Comm 64.0102 (title) and (2), Comm 64.0401 (6), Comm 64.0403 (4), Comm 64.0501, Comm 64.0502, Comm 64.0918 (3), Comm 66.0910, Comm 66.1101 (2), Comm 66.1301 (2), and Comm 82.40 (3) (e) 2. a.;

to renumber and amend Comm 61.03 (14) (f), Comm 62.0704 and 62.0705, Comm 62.0903 (5), Comm 62.0903 (6) (intro.), (c) and (d) 3., Comm 62.0903 (6m) (intro.), Comm 62.0903 (11) and (13), Comm 62.0907 (5) to (7), Comm 62.1017, Comm 62.1019, Comm 62.1107 (2) (c), Comm 62.1603 (5), Comm 62.1607 (3), Comm 62.1808 (1), Comm 62.1808 (title) (2) and (3), Comm 62.1808 (5), Comm 62.1809, Comm 62.2109 (3), Comm 62.3001 (2), Comm 63.0102, Comm 63.0404, Comm 63.0505 (2), Comm 64.0300, Comm 64.0401 (4) (a) and (b), Comm 64.0401 (5), Comm 64.0403 (2), (3) and (5), Comm 64.0403 (6) and (7), Comm 64.0403 (8), Comm 64.0506 (2) (bm), Comm 66.0101 (2), Comm. 66.0701 and Comm 66.1101 (1);

to amend Comm 2.31 (1) (a) and (d), Comm 2.52 (3) (title) and (a), Comm 5.61 (1), Comm 5.63 (1) (b) 5., Comm 14.13 (3) (title) and (intro.), Comm 14.13 (4), Comm 61.03 (14) (a) to (c), Comm 61.04 (15), Comm 61.05, Comm 61.30 (1) (a), Comm 61.40 (1) (a), Comm 62.0401 Note, Comm 62.0902 and (title), Comm 62.1008 (2), Comm 62.1101 (2) (a), Comm 62.1107 (title), (1) (a) to (c) and (2) (a), Comm 62.1107 (3) (a), Comm 62.1107 (3) (b) (title), Comm 62.1110 (1) (title) and (2) (title) and (a), Comm 62.1200 (2) (a) 1., Comm 62.1200 (3) (d), Comm 62.1607 (1), Comm Table 1607.1 and footnote j, Comm 62.1700, Comm 62.2902 (5) Note, Comm 62.3500 (3) (b) and (d), Comm 63.0101, Comm 63.0501 (2), Comm 63.0506 Note, Comm 64.0202 (1) (d), Comm 64.0301 (3) (b) 2., Comm 64.0404 (1) and (2) (c), Comm 64.0514, Comm 64.0601 and 64.0602, Comm 64.1500 (2) (a) and Note, Comm 65.0303 (2), Comm 66.0202 (2), Comm 66.0300, Comm 66.0602, Comm 66.0901 (1) and Comm 66.1301 (title);

to repeal and recreate Comm 2.31 (1) (i), Comm 18.1702 (1) (a) and (b), Comm 21.095, Comm 61.04 (4), Comm 61.30 (3), Comm 62.0202 (1) and (2), Comm 62.0702, Comm 62.0707, Comm 62.0903 (5) (c), Comm 62.1405, Comm 62.1803, Comm 62.1805, Comm 62.1807, Comm 62.1913,

Comm 62.2204, Comm 62.2303, Comm 62.3004 (2) (b), Comm 63.002 (2), Comm 63.0403 (2), Comm 64.0401 (1), Comm 64.0402, Comm Table 64.0403, and Comm 65.0630;

and to create Comm 14.13 (3) Note [2], Comm 61.03 (15), Comm 61.30 (4) (b), Comm 61.31 (1) (b) 2. Note [2], Comm 61.31 (1) (b) 3., Comm 62.0400 (1) Note, Comm 62.0708, Comm 62.0721, Comm 62.0903 (5) (d), Comm 62.0903 (10) (b), Comm 62.1021 (2), Comm 62.1022, Comm 62.1101 (2) (c), Comm 62.1107 (2) (c), Comm 62.1107 (3) (a) Note, Comm 62.1804, Comm 62.1806, Comm 62.1808, Comm 62.1809, Comm 62.1810 (3) to (6) and (8), Comm 62.2210, Comm 62.2903, Comm 62.3002, Comm 63.0503 (4) and (5), Comm 63.0503 (6), Comm 64.0300 (2), Comm 64.0307, Comm 64.0401 (4) (a) and (b), Comm 64.0407, Comm 64.0501 (1), Comm 64.0502 (2), Comm 66.0100 Note [2], Comm 66.0101 (2) (b), Comm 66.0500, Comm 66.0503, Comm 66.0509 Note, Comm 66.0607 (2) (e) to (h), Comm 66.0607 (3), Comm 66.1002, Comm 66.1101 (1), Comm 66.1301 (2), Comm 66.1400 and Comm 82.40 (3) (e) 1. Note [2] relating to construction, use and maintenance of public buildings and places of employment and affecting small businesses.

* * * *

4. Explanation of Agency Authority.

Under the statutes cited, the Department of Commerce protects public health, safety, and welfare by promulgating comprehensive requirements for design, construction, maintenance and inspection of public buildings and places of employment, including commercial buildings and structures and multifamily dwellings. The department also updates these requirements as necessary to be consistent with nationally recognized standards that are incorporated by reference into the Wisconsin Commercial Building Code (WCBC), specifically, the building code requirements developed by the *International Code Council*® (ICC).

5. Summary of Proposed Rules.

Currently, the department adopts by reference the 2006 editions of the ICC suite of building codes – the *International Building Code*® (IBC), the *International Energy Conservation Code*® (IECC), *International Existing Buildings Code*® (IEBC), the *International Fuel Gas Code*® (IFGC) and the *International Mechanical Code*® (IMC) – and makes Wisconsin modifications to these codes within the WCBC. The department proposes to adopt the 2009 editions of these ICC codes.

Significant changes from the 2006 to the 2009 editions of the ICC codes include:

- Defining and clarifying live/work unit provisions; IBC section 419.
- Adding provisions for Ambulatory Health Care Facilities; IBC section 422.
- Adding storm shelter provisions and references to ICC 500; IBC section 423.
- Requiring the sprinkling of upholstered furniture stores; IBC section 903.
- Deleting reduced egress width exception for buildings with automatic fire sprinkler systems; IBC section 1005.
- Requiring new locking provisions for egress doors serving certain types of occupancies; IBC sections 1008.1.9.6, 1008.1.9.8 and 1008.1.9.9.
- Clarifying accessibility provisions for live/work units are to be evaluated separately; IBC section 1103.2.13.
- Requiring at least one lavatory with enhanced reach ranges in toilet rooms having 6 or more lavatories for accessibility purposes; IBC section 1109.2.3.
- Providing specific provisions on tightness of buildings (air barriers); IECC section 402.4.2.
- Requiring shutoff controls for snow/ice-melting systems serving residential occupancies; IECC section 403.8.
- Specifying the heating of outside spaces to be radiant type and provided with efficiency controls; IECC section 503.2.11.
- Revising the mechanical ventilation table to provide more detailed occupancy classifications that reflect ASHRAE standard 62 – Ventilation for Acceptable Indoor Air Quality; IMC table 403.3.
- Requiring that make-up air to be provided for domestic kitchen exhaust hoods with capacities of greater than 400 cfm be tied in to operation of hood; IMC section 505.2.
- Eliminating details on combustion air from within the IMC by deferring to NFPA standard 31 for oil-fired appliances and the manufacturers' recommendations for solid-fuel-fired appliances.

- Expanding the provisions for the piping of hydronic heating systems to reflect newer materials and standards; IMC chapter 12.
- Requiring thermal insulation below radiant floor heating systems; IMC sections 1209.5 to 1209.5.4.
- Establishing bonding/grounding provisions specific to corrugated stainless steel gas tubing (CSST); IFGC section 310.1.1.
- Prohibiting gas piping from entering/exiting a building below grade; IFGC section 404.4.
- Requiring LP-Gas piping to be electrically isolated (dielectric fitting) where the underground piping comes above ground to enter the building; IFGC section 404.8.
- Requiring gas clothes dryer exhaust ducts to be protected from penetration by nails/screws; IFGC section 614.6.3.
- Specifying minimum vertical clearances between gas cooktops and materials or cabinets above; IFGC section 623.7.
- Adding provisions associated with the use of used materials and equipment; IEBC section 104.9.1.
- Clarifying that when undergoing a partial change of occupancy, accessibility will be driven by the alteration provisions found in IEBC sections 605 or 706; IEBC section 912.8.1.

Many of the current Wisconsin modifications under the WCBC are proposed to be repealed because of changes in the 2009 editions of the ICC codes. Minor amendments, including renumbering, are being made to several Wisconsin modifications to reflect changes in the 2009 IBC codes.

The proposed rules include creating some general global modifications that replace various current individual deletions of unnecessary ICC requirements, such as requirements that address (1) designing one- and two- family dwellings; (2) employing special inspectors or obtaining special inspections; (3) obtaining a mandated approval from a local building or fire code official; and (4) building in flood-hazard areas. Other proposed Wisconsin modifications include:

- Eliminating the option to register the construction of a small building in lieu of the required plan submittal and approval when the building was designed by a registered architect or engineer but not otherwise required; s. Comm 61.30.
- Modifying the definition of fire area so that it only includes enclosed spaces as it relates to fire protection; s. Comm 62.0902 (2).
- Modifying the provisions for firewalls or division walls separating townhouses for the purpose of allowing sprinkler protection in accordance with NFPA standard 13D; s. Comm 62.0903 (5).
- Extending a provision relating to a type of automatic sprinkler protection currently afforded small R-2 multifamily dwellings to other small residential buildings, such as cabins at summer camps; s. Comm 62.0903 (5) (d).
- Revising the sprinkling requirements for townhouses with less than 20 units to reflect the changes in the latest edition of the *International Residential Code*®; s. Comm 62.0903 (5) (d).
- Eliminating current Wisconsin exceptions resulting in fire suppression systems to be provided in enclosed parking garages serving other occupancies; s. Comm 62.0903 (8) to (10).

- Eliminating the required international symbol accessibility signage for assigned parking serving a residential apartment building; s. Comm 62.1103.
- Extending the modified uniform live loads for attics in townhouses to attics in all residential occupancies; s. Comm 62.1607.
- Codifying additional criteria for ground improvement methods relating to foundations and floor slabs, such as for Geopier® systems; s. Comm 62.1804.
- Reducing presumptive load-bearing values by ½ for saturated soils; s. Comm 62.1806.
- Alerting building owners or occupants to the heating assumption for frost-protected shallow foundations; s. Comm 62.1809.
- Requiring an elevator car that accommodates an ambulance stretcher for fire department emergency access in defined buildings; s. Comm 62.3002.
- Exempting the need for economizers for package RTU's 33,000 BTU/hr and larger; s. Comm 63.0503.
- Clarifying the exemption of an economizer for a closed circuit cooling tower heat pump system; s. Comm 63.0503.
- Clarifying maintenance requirements for smoke alarms; s. Comm 66.0503.

The draft also reflects the renumbering of Commercial Building Code to chapters Comm 61 to 66, in light of chapter Comm 60, relating to soil erosion now being administered by the Department of Natural Resources.

6. Summary of, and Comparison with Existing or Proposed Federal Regulations.

General Building Code

- *Code of Federal Regulations* – An Internet-based search for "federal commercial building code" and "building code regulations" in the *Code of Federal Regulations* (CFR) did not identify any federal regulations pertaining to these topics.

- *Federal Register* – An Internet-based search for "federal commercial building code" and "building code regulations" in the 2005 to 2010 issues of the *Federal Register* did not identify any proposed federal regulations pertaining to these topics.

Energy Conservation Requirements

- *Code of Federal Regulations* – The portion of the CFR relating to energy conservation for commercial buildings and facilities is found under 10 CFR 420–State Energy Program. The purpose of this regulation is to promote the conservation of energy, to reduce the rate of growth of energy demand and to reduce dependence on imported oil through the development and implementation of comprehensive state energy programs. This regulation initially required that each state's energy conservation rules for new buildings be no less stringent than the provisions of the 1989 edition of ASHRAE Standard 90.1, *Energy Standard for Buildings Except Low-Rise Residential Buildings*.

- *Federal Register* – According to the January 23, 2009, *Federal Register*, the Department of Energy (DOE) is determining if ANSI/ASHRAE/IESNA Standard 90.1–2007 would save energy in commercial buildings. DOE is doing a comparative analysis of the 2007

edition of that standard to the 2004 edition. The 2009 edition of the IECC energy conservation requirements for commercial buildings, which the proposed rules would adopt by reference, reflect the 2007 edition of the ASHRAE 90.1 Standard.

Accessibility Requirements

- *Code of Federal Regulations* – The portions of the CFR relating to accessibility in commercial buildings and facilities include the following:

  1. 28 CFR 35 – Nondiscrimination on the Basis of Disability in State and Local Government Services.
  2. 28 CFR 36 – Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities.
  3. 24 CFR 40 – Accessibility standards for design, construction, and alteration of publicly owned residential structures.
  4. 24 CFR 41 – Policies and procedures for the enforcement of standards and requirements for accessibility by the physically handicapped.

  Both 28 CFR 35 and 28 CFR 36 require public buildings and commercial facilities – including government-owned and -operated buildings and facilities – be designed, constructed and altered in compliance with the accessibility construction regulations specified under the federal Americans with Disabilities Act Accessibility Guidelines (ADAAG). The purpose of 24 CFR 40 and 24 CFR 41 is to provide technical guidance on the design and construction of dwelling units as required by the federal Fair Housing Amendments Act of 1988.

  The intent of the IBC and the amendments included under chapter Comm 62 is to ensure the Wisconsin construction requirements related to accessibility are equivalent to these applicable federal laws and regulations.

- *Federal Register* – Proposed federal regulations and amendments to established federal regulations for accessibility are found in the following issues of the *Federal Register*:

  1. October 24, 2008 – Design and Construction Requirements; Compliance with ANSI A117.1 (2003) Standards.
  2. August 5, 2005 – ADAAG; Corrections.
  3. December 7, 2009 – Nondiscrimination on the Basis of Disability in Public Accommodations and Commercial Facilities.
  4. March 23, 2007 – ADAAG Supplementary Material.
  5. November 23, 2005 – ADAAG Public Rights-of-Way.
  6. April 17, 2006 – Multifamily Building Conformance with the Fair Housing Accessibility Guidelines: Improving the Methodology.

The ICC is actively monitoring the proposed changes to the federal standards affecting accessibility and will include these changes in future editions of the IBC and the corresponding ICC/ANSI A117.1–Accessible and Usable Buildings and Facilities Standard.

7. Comparison with Rules in Adjacent States.

An Internet-based search of the four adjacent states found the following regulations that include similar requirements relating to public buildings and places of employment:

- **Illinois** – Illinois does not administer a statewide building code with the exception of an energy code as of February, 2010.

- **Iowa** – The Iowa Department of Public Safety administers the Iowa State Building Code. Effective January 1, 2010, the department adopted the 2009 editions of the IBC, IMC, IEBC and IECC with Iowa amendments.

- **Michigan** – The Michigan Department of Labor and Economic Growth administers the Michigan construction codes, which adopt by reference the 2006 editions of the IBC, IMC and IEBC with amendments. The 2009 Michigan Building, Residential, and Rehabilitation Code for Existing Buildings review process is in progress.

- **Minnesota** – The Minnesota Department of Labor and Industry administers the Minnesota State Building Code, which adopted the 2006 editions of the IBC, IFGC and IMC.

8. Summary of Factual Data and Analytical Methodologies.

The primary methodology for updating the Wisconsin Commercial Building Code, chapters Comm 61 to 66, has been a review and assessment of the latest editions of the national model codes that serve as the basis for the Wisconsin code. The department's review and assessment process involved the participation and support of 10 advisory councils. The members of the councils represent many stakeholders involved in the building industry, including designers, contractors, developers, regulators, labor, the fire service and the public. (A listing of the councils and the current members is provided at the end of this analysis.)

The department believes that the national model codes reflect current societal values with respect to protecting public health, safety and welfare in the design, construction, use, operation and maintenance of commercial buildings that serve as public buildings and places of employment. The model code organization – International Code Council, ICC – uses a process open to all parties to develop its codes. More information, including background information in the development of the 2009 model code editions, may be found at the ICC web site, http://www.iccsafe.org.

The review and assessment process for the Commercial Building Code involved an examination of the revisions in the 2009 editions of the IBC, IECC, IMC, IFGC and IEBC. The assessment included the evaluation of the current rules under chapters Comm 61 to 66 that modified these ICC codes. Working with the 10 advisory councils, the department determines if the various technical requirements in the 2009 model codes are reasonable for addressing potential risks or concerns and promoting the public health, safety and welfare. Such determinations are made based upon experience, forecasts, intuition or projection.

9. Analysis and Supporting Documents Used to Determine Effect on Small Business or in Preparation of Economic Impact Report.

The department used 10 advisory code councils to analyze and develop the proposed revisions to the Commercial Building Code. The councils involve a variety of organizations whose memberships include many types of small businesses. The department uses these councils to gather information on potential impacts in complying with the technical and administrative requirements of the codes. Council members are responsible for bringing forth the concerns that their respective organizations may have with the requirements including economic impacts. (Copies of the council meetings summaries are available on the Safety and Building Division web site, http://www.commerce.state.wi.us/SB/SB-CodeCouncilsComBldgSum.html .)

The department also offers an e-mail subscription service to anyone who is interested in rule development and/or council activities. The service provides e-mail notification of council meetings, meeting agendas and council meeting progress reports. Currently, there are about 2,000 subscriptions for information pertaining to the commercial building program.

The department believes the rules will not increase the effect on small businesses from what the current rules impose on them. An economic impact report is not required pursuant to section 227.137, Stats.

10. Effect on Small Business

The requirements of the Commercial Building Code impact all businesses, regardless of size, that use public buildings and places of employment in Wisconsin. The codes impact a variety of businesses, including small businesses, particularly those businesses that design, build, or maintain commercial buildings; provide or produce building materials or components; own commercial buildings; or occupy commercial buildings. It is indeterminable how many small businesses may be impacted by the rules in some manner.

The potential effects of the codes occur on two basic levels, administrative and technical. The codes dictate certain administrative procedural requirements that are to be followed to acquire various approvals. For the most part, the codes establish numerous technical standards that are to be adhered to when designing, constructing, using, operating or maintaining a commercial building to protect public health, safety and welfare.

The proposed rule revisions do not substantially modify the current administrative requirements of the Commercial Building Code. Therefore, this type of impact on small businesses will not substantially change.

How the code's technical standards may impact small businesses is dependent upon many variables. The proposed revisions for the Commercial Building Code do not apply retroactively to existing buildings. The proposed revisions would apply when a new building or modification to an existing building is proposed. The various advisory councils did not identify major economic concerns for updating the Commercial Building Code to the latest ICC codes as amended in this proposal.

Regarding s. 227.115, Stats., the department believes the proposed rule changes for the Commercial Building Code will not directly or substantially affect the development, construction, cost or availability of housing.

11. Agency Contact.

Jim Smith, Program Manager, jim.smith@wisconsin.gov, (608) 266-0251.

12. Public Hearing Comments.

A public hearing has been scheduled for October 5, 2010. The hearing record on this proposed rulemaking will remain open until October 18, 2010. Written comments on the proposed rules may be submitted to Jim Smith, at the Department of Commerce, P.O. Box 2689, Madison, WI 53701-2689, or email at jim.smith@wisconsin.gov.

* * * *

Janet Segelken ..... Eau Claire Fire Department – Wisconsin State Fire Chiefs Association
Michael Shoys ..... Wisconsin Manufacturers & Commerce
Jeff Stauber..... Wisconsin State Fire Chiefs Association

Multifamily Dwelling Code Council

Kraig Biefeld ..... Watertown Fire Department – Fire Service
Jeffery Brohmer..... LaCross Fire Department – Fire Service
Emory Budzinski..... Weather Shield Windows & Doors – Manufacturer/Supplier Wood Products
Beth Gonnering ..... Building Contractors/Developers
Edward Gray ..... Electrical Workers, Local 127 – Labor
Greta Hansen ..... Community Action Coalition for South Central Wisconsin
James Klett ..... Architects/Engineers/Developers
Michael Morey ..... Oakbrook Corp. – Contractors/Developers
Dave Nitz..... City of Berlin – Building Inspectors
Richard Paur ..... City of Milwaukee – Building inspectors
Stan Ramaker ..... Design II Architects – Wisconsin Builders Association
Nicholas Rivecca..... Sonag Ready Mix LLC – Manufacturer/Supplier (Concrete)
Kori Schneider..... Metropolitan Milwaukee Fair Housing Council
Mark Scott ..... Chicago Regional Council of Carpenters
Kevin Wippurfurth ..... Wisconsin Drywall Distributors

Alteration and Change of Occupancy

Joel Becker ..... Associated General Contractors of Greater Milwaukee
Tom Clark ..... Pleasant Prairie Fire & Rescue – Wisconsin State Fire Inspectors Association
Bruce Johnson ..... Wisconsin Builders Association
Jennie Macaluso-Ruditys ..... Building Owners and Managers Association
Charles Quagliana ..... American Institute of Architects
Chris Rute..... City of Milwaukee
Jim Sewell ..... Wisconsin Historical Society
Harry Sulzer ..... City of Madison Building Inspection – League of Wisconsin Municipalities

Energy Conservation

Jeffrey Boldt..... KJWW Engineering Consultants – Wisconsin Chapter of the American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE)
Thomas Cox ..... Cox Group Architects, LLC – American Institute of Architects, Wisconsin Society
Dan Dehnert ..... Planning Design Build Inc. – Associated General Contractors of Wisconsin
Ross DePaola..... Integrated Energy Services – Clean Wisconsin
Michael Mamayekk..... Illingworth Corp. – Plumbing, Mechanical and Sheet Metal
Dave Osborne ..... Wisconsin Builders Association

Gerald Schulz ..... Wisconsin Chapter National Electrical Contractors
Harry Sulzer ..... City of Madison Building Inspection – League of Wisconsin Municipalities

Fire Safety

Peter Braun ..... Wall-tech Inc. – Associated General Contractors of Greater Milwaukee, Inc.
Kevin Cavanaugh ..... Wisconsin Concrete Masonry Association
Thomas Clark ..... Pleasant Prairie Fire and Rescue Department – Wisconsin State Fire Inspectors Association
Michael Gardner..... Gypsum Association
Chris LaShorne..... American Institute of Architects – Wisconsin Society
Kerry Vondross ..... County Materials Corporation – Associated Builders and Contractors of Wisconsin, Inc.
David Wheaton..... City of Wauwatosa – League of Wisconsin Municipalities

Fire Protection Systems

Brandon Bartow ..... Bartow Builders Inc. – Wisconsin Builders Association
Tom Binish..... A&A Fire and Security – Associated Builders and Contractors of Wisconsin, Inc.
Thomas Clark ..... Pleasant Prairie Fire and Rescue Department – Wisconsin State Fire Inspectors Association
John Crook ..... City of Fitchburg – League of Wisconsin Municipalities
Chris LaShorne..... American Institute of Architects, Wisconsin Society

General

Norm Arendt ..... SEH – Wisconsin Society of Professional Engineers
Curt Hastings..... J.H. Findorff & Son Inc. – Associated General Contractors of Wisconsin
Joseph Jurkiewicz..... Kahler Slater Architects – American Institute of Architects, Wisconsin Society
James Klett ..... American Institute of Architects, Wisconsin Society
Richard Paur..... City of Milwaukee
Bill Pennoyer..... VJS Construction Services – Associated General Contractors of Greater Milwaukee
Ed Ruckriegel..... Madison Fire Department
Mark Scott..... Chicago Regional Council of Carpenters

HVAC

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Jennie Macaluso-Ruditys ..... Building Owners and Managers Association
Michael Mamayek..... Illingworth Corp. – Plumbing and Mechanical Contractors of Milwaukee and Southeast Wisconsin

Jay Myers ..... Komfort Heating – Wisconsin Builders Association
Richard Pearson..... Pearson Engineering – American Society of Heating, Refrigeration, and Air-Conditioning Engineers, Madison Chapter
Dan Rogers..... Bredan Mechanical Systems, Inc. – Sheet Metal and Air-Conditioning Contractors of Wisconsin
Keith Spruce..... City of Milwaukee, Department of Neighborhood Services – American Institute of Architects, Wisconsin Society
David Stockland ..... Capitol Mechanical Inc. – Associated Builders and Contractors of Wisconsin
Harry Sulzer ..... City of Madison, Building Inspection Unit – League of Wisconsin Municipalities

Means of Egress and Accessibility

Larry Earll ..... Wisconsin Department of Administration
Tom Hirsch..... Hirsch Group LLC – American Institute of Architects, Wisconsin Society
Joseph Jurkiewicz..... Kahler Slater Architects – American Institute of Architects, Wisconsin Society
Larry Palank ..... Hunzinger Construction Co. – Associated General Contractors of Greater Milwaukee
Monica Sommerfeldt..... Archer Lion Inc. – Wisconsin Builders Association
David Wheaton..... City of Wauwatosa – Wisconsin Building Inspectors Association

Structural

Steven Cramer ..... UW-Madison, Department of Civil and Environmental Engineering
David Hyzer ..... American Institute of Architects, Wisconsin Society
Tom Luttrell ..... Wisconsin Department of Administration, Division of State Facilities
Michael Oliva..... UW-Madison, Department of Civil and Environmental Engineering
John Rave ..... 4th Dimension Design Inc. – Associated Builders and Contractors of Wisconsin
Robert Schumacher ..... GRAEF – American Society of Civil Engineers, Wisconsin Section
Alan Wagner ..... Wagner Komurka Geotechnical Group, Inc. – American Society of Civil Engineers, Wisconsin Section
Michael West..... Computerized Structural Design –American Society of Civil Engineers, Wisconsin Section

* * * *

SECTION 1. Comm 2.31 (1) (a) and (d) are amended to read:

Comm 2.31 (1) (a) *General*. Fees relating to the submittal of all plans, submitted in accordance with the requirements of chs. Comm ~~60~~ 61 to 66, shall be determined in accordance with this section.

(d) *Miscellaneous plans*. The fee for miscellaneous plans shall be $250 per plan. Miscellaneous plans are plans which have no building, HVAC or fire protection system plan submissions and those plans for which no area may be associated. Miscellaneous plans include, but are not limited to, all of the following:

1. Footing and foundation plans submitted prior to the submission of the building plans.

2. ~~Industrial exhaust~~ Exhaust systems for dust, fumes, vapors and gases~~, for government-owned buildings only~~.

~~3. Spray booth plans, for government-owned buildings only~~.

~~4.~~ 3. Stadium, grandstand and bleacher plans, and interior bleacher plans submitted as independent projects.

~~5. Structural plans submitted as independent projects, such as docks, piers, antennae, outdoor movie screens and observation towers.~~

~~6.~~ 4. Any building component, other than building, HVAC and fire protection systems, submitted after installation.

~~7. Building, HVAC and fire protection system plans submitted following denial of plan approval, if the submission is within 8 months of the denial.~~

SECTION 2. Comm 2.31 (1) (i) is repealed and recreated to read:

Comm 2.31 (1) (i) *Resubmission*. The fee for building, HVAC or fire protection system plans resubmitted within 8 months following denial of plan approval shall be $250 per plan.

SECTION 3. Comm 2.36 is repealed.

SECTION 4. Comm 2.52 (3) (title) and (a) are amended to read:

Comm 2.52 (3) (title) PETITIONS FOR VARIANCE ON RULES UNDER CHS. COMM ~~60~~ 61 TO 66, WISCONSIN COMMERCIAL BUILDING CODE. (a) Except as provided under sub. (4), the fee for reviewing petitions for variance on rules under chs. Comm ~~60~~ 61 to 66 shall be $550.00 per petition.

SECTION 5. Comm 5.61 (1) is amended to read:

Comm 5.61 (1) GENERAL. A person who holds a certification issued by the department as a certified commercial building inspector may conduct inspections of public buildings and places of employment for the purpose of administering and enforcing chs. Comm ~~60~~ 61 to 66 and 75 to 79.

SECTION 6. Comm 5.63 (1) (b) 5. is amended to read:

Comm 5.63 (1) (b) 5. Certified soil erosion inspector may inspect one- and 2-family dwellings for the purpose of administering and enforcing s. Comm 21.125~~, and public buildings and places of employment for the purpose of administering and enforcing ch. Comm 60~~.

SECTION 7. Comm 14.13 (3) (title) and (intro.) are amended to read:

Comm 14.13 (3) (title) MAINTENANCE OF SMOKE DETECTORS ~~IN RESIDENTIAL BUILDINGS~~ AND ALARMS. ~~This is a~~ These are department informational ~~note~~ notes to be used under NFPA 1 section 13.7.4.6:

SECTION 8. Comm 14.13 (3) Note [2] is created to read:

Comm 14.13 (3) Note [2]**:** Under ch. Comm 66, all smoke alarms must be replaced by the end of the service period specified by their manufacturer, and a replacement alarm that uses a battery as the primary power source must have a non-replaceable, non-removable battery which is capable of powering the alarm for at least ten years.

SECTION 9. Comm 14.13 (4) is amended to read:

Comm 14.13 (4) MANUAL WET SPRINKLER SYSTEMS. This is a department rule ~~and informational note~~ in addition to the requirements in NFPA 1 section 13.8: Inspection, testing and maintenance of manual wet sprinkler systems shall comply with all of the requirements of NFPA 25, for an automatic fire sprinkler system, except that the main drain test specified in NFPA 25 is not required.

~~**Note:** Wisconsin has unique design requirements for these manual wet systems, as established in chapters Comm 61 to 66.~~

SECTION 10. Comm 18.1702 (1) (a) and (b) are repealed and recreated to read:

Comm 18.1702 (1) (a) This is a department informational note to be used under ASME A17.1 section 2.2.2.3:

Note: See ch. Comm 62 of the building code for hoistway drain and sump requirements.

(b) The requirements in ASME A17.1 section 2.2.2.5 are not included as part of this chapter.

Note: See ch. Comm 62 of the building code for hoistway drain and sump requirements.

SECTION 11. Comm 21.095 is repealed and recreated to read:

Comm 21.095 Automatic fire sprinklers. (1) Except as provided in subs. (2) and (3), the design, installation, testing and maintenance of automatic fire sprinklers shall conform to NFPA 13D.

(2) (a) The requirements of NFPA 13D sections 6.3 (4), 8.1.3 and 8.6 are not included as part of this code.

(b) Fire department connections are prohibited in multipurpose piping systems.

(3) (a) Limited area automatic fire sprinkler systems are allowed in dwellings.

(b) 1. A limited area automatic fire sprinkler system shall add the following wording to the warning sign required in 6.3(5) of NFPA 13D: "The number and location of sprinklers in this system does not conform to NFPA 13D."

2. An automatic fire sprinkler system providing fire protection throughout the dwelling in accordance with NFPA 13D shall add the following wording to the warning sign required in 6.3(5) of NFPA 13D: "The number and location of sprinklers in this system conform with NFPA 13D."

Note: Multipurpose piping systems need to conform to provisions of the Plumbing Code, chs. Comm 81 to 87. These systems attach fire sprinkler heads to the dwelling's potable water piping system.

Note: Chapter 145 of the Statutes requires automatic fire sprinkler systems on dedicated water supply systems, to be installed by a licensed sprinkler fitter.

SECTION 12. Comm 61.03 (14) (a) to (c) are amended to read:

Comm 61.03 (14) (a) Design and construction-related requirements shall apply that are addressed in IFC section 102.6; IFC chapters 2 to 4; IFC sections 501 to 502 and 504 to 510; IFC sections 601 to 605 and 607 to 609; IFC chapters 7 and 8; IFC sections 901.1 to 901.4.2, 901.4.4 to 909.18.9, and 909.20 to 913; and IFC chapters 10, 12 to 21, 23 to 29, 31 to 33, 36, 37, and 39 to ~~44~~ 47.

(b) Occupant loads addressed in IFC section ~~1003.2.2.10~~ 1004.8 shall apply but shall be established by the owner rather than by the code official.

(c) Construction-related inspections and reports shall apply that are addressed in IFC chapters 2 to 8; IFC sections 901 to 909.18.9 and 909.20 to 913; and IFC chapters 10, 12 to 21, 23 to 29, 31, 32, 33, 36, 37, and 39 to ~~44~~ 47 but may be performed or compiled by any qualified agency, rather than by a special inspector.

SECTION 13. Comm 61.03 (14) (d) and (e) are repealed.

SECTION 14. Comm 61.03 (14) (f) is renumbered Comm 61.03 (14) (d) and amended to read:

Comm 61.03 (14) (d) Use and operation provisions shall apply which are a contingency of design and construction-related requirements and which are addressed in IFC chapters 2 to 4; IFC sections 501 and 502 and 504 to 510; IFC sections 601 to 605 and 607 to 609; IFC chapters 7 and 8; IFC sections 901.1 to 901.4.2, 901.4.4 to 909.18.9, and 909.20 to 913; and IFC chapters 10, 12 to 21, 23 to 29, 31 to 33, 36, 37, and 39 to ~~44~~ 47.

SECTION 15. Comm 61.03 (15) is created to read:

Comm 61.03 (15) GLOBAL DELETIONS FOR THE INTERNATIONAL CODES. Unless specifically applied by another department-written rule in this code, the following requirements of the IBC, IEBC, IECC, IFC, IFGC and IMC do not apply as rules of the department:

(a) All requirements that specify submittal and approval of construction documents, shop drawings or acceptance tests and records.

(b) All requirements that specify employing special inspectors or obtaining special inspections or structural observations.

(c) All requirements that mandate obtaining approval, acceptance or other direction from a building or fire code official.

Note: This paragraph does not delete options to obtain approval from the Department or its authorized agents for specific circumstances that differ from conditions which are more generally prescribed in the above-listed codes.

(d) All requirements that specify providing information to a building or fire code official, unless that official requests the information.

(e) All requirements that address construction in flood hazard areas.

(f) All requirements that address construction of detached one- or two-family dwellings.

(g) All requirements that specify obtaining a permit or certificate of occupancy.

Note: For an example of a Department-written rule that specifically applies one or more of the requirements referenced above, see s. Comm 62.1700, which specifically applies the special inspections and determinations in IBC sections 1711 to 1716.

SECTION 16. Comm 61.04 (4) is repealed and recreated to read:

Comm 61.04 (4) "HVAC system" means a heating, ventilating or air conditioning system or a component thereof that is permanently installed to provide control of environmental conditions within buildings.

SECTION 17. Comm 61.04 (15) are amended to read:

Comm 61.04 (15) "This code" means chs. Comm ~~60~~ 61 to 66, which is the Wisconsin Commercial Building Code.

SECTION 18. Comm 61.05 is amended to read:

Comm 61.05 Adoption of the International Codes. (1) IBC. The *International Building Code*® – ~~2006~~ 2009, subject to the modifications specified in this chapter and ch. Comm 62 is hereby incorporated by reference into this code.

(2) IECC. The *International Energy Conservation Code*® – ~~2006~~ 2009, subject to the modifications specified in this chapter and ~~in~~ ch. Comm 63 is hereby incorporated by reference into this code.

(3) IMC. The *International Mechanical Code*® – ~~2006~~ 2009, subject to the modifications specified in this chapter and ~~in~~ ch. Comm 64 is hereby incorporated by reference into this code.

(4) IFGC. The *International Fuel Gas Code*® – ~~2006~~ 2009, subject to the modifications specified in this chapter and ~~in~~ ch. Comm 65 is hereby incorporated by reference into this code.

(5) IEBC. The *International Existing Building Code*® – ~~2006~~ 2009, subject to the modifications specified in this chapter and ch. Comm 66, is hereby incorporated by reference into this code.

Note: A copy of the *International Building Code*®, *International Energy Conservation Code*®, *International Mechanical Code*®, *International Fuel Gas Code*®, and *International Existing Building Code*® is on file in the offices of the Department and the Legislative Reference Bureau. Copies of the International Codes may be purchased from the International Code Council®, 4051 West Flossmoor Road, Country Club Hills, IL 60478−5795, (708) 799−2300, Website www.iccsafe.org.

Note: The references in chs. Comm 62 to 66 to individual ICC code sections typically are to a particular paragraph or set of paragraphs within a referenced ICC section, and are not intended to affect any subsequent subdivisions of the specified section unless stated otherwise. For example, the directive in s. Comm 62.0907 (1) to substitute certain language for IBC section 907.1 is not intended to mean that IBC sections 907.1.1 through 907.1.2 are also being changed.

SECTION 19. Comm 61.30 (1) (a) is amended to read:

Comm 61.30 (1) (a) Except as provided in par. (b) and sub. (4), the construction of, the alteration of or the addition to a public building or a place of employment may not commence unless plans for the project have been submitted to and approved by department or its authorized representative in accordance with s. Comm 61.31.

SECTION 20. Comm 61.30 (1) (b) 2. and 3. and Table 61.30-2 are repealed.

SECTION 21. Comm 61.30 (1) (b) 1. is renumbered Comm 61.30 (1) (b).

SECTION 22. Comm 61.30 (3) is repealed and recreated to read:

Comm 61.30 (3) TYPES OF BUILDING COMPONENTS. (a) Except as provided in sub. (4), building component or system plans shall be submitted to and approved by the department or authorized representative prior to installation of the component or system, for each of the following type components or systems:

1. Pre-manufactured and pre-engineered structural components.

2. Heating, ventilating and air conditioning systems.

3. Fire protection systems.

(b) Component or systems plans shall be submitted in one of the following manners:

1. Included with the plans under sub. (1) (a).

2. Submitted as a separate plan for the component or system.

SECTION 23. Comm Table 61.30-3 is repealed.

SECTION 24. Comm 61.30 (4) is renumbered Comm 61.30 (4) (a).

SECTION 25. Comm 61.30 (4) (b) is created to read:

Comm 61.30 (4) (b) The submission and approval of fire protection system plans is not required for a project involving the alteration or addition of the following components:

1. Twenty or fewer sprinkler heads to an existing automatic fire sprinkler system.

2. Twenty or fewer alarm devices to an existing fire alarm system.

SECTION 26. Comm 61.31 (1) (b) 2. Note [2] is created to read:

Comm 61.31 (1) Note [2]**:** Nothing in this code is intended to prohibit the submission and acceptance of plans and construction documents in an electronic or digital media.

SECTION 27. Comm 61.31 (1) (b) 3. is created to read:

Comm 61.31 (1) (b) 3. Be signed, including license number, and dated by the master plumber who is responsible for the installation of a NFPA 13D multipurpose piping system and who is licensed by the department of commerce.

Note: Plans for a multipurpose piping system must be submitted under s. Comm 82.20 to determine compliance for the non-fire protection aspects of the system.

SECTION 28. Comm 61.34 is repealed.

SECTION 29. Comm 61.40 (1) (a) is amended to read:

Comm 61.40 (1) (a) Except as provided in par. (b), the proposed construction of a project within the scope of this code shall be supervised by ~~a~~ one or more Wisconsin registered ~~architect~~ architects or ~~engineer~~ engineers, except that ~~a~~ Wisconsin registered ~~designer~~ designers may supervise the installation of heating, ventilating and air conditioning systems, fire protection systems and illumination systems. The person responsible for supervision shall also be responsible for the construction and installation being in substantial compliance with the approved plans and specifications. If the supervising architect, engineer or designer is confronted with a nonconformance with the code during or at the end of construction, that party, together with the designing architect, engineer or designer shall effect compliance or shall notify the department of the noncompliance.

SECTION 30. Comm 62.0202 (1) and (2) are repealed and recreated to read:

Comm 62.0202 (1) ADDITIONS. This is a department definition for this chapter in addition to the definitions in IBC section 202: "High-piled combustible storage" means storage of combustible materials in closely packed piles, or on pallets, in racks or on shelves, where the top of storage is greater than 12 feet in height. When required by the fire code official, high-piled combustible storage also includes certain high-hazard commodities, such as rubber tires, Group A plastics, flammable liquids, idle pallets and similar commodities, where the top of storage is greater than 6 feet in height.

(2) SUBSTITUTIONS. Substitute the following definition for the corresponding definition in IBC section 202: "Approved" means acceptable to the department.

SECTION 31. Comm 62.0400 (1) Note is created to read:

Comm 62.0400 (1) **Note:** Pursuant to s. 167.10 (6) (d), Stats., no wholesaler, dealer or jobber may store fireworks within 50 feet of a dwelling.

SECTION 32. Comm 62.0401 Note is amended to read:

Comm 62.0401 Note: See ~~chapter~~ ch. Comm 10 for additional requirements ~~for~~ relating to motor ~~vehicle service stations~~ fuel dispensing facilities and repair garages and ~~for~~ to storage, handling, processing and transporting of flammable, ~~and~~ combustible and hazardous liquids.

SECTION 33. Comm 62.0402 is repealed.

SECTION 34. Comm 62.0414 is repealed.

SECTION 35. Comm 62.0702 is repealed and recreated to read:

Comm 62.0702 Fire separation distance. Substitute the following definition for the corresponding definition listed in IBC section 702: "Fire separation distance" means the distance measured at right angles from the face of the building wall to one of the following:

(1) The closest interior lot line.

(2) To a permanent no-build easement line.

(3) To the centerline of a street, an alley or a public way.

(4) To an imaginary line between two buildings on the same property.

SECTION 36. Comm 62.0703 is repealed.

SECTION 37. Comm 62.0704 and 62.0705 are renumbered Comm 62.0705 and 62.0706, and Comm 62.0705 and 62.0706 (intro.), as renumbered, are amended to read:

Comm 62.0705 Connections between buildings. This is a department exception to the requirements in IBC section ~~704.1~~ 705.1: This section does not apply to connections between buildings, that are in compliance with IBC section 3104.

Comm 62.0706 Fire wall identification. These are department rules in addition to the requirements in IBC section ~~705~~ 706:

SECTION 38. Comm 62.0707 is repealed and recreated to read:

Comm 62.0707 Fire barriers. Substitute the following wording for IBC section 707.5: Fire barriers shall extend from the top of the foundation; or horizontal assembly constructed in accordance with IBC section 712; or floor/ceiling assembly below to the underside of the floor or roof sheathing, slab or deck above, or to the underside of the horizontal assembly constructed in accordance with IBC section 712 and shall be securely attached thereto. Such fire barriers shall be continuous through concealed spaces, such as the space above a suspended ceiling.

SECTION 39. Comm 62.0708 is created to read:

Comm 62.0708 Shaft enclosures. Substitute the following wording for the 7.2 exception in IBC section 708.2: Is not part of a required exit enclosure.

SECTION 40. Comm 62.0721 is created to read:

Comm 62.0721 Calculated fire resistance (1) NONSYMETRICAL ASSEMBLIES. Substitute the following wording for the exception in each of IBC sections 721.2.1.4.3, 721.3.2.3 and 721.4.1.4: Exception: For an exterior wall with a fire separation distance greater than 10 feet, the fire shall be assumed to occur on the interior side only.

(2) EXTERIOR WALLS. Substitute the following wording for IBC Section 721.6.2.3: For an exterior wall with a fire separation distance greater than 10 feet, the wall is assigned a rating dependant on the interior membrane and the framing as described in IBC Tables 721.6.2(1) and 721.6.2(2). The membrane on the outside of the nonfire-exposed side of exterior walls with a fire separation distance greater than 10 feet may consist of sheathing, sheathing paper and siding as described in IBC Table 721.6.2(3).

SECTION 41. Comm 62.0902 and (title) are amended to read:

Comm 62.0902 ~~Definition~~ Definitions. Substitute the following ~~definition~~ definitions and informational note for the corresponding ~~definition~~ definitions listed in IBC section 902.1:

(1) "Automatic sprinkler system" or "Automatic fire sprinkler system" has the meaning given in s. 145.01 (2), Stats.

Note: Section 145.01 (2), Stats., reads as follows: " 'Automatic fire sprinkler system,' for fire protection purposes, means an integrated system of underground and overhead piping designed in accordance with fire protection engineering standards. The system includes a suitable water supply, such as a gravity tank, fire pump, reservoir or pressure tank or connection beginning at the supply side of an approved gate valve located at or near the property line where the pipe or piping system provides water used exclusively for fire protection and related appurtenances and to standpipes connected to automatic sprinkler systems. The portion of the sprinkler system above ground is a network of specially sized or hydraulically designed piping installed in a building, structure or area, generally overhead, and to which sprinklers are connected in a systematic pattern. The system includes a controlling valve and a device for actuating an alarm when the system is in operation. The system is usually activated by heat from a fire and discharges water over the fire area."

(2) "Fire area" means the aggregate floor area enclosed and bounded by fire walls, fire barriers, exterior walls or fire-resistance-rated horizontal assemblies of a building.

SECTION 42. Comm 62.0903 (1) is repealed.

SECTION 43. Comm 62.0903 (2) to (5) are renumbered Comm 62.0903 (1) to (4) and Comm 62.0903 (4) (intro.), as renumbered, is amended to read:

Comm 62.0903 (4) GROUP E. Substitute the following wording for the requirements in IBC section ~~903.2.2~~ 903.2.3:

SECTION 44. Comm 62.0903 (6) (b) and Table 62.0903 are repealed.

SECTION 45. Comm 62.0903 (6) (intro.), (a), (c) and (d) are renumbered Comm 62.0903 (5) (intro.), (a), (b) and (c), and Comm 62.0903 (5) (intro.), (b) (intro.) and (c) 3. (intro.) and 3. b., as renumbered, are amended to read:

Comm 62.0903 (5) GROUP R. Substitute the following wording for the requirements in IBC section ~~903.2.7~~ 903.2.8:

(b) An automatic sprinkler system installed in a multifamily dwelling may conform with sub. ~~(14)~~ (10) provided the multifamily dwelling complies with all of the following:

(c) 3. An automatic sprinkler system installed in a townhouse may conform with sub. ~~(14)~~ (10) provided the townhouse complies with all of the following:

3. b. Each dwelling unit within the townhouse is separated from other dwelling units by at least 2 hour fire-resistive-rated separation walls constructed in accordance with the requirements of IBC section ~~705~~ 706 and do not contain any openings ~~and~~ or have any plumbing equipment or mechanical equipment within. The separation wall does not have to comply with the structural stability requirements of IBC section ~~705.2~~ 706.2 and the horizontal continuity requirements of IBC section ~~705.5~~ 706.5.

SECTION 46. Comm 62.0903 (5) (c) is repealed and recreated to read:

Comm 62.0903 (5) (c) An automatic sprinkler system installed in a townhouse may conform with sub. (10) provided the townhouse complies with all of the following:

1. The townhouse does not exceed more than 3 stories above grade plane in height.

2. Each dwelling unit within the townhouse is separated from other dwelling units by at least one hour fire-resistive-rated separation walls constructed in accordance with the requirements of IBC section 706 and do not contain any openings or have any plumbing equipment or mechanical equipment within. The separation wall does not have to comply with the structural stability requirements of IBC section 706.2 and the horizontal continuity requirements of IBC section 706.5.

[**Note to reader:** per the Effective Date clause, treatment section 46 is to be effective July 1, 2014.]

SECTION 47. Comm 62.0903 (5) (d) is created to read:

Comm 62.0903 (5) (d) An automatic sprinkler system installed in a building with a Group R-3 fire area may conform with sub. (10) provided the Group R-3 use complies with all of the following:

1. The Group R-3 use is limited to a single-room bunkhouse type sleeping unit.

2. The fire area does not exceed 1,500 square feet.

3. The fire area is not more than one story above grade plane in height.

4. The fire area has an occupant load of 10 or less.

5. The Group R-3 use is not served by either a community water system or a municipal water system as defined under s. NR 811.02.

Note: Under s. NR 811.02, ""community water system" means a public water system which serves at least 15 service connections used by year–round residents or regularly serves at least 25 year–round residents. Any water system serving 7 or more homes, 10 or more mobile homes, 10 or more apartment units or 10 or more condominium units shall be considered a community water system unless information is provided by the owners indicating that 25 year–round residents will not be served."

Note: Under s. NR 811.02, ""municipal water system" means a community water system owned by a city, village, county, town, town sanitary district, utility district, public inland lake and rehabilitation district, municipal water district or a federal, state, county or municipal owned institution for congregate care or correction, or a privately owned water utility serving the foregoing."

SECTION 48. Comm 62.0903 (6m) (b) 1. and 2. are repealed.

SECTION 49. Comm 62.0903 (6m) (intro.), (a), (b) 3. to 5. and (c) are renumbered Comm 62.0903 (6) (intro.), (a), (b) 1. to 3. and (c), and Comm 62.0903 (6) (intro.), as renumbered, is amended to read:

Comm 62.0903 (6) STUDENT HOUSING. These are department rules in addition to the requirements in IBC section ~~903.2.7~~ 903.2.8:

SECTION 50. Comm 62.0903 (8) to (10) are repealed.

SECTION 51. Comm 62.0903 (11) to (13) are renumbered Comm 62.0903 (7) to (9), and Comm 62.0903 (7) (intro.) and (b) 4. and (9), as renumbered, are amended to read:

Comm 62.0903 (7) BUILDINGS OVER 60 FEET IN HEIGHT. This is a department rule in addition to the requirements in IBC section ~~903.2.10.3~~ 903.2.11.3:

(b) 4. Special industrial occupancies complying with the criteria outlined in IBC section ~~503.1.2~~ 503.1.1.

(9) BALCONIES. Substitute the following wording for the requirements in IBC section 903.3.1.2.1: Sprinkler protection complying with NFPA 13 shall be provided for exterior balconies, decks and ground-floor patios of dwelling units where the building is of Type V construction, provided there is a roof or deck above. Sidewall sprinklers that are used to protect such areas shall be permitted to be located such that their deflectors are within 1 inch to 6 inches below the structural members, and a maximum distance of 14 inches below the deck of the exterior balconies and decks that are constructed of open wood joist construction.

SECTION 52. Comm 62.0903 (14) (b) is repealed.

SECTION 53. Comm 62.0903 (14) is renumbered Comm 62.0903 (10).

SECTION 54. Comm 62.0903 (10) (b) is created to read:

Comm 62.0903 (10) (b) 1. The requirements in NFPA 13D section 6.3 (4) are not included as part of this code.

2. Fire department connections are prohibited in multi-purpose piping systems.

Note: Multipurpose piping systems must conform with the applicable provisions of the Plumbing Code, chs. Comm 81 to 87.

SECTION 55. Comm 62.0903 (15) is renumbered Comm 62.0903 (11).

SECTION 56. Comm 62.0907 (2) to (4) are repealed.

SECTION 57. Comm 62.0907 (5) to (7) are renumbered Comm 62.0907 (2) to (4) and amended to read:

Comm 62.0907 (2) SMOKE ALARMS. These are department informational notes to be used under IBC section ~~907.2.10 (intro.)~~ 907.2.11:

(3) PROTECTIVE COVERS. Substitute the following wording for the requirements in IBC section ~~907.3.5~~ 907.4.2.5: The building official is authorized to require the installation of listed manual fire alarm box protective covers to prevent malicious false alarms or provide the manual fire alarm box with protection from physical damage. The protective cover shall be transparent or red in color with a transparent face to permit visibility of the manual fire alarm box. Each cover shall include proper operating instructions. Protective covers shall not project more than that permitted by IBC section 1003.3.3.

(4) EMPLOYEE WORK AREAS. Substitute the following wording for the requirements in IBC section ~~907.9.1.2~~ 907.5.2.3.2: Where employee work areas have audible alarm coverage, the

alarm system shall be designed so that visible notification appliances can be integrated into the system.

SECTION 58. Comm 62.0909 (7) is repealed.

SECTION 59. Comm 62.1007 is repealed.

SECTION 60. Comm 62.1008 (2) is amended to read:

Comm 62.1008 (2) DOOR ARRANGEMENT. This is a department exception to the requirements in IBC section ~~1008.1.7~~ 1008.1.8: Where ~~ample~~ maneuvering space is provided between the doors in accordance with IBC section 1101.2 such that use by an individual in a wheelchair will not block the operation of the doors.`

SECTION 61. Comm 62.1009 and Comm 62.1016 are repealed.

SECTION 62. Comm 62.1017 is renumbered Comm 62.1018, and Comm 62.1018 (intro.), as renumbered, is amended to read:

Comm 62.1018 Corridor continuity. This is a department exception to the requirements in IBC section ~~1017.5~~ 1018.6: Other spaces or rooms constructed as required for corridors, and that are adjacent to a fire-resistance-rated corridor, shall not be construed as intervening rooms; and may be open to the corridor when all of the following are satisfied:

SECTION 63. Comm 62.1019 (2) is repealed.

SECTION 64. Comm 62.1019 is renumbered Comm 62.1021, and Comm 62.1021 (title) and (1), as renumbered, are amended to read:

Comm 62.1021 (title) ~~Minimum number of exits~~ Exits from stories. (1) Substitute the following wording for the requirements in IBC section ~~1019.1~~ 1021.1: All rooms and spaces within each story shall be provided with and have access to the minimum number of approved independent exits required by Table ~~1019.1~~ 1021.1 based on the occupant load of the story. For the purposes of this chapter, occupied roof shall be provided with exits as required for stories. The required number of exits from any story, basement or individual space shall be maintained until arrival at grade or the public way.

SECTION 65. Comm 62.1021 (2) is created to read:

Comm 62.1021 (2) This is a department exception to the requirements in IBC section 1021.1: Buildings of Group I−3 occupancy that are used as guard towers, provided the towers are

no higher than 2 stories above grade, accommodate no more than 10 occupants, and have a travel distance of no more than 75 feet.

SECTION 66. Comm 62.1020 is repealed.

SECTION 67. Comm 62.1022 is created to read:

Comm 62.1022 Enclosures required. Substitute the following wording for exceptions 6. and 7. in IBC section 1022.1:

(1) Stairways as required by IBC sections 410.5.3 and 1015.6.1 are not required to be enclosed.

(2) Stairways from balconies, galleries or press boxes as provided for in IBC section 1028.5.1 are not required to be enclosed.

SECTION 68. Comm 62.1101 (2) (a) is amended to read:

Comm 62.1101 (2) (a) When toilet and bathing rooms are provided in dwelling units and sleeping units within an R−2 occupancy, the rooms shall conform to ICC/ANSI A117.1 section 1004.11.3.2 and with the requirements specified under ~~par.~~ pars. (b) and (c).

SECTION 69. Comm 62.1101 (2) (c) is created to read:

Comm 62.1101 (2) (c) The controls for a roll-in, 60-inch transfer shower may be located on the back wall of the shower.

SECTION 70. Comm 62.1103 (1) is repealed.

SECTION 71. Comm 62.1103 (2) (a) and (b) are renumbered Comm 62.1103 (1) and (2).

SECTION 72. Comm 62.1107 (title), (1) (a) to (c) and (2) (a) are amended to read:

Comm 62.1107 (title) ~~General dwelling unit~~ Dwelling units and sleeping ~~unit exceptions~~ units. (1) GROUP I. (a) *Group I−1.* Substitute the following wording for the requirements, but not the exception, in IBC section 1107.5.1.2: In structures with three or more dwelling units or sleeping units intended to be occupied as a residence, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

(b) *Group I−2 nursing homes.* Substitute the following wording for the requirement, but not the exception, in IBC section 1107.5.2.2: In structures with three or more dwelling units or sleeping

units intended to be occupied as a residence, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

(c) *Group I−2 hospitals.* Substitute the following wording for the requirement, but not the exception, in IBC section 1107.5.3.2: In structures with three or more dwelling units or sleeping units intended to be occupied as a residence, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

(2) (a) *Group R−1.* Substitute the following wording for the requirement, but not the exception, in IBC section 1107.6.1.2: In structures with three or more dwelling units or sleeping units intended to be occupied as a residence, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

SECTION 73. Comm 62.1107 (2) (c) is renumbered Comm 62.1107 (2) (d) and amended to read:

Comm 62.1107 (2) (d) *Group R−4.* Substitute the following wording for the requirement, but not the exception, in IBC section 1107.6.4.2: In structures with three or more dwelling units or sleeping units intended to be occupied as a residence, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

SECTION 74. Comm 62.1107 (2) (c) is created to read:

Comm 62.1107 (2) (c) *Group R-3*. Substitute the following wording for the requirement, but not the exception, in IBC section 1107.6.3: In Group R-3 occupancies where there are three or more dwelling units or sleeping units intended to be occupied as a residence in a single structure, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

SECTION 75. Comm 62.1107 (3) (a) is amended to read:

Comm 62.1107 (3) (a) *Petition for variance*. This is a department rule in addition to the requirements in IBC section 1107.7.4: In accordance with s. 101.132 (2) (b) 4. and (c) 2., Stats., the owner may use the petition for variance procedure specified in s. Comm 61.22 to request a reduction in the number of Type A or Type B dwelling units due to site impracticality ~~through the petition for variance procedures specified in ch. Comm 61~~.

SECTION 76. Comm 62.1107 (3) (a) Note is created to read:

Comm 62.1107 (3) (a) **Note:** The Department may grant a variance in accordance with ch. Comm 3 which requires the submittal of a petition for variance form (SBD−9890) and a fee, and that an equivalency is established in the petition for variance that meets the intent of the rule being petitioned. Chapter Comm 3 also requires the Department to process regular petitions within 30 business days and priority petitions within 10 business days. The SBD−9890 form is available from the Department's web site at www.commerce.wi.gov, through links to Safety and Buildings Division forms.

SECTION 77. Comm 62.1107 (3) (b) (title) is amended to read:

Comm 62.1107 (3) (b) (title) ~~Condition~~ *Condition*.

SECTION 78. Comm 62.1110 (1) (title) and (2) (title) and (a) are amended to read:

Comm 62.1110 (1) (title) ~~PUBLIC PARKING~~ SIGNS.

(2) (title) DIRECTIONAL ~~AND INFORMATIONAL SIGNS~~ SIGNAGE. (a) Substitute the following wording for the introductory paragraph of IBC section ~~1110.3~~ 1110.2: ~~Signs~~ Signage indicating directional information or information about functional spaces or signage indicating special accessibility provisions shall comply with ICC A117.1 and be provided ~~as follows~~ at the following locations:

SECTION 79. Comm 62.1110 (2) (b) Note is repealed.

SECTION 80. Comm 62.1200 (2) (a) 1. is amended to read:

Comm 62.1200 (2) (a) 1. Listed and labeled carbon monoxide alarms or detectors shall be installed at locations specified in s. 101.149 (2), Stats., and maintained in accordance with s. 101.149 (3), Stats., in buildings, including buildings existing on October 1, 2008, which are residential buildings or include residential buildings, and contain fuel-burning appliances, except as provided in subd. ~~4.~~ 5.

SECTION 81. Comm 62.1200 (3) (d) is amended to read:

Comm 62.1200 (3) (d) For the propose of sub. (2) (a) 5. b., the inspection of the sealed combustion appliances, vents and chimneys shall be performed by an individual who holds a certification issued under s. Comm ~~5.73~~ 5.71 as an HVAC qualifier.

SECTION 82. Comm 62.1405 is repealed and recreated to read:

Comm 62.1405 Exterior walls. (1) This is a department exception in addition to the exceptions in IBC section 1405.3: Where other approved means to avoid condensation in unventilated framed wall, floor, roof, and ceiling cavities, and box sills are provided.

(2) This is a department rule in addition to the requirements in IBC section 1405.14.1: Polystyrene sheathing may be utilized as the required backing material for vinyl siding provided all of the following characteristics and conditions are met:

(a) The sheathing is extruded, rigid and cellular.

(b) The sheathing is type IV, as specified in ASTM C 578.

(c) The sheathing has a thickness of at least one inch.

(d) The sheathing is installed with an on-center stud spacing of 16 inches or less.

(e) The mean roof height of the building is 40 feet or less.

(f) The building wall has a wind exposure category of B or C, as established in IBC section 1609.4; and the building is not sited on the upper half of an isolated hill or escarpment meeting conditions 1, 2, and 3 in IBC section 1609.1.1.1.

SECTION 83. Comm 62.1407 is repealed.

SECTION 84. Comm 62.1603 (title), (1), (3), (4) and (6) are repealed.

SECTION 85. Comm 62.1603 (5) is renumbered Comm 62.0400 (6) and amended to read:

Comm 62.0400 (6) LIVE LOADS POSTED. ~~Substitute the following wording for the requirements in IBC section 1603.3:~~ Where the live loads for which each floor or portion thereof of a commercial or industrial building is or has been designed to exceed 100 pounds per square foot, such design live loads shall be conspicuously posted by the owner in that part of each story in which they apply, using durable signs. It shall be unlawful to remove or deface such notices.

SECTION 86. Comm 62.1603 (2) is renumbered Comm 62.1603.

SECTION 87. Comm 62.1604 (title) and (1) are repealed.

SECTION 88. Comm 62.1604 (2) is renumbered Comm 62.1604.

SECTION 89. Comm 62.1607 (1) is amended to read:

Comm 62.1607 (1) RESIDENTIAL FLOOR LOADS. Substitute the following wording and live loads for the requirements in line ~~28~~ 27 and footnote j of IBC Table 1607.1:

SECTION 90. Comm Table 1607.1 and footnote j are amended to read:

Table 1607.1
Minimum Uniformly Distributed Live Loads
and Minimum Concentrated Live Loads[g]
(Partial Table)

Occupancy or Use	Uniform (psf)	Concentrated (lbs.)
~~28~~ 27. Residential		
~~Three or more attached dwelling units not more than 3 stories high, with separate means of egress for each unit~~		
Uninhabitable attics without storage[i]	5	
Uninhabitable attics with storage[i, j, k]	20	—
~~All other areas except balconies~~ Habitable attics	40	
Hotels and Group R-2		
Private rooms and corridors serving them	40	
Public rooms and corridors serving them	100	

j. For attics with storage and constructed with trusses, this live load need only be applied to those portions of the bottom chord where there are two or more adjacent trusses with the same web configuration capable of containing a rectangle 42 inches high by 2 feet wide or greater, located within the plane of ~~he~~ the truss. The rectangle shall fit between the top of the bottom chord and the bottom of any other truss member, provided that each of the following criteria is met:

i. The attic area is accessible by a pull-down stairway or framed opening in accordance with ~~Section~~ IBC section 1209.2.

ii. The truss shall have a bottom chord pitch less than 2:12.

iii. Bottom chords of trusses shall be designed for the greater of actual imposed dead load or 10 psf, uniformly distributed over the entire span.

SECTION 91. Comm 62.1607 (2) is repealed.

SECTION 92. Comm 62.1607 (3) is renumbered Comm 62.1607 (2) and amended to read:

Comm 62.1607 (2) TRUCK AND BUS GARAGES. Substitute the following wording for the requirements in IBC section 1607.6: Minimum live loads for garages having trucks or buses shall be as specified in IBC Table 1607.6, but shall not be less than 50 pounds per square foot, unless other loads are specifically justified and approved by the department. Actual loads shall be used where they are greater than the loads specified in the table.

SECTION 93. Comm 62.1612 is repealed.

SECTION 94. Comm 62.1613 (1) and (2) are repealed.

SECTION 95. Comm 62.1613 (3) is renumbered Comm 62.1613.

SECTION 96. Comm 62.1700 is amended to read:

Comm 62.1700 Structural tests and special inspections. The requirements in IBC chapter 17, except for the requirements in IBC sections ~~1710~~ 1711 to ~~1715~~ 1716, are not included as part of this code.

SECTION 97. Comm 62.1802 is repealed.

SECTION 98. Comm 62.1803 is repealed and recreated to read:

Comm 62.1803 Deep foundations. Item 5 in IBC section 1803.5.5 is not included as part of this code.

SECTION 99. Comm 62.1804 is created to read:

Comm 62.1804 Ground improvement. These are department rules in addition to the requirements in IBC section 1804:

(1) DESIGN OF GROUND IMPROVEMENT. Ground improvement for support of foundations or floor slabs shall be designed by an architect or engineer who is registered by the department of regulation and licensing.

(2) ALLOWABLE FOUNDATION PRESSURE OF IMPROVED GROUND. The allowable foundation pressure for improved ground shall incorporate a minimum safety factor of 3 with respect to a bearing capacity failure within the composite improved ground.

(3) SETTLEMENT OF STRUCTURES SUPPORTED ON IMPROVED GROUND. The improved ground shall be designed and constructed for a maximum anticipated total settlement of one inch and a maximum anticipated differential settlement of three fourths of an inch, unless it can be shown that the predicted total and differential settlement will not cause any of the following:

(a) Harmful distortion of the structure.

(b) Instability in the structure.

(c) Any element to be loaded beyond its capacity.

(4) DESIGN CONFIRMATION TESTING. The registered design professional responsible for the design of the ground improvement shall determine the scope of field testing required to confirm the design, shall supervise the testing, and shall write a report indicating whether the test results confirm the design. At the discretion of that design professional, testing may be limited to a modulus load test to measure deformation behavior of a single ground improvement element. The design of the ground improvement shall be modified as appropriate based on the results of the confirmatory testing.

(5) QUALITY CONTROL OBSERVATIONS AND TESTING. The registered design professional responsible for the design of the ground improvement, or a technician working under supervision of that professional, shall observe construction of the ground improvement, perform quality control testing, and upon completion of work, prepare a report stating whether the ground improvement meets the intent of the approved construction documents. A copy of the report shall be provided to the registered design professional in responsible charge of the project, and to the building official if requested.

SECTION 100. Comm 62.1805 is repealed and recreated to read:

Comm 62.1805 Basement floor base course. This is a department rule in addition to the requirements in IBC section 1805.4.1: A required base course shall be placed on a geotextile fabric that is designed to limit migration of silt and fine sand into the base course.

SECTION 101. Comm 62.1806 is created to read:

Comm 62.1806 Presumptive load-bearing values for saturated soils. This is an additional department footnote for IBC Table 1806.2: Footnote c. Values to be multiplied by 0.5 for saturated soils.

SECTION 102. Comm 62.1807 is repealed and recreated to read:

Comm 62.1807 Shallow post foundations. This is a department alternative to the requirements in IBC section 1807.3.2: The design criteria in ANSI/ASAE EP 486.1 may be used in lieu of the design criteria in IBC section 1807.3.2.

SECTION 103. Comm 62.1808 (1) is renumbered Comm 62.1802 and amended to read:

Comm 62.1802 Definition of neutral plane. This is a department definition in addition to the definitions in IBC section ~~1808.1~~ 1802.1: NEUTRAL PLANE. A ~~pile's~~ deep foundation's neutral plane is the level at which drag load, accumulated from the top down, added to the long-term static service load, equals the upward acting shaft resistance accumulated from the bottom up, added to the ~~pile's~~ deep foundation's toe resistance.

SECTION 104. Comm 62.1810 is repealed.

SECTION 105. Comm 62.1808 (title), (2) and (3) are renumbered Comm 62.1810 (title) and (1) and (2), and Comm 62.1810 (title), (1), (2) (intro.), (a), (b) and (d) to (f), as renumbered, are amended to read:

Comm 62.1810 (title) ~~Pier and pile~~ Deep foundations. (1) DOWNDRAG. This is a department rule in addition to the requirements in IBC section ~~1808.2.2~~ 1803.5.5: Investigations and reports for ~~pier or pile~~ deep foundations shall include analysis of whether downdrag is

anticipated. Where downdrag is anticipated, the report shall include a determination of the position of the ~~pile's~~ deep foundation's neutral plane, an estimate of the soil settlement at the neutral plane, and a determination of the maximum load at the neutral plane.

(2) DETERMINATION OF ALLOWABLE LOADS. Substitute the following wording for the requirements in IBC section ~~1808.2.8.1~~ 1810.3.3:

(a) The allowable axial and lateral loads on ~~piers or piles~~ deep foundations shall be determined by an approved formula, load tests or static analysis.

(b) The factor of safety to be used for ~~pier or pile~~ deep foundation design shall depend on the extent of field testing performed to verify capacity.

(d) If only static analysis and dynamic field testing are performed, a minimum factor of safety of 2.5 shall be applied to the ultimate capacity to determine allowable load capacity.

(e) 1. If one or more static load tests are performed, in addition to a static analysis, a minimum factor of safety of 2.0 shall be applied to the ultimate ~~allowable~~ capacity to determine allowable load capacity, except as provided in subd. 2.

~~(f) A minimum factor of safety of 2.0 shall be used for occupiable structures in occupancy categories II to IV provided that all of the conditions in pars. (a) to (e) are met.~~ 2. A minimum factor of safety of 1.5 may be used for ~~non-occupiable~~ structures in occupancy category I, provided ~~that~~ all of the following conditions are met:

a. The deep foundations are required only to control settlement~~, and it can be demonstrated that~~.

b. The deep foundations are not required to prevent a bearing capacity failure.

c. A static load test, a static analysis and dynamic field testing have been performed.

SECTION 106. Comm 62.1808 (4) and (6) are repealed.

SECTION 107. Comm 62.1808 (5) is renumbered Comm 62.1810 (7) and amended to read:

Comm 62.1810 (7) (title) ~~PILES~~ DEEP FOUNDATIONS IN SUBSIDING AREAS. Substitute the following wording for the requirements in IBC section ~~1808.2.11~~ 1810.3.4:

(a) Where ~~piles~~ deep foundations are installed through subsiding fills or other subsiding strata and derive support from underlying firmer materials, consideration shall be given to the downward drag load that may be imposed on the ~~piles~~ deep foundations by the subsiding upper strata.

(b) Where the influence of subsiding fills is considered as imposing loads on the ~~pile~~ deep foundation, the allowable stresses specified in this chapter are permitted to be increased where satisfactory substantiating data are submitted.

(c) The position of the ~~pile's~~ deep foundation's neutral plane shall be determined, and the settlement of the soil at the level of the neutral plane shall be estimated. The maximum load in the ~~pile~~ deep foundation, which occurs at the neutral plane, shall be determined.

SECTION 108. Comm 62.1808 is created to read:

Comm 62.1808 Foundations. Substitute the following wording for the requirements in IBC section 1808.7.5: Alternate setbacks and clearances are permitted, subject to the approval of the department.

SECTION 109. Comm 62.1809 is renumbered Comm 62.1810 (9) and amended to read:

Comm 62.1810 (9) DRIVEN ~~PILE FOUNDATIONS~~ TIMBER PILES. Substitute the following wording for the requirements in IBC section ~~1809.1.3~~ 1810.4.1.5: Any sudden decrease in driving resistance of an end-supported timber pile shall be investigated with regard to the possibility of damage. If the sudden decrease in driving resistance cannot be correlated to load-bearing data, the pile shall be removed for inspection or rejected, or shall be assigned a reduced capacity commensurate with the loss of end-bearing in lieu of removing or rejecting the pile.

SECTION 110. Comm 62.1809 is created to read:

Comm 62.1809 Frost-protected shallow foundations. This is a department rule in addition to the requirements in IBC section 1809.5: Where a frost-protected shallow foundation is relied upon for a heated or semi-heated structure, permanent, legible notices shall be posted near the thermostats of all building heating appliances that indicates all of the following:

(1) That the structure is designed using a frost-protected-shallow foundation.

(2) The minimum monthly average temperature that the structure must be maintained at to avoid frost damage to the foundation.

SECTION 111. Comm 62.1810 (3) to (6) and (8) are created to read:

Comm 62.1810 (3) DRIVING CRITERIA. This is a department rule in addition to the requirements in IBC section 1810.3.3.1.1: Driving criteria for deep foundations shall be submitted prior to installing the foundations, if requested by the building official.

(4) APPROVED FORMULAS. This is a department informational note to be used under IBC section 1810.3.3.1.1:

Note: The Department has approved the following two dynamic driving formulas, when used within the parameters prescribed below.

1. Washington State Department of Transportation formula:

$$R_n = 6.6F_{eff}WH \ln(10N)$$

Where:
R_n is the ultimate axial compression capacity in kips.
F_{eff} is an efficiency factor based on hammer and pile type.
W is the hammer weight in kips.
H is the drop height of the hammer in feet.
N is the average penetration resistance at the end of driving, in blows per inch.

Acceptable Fe_{ff} values are:
0.55 for all pile types driven with an air or steam hammer.
0.37 for open-ended diesel hammers for concrete and timber piles.
0.47 for open-ended diesel hammers for steel piles.
0.35 for closed-ended diesel hammers for all pile types.

2. Corrected FHWA-Modified Gates Equation:

$$R_u = [(1.75)((eE_r)^{0.5}) (\log(10N_b))\text{-}100] (F_o) (F_s) (F_p) (F_h)$$

Where:
R_u is the ultimate axial compression capacity in kips.
e is the hammer efficiency.
E_r is the hammer energy in foot-pounds.
N_b is the final penetration resistance in blows per inch.
F_o is an overall correction factor.
F_s is a correction factor for soil type.
F_p is a correction factor for pile type.
F_h is a correction factor for hammer type.

Acceptable hammer-efficiency values are:
0.75 for drop hammers.
0.85 for other hammers, or an efficiency recommended by the hammer manufacturer.

Acceptable correction factors are:
Overall F_o: 0.94.

Soil F_s: 1.00 for mixed soil profile.
0.87 for sandy soil profile.
1.20 for clayey soil profile.

Pile F_p: 1.00 for closed-ended pipe.
1.02 for open-ended pipe.
0.80 for H-Section piles.

Hammer F_h: 1.00 for open-ended diesel.
0.84 for closed-ended diesel.
1.16 for air or steam single-acting.
1.01 for air or steam double-acting.
1.00 for hydraulic.

If at least 1 static load test is performed to field-check the penetration resistance criteria calculated by the above dynamic formulas, a minimum safety factor of 2.5 must be applied to the ultimate axial compression capacity calculated by the dynamic formula to determine the allowable pile load. If only dynamic testing (including signal matching) is performed to field-check the penetration resistance criteria determined by the dynamic formula, a minimum safety factor of 2.75 must be applied to the ultimate axial compression capacity calculated by the dynamic formula to determine the allowable pile load. If no field testing is performed to check the penetration resistance criteria

calculated by the dynamic formula, a minimum safety factor of 3.0 must be applied to the ultimate axial compression capacity calculated by the dynamic formula to determine the allowable pile load.

The above formulas are predicated on the following three conditions: (1) static load testing and/or dynamic testing being performed on pile(s) driven in uniform site soil conditions, (2) test pile(s) being driven with the same hammer and cushion used for installation of production piles, and (3) test pile(s) being of the same type and section used for production piles. If any of the three conditions is not met, additional field testing is required. With static load testing and/or dynamic testing, penetration resistance criteria calculated by the dynamic formula must be modified as appropriate based on the results of the field testing. A site must be defined as a project site, or a portion of it, where subsurface conditions can be characterized as geologically similar in terms of subsurface stratigraphy, including the sequence, thickness, geologic history, engineering properties and groundwater aspects.

(5) FACTOR OF SAFETY FOR UPLIFT. The exception in IBC section 1810.3.3.1.5 is not included as part of this code.

(6) HELICAL PILES. This is a department informational note to be used under IBC section 1810.3.3.1.9:

Note: See sub. (2) for factors of safety that supersede the criteria in this section. For example, under sub. (2) (c), (d) and (e), this factor may be 3, 2.5 or 1.5, respectively.

(8) DESIGN CRACKING MOMENT. Substitute the following equation for IBC equation 18-11: $\varphi M_n = 3(f'_c)^{0.5}(S_m)$.

SECTION 112. Comm 62.1901 to 62.1908 are repealed.

SECTION 113. Comm 62.1913 is repealed and recreated to read:

Comm 62.1913 Shotcrete clearance. Substitute the following wording for the exception under IBC section 1913.4.2: Subject to the approval of the department, required clearances may be reduced where it is demonstrated by preconstruction tests that adequate encasement of the bars used in the design will be achieved.

SECTION 114. Comm 62.1915 and 62.2101 are repealed.

SECTION 115. Comm 62.2105 is repealed.

SECTION 116. Comm 62.2109 (2) and Table 62.2109-1 are repealed.

SECTION 117. Comm 62.2109 (3) is renumbered Comm 62.2109 (2), and Comm 62.2109 (2) (b), as renumbered, is amended to read:

Comm 62.2109 (2) (b) *Vertical jointing.* Vertical movement joints shall be provided at a spacing in compliance with Table ~~62.2109–2~~ 62.2109.

SECTION 118. Comm Table 62.2109–2 is renumbered Comm Table 62.2109.

SECTION 119. Comm 62.2204 is repealed and recreated to read:

Comm 62.2204 Welded connections. This is a department informational note to be used under IBC section 2204.1:

Note: The rules pertaining to registration of structural welders are specified in ch. Comm 5.

SECTION 120. Comm 62.2206 is repealed.

SECTION 121. Comm 62.2210 is created to read:

Comm 62.2210 Trusses spanning 60 feet or greater. The requirements in IBC section 2210.3.4 are not included as part of this code.

SECTION 122. Comm 62.2303 is repealed and recreated to read:

Comm 62.2303 Trusses spanning 60 feet or greater. The requirements in IBC section 2303.4.1.3 are not included as part of this code.

SECTION 123. Comm 62.2902 (5) Note is amended to read:

Comm 62.2902 (5) **Note:** Additional ~~location~~ requirements for restaurant toilet rooms may be applied by the Department of Health Services.

SECTION 124. Comm 62.2903 is created to read:

Comm 62.2903 Drinking facilities. This is a department rule in addition to the requirements in IBC section 2903: Drinking fountains, water coolers and bottled water dispensers may not be located or installed in public restrooms.

SECTION 125. Comm 62.3001 (1) is repealed.

SECTION 126. Comm 62.3001 (2) and (3) are renumbered Comm 62.3001 (1) and (2), and Comm 62.3001 (1), as renumbered, is amended to read:

Comm 62.3001 (1) REFERENCED STANDARDS. Substitute the following wording for the requirements in IBC section 3001.2: Except as otherwise provided for in this code, the design,

construction, installation, alteration, repair and maintenance of ~~elevators, dumbwaiters, escalators, moving walks~~ conveyances and their components shall comply with ch. Comm 18.

SECTION 127. Comm 62.3002 is created to read:

Comm 62.3002 Elevator car to accommodate ambulance stretcher. Substitute the following wording for IBC section 3002.4:

(1) Where passenger elevators are provided, at least one elevator shall be provided for fire department emergency access to all floors served by passenger elevators in all of the following situations:

(a) A building four or more stories above or four or more stories below grade plane.

(b) Any floor above or below the level affording fire department vehicle access, if the floor accommodates any one of the following occupancies:

1. Group I.

2. R-2.

3. Outpatient clinic and ambulatory health care facility.

(2) The elevator car provided for fire department emergency access shall be of such a size and configuration to accommodate an ambulance stretcher 24 inches by 84 inches with not less than 5-inch radius corners, in the horizontal, open position.

(3) The elevator car provided for fire department emergency access shall be identified by the international symbol for emergency medical services, star of life. The symbol may not be less than 3 inches high and shall be placed inside on both sides of the hoistway door frame.

SECTION 128. Comm 62.3004 (2) (b) is repealed and recreated to read:

Comm 62.3004 (2) (b) 1. Except as provided in subd. 2., A drain or sump complying with ss. Comm 82.33 and 82.36 shall be provided in an elevator pit. Connection of the drain or sump to a sanitary system is prohibited.

2. An elevator pit is exempt from the sump or drain requirement under subd. 1. for any of the following situations:

a. The floor of an elevator walk-in pit is level with the adjacent floor.

b. The elevator does not extend to the building's lowest floor level and the pit floor is not in contact with the earth.

c. The pit floor is above adjacent grade where the elevator hoistway shaft has one or more exterior walls.

3. The aggregate capacity for drainage from the pit shall be at least one of the following:

a. 30 gpm in a hoistway with one elevator.

b. 50 gpm in a hoistway with two or three elevators.

c. 80 gpm in a hoistway with four elevators.

Note: See s. Comm 82.36 for the width or diameter and depth of a sump pump located in an elevator pit.

SECTION 129. Comm 62.3500 (3) (a) is repealed.

SECTION 130. Comm 62.3500 (3) (b) and (d) are amended to read:

Comm 62.3500 (3) (b) NFPA 30A – ~~2000~~ 2008, Code for Motor Fuel Dispensing Facilities and Repair Garages.

(d) NFPA 750 – ~~1996~~ 2010, Standard on Water Mist Fire Protection Systems.

SECTION 131. Comm 63.002 (2) is repealed and recreated to read:

Comm 63.002 (2) EXEMPTED BUILDINGS AND STRUCTURES. Glazed structures or glazed portions of buildings used for the production of plant life or for maintaining plant life as the primary purpose are exempt from the building thermal envelope provisions of this code, provided that glazed portions are separated from the remainder of the building by building thermal envelope assemblies complying with this chapter.

SECTION 132. Comm 63.0101 is amended to read:

Comm 63.0101 Administration and enforcement. ~~The~~ Except for IECC section 101.5..2, the requirements in IECC sections 101~~,~~ and 103 to ~~106~~ 109 are not included as part of this chapter.

SECTION 133. Comm 63.0102 is renumbered Comm 63.0303 and Comm 63.0303 (intro.), as renumbered, is amended to read:

Comm 63.0303 Materials, systems and equipment. These are department rules in addition to the requirements in IECC section ~~102~~ 303.

SECTION 134. Comm 63.0402 is repealed.

SECTION 135. Comm 63.0403 (2) is repealed and recreated to read:

Comm 63.0403 (2) DUCTS. Substitute the following wording for the requirements in IECC section 403.2.2: All ducts, air handlers, and filter boxes shall be sealed. Joints and seams shall comply with IMC section 603.9.

SECTION 136. Comm 63.0403 (3) is repealed.

SECTION 137. Comm 63.0404 is renumbered Comm 63.0405 and amended to read:

Comm 63.0405 Calculation software tools. This is a department informational note to be used under IECC section ~~404.6~~ 405.6:

Note: The federal Department of Energy has developed REScheckTM, a computer program that may be used in demonstrating compliance for a residential building which has no more than 3 stories above grade and has 3 or more dwelling units. The REScheck program may be downloaded at http://www.energycodes.gov/. When using the program, the applicable code must be defined as the "~~2006~~ 2009 IECC." The use of the "Wisconsin" option will apply requirements associated with a 1 or 2 family dwelling, which are more restrictive than those associated with low-rise multifamily buildings.

SECTION 138. Comm 63.0501 (2) is amended to read:

Comm 63.0501 (2) Sections Comm 63.0503 ~~(7)~~ (3) and ~~(8)~~ (4) relating to economizers.

SECTION 139. Comm 63.0502 is repealed.

SECTION 140. Comm 63.0503 (3) to (6) and Tables 503.2.3 (1) and 503.2.3 (2) are repealed.

SECTION 141. Comm 63.0503 (7) is renumbered Comm 63.0503 (3).

SECTION 142. Comm 63.0503 (8), (9) and Table 63.0503 are repealed.

SECTION 143. Comm 63.0503 (4) and (5) are created to read:

Comm 63.0503 (4) ECONOMIZERS SIMPLE HVAC SYSTEMS. Substitute the following wording for the requirements in IECC section 503.3.1 the first paragraph and Table 503.3.1 (1): Supply air economizers shall be provided on the following cooling systems:

(a) Package roof top units $\geq$ 33,000Btu/h.

(b) All other cooling systems $\geq$ 54,000 Btu/h.

(5) ECONOMIZERS COMPLEX HVAC SYSTEMS. Substitute the following wording for the requirements, but not the exceptions, in IECC section 503.4.1: Supply air economizers shall be provided on cooling systems as described under sub. (4). Economizers shall be capable of operating at 100 percent outside air, even if additional mechanical cooling is required to meet the cooling load of the building.

SECTION 144. Comm 63.0503 (6) is created to read:

Comm 63.0503 (6) CLIMATE ZONES 3 AND 4. Substitute the following wording for the requirements in IECC section 503.4.3.3.2.2: For climate Zones 5 through 8 as indicated in Figure 301.1 and Table 301.1, if an open-circuit cooling tower is used, then a separate heat exchanger shall be required to isolate the cooling tower from the heat pump loop, and heat loss shall be controlled by shutting down the circulation pump on the cooling tower loop and providing an automatic valve to stop the flow of fluid.

SECTION 145. Comm 63.0505 (1), (2) (a) 3. and (3) are repealed.

SECTION 146. Comm 63.0505 (2) and (4) are renumbered Comm 63.0505 (1) and (2) and Comm 63.0505 (1), as renumbered, is amended to read:

Comm 63.0505 (1) CONTROLS. These are department rules in addition to the requirements in IECC section 505:

(a) *General.* Except as provided in par. (b), ~~daylit areas~~ daylight zones in any interior enclosed space greater than 250 square feet and a lighting density more than ~~0.8~~ 0.6 W/ft^2 shall have at least one control that meets all of the following requirements:

1. Controls only luminaires in the ~~daylit areas~~ daylight zones.

2. Controls at least 50% of the lamps or luminaires in the ~~daylit area~~ daylight zone, in a manner described in IECC section 505.2.2.1.

(b) *Exceptions.* The requirements of this subsection do not apply to any of the following:

1. ~~Daylit areas~~ Daylight zones where the effective aperture of glazing is equal or less than 0.1 for vertical glazing and 0.01 for horizontal glazing.

2. ~~Daylit areas~~ Daylight zones where existing adjacent structures or natural objects obstruct daylight to the extent that effective use of daylighting is not feasible.

SECTION 147. Comm 63.0506 Note is amended to read:

Comm 63.0506 Note: ComCheck is a computer program that may be used only for determining building envelope~~,~~ or lighting ~~or total building~~ compliance. The ComCheck computer program may be downloaded at: http:/www.engergycodes.gov/.

SECTION 148. Comm 64.0101 is repealed.

SECTION 149. Comm 64.0102 (title) and (2) are renumbered Comm 64.0313 (4).

SECTION 150. Comm 64.0202 (1) (d) is amended to read:

Comm 64.0202 (1) (d) "Health care facility" means a hospital, nursing home, or ~~ambulatory~~ outpatient surgical ~~center~~ facility.

SECTION 151. Comm 64.0300 is renumbered Comm 64.0300 (1) and amended to read:

Comm 64.0300 Health care facilities. (1) This is a department rule in addition to the requirements in IMC chapter 3: In addition to the requirements in this code, the heating and ventilation systems for health care facilities only shall conform to the applicable provisions of ~~the American Institute of Architects (AIA)~~ The Facility Guidelines Institute (FGI) Guidelines for Design and Construction of Health Care Facilities, except as provided in sub. (2).

Note: The Guidelines for Design and Construction of Health Care Facilities are not intended for use in the design or construction of HVAC systems for other types of institutional health care facilities including community-based residential facilities (CBRFs) or residential care apartment complexes (RCACs).

SECTION 152. Comm 64.0300 (2) is created to read:

Comm 64.0300 (2) (a) The requirements in parts 1 and 5 of FGI guidelines are not included as part of this chapter.

(b) This is a department rule in addition to the requirements in part 6 of the FGI guidelines: Addenda a, b, d, e and f for ASHRAE 170 are included as part of this chapter, except as provided in subd. 2.

(c) Substitute the following definition for the corresponding definition listed in ASHRAE 170 section 3: "Alteration", has the meaning as given in IEBC section 202.

Note: IEBC section 202 defines "alteration" as "any construction or renovation to an existing structure other than a *repair* or *addition*. Alterations are classified as Level 1, Level 2, and Level 3".

SECTION 153. Comm 64.0301 (3) (b) 2. is amended to read:

Comm 64.0301 (3) (b) 2. The results of a test ~~conducted by a Wisconsin registered engineer~~ on the output and safety controls in accordance with the national standard used by the manufacture.

SECTION 154. Comm 64.0307 is created to read:

Comm 64.0307 Auxiliary and secondary drain systems. The requirements in IMC section 307.2.3 are not included as part of this chapter.

SECTION 155. Comm 64.0401 (1) is repealed and recreated to read:

Comm 64.0401 (1) VENTILATION REQUIRED. (a) These are department rules in addition to the requirements in IMC section 401.2:

1. Natural ventilation shall be in accordance with s. Comm 64.0402.

2. Mechanical ventilation shall be in accordance with IMC section 403 and as modified in ss. Comm 64.0403 (1) to (6).

(b) These are department exceptions to the requirements of IMC section 401.2:

1. Outdoor air ventilation by natural or mechanical means shall be permitted to be omitted in large volume spaces containing 5,000 or more cubic feet per occupant.

2. A toilet room that has only one water closet or urinal and no bathtub or shower may be provided with either natural ventilation via a window or louvered opening with at least 2 square feet of area openable directly to the outside or mechanical exhaust ventilation as specified in Table 64.0403.

3. A janitor closet that has only one service sink may be provided with either natural ventilation via a window or louvered opening with at least 2 square feet of area openable directly to the outside or mechanical exhaust ventilation as specified in Table 64.0403.

SECTION 156. Comm 64.0401 (4) (a) and (b) are renumbered Comm 64.0401 (4) (c) and (d) and amended to read:

Comm 64.0401 (4) (c) This is a department rule in addition to the requirements in IMC section ~~401.4.1~~ 401.4: The lowest side of outside air intake required openings shall be located at least 12 inches vertically from the adjoining grade level, above adjoining roof surfaces, or above the bottom of an areaway.

(d) These are department exceptions in addition to the requirements in IMC section ~~401.4.1~~ 401.4 and par. ~~(a)~~ (c):

1. The setback distances as specified in IMC section ~~401.4.1~~ 401.4 and par. ~~(a)~~ (c) shall not apply to the combustion air intake of a direct vent appliance.

2. Where it can be demonstrated that an engineered system design will prevent the maximum concentration of contaminants brought in through the outside air intake from exceeding the maximum contaminant concentration obtainable by providing the separation distances in

accordance with IMC section ~~401.4.1~~ 401.4 and par. ~~(a)~~ (c), the outdoor air intakes may be located in accordance with such engineered system design.

SECTION 157. Comm 64.0401 (4) (a) and (b) are created to read:

Comm 64.0401 (4) (a) Substitute the following wording for the requirements in IMC introductory section 401.4: Air intake openings for both mechanical and gravity ventilation systems shall comply with all of the following:

(b) Substitute the following wording for the requirements in IMC section 401.4. 2.: Intake openings shall be located not less than 10 feet horizontally from any hazardous or noxious contaminant source.

SECTION 158. Comm 64.0401 (5) is renumbered Comm 64.0501 (3) and 64.0501 (3) (title) and (intro.), as renumbered, are amended to read:

Comm 64.0501 (5) ~~EXHAUST OPENINGS.~~ These are department rules in addition to the requirements in IMC section ~~401.4.2~~ 501.2.1.

SECTION 159. Comm 64.0401 (6) is renumbered Comm 64.0501 (5).

SECTION 160. Comm 64.0402 is repealed and recreated to read:

Comm 64.0402 Natural ventilation. This is a department rule in addition to the requirements in IMC section 402: The use of natural ventilation shall be permitted under either of the following:

(1) In occupancies specified in Table 64.0402.

(2) For any occupancy, provided an engineered design indicates how the ventilation satisfies the needs of the occupancy.

Table 64.0402
Natural Ventilation
Allowed for Specific Occupancies

Occupancy Classification		
Correctional facilities Cells without plumbing features Dining halls < 100 persons Guard stations Day room Booking/waiting **Dry cleaners, laundries** Coin-operated dry cleaners Coin-operated laundries Storage, pick up **Education** Auditoriums < 100 persons Media center Music/theater/dance Day care facilities < 20 children (through age 4) Lecture < 100 persons Multiuse assembly < 100 persons **Food and beverage service** Bars, cocktail lounges < 100 persons Cafeterias, fast food < 100 persons Dining rooms < 100 persons Kitchens (cooking) **Hotels, motels, resorts and dormitories** Multipurpose assembly < 100 persons Bedroom/living room Conference/meeting < 100 persons Dormitory sleeping areas Gambling casinos < 100 persons Lobbies/prefunction	**Business areas** Conference rooms < 100 persons Reception areas < 100 persons Main entry lobbies < 100 persons **Public spaces** Places of religious worship < 100 persons Courtrooms < 100 persons Legislative chambers < 100 persons Libraries < 100 persons Museums/galleries < 100 persons **Dwellings units** Garages Kitchens Living areas **Retail stores, sales floors and showroom floors** Sales Dressing rooms Mall common areas Storage rooms **Specialty shops** Pet shops (animal areas) Supermarkets Car Washes Enclosed parking garages 850 S.F. or less in area and storing 5 or fewer vehicles	**Sports and amusement** Discos/dance floors < 100 persons Bowling alleys (seating areas) < 100 persons Game arcades < 100 persons Ice arenas without combustion engines < 100 persons Gym, stadium, arena (play area) < 100 persons Spectator areas < 100 persons Swimming pools (pool and deck area) < 100 persons Health club/aerobics room < 100 persons Health club/weight room < 100 persons **Theaters** Auditoriums < 100 persons Lobbies < 100 persons Stages, studios < 100 persons **Transportation** Platforms < 100 persons Waiting rooms < 100 persons **Workrooms** Meat processing Pharmacy (prep. area) Photo studios Copy, printing rooms

SECTION 161. Comm 64.0403 (2) to (5) is renumbered Comm 64.0403 (1) to (4) and Comm 64.0403 (1) (a), (2) and (4), as renumbered, are amended to read:

Comm 64.0403 (1) (a) Substitute the following wording for the exception in IMC section 403.2: Where it can be demonstrated that an engineered ventilation system design will prevent the maximum concentration of contaminants from exceeding the maximum obtainable by providing the rate of outdoor air ventilation determined in accordance with IMC section 403.3 <u>as modified by subs. (2) to (6)</u>, the minimum required rate of outdoor air may be reduced in accordance with such engineered system design. <u>A ventilation system complying with IMC section 403.3 without the modifications of subs. (2) to (6) is recognized as meeting this exception.</u>

(2) RECIRCULATION PROHIBITED. Substitute the following wording for exception 3 in IMC section 403.2.1: Where ~~indicated in~~ mechanical exhaust is governed by Table 64.0403 footnote c., recirculation of air from such spaces is prohibited. All air supplied to such spaces shall be exhausted, including any air in excess of that required by Table 64.0403.

(4) TRANSFER AIR. Substitute the following wording for the requirements in IMC section 403.2.2: Except where recirculation from such spaces is prohibited by Table 64.0403 air transferred from occupied spaces is not prohibited from serving as makeup air for required exhaust systems in such spaces as kitchens, baths, toilet rooms, elevators and smoking lounges. The amount of transfer air and exhaust air shall be sufficient to provide the flow rates as specified in ~~IMC sections 403.3 and 403.3.1~~ sub. (5). The required outdoor air rates specified in Table 64.0403 shall be introduced directly into such spaces or into the occupied spaces from which air is transferred or a combination of both.

SECTION 162. Comm 64.0403 (6) (c) 4. is repealed.

SECTION 163. Comm 64.0403 (6) and (7) are renumbered Comm 64.0403 (5) and (6) and Comm 64.0403 (5) (a) 1. and (6), as renumbered, are amended to read:

Comm 64.0403 (5) (a) 1. Except as provided in sub. ~~(2)~~ (1) (a) and s. Comm 64.0300, a mechanical ventilation system shall be designed to have the capacity to supply a minimum outdoor airflow rate of 7.5 cfm per person as determined in accordance with Table ~~Comm~~ 64.0403 based on the occupancy of the pace and the occupant load or other parameters stated therein. A mechanical ventilation system shall be designed to have the capacity to exhaust air as specified in Table ~~Comm~~ 64.0403 except as provided in par. (c).

(6) SYSTEM OPERATION. Substitute the following wording for the requirements in IMC section ~~403.3.1~~ 403.5: The minimum flow rate of outdoor air that the ventilation system must be capable of supplying during its operation may be based on the rate per person indicated in Table 64.0403 and the actual number of occupants present.

SECTION 164. Comm 64.0403 (8) is renumbered Comm 64.0403 (5) (d) and Comm 64.0403 (5) (d) (title) and (d) 1., 2. a. and 2. d., as renumbered, are amended to read:

Comm 64.0403 (5) (d) *Common ventilation system airflow.* 1. ~~This is a department alternative to the requirements in IMC section 403.3.2~~ Substitute the following wording for the requirements in IMC sections 403.3.1 through 403.3.2.3.4: Where multiple spaces having different ventilation rate requirements are served by a common ventilation system, the minimum amount of outdoor airflow supplied by the ventilation system shall equal the total outdoor airflow required for each space if each space is provided with minimum air changes in accordance with this ~~subsection~~ paragraph.

2. a. Except as provided in subd. ~~4.~~ 2. d., an air change rate of 6 air changes per hour shall be provided in each space.

d. Air change rate of less than 6 air changes per hour is permitted where mechanical cooling is provided to maintain an interior design temperature of 78°F or lower. The air change rate may not be less than the alternative minimum air change rate per hour specified in Table 64.0403. ~~b.~~ Air changes are not required to be provided for spaces required to be mechanically exhausted.

SECTION 165. Comm 64.0403 (9) is repealed.

SECTION 166. Table 64.0403 is repealed and recreated to read:

Table 64.0403
Mechanical Ventilation Requirements

Occupancy Classification	**Estimated Maximum Occupant Load (persons per 1,000 sq. ft.)** [a]	**Exhaust** [b] **(cfm/net sq. ft. floor area)**	**Common Ventilation System Alternative - Minimum Air Change Rate per hour with A/C**
Correctional facilities			
Sleeping rooms	20	NR	2.0
Dining halls	100	NR	2.0
Guard stations	40	NR	1.5
Dry cleaners, laundries			
Coin-operated dry cleaners	8	NR	1.0
Coin-operated laundries	8	NR	1.0
Commercial dry cleaners	NA	2.0	NR
Commercial laundries	NA	2.0	NR
Storage, pick up	8	NR	1.0
Apartment laundry rooms	NA	0.5	NR
Education			
Auditoriums	150	NR	2.0
Classrooms	50	NR	2.0
Day care facilities	30	NR	2.0
Laboratories (science)	30	NR	2.0
Music rooms	50	NR	2.0
Special education	35	NR	2.0
Training shops	30	NR	2.0
Food and beverage service			
Bars and cocktail lounges	100	NR	2.0
Cafeterias, fast food	100	NR	2.0
Dining rooms	70	NR	2.0
Kitchens (cooking) [d, e]	20	NR	1.0

Table 64.0403 - continued

Health care facilities			
Hospitals	See s. Comm 64.0300	See s. Comm 64.0300	See s. Comm 64.0300
Nursing homes	See s. Comm 64.0300	See s. Comm 64.0300	See s. Comm 64.0300
Outpatient surgical facilities	See s. Comm 64.0300	See s. Comm 64.0300	See s. Comm 64.0300
Hotels, motels, resorts and dorms			
Assembly rooms	120	NR	2.0
Bathrooms [c, d]	NA	35 cfm/room	NR
Bedrooms	footnote f	NR	1.0
Conference rooms	50	NR	2.0
Dormitory sleeping areas	20	NR	1.0
Casinos	NA	2.0	NR
Living rooms	footnote f	NR	1.0
Lobbies	30	NR	2.0
Industrial/Factory			
Factories and machine shops	13	NR	NR
Foundries	13	NR	NR
Sawmills	NA	NR	NR
Offices			
Conference rooms	50	NR	1.5
Office spaces	7	NR	1.5
Reception areas	60	NR	1.5
Telecommunication centers and data entry	60	NR	1.5
Private dwellings, single and multiple			
Living areas	2 people for first bedroom plus one person for each additional bedroom	NR	1.0
Kitchens [d]	NA	100 cfm intermittent or 20 cfm continuous	NR
Toilet rooms and bathrooms [d]	NA	Mechanical exhaust capacity 50 cfm intermittent or 20 cfm continuous per room j	NR
Garages, separated by a solid wall for each dwelling	NA	100 cfm/ vehicle	NR
Garages, common for multiple units [c]	NA	0.5	NR

Table 64.0403 - continued

Retail stores, sales floors and showroom floors	8	NR	1.0
Seasonal occupancies, camps and lodges			
Dining and recreational areas	15	NR	1.0
Living and sleeping areas	NA	NR	1.0
Club houses	15	NR	1.0
Drive-ins	15	NR	1.0
Specialty shops			
Automotive service and repair garages	NA	0.5	NR
Barber shops	25	NR	1.0
Beauty salons [h]	NA	0.5	NR
Car washes	NA	NR	NR
Clothier, furniture specialty shops	8	NR	1.0
Florist shops	8	NR	1.0
Hardware, drugs, fabrics stores	8	NR	1.0
Supermarkets	8	NR	1.0
Sports and amusement			
Ballrooms and discos	100	NR	2.0
Bleacher areas	363 or 18 in./person	NR	2.0
Bowling centers (seating areas)	70	NR	2.0
Game rooms	70	NR	2.0
Ice skating rinks (indoor)	5	NR	NR
Natatoriums	NA	2.0 cfm/sq. ft. pool area	NR
Playing floor (gymnasiums)	30	NR	2.0
Roller skating rinks (indoor)	30	NR	2.0
Spectator areas (non-bleacher)	150	NR	2.0
Storage			
Chlorine storage and handling rooms	NA	2.0	NR
Enclosed parking garages [i]	NA	0.5	NR
Warehouses	NA	NR	NR
Theaters			
Auditoriums	150	NR	2.0
Lobbies	150	NR	2.0
Stages, studios	70	NR	2.0
Ticket booths	60	NR	2.0

Table 64.0403 - continued

Transportation			
Platforms	100	NR	2.0
Waiting rooms	100	NR	2.0
Utility and public spaces			
Elevator cars [m]	NA	NR	NR
Janitor closets	NA	2.0 or 75 cfm/sink[g]	NR
Locker and dressing rooms [c]	NA	0.5	NR
Shower rooms	NA	2.0	NR
Toilet rooms [c, d]	NA	75 cfm/TF [g]	NR
Workrooms			
Bank vault	5	NR	NR
Meat processing	10	NR	NR
Pharmacy	20	NR	1.5
Photo studio	10	NR	1.0
Printing	13	footnote j	NR

NA = not applicable; NR = none required; cfm = cubic feet per minute; TF = toilet fixtures (water closets and urinals); A/C = air conditioning

a Based upon net floor area.

b The ventilation rate is based upon cubic feet per minute per square foot of the floor area being ventilated.

c Mechanical exhaust is required and the recirculation of air from these spaces that would otherwise be allowed by IMC section 403.2.1 is prohibited.

d Outdoor air shall be provided at the rate of 1.0 cfm/net sq. ft. floor area. Transfer air is permitted in accordance with IMC section 403.2.2.

e The sum of the outdoor and transfer air from adjacent spaces shall be sufficient to provide an exhaust rate of not less than 1.5 cfm/sf.

f The minimum mechanical ventilation rate is 15 cfm/room of outside air.

g Natural ventilation may be allowed under this section.

h The classification of a 'beauty' salon depends on the types of services provided. Only beauty salons routinely provide chemical processing of hair to produce texture or color changes, or manicures or other services with a similar need for air-borne contaminant and odor control.

i Enclosed parking garages are parking garages with less than 30% open areas in the total wall area enclosing the garage. Ventilation systems in enclosed parking garages shall comply with IMC section 404. A mechanical ventilation system shall not be required in garages having a floor area of 850 square feet or less and used for the storage of 5 or fewer motorized vehicles.

j Refer to IMC chapter 5 for exhaust requirements based upon the chemicals used.

SECTION 167. Comm 64.0404 (1) and (2) (c) are amended to read:

Comm 64.0404 (1) Substitute the following wording for the requirements in IMC section 404.2: Automatic operation of the system shall not reduce the ventilation rate below 0.05 cfm per square foot of the floor area and the system shall be capable of producing a ventilation rate of ~~0.5~~ 0.75 cfm per square foot of floor area.

(2) (c) The system includes automatic controls for providing exhaust ventilation at a rate of ~~0.5~~ 0.75 cfm per square foot for at least 5 hours in each 24-hour period.

SECTION 168. Comm 64.0407 is created to read:

Comm 64.0407 Chemical and septic toilets. This is a department rule in addition to the requirements in IMC section 400: Chemical or septic toilets and composting privies are prohibited in spaces under negative pressure. Toilet rooms with chemical or septic toilets shall be provided with natural ventilation via a window, louver or skylight with at least 2 square feet of area openable directly to the outside. The opening shall be provided with a screen to limit the passage of insects and vermin.

SECTION 169. Comm 64.0501 is renumbered Comm 64.0501 (2).

SECTION 170. Comm 64.0501 (1) is created to read:

Comm 64.0501 (1) Substitute the following wording for the requirements in IMC section 501.1: This chapter shall govern the design, construction and installation of mechanical exhaust systems, including exhaust systems serving clothes dryers and cooking appliances; environmental air exhaust systems; hazardous exhaust systems; dust, stock and refuse conveyor systems; subslab soil exhaust systems; smoke control systems; energy recovery ventilation systems and other systems specified in IMC Section 502.

SECTION 171. Comm 64.0502 is renumbered Comm 64.0502 (1).

SECTION 172. Comm 64.0502 (2) is created to read:

Comm 64.0502 (2) This is a department exception in addition to the exceptions in section IMC 502.14: The source capture system is not required when the motor vehicle exhaust system is connected directly to a noncombustible hose that is not more than 10 feet long and discharges directly to the exterior of the building.

SECTION 173. Comm 64.0506 (2) (bm) is renumbered Comm 64.0506 (2) (c) and amended to read:

Comm 64.0506 (2) (c) The requirements of IMC section ~~506.3.3.1~~ 506.3.2.5 are not included as part of this chapter.

SECTION 174. Comm 64.0514 is amended to read:

Comm 64.0514 Energy recovery ventilation systems. This is a department exception to the ~~requirements~~ prohibitions in IMC section 514.2: An engineered energy recovery ventilation system design may be used in the systems specified in IMC section 514.2 provided that corrosion, cross-contamination and fouling are addressed by the engineered system.

SECTION 175. Comm 64.0601 and 64.0602 are amended to read:

Comm 64.0601 General. Substitute the following wording for the requirements in IMC section 601.2 Exception 1: Use of a corridor as a source of makeup air for exhaust systems in rooms that open directly onto such corridors shall be permitted provided that each such corridor is directly supplied with ~~outdoor~~ air at a rate greater than the rate of makeup air taken from the corridor.

Comm 64.0602 Plenums. Substitute the following wording for the requirements, but not the exceptions, in IMC section 602.2.1: Except as required by Sections 602.2.1.1 through 602.2.1.5, materials within plenums shall be noncombustible or shall have a flame spread index of not more than 25 and a smoke-developed index of not more than 50 when tested in accordance with ASTM E 84, ~~or~~ CAN/ULC S102.2 or UL 723.

SECTION 176. Comm 64.0702 and 64.0710 are repealed.

SECTION 177. Comm 64.0801 (3) is repealed.

SECTION 178. Comm 64.0918 (2) is repealed.

SECTION 179. Comm 64.0918 (3) is renumbered Comm 64.0918 (2).

SECTION 180. Comm 64.1500 (2) (a) and Note are amended to read:

Comm 64.1500 (2) (a) ~~AIA~~ FGI Guidelines for Design and Construction of Health Care Facilities, ~~2006~~ 2010.

Note: ~~AIA~~ FGI guidelines may be purchased from ~~the American Institute of Architects, Order Department, 9 Jay Gould Court, P.O. Box 753, Waldorf, MD 20601~~ The Facility Guidelines Institute, 1919 McKinney Avenue, Dallas, TX 75201.

SECTION 181. Comm 65.0303 (2) is amended to read:

Comm 65.0303 (2) PROHIBITED LOCATIONS. The ~~requirements~~ exceptions 3. and 4. in IFGC section 303.3 ~~exceptions 3. and 4.~~ are not included as part of this ~~chapter~~ code.

SECTION 182. Comm 65.0610 is repealed.

SECTION 183. Comm 65.0630 is repealed and recreated to read:

Comm 65.0630 Infrared radiant heaters. This is a department rule in addition to the requirements in IFGC section 630.1: Unvented infrared radiant heaters may be used only in the following occupancies:

(1) Groups F and S.

(2) Groups U and H only with written approval.

SECTION 184. Comm 66.0100 Note [2] is created to read:

Comm 66.0100 Note [2]**:** Section 101.126, Stats., requires the owner of a building to provide a separate room or designated space within or adjacent to the building for the separation, temporary storage and collection of recyclable materials that are likely to be generated by the building occupants, if there is an increase in the size of the building by 50% or more or an alteration of 50% or more of the existing area of a building that is 10,000 square feet or more in area. See Appendix B for guidelines for recommended designated areas.

SECTION 185. Comm 66.0101 (2) is renumbered Comm 66.0101 (2) (a) and amended to read:

Comm 66.0101 (2) (b) ~~Where~~ Except as provided in par. (b), where a building or portion of a building that has not been previously occupied or used as a public building or place of employment is to be changed to an occupancy or use that constitutes a public building or place of employment, the building or portion of a building shall comply with the IBC for new construction~~, except for IBC rules relating to the properties of building materials~~.

SECTION 186. Comm 66.0101 (2) (b) is created to read:

Comm 66.0101 (2) (b) 1. Under par. (a) the IBC rules for new construction do apply to the properties of existing building materials.

2. A alteration or a change of occupancy in a qualified historic building which has not been previously occupied or used as a public building or place of employment may utilize the provisions of the IEBC as modified by this subchapter.

SECTION 187. Comm 66.0202 (2) is amended to read:

Comm 66.0202 (2) SUBSTITUTIONS. (a) Substitute the following definition for the corresponding definition in IEBC section 202: "Historic building" means a "qualified historic building" as defined under s. ~~Comm 62.0202 (2) (c)~~ 101.121 (2) (c), Stats.

Note: Section 101.121 (2) (c) of the Statutes reads as follows: "Qualified historic building" means a historic building which:

1. Is listed on, or has been nominated by the state historical society for listing on, the national register of historic places in Wisconsin or the state register of historic places;

2. Is included in a district which is listed on, or has been nominated by the state historical society for listing on, the national register of historic places in Wisconsin or the state register of historic places, and has been determined by the state historical society to contribute to the historic significance of the district;

2m. Is determined by the state historical society to be eligible for listing on the national register of historic places in Wisconsin or the state register of historic places;

3. Is listed on a certified local register of historic property; or

4. Is included in a district which is listed on a certified local register of historic property, and has been determined by the city, village, town or county to contribute to the historic significance of the district.

(b) Substitute the following definition for the corresponding definition in IEBC section 202: "Unsafe" means buildings, structures or equipment that are unsanitary, or that are deficient due to inadequate means of egress facilities, inadequate light and ventilation, or that constitute a fire hazard, or in which the structure or individual structural members meet the definition of "dangerous," or that are otherwise dangerous to human life or the public welfare, or that involve illegal or improper occupancy or inadequate maintenance shall be deemed unsafe.

SECTION 188. Comm 66.0300 is amended to read:

Comm 66.0300 Prescriptive compliance method. The requirements in IEBC Chapter 3 are not included as a part of this code, except for the requirements in IEBC Section 310 when applied by IEBC Section 1301.2.5.

SECTION 189. Comm 66.0500 is created to read:

Comm 66.0500 Carbon monoxide alarms for CBRF's accommodating fewer than 20 residents. These are department rules in addition to the requirements in IEBC chapter 5 and are established under the authority of s. 101.127, Stats.: **(1)** (a) Existing buildings converted to be community-based residential facilities accommodating fewer the 20 residents shall be provided with carbon monoxide alarms by July 1, 2013 when either one of the following conditions exists:

1. The building contains fuel-burning appliances.

2. The building has an attached garage.

(b) This section applies to community-based residential facilities described under par. (a) in existence prior to January 1, 2005.

Note: Pursuant to s. 101.01 (12), Stats., an existing building converted to be community-based residential facility accommodating fewer than 20 residents is not defined to be a "public building". See also s. Comm 61.02 (5).

(2) Carbon monoxide alarms shall be listed and labeled to be in conformance with one of the following standards:

(a) UL 2034.

(b) UL 2075.

(3) (a) A carbon monoxide alarm shall be installed in accordance with the instructions of its manufacturer.

(b) A carbon monoxide alarm shall be provided on each floor level of an existing building accommodating a community-based residential facility described under sub. (1) (a), if the building contains fuel-burning appliances.

(c) A carbon monoxide alarm shall be provided on each floor level where sleeping units are located in an existing building accommodating a community-based residential facility described under sub. (1) (a), if the building has an attached garage and no fuel-burning appliances.

SECTION 190. Comm 66.0503 is created to read:

Comm 66.0503 Smoke alarms. These are department rules in addition to the requirements in IEBC section 503:

(1) No smoke alarm, including an alarm that exists on [the effective date of this rule … LEGISLATIVE REFERENCE BUREAU TO INSERT DATE] may remain in service for more than that specified by the manufacturer.

(2) The replacement of a smoke alarm that uses a battery as its primary power source shall be a new smoke alarm that complies with UL 217 and either of the following:

(a) The alarm is hardwired in accordance with IBC section 907.2.11.4 and has backup power in accordance with that section.

(b) The alarm uses, as its primary power source, a non-replaceable, non-removable battery that is capable of powering the alarm for at least 10 years.

SECTION 191. Comm 66.0509 Note is created to read:

Comm 66.0509 Note: See the Wisconsin Uniform Plumbing Code, chs. Comm 82 to 87, for plumbing and water conservation provisions.

SECTION 192. Comm 66.0602 is amended to read:

Comm 66.0602 Building elements and materials. (1) MATERIALS AND METHODS. Substitute the following wording for the requirements in IEBC section ~~602.3~~ 602.4: All new work shall comply with materials and methods requirements in the ~~ICC EC,~~ IBC, IECC, IFGC, IMC, and IPC, as applicable, that specify material standards, detail of installation and connection, joints, penetrations, and continuity of any element, component, or system in the building.

(2) INTERNATIONAL FUEL GAS CODE. The requirements in IEBC section ~~603.3.1~~ 602.4.1 are not included as part of this code.

SECTION 193. Comm 66.0607 (2) (e) to (h) are created to read:

Comm 66.0607 (2) (e) Reroofing for roofs where neither the sheathing nor the insulation is exposed.

(f) Replacement of existing doors that separate conditioned space from the exterior shall not require the installation of a vestibule or revolving door, provided, however, that an existing vestibule that separates a conditioned space from the exterior shall not be removed.

(g) Alterations that replace less than 50 percent of the luminaires in a space, provided that such alterations do not increase the installed interior lighting power.

(h) Alterations that replace only the bulb and ballast within the existing luminaires in a space provided that the alteration does not increase the installed interior lighting power.

SECTION 194. Comm 66.0607 (3) is created to read:

Comm 66.0607 (3) REROOFING**.** This is a department rule in addition to the requirements in IEBC section 607: Roofs without insulation in the cavity and where the sheathing or insulation is exposed during reroofing shall be insulated either above or below the sheathing.

SECTION 195. Comm 66.0701 is renumbered Comm 66.0704 and amended to read:

Comm 66.0704 ~~Compliance~~ Automatic sprinkler systems. This is a department exception to the requirement in IEBC section ~~701.3~~ 704.2: The installation or extension of an automatic sprinkler system may exclude the protection of combustible concealed spaces that are not accessible in existing buildings.

SECTION 196. Comm 66.0901 (1) is amended to read:

Comm 66.0901 (1) CHANGE IN OCCUPANCY WITH NO OCCUPANCY CLASSIFICATION. Substitute the following wording for the requirements in IEBC section 901.2: A change in occupancy, as defined in IEBC section 202, with no change of occupancy classification ~~shall~~ may not be made to any structure ~~which~~ that will subject the structure to any special provisions of ~~the applicable international codes~~ this code, including the provisions of IEBC sections 902 through 911, without the approval of the code official.

SECTION 197. Comm 66.0910 is renumbered Comm 66.0912.

SECTION 198. Comm 66.1002 is created to read:

Comm 66.1002 Fire Protection Systems. This is a department exception to the requirements in IEBC section 1002.3: An automatic sprinkler system is not required for additions to individual dwelling units within existing townhouses that are not already protected with an automatic sprinkler system.

SECTION 199. Comm 66.1101 (2) is renumbered Comm 66.1105.

SECTION 200. Comm 66.1101 (1) is renumbered Comm 66.1101 (2) and Comm 66.1101 (2) (title), as renumbered, is amended to read:

Comm 66.1101 (2) ~~GENERAL~~ REPORT.

SECTION 201. Comm 66.1101 (1) is created to read:

Comm 66.1101 (1) SCOPE. This is a department rule in addition to the requirements in IEBC section 1101.1: Any historic building is exempt from the energy requirements of this code.

SECTION 202. Comm 66.1301 (title) is amended to read:

Comm 66.1301 (title) ~~**Compliance with other codes**~~ **Applicability.**

SECTION 203. Comm 66.1301 (2) is renumbered Comm 66.1301 (3).

SECTION 204. Comm 66.1301 (2) is created to read:

Comm 66.1301 (2) ACCESSIBILITY REQUIREMENTS. Substitute the following wording for the requirements in IEBC section 1301.2.5: All portions of the buildings proposed for change of occupancy or being altered shall conform to the accessibility provisions of IEBC section 310.

SECTION 205. Comm 66.1400 is created to read:

Comm 66.1400 Construction safeguards. The requirements in IEBC chapter 14 are not included as part of this code.

SECTION 206. Comm 82.40 (3) (e) 1. Note [2] is created to read:

Comm 82.40 (3) (e) 1. **Note** [2]**:** See s. Comm 21.095 of the Dwelling Code and s. Comm 62.0903 (10) of the Commercial Building Code as to fire protection provisions for multipurpose piping systems.

SECTION 207. Comm 82.40 (3) (e) 2. b. to 2. d. are repealed.

SECTION 208. Comm 82.40 (3) (e) 2. a. is renumbered Comm 82.40 (3) (e) 2.

(END)

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