

(2) CHIMNEYS AND VENTS. These are department rules in addition to the requirements in IMC section 801.2: Permanently installed and portable unvented fuel-fired space heaters are prohibited.

Note: See ch. Comm 65, subch. II, Part 6 for the prohibition of unvented gas-fired space heaters.

Comm 64.0918 Forced-air warm-air furnaces. (1) This is a department rule in addition to the requirements in IMC section 918.6: The outside air intake openings shall be located at least 12 inches vertical from the adjoining grade level.

- (2) Substitute the following wording for the requirements IMC section 918.6.1: Closer than 10 feet from any appliance vent outlet, a vent opening from a plumbing drainage system or the discharge outlet of an exhaust fan, unless the outlet is 2 feet above the outside air inlet.
- (3) Substitute the following wording for the requirements in IMC section 918.6 item 2: Where located less than 10 feet above the surface of any abutting public way or driveway, or at grade level by a sidewalk, street, alley or driveway.

Comm 64.1001 Boilers, water heaters and pressure vessels. Substitute the following wording for the requirements and exceptions in IMC chapter 10:

- (1) The provisions of ch. Comm 41 shall govern the installation, alteration and repair of boilers and pressure vessels. The provisions of chapters Comm 81 to 86 shall govern the installation, alteration and repair of water heaters.
- (2) Water heaters utilized both to supply potable hot water and provide hot water for space-heating applications shall be listed and labeled by the manufacturer and shall be installed in accordance with the manufacturer's installation instructions and applicable provisions in chs. Comm 81 to 86.
- (3) Water heaters utilized for both potable water heating and space-heating applications shall be sized to prevent the space-heating load from diminishing the required water-heating capacity.
- (4) Where a combination potable water-heating and space-heating system requires water for space heating at temperatures higher than 140°F, a tempering valve shall be provided to temper the water supplied to the potable hot water distribution system to a temperature of 140°F or less.

Comm 64.1101 Refrigeration. Substitute the following wording for the requirements and exceptions in IMC chapter 11: Mechanical refrigerating systems installed in public buildings and places of employment shall comply with ch. Comm 45.

Comm 64.1201 Hydronic piping. Substitute the following wording for the requirements and exceptions in IMC Chapter 12: The provisions of ch. Comm 41 shall apply to boilers, piping components associated with boilers, pressure vessels and power piping in places of employment and in public buildings.

Comm 64.1300 Fuel oil piping and storage. Substitute this informational note for the requirements in IMC chapter 13:

Note: See ch. Comm 10 for fuel oil piping requirements.

Comm 64.1500 Referenced standards. (1) Substitute the following NFPA standard for the corresponding standard listed in IMC chapter 15: NFPA 13-1999 and NFPA 72-1999.

(2) These are department rules in addition to the requirements in IMC chapter 15: American Institute of Architects (AIA), R673-1996-97, Guidelines for Design and Construction of Hospital and Health Care Facilities, The American Institute of Architects, Order Department, 9 Jay Gould Court, P.O. Box 753, Waldorf, MD 20601

Note: Copies of the adopted standards are on file in the offices of the department, the secretary of state and the revisor of statutes. Copies may be purchased through the respective organizations as listed in the IMC.

Note: The tables in this section provide a comprehensive listing of all of the standards adopted by reference in this chapter. For requirements or limitations in how these standards are to be applied, refer to the code section that requires compliance with the standard.

Comm 64.1600 Appendices. IMC Appendices A and B are not included as part of this chapter.

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File reference: IBC/Comm 64

Comm 65 Fuel Gas Appliances

Subchapter I — Purpose, Scope, Application and Compliance

Comm 65.0001 Purpose and scope. (1) PURPOSE. The purpose of this chapter is to regulate the design, installation, operation and maintenance of gas-fueled heating, ventilating and air conditioning systems in buildings and structures as specified in ch. Comm 61.

(2) SCOPE. The scope of this chapter is as specified in s. Comm 61.02.

Comm 65.0002 Application. (1) GENERAL. The application of this chapter is as specified in s. Comm 61.03 and as modified in this section.

- (2) APPLICABILITY. All heating, ventilating and air conditioning systems shall be designed, installed, maintained and operated so as to provide the service and results required within the provisions of this chapter. The minimum requirements established in each part of this chapter shall be complied with as they apply to the structures and facilities covered in the IBC.
- (3) ADDITIONS. (a) This chapter applies to all additions to existing buildings and structures as specified in s. Comm 61.03.
- (b) Except when an existing heating, ventilation and air conditioning system is extended to serve an addition, existing system components are not required to be replaced if the provisions in this chapter are met within the addition.
- (4) ALTERATIONS. (a) This chapter applies to all remodeling and alterations in any building or structure which affect the replacement of major equipment as specified in s. Comm 61.03.
- (b) When an existing heating, ventilating and air conditioning system serves a remodeled or altered space that has not undergone a change in occupancy or use, the existing system components are not required to be replaced if the provisions in this chapter that applied to the original construction of the space are met.

Note: "Occupancy or use" refers to the entries in Table 64.0403.

Note: Maintenance and repair to existing equipment when there is no change to the building or occupancy, is considered an alteration.

Comm 65.0003 Compliance. All gas-fueled heating, ventilating and air conditioning systems in buildings and structures shall comply with the IFGC and the changes, additions or omissions under subch. II.

Comm 65.0004 Approval of drawings and specifications. All drawings and specifications shall be submitted to the department in accordance with the provisions of subch. III, ch. Comm 61.

Subchapter II—Changes, Additions or Omissions to the International Fuel Gas Code (IFGC)

Comm 65.0100 Changes, Additions or Omissions to the International Fuel Gas Code® (IFGC). Changes, Additions or Omissions to the international fuel gas code are specified in this subchapter and are rules of the department and are not requirements of the IFGC.

Note: This subchapter is numbered to corresponds with the numbering used within the model code; i.e., s. Comm 65.0201 refers to section IFGC 201.

Comm 65.0101 Administration. Except for IFGC sections 102.8 and 108.7, the requirements in IFGC chapter 1 are not included as part of this chapter.

Comm 65.0201 Definitions. (1) This is a department substitution for the corresponding definition in IFGC section 201: "Unusually tight construction" means the total area of outdoor openings is less than 3% of the floor area of the space in which equipment is located.

(2) This is a department addition to the definitions in IFGC section 201: "DHFS" means the department of health and family services.

Comm 65.0300 Temperature control. This is a department rule in addition to the requirements in IFGC chapter 3: The requirements in IMC section 309 and s. Comm 64.0309 apply to gas-fired equipment and systems.

Comm 65.0301 General regulations. Substitute the following wording for the requirements in IFGC section 301: The requirements as specified in s. Comm 64.0301 (2) (b) shall apply.

Comm 65.0303 Appliance location. (1) GENERAL. This is a department rule in addition to the requirements in IFGC section 303.1: If the air entering the heat exchanger of all gas—fired equipment is 30°F or lower, the heat exchanger and burners shall be constructed of corrosion—resistive materials.

(2) PROHIBITED LOCATIONS. The requirements in IFGC section 303.3 Exceptions 3. and 4. are not included as a part of this chapter.

Comm 65.0304 Combustion, ventilation and dilution air. (1) GENERAL. This is a department rule in addition to the requirement of IFGC section 304.1: The requirements in IMC sections 705, 706, and 707 shall apply to gas appliances.

(2) UNUSUALLY TIGHT CONSTRUCTION. This is a department informational note to be used under IFGC section 304.9:

Note: When applying the provisions of this section, refer to s. Comm 65.0201 (1) for the definition for "unusually tight construction".

- (3) ALL AIR FROM INSIDE THE BUILDING. This is a department rule in addition to the requirements in IFGC section 304.10: When the space providing air for combustion, ventilation and dilution of flue gases has a minimum volume of 250 cubic feet per 1,000 Btu per hour combined input rating of all appliances, the use of inside air for combustion shall be allowed.
- (4) COMBUSTION AIR DUCTS. This is a department rule in addition to the requirement of IFGC section 304.15: Mounting height of the combustion air intakes shall have the lowest side of outside air intake openings located at least 12 inches vertically from the adjoining grade level.

Comm 65.0305 Installation. (1) GENERAL. These are department rules in addition to the requirements in IFGC section 305.1:

- (a) Additional requirements. The requirements in IMC sections 304.2, 304.8, 304.9, 304.10, and 305 as adopted in s. Comm 64.0304 shall apply to gas appliance installations.
 - (b) Final test required. The requirements as specified in s. Comm 64.0313 shall apply.

Comm 65.0306 Access and service space. This is a department exception to the requirements in IFGC section 306.5.1: Section IFGC 306.5.1 does not apply to installations which consist of only fans.

Comm 65.0400 Gas piping installations. Substitute the following wording for the requirements and exceptions in IFGC chapter 4: All gas piping and gas piping installations shall comply with NFPA 54, National Fuel Gas Code.

Comm 65.0501 Chimneys and vents. (1) This is a department informational note to be used under IFGC chapter 5:

Note: For DHFS licensed healthcare facilities as specified in chs. HFS 124, 132, and 134, also refer to NFPA 211 as adopted in these chapters.

- (2) The requirements in section IFGC 501.8 item 8 are not included as a part of this chapter.
- (3) Substitute the following wording for the requirements in section IFGC 501.8 item 10: Infrared radiant heaters listed for unvented use and not provided with flue collars.

Comm 65.0503 Venting of equipment. (1) MECHANICAL DRAFT SYSTEMS. These are department rules in addition to the requirements in IFGC section 503.3.3:

- (a) All horizontal exit terminals of a gas appliance mechanical draft system shall be located in accordance with IMC section 804.3.4, items 4 and 5.
- (b) All vertical exit terminals of a gas appliance mechanical draft system shall be located accordance with IMC section 804.3.5, items 3 and 6.
- (2) VENTING SYSTEM TERMINATION LOCATION. Substitute the following wording for the requirements, but not the exceptions, in IFGC sections 503.8.1, 503.8.2 and 503.8.3:
- (a) The separation between gravity and mechanical air inlets and venting system terminations shall comply with IMC section 401.5.1 and s. Comm 64.0401 (5) and (6).
- (b) Unless a greater distance is specified by the manufacturer, mechanical draft venting systems shall terminate at least 12 inches vertically from the adjoining grade level.

Comm 65.0609 Duct furnaces. The requirements in IFGC section 609.2 are not included as part of this chapter.

Comm 65.0617 Forced-air warm-air furnaces. Substitute the following wording for the requirements in IFGC section 617.5: Gas-fired appliances shall comply with IMC section 918 and s. Comm 64.0918.

Comm 65.0620 Unvented room heaters. Substitute the following wording for the requirements in IFGC section 620: The use of unvented room heaters is prohibited.

Comm 65.0629 Infrared radiant heaters. These are department rules in addition to the requirements in IFGC section 629.1:

- (1) Spaces served with unvented infrared radiant heaters shall be provided with at least 4 cfm of outside air per 1,000 Btu per hour input of installed heaters.
 - (2) Unvented infrared radiant heaters may be used only in the following occupancies:
 - (a) Groups F and S.
 - (b) Groups U and H only with written approval.

Comm 65.0630 Boilers. Substitute the following wording for the requirements in IFGC section 630: The provisions of ch. Comm 41 shall govern the installation, alteration and repair of boilers and pressure vessels.

Comm 65.0700 Referenced standards. These are department rules in addition to the requirements in IFGC chapter 7:

- (1) American Institute of Architects (AIA), R673-1996-97, Guidelines for Design and Construction of Hospital and Healthcare Facilities, The American Institute of Architects, Order Department, 9 Jay Gould Court, P.O. Box 753, Waldorf, MD 20601
 - (2) ANSI Z223.1/NFPA 54-1999.

Note: Copies of the adopted standards are on file in the offices of the department, the secretary of state and the revisor of statutes. Copies may be purchased through the respective organizations as listed in the IMC.

Note: The tables in this section provide a comprehensive listing of all of the standards adopted by reference in this chapter. For requirements or limitations in how these standards are to be applied, refer to the code section that requires compliance with the standard.

Comm 65.0800 Appendices. IFGC Appendices A to D are not included as part of this chapter.

File reference: IBC/Comm 65

CHAPTERS Comm 61 to 65 APPENDIX A

The material contained in this appendix is for clarification purposes only and is numbered to correspond to the number of the rule as it appears in the text of the code.

A-61.03 (4)(b) Lower thresholds for municipalities with preexisting stricter sprinkler ordinances. Section 101.14 (4m) (d) and (e), Stats, provides the following thresholds above which fire sprinkler protection or 2-hour fire-resistance can be required by a municipality with a preexisting stricter sprinkler ordinance.

Class of Construction	Total Floor Area Within Individual Dwelling Units	Number of Units	Total Floor Area of Nondwelling Unit Portions (Common use areas, such as corridors, stairways, basements, cellars, vestibules, community rooms, laundry rooms, pools, etc.)
Type IA			12,000 sq ft
Type IB			10,000 sq ft
Type IIA	, Williams		8,000 sq ft
Type IIB	V 4		
Type III			
Type IV	8,000 sq ft	8 units	5,600 sq ft
Type VA	, 1		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Type VB			4,800 sq ft

The department, based on ordinances forwarded by municipalities (and checked by Safety and Buildings staff for conformance with the preexisting sprinkler ordinance criteria) believes the following municipalities have preexisting stricter sprinkler ordinances:

Appleton	Greenfield	Muskego	Shorewood Hills
Brookfield	Madison	New Berlin	Sussex
Franklin	Menomonee Falls	Oak Creek	West Allis
Greendale	Monona	Racine	West Bend

SECTION 8. Comm 50 to 64 Appendix C is renumbered Comm 61 to 65 Appendix B.

SECTION 9. Chapters Comm 69 and 73 are repealed.

EFFECTIVE DATE

Pursuant to s. 227.22 (2) (b), Stats., these rules shall take effect on July 1, 2002.



State of Wisconsin \ Department of Commerce

RULES IN FINAL DRAFT FORM

Rule No.: Comm 4, 14, 15, 16.46, 50 to 64, 65, 66, 69, and 73

Relating to: Construction and Fire Prevention for Public Buildings and

Places of Employment, Including Commercial Buildings and

Structures, and Multifamily Dwellings

Clearinghouse Rule No.: 00-179

WISCONSIN FIRE CODE

Comm 14 – NFPA 1 (Fire Prevention)

WISCONSIN COMMERCIAL BUILDING CODE

- Comm 61 Administration and Enforcement
- Comm 62 IBC (Buildings and Structures)
- Comm 63 IECC (Energy Conservation)
- Comm 64 IMC (Mechanical)
- Comm 65 IFGC (Fuel Gas)

ORDER OF THE DEPARTMENT OF COMMERCE

CREATING RULES

The Wisconsin Department of Commerce proposes an order to repeal chapters Comm 4 and 15, Comm 16.46, and chapters Comm 50 to 64 and Appendices A and B to 50 to 64, 66, 69, and 73; to renumber chapter Comm 50 to 64 Appendix C and 65; to repeal and recreate chapter Comm 14; and to create chapters Comm 61 to 65 and Appendix A to 61 to 65, relating to construction and fire prevention for public buildings and places of employment, including commercial buildings and structures and multifamily dwellings.

ANALYSIS OF PROPOSED RULES

Statutory Authority and Statutes Interpreted

Statutory Authority: ss. 101.02 (1) and (15), 101.025, 101.027, 101.13, 101.132, 101.135, 101.14 (1) and (4), and 101.973 (1), Stats.

Statutes Interpreted: ss. 101.02 (1), (6), (7), (7m), and (15); 101.025; 101.027; 101.11; 101.12; 101.13; 101.132; 101.135; 101.14 (1), (4), and (4m); 101.73; and 101.973 (1), Stats.

Overview

Under the statutes cited, the Department protects public health, safety, and welfare by promulgating fire prevention requirements and construction requirements for public buildings and places of employment, including commercial buildings and structures and multifamily dwellings. Currently, these requirements are primarily contained in chapters Comm 14, 50 to 64, 66, and 69. These requirements began and evolved over the past ninety years.

Following enactment of the "Safe Place" statutes in Wisconsin in 1911, Wisconsin became the first state in this country to adopt a state building code. In the early 1920's, building inspectors in other states began forming what eventually became three regional model code groups, to develop and offer model codes for adoption at state and local levels. In developing its building codes over the past century, Wisconsin has traditionally relied on the model codes, on input from affected parties, and on various consensus standards produced by nationally recognized technical societies.

In the mid 1990's, the three model code groups joined together for the purpose of replacing their codes with a single set of jointly-developed model codes for building construction. Publication of this set was completed in 2000, by the International Code Council[®].

Development and publication of the ICC codes has intensified the desire of several parties in the construction industry to replace Wisconsin's building construction codes with model codes that are used elsewhere in this country. Having the same building construction requirements would make it easier for designers, manufacturers, and suppliers who work in numerous states to provide products and services in Wisconsin and to comply with the various technical design requirements.

The ICC codes contain state-of-the art minimum requirements for the built environment, developed with input from experts across the nation. The suite of ICC codes has been developed to be an integrated set of requirements. Commonly, these requirements considerably expand upon the detail that is currently contained in Wisconsin's fire prevention and building construction codes.

Adoption of the ICC codes is a major initiative that will require extensive preparation of Department staff, partners, and customers. Adopting the ICC codes will enable national or regional organizations to conduct training courses in Wisconsin, rather than have Wisconsin provide its own training.

The ICC codes that are proposed for adoption in this rule package are as follows:

International Building Code[®] International Energy Conservation Code™ International Mechanical Code[®] International Fuel Gas Code[®]

These ICC codes can be purchased from the following organizations: Building Officials and Code Administrators International, Inc., 4051 West Flossmoor Road, Country Club Hills, IL 60478-5695, (708) 799-2300, web page www.bocai.org; International Conference of Building Officials, 5360 Workman Mill Road, Whittier, CA, 90601-2298, (562) 699-0541, web page www.icbo.org; and Southern Building Code Congress, Inc. 900 Montclair Road, Birmingham, AL, 35213-1206, (205) 591-1853, web page www.sbcci.org.

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This proposed adoption includes modifications to the ICC codes. These modifications were developed during the past four years through a comparative analysis with Wisconsin's current requirements, and in consultation with the following advisory councils. The proposed adoption and modifications of the ICC codes are supported by these councils. A listing of the members and the corresponding representation for the councils is included later in this analysis.

Commercial Building Code Council
Multifamily Dwelling Code Council
Fire Safety Code Council
Means of Egress and Accessibility Code Council
Elevator Code Council
Structural Review Code Council
Energy Conservation Code Council
Heating, Ventilating, and Air Conditioning Code Council

This rule package proposes to adopt the above ICC codes and corresponding modifications in the following chapters of the Wisconsin Administrative Code:

- Comm 61 Administration and Enforcement; which includes adoption of the IBC, IECC, IMC, and IFGC.
- Comm 62 Buildings and Structures, which includes Wisconsin modifications of the IBC
- Comm 63 Energy Conservation; which includes Wisconsin modifications of the IECC
- Comm 64 Heating, Ventilating and Air Conditioning; which includes Wisconsin modifications of the IMC
- Comm 65 Fuel Gas Appliances; which includes Wisconsin modifications of the IFGC

These proposed chapters Comm 61 to 65 (and the ICC's *International Fire Code*[®], as referenced in the four proposed ICC codes) would regulate the design and construction of all public buildings and places of employment that are built after the effective date of the rules, which is proposed to be July 1, 2002.

This rule package also proposes to substitute the National Fire Protection Association's Fire Prevention Code (NFPA 1) for most of the fire prevention standards in Wisconsin's current fire prevention code, chapter Comm 14. This substitution includes several modifications of NFPA 1, such as (1) excluding all NFPA 1 design and construction requirements and any associated design and construction requirements from NFPA's Life Safety Code®, NFPA 101; (2) excluding all NFPA 1 requirements for properties that are not public buildings or places of employment; (3) excluding the NFPA 1 chapters and sections that address topics which are currently regulated by Commerce codes other than proposed chapters Comm 61 to 65, such as flammable liquids in Comm 10; (4) generally applying the current requirements from Comm 14 that are not included in NFPA 1; and (5) allowing municipalities to receive written approval from the Department to use the ICC's International Fire Code in lieu of NFPA 1.

Consequently, except where the *International Fire Code* is used in lieu of NFPA 1, Comm 14 (and the incorporated NFPA 1 and the referenced NFPA 101) would regulate all of the following: (1) the use and operation of all public buildings and places of employment that exist

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on or after the effective date of the rules; and (2) the inspection, testing and maintenance of all fire safety features for all public buildings and places of employment that exist on or after the effective date of the rules.

This proposed application of NFPA codes is supported by the Commercial Building Code Council, the Multifamily Dwelling Code Council, and the Wisconsin Fire and EMS Legislative Leadership Coalition.

Copies of the NFPA codes may be purchased from the National Fire Protection Association, 1 Batterymarch Park, Box 9101, Quincy, MA, 02269-9101.

In the above Comm chapters that contain modifications to the ICC and NFPA codes, each modification is preceded by one of the following seven generalized directive statements. The intended meanings of these seven directive statements are illustrated here.

- 1. This is a department rule in addition to the requirements in IBC section XXXX:

 Means: All text in this section has been adopted without modification, but
 Wisconsin has some additional requirements.
- 2. This is a department alternative to the requirements in IBC section XXXX:

 Means: The new text provides flexibility and may be used in place of the IBC text.
- 3. Substitute the following wording for the requirements in IBC section XXXX: Means: New text is completely replacing existing text.
- 4. This is a department informational note to be used under IBC section XXXX:

 Means: The only addition to this IBC section is a note which may be a crossreference or an example or which conveys a statutory requirement.
- 5. The requirements in IBC section XXXX are not included as part of this code.

 Means: The section has not been adopted; no text is replacing or substituting for this section.
- 6. This is a department exception to the requirements in IBC section XXXX:

 Means: An exception is being added to the section where none exists.
- 7. This is an additional department exception to the requirements in IBC section XXXX:

 Means: A numbered exception is being added where one or more exceptions already exist.

The references in the Comm chapters to individual ICC or NFPA 1 code sections typically are to a particular paragraph or set of paragraphs within a referenced ICC or NFPA 1 section, and are not intended to affect any subsequent subdivisions of the specified section unless stated otherwise. For example, a directive to substitute certain language for IBC section 703.2 is not intended to mean that IBC sections 703.2.1 through 703.2.3 are also being changed.

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In the Comm chapters that include modifications to the ICC or NFPA codes, individual code sections generally are numbered to correspond with the section numbering in the ICC or NFPA codes. For example, section Comm 62.0202 corresponds to IBC section 202, Comm 62.3408 corresponds to IBC section 3408, and Comm 14.16 refers to chapter 16 in NFPA 1.

This rule package includes a proposal to subsume the current Uniform Multifamily Dwelling Code, Comm 66, into the Commercial Building Code. This proposal is intended to discontinue repeating the administrative requirements of the Commercial Code in a Multifamily Code.

These chapters include affirmation that the Department will retain its authority to interpret all of the incorporated requirements, including those from the ICC and NFPA codes, and to issue variances to those requirements.

This rule package does not include rule changes for updating several other Comm code chapters that currently reference or relate to chapters Comm 51 to 64, such as Comm 2, 3, 5, 18, 34, 41, 45, 70, 75-79, 81-87, and 90. A separate, subsequent rule package with a simultaneous effective date is expected to contain this updating.

Council Members and Representation

The members and representation of the councils advising the Department on this rule package are as follows:

Commercial Building Code Council: Warren Bauer, representing the American Institute of Architects – Wisconsin Society; Curt Hastings, representing the Associated General Contractors of Wisconsin; Tim Ihlenfeld, representing laborers and craftsworkers in the Wisconsin State AFL-CIO; Joe Jameson, representing building inspectors and the League of Wisconsin Municipalities; David Kakatsch, representing the City of Milwaukee and certified municipalities; David Keller, representing building owners and the Wisconsin Realtors Association; Terry Kennedy, representing the Wisconsin Society of Professional Engineers; Bill King, representing building owners and the Wisconsin Department of Administration; Dennis Krutz, representing insurance organizations; Ed Ruckriegel, representing the City of Madison Fire Department; Michael Shoys, representing building owners and Wisconsin Manufacturers & Commerce; Russ Spahn, representing the Wisconsin State Fire Chiefs' Association; and Fred Stier, representing the Associated Builders and Contractors of Wisconsin and the Wisconsin Builders Association.

Multifamily Dwelling Code Council: Charles Aldrian, representing architects, engineers, and designers; Beth Gonnering, representing building contractors and developers; Ed Gray, representing labor organizations for the building trades; Richard Paur, representing municipal inspectors in large counties; Phil Kalscheur, representing manufacturers and suppliers of cement products; Linda Keegan, representing the public; Harry Macco, representing building contractors and developers; Carl Mastaglio, representing the public and advocating fair housing; Bruce McMiller, representing building inspectors in small counties; Larry Plumer, representing the fire services; William Roehr, representing labor organizations for the building trades; Ed Ruckriegel, representing the fire services; C. Frederick Tolson, representing

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manufacturers and suppliers of gypsum products; and Kerry Vondross, representing manufacturers and suppliers of concrete block products.

Fire Safety Code Council: David L. Berenz, representing the Wisconsin State AFL-CIO; Dan Burazin, representing the Associated General Contractors of Greater Milwaukee, Inc.; Larry Burton, representing the Wisconsin Insurance Alliance; J. C. Carver, representing the City of Madison Fire Department; Gregg Cleveland, representing the Wisconsin State Fire Chiefs' Association; Steven Fritsche, representing the City of Milwaukee; Tom Jahn, representing the Wisconsin Society of Fire Protection Engineers; Gerard J. Rabas, representing Wisconsin Manufacturers & Commerce; Russ Spahn, representing the Wisconsin Fire Inspectors Association; Robert W. Stedman, representing the City of Waukesha Fire Department; and David M. Wheaton, representing the Wisconsin Building Inspectors Association.

Means of Egress and Accessibility Code Council: Larry Earll, representing the Wisconsin Department of Administration; Cleo Eliason, representing barrier-free accessibility and the Easter Seal Society of Wisconsin, Inc.; Steven Howard, representing the Wisconsin State Fire Chiefs' Association; Mary Lawson, representing the American Institute of Architects – Wisconsin Society; Larry Palank, representing general contractors and the Associated General Contractors of Greater Milwaukee, Inc.; Richard Pomo, representing barrier-free accessibility and the Wisconsin Council for the Blind; Ed Solner, representing the American Institute of Architects – Wisconsin Society; Monica Sommerfeldt, representing the Wisconsin Builders Association; David M. Wheaton, representing inspectors and the Wisconsin Building Inspectors Association.

Elevator Code Council: Warren R. Bauer, representing the American Institute of Architects – Wisconsin Society; Ken Bavery, representing the Wisconsin State Fire Chiefs' Association; David Koch, representing elevator manufacturers/suppliers and the National Association of Elevator Contractors; Bruce Lammi, representing engineers and the Wisconsin Society of Professional Engineers; Steve Lex, representing the Wisconsin State AFL-CIO; Jeff Lund, representing lift manufacturers/suppliers and the Waupaca Elevator Company; William Page, representing lift manufacturers/suppliers and the Accessibility Equipment Manufacturers Association; David M. Rakowski, representing Northwestern Elevator Company, Inc.; John Zalewski, representing inspectors and the City of Milwaukee; Andrew M. Zielke, representing elevator manufacturers/suppliers and the National Elevator Industry, Inc.

Structural Review Code Council: Professor Steven Cramer, representing the University of Wisconsin – Madison Department of Civil and Environmental Engineering; Chuck Hanson, representing the American Society of Civil Engineers; Kirk Haverland, representing the Wisconsin Society of Professional Engineers; David Hyzer, representing the American Institute of Architects – Wisconsin Society; Lynn Lauersdorf, representing the Wisconsin Department of Administration; Professor Michael Oliva, representing the University of Wisconsin – Madison Department of Civil and Environmental Engineering; Robert Schumacher, representing the American Society of Civil Engineers; Alan Wagner, representing the American Society of Civil Engineers.

Energy Conservation Code Council: Ross DePaola, representing the Wisconsin Environmental Decade; Thomas F. Flickinger, representing the Wisconsin Association of Consulting

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Engineers; Jay F. Jorgensen, representing the Wisconsin Chapter of the American Society of Heating, Refrigerating, and Air Conditioning Engineers; Timothy J. Kritter, representing the Associated Builders and Contractors of Wisconsin; William F. McKee, representing the Associated General Contractors of Wisconsin; Dave J. Osborne, representing the Wisconsin Builders Association; Gerald W. Schulz, representing the Wisconsin Chapter of the National Electrical Contractors Association; Harry A. Sulzer, representing the League of Wisconsin Municipalities; Robert D. Wiedenhoefer, representing the Sheet Metal and Air Conditioning Contractors Association of Wisconsin.

Heating, Ventilating, and Air Conditioning Code Council: Michael J. Broge, representing the Wisconsin Association of Consulting Engineers; Timothy J. Gasperetti, representing the Building Owners and Managers Association of Milwaukee; Michael Mamayek, representing the Plumbing and Mechanical Contractors of Southeast Wisconsin; Ken Pavlik, representing the Wisconsin Builders Association; Richard J. Pearson, representing the Wisconsin Chapter of the American Society of Heating, Refrigerating, and Air Conditioning Engineers; Robert Pertzborn, representing the Wisconsin Association of Plumbing, Heating and Cooling Contractors; David Stockland, representing the Associated Builders and Contractors of Wisconsin; Harry A. Sulzer, representing the League of Wisconsin Municipalities; and Robert D. Wiedenhoefer, representing the Sheet Metal and Air Conditioning Contractors Association of Wisconsin.

Chapter-by-Chapter Analysis

Chapter Comm 14

Under Wisconsin statutes, the Department of Commerce has the responsibility to supervise every public building and place of employment, including the fire safety aspects, in order to protect the life, health, safety and welfare of every employee, frequenter, tenant and firefighter. The changes contained in this proposal are intended to update code requirements relating to the maintenance, inspection, operation and use of a building or structure and to the inspection, testing and maintenance of fire prevention, detection and suppression features as one part of that responsibility.

The proposed changes to ch. Comm 14, Fire Prevention Code, are designed to accommodate the changes that will occur with the repeal of chs. Comm 50-64, Building and HVAC Code, and the creation of chapters Comm 61 to 65, which will include the adoption of the *International Building Code, International Mechanical Code, International Energy Efficiency Code,* and *International Fuel Gas Code.* The proposed Fire Prevention Code adopts most of the requirements in NFPA 1, Fire Prevention Code by reference. Chapter 32 of NFPA 1 incorporates many national standards by reference into the code. These include 114 NFPA standards, many of which are already familiar to users of Wisconsin's codes.

NFPA 1 is divided into the following 32 chapters that cover fire safety hazards in the areas of general fire safety requirements, hazardous structures, hazardous operations and hazardous materials:

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1. Administration & Enforcement	17. Flammable & Combustible Liquids		
2. Definitions	18. Hot Work Operations		
3. General Provisions	19. Industrial Ovens & Furnaces		
4. Means of Egress	20. Laboratories Using Chemicals		
5. Features of Fire Protection	21. LP Gases & Liquefied Natural Gases		
6. Building Services	22. Marinas, Boatyards, Piers & Wharves		
7. Fire Protection Systems	23. Mechanical Refrigeration		
8. Occupancy Fire Safety	24. Oxidizers & Organic Peroxides		
9. Aerosol Products	25. Parking Garages		
10. Airports & Heliports	26. Pesticides & Herbicides		
11. Cleanrooms	27. Manufactured Home & RV Sites		
12. Combustible Waste, Refuse & Fibers	28. Refueling		
13. Commercial Cooking Equipment	29. Construction & Demolition Safeguards		
14. Dry Cleaning	30. Service Stations & Repair Garages		
15. Dust Explosion Prevention	31. Grandstands, Bleachers & Tents		
16. Fireworks, Model Rocketry & Explosives	32. Referenced Publications		

These chapters include topics that are currently covered under several other Wisconsin administrative code chapters. Adoption of NFPA 1 will allow these included requirements to be updated in unison on a regular basis. Adoption will also allow the Department to repeal one or more of these existing codes. In general, the NFPA requirements are at least equivalent and in many cases, more detailed than the fire safety requirements contained in the current editions of the corresponding Wisconsin Administrative Code chapters.

In this proposal, 6 chapters of NFPA 1 are omitted. These 6 chapters are 17 - Flammable and Combustible Liquids, 21 - Liquefied Petroleum Gases & Liquefied Natural Gases, 23 - Mechanical Refrigeration, 27 - Manufactured Home and Recreational Vehicle Sites, 28 - Refueling, and 30 - Service Stations and Repair Garages. These 6 chapters cover topics that are currently covered by other codes administered by the Department or other state agencies. The Department is planning to update the Commerce codes that contain material that is also covered by these 6 chapters, with the effective date coordinated with the rest of this proposal. Additional requirements, most of which are contained in the current version of chapter Comm 14, have been included, relating to general hazard protection, detailed specific hazard protection such as for lumberyards and woodworking shops, fire department duties and the 2% Fire Dues Program.

Adoption of NFPA 1 will expand the scope and application of fire safety regulations in Wisconsin. There are many fire hazards addressed in NFPA 1 that have not been covered in chapter Comm 14, the Fire Prevention Code, in the past. NFPA 1 provides guidance for the building owner and the fire code official to ensure that fire hazards are identified and appropriate fire prevention procedures, and fire protection features, are provided based upon the specific hazard. NFPA 1 is structured to manage the risks associated with fire and explosions within buildings, structures and upon the premises. The application of this chapter will be to the use and operations of a building and to the inspection, testing and maintenance of the fire protection features of the building. These requirements will apply to all buildings in existence at the time of adoption and to all new buildings constructed thereafter. The

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inspection, testing or maintenance of other aspects of the building construction will continue to be regulated by the building code in effect at the time of construction, in accordance with current practice.

The Department has tried to keep Wisconsin amendments to a minimum. Amendments were necessary to incorporate a unified code implementation and enforcement policy with other codes and to accommodate Wisconsin statutory requirements.

Chapter Comm 61

The first chapter of the proposed revised Wisconsin Commercial Building Code will be numbered chapter Comm 61. This first chapter of the code will delineate the administrative and enforcement processes and procedures, currently found in chapter Comm 50, that the Department will utilize and people are to follow in designing and constructing buildings. The chapter covers such matters as the scope and application of the code, plan review, product review, inspection, appeals and Department authorization of plan review and inspection agents. In comparison to chapter Comm 50 the new chapter has been reorganized, but has been revised very little in substance. Although one subject of significant revision reflects the combining of the Commercial Building Code and the Multifamily Dwelling Code into one book. Provisions have been incorporated to address the uniform application of the code for multifamily dwellings as well as building permits for such structures. Most of the other revisions are intended as clarifications, with an emphasis towards the Department's statutory responsibilities and role. The chapter is laid out as follows:

Chapter Comm 61 – Administration and Enforcement
Subchapter I – Scope and Application
Subchapter II – Responsibilities, Appeals, Petitions and Penalties
Subchapter III – Plan Review
Subchapter IV – Multifamily Building Permits
Subchapter V – Supervision and Inspection
Subchapter VI – Product and Standard Review and Approval
Subchapter VII – First Class City and Certified Municipality Approvals

Chapter Comm 62

Chapter Comm 62 is proposed to primarily contain the Wisconsin modifications of the 2000 *International Building Code*[®], as adopted in chapter Comm 61.

The following listing is a summary of the concerns identified by the Department and the various advisory councils relating to the use and application of the IBC and recommendations for changes and additions to or omissions from the IBC.

1. Chapter 1 of the IBC, and numerous other sections of the IBC, contain extensive administrative and enforcement requirements that generally have been developed by municipal officials, for use by municipal officials in other states which do not have

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Wisconsin's emphasis on state-level enforcement and administration. Numerous modifications were developed by Division staff to orient these requirements to this emphasis, and to maintain other current administrative and enforcement procedures in Wisconsin, including those relating to regulation of existing or historic buildings. [See sections Comm 62.0001, Comm 62.0100 (1); Comm 62.0202; Comm 62.0400 (1); Comm 62.0401; Comm 62.0402; Comm 62.0403 (2); Comm 62.0414; Comm 62.0415; Comm 62.0703; Comm 62.0712; Comm 62.0901 (1); Comm 62.0902; Comm 62.0903 (1), (4), and (5); Comm 62.0907 (1) and (3); Comm 62.0909; Comm 62.1407; Comm 62.1506; Comm 62.1603 (2); Comm 62.1604; Comm 62.1607; Comm 62.1612; Comm 62.1506; Comm 62.1802; Comm 62.1805; Comm 62.1809; Comm 62.1914; Comm 62.1916; Comm 62.2101; Comm 62.2105; Comm 62.2108; Comm 62.2208; Comm 62.2303; Comm 62.2503; Comm 62.3102; Comm 62.3103; Comm 62.3104 (2); Comm 62.3109; Comm 62.3400 (1); and Comm 62.3406.]

- 2. Section 115 of the IBC contains detailed requirements for unsafe buildings and structures, and includes directives for how local building officials are to address these buildings and structures. Text is proposed that would apply these requirements to all public buildings and structures and places of employment, which exist before, on, or after the effective date of the proposed rules. [Comm 62.0100 (2)]
- 3. The proposal contains three modifications to the IBC for retaining Wisconsin's current electrical code, plumbing code, and private sewage code, rather than adopting the ICC codes for these three subjects. [Comm 62.0202 (1) (d), (i), and (j)]
- 4. Several sections of the Wisconsin Statutes contain building construction criteria that supercede or are in addition to various IBC requirements. Several modifications to the IBC are proposed for maintaining compliance with these statutory criteria, which include use and occupancy classifications [Comm 62.0310], recycling space [Comm 62.0400 (2)], employee restrooms [Comm 62.0400 (3)], sixty-foot high-rise fire sprinkler thresholds [Comm 62.0403 (1)], retroactive fire sprinkler requirements for University of Wisconsin dormitories [Comm 62.0403 (1)], firewall identification [Comm 62.0705], fire hose threads [Comm 62.0901 (2)], thresholds for fire sprinklers or two-hour fire resistance in multifamily dwellings [Comm 62.903 (2)], mandatory fire sprinklers for all newly constructed University of Wisconsin dormitories [Comm 62.0903 (3)], retroactive fire alarm and detection system requirements [Comm 62.0907 (2)], barrier-free accessibility [Comm 62.1101 (1), Comm 62.1107 (1) and (3), and Comm 62.1109], smoking area signage [Comm 62.1109 (2) Note], prohibition of pay toilets [Comm 62.2902 (7)] protection of adjoining property [Comm 62.3300 (2)], barrier-free accessibility for fair housing in existing structures [Comm 62.3400 (1) and Comm 62.3408], community-based residential facilities for 9-20 unrelated adults [Comm 62.3400 (2)], and statewide requirements for historic buildings [Comm 62.3406].
- 5. For a newly constructed building or portion thereof that is a community-based residential facility serving three to eight unrelated adults, text is proposed that would continue the current practice of applying the construction requirements in Wisconsin's One- and Two-Family Dwelling Code, rather than the requirements in the Commercial Building Code. [Comm 62.0400 (4)]

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- 6. Proposed text would continue Wisconsin's current alternatives for isolating fuel-fired appliances in parking garages. [Comm 62.0406]
- 7. For fire apparatus access, text is proposed that generally applies the construction requirements from the *International Fire Code*®.
- 8. Several modifications to the IBC were developed to retain current flexibility for achieving minimum levels of fire safety, which include fire separation distance to a no-build easement [Comm 62.0702]; fire-resistance clarification for connections between buildings [Comm 62.0704]; alternatives for fire-resistive floor, ceiling, and roof construction [Comm62.0719]; fire resistance for cellulose insulation [Comm 62.0720]; water mist fire protection systems [Comm 62.0904 (1)]; and manual wet fire sprinkler systems [Comm 62.0904 (2)].
- 9. Although text is proposed that replaces the IBC fire sprinkler thresholds in multifamily dwelling buildings with Wisconsin's statutory thresholds for these fire sprinklers or two-hour fire resistance, a related section of the IBC, 705.1, is not proposed to be changed for these thresholds. Section 705.1 specifies that each portion of a building separated by one or more fire walls which comply with the section must be considered a separate building. Consequently, instead of using unpierced four-hour-rated fire walls to separate a large multifamily building into smaller buildings that individually are not required to have fire sprinklers or two-hour fire resistance, as Wisconsin currently allows, two-hour-rated fire walls with various protected openings could be used, for example, in wood-frame construction, in lieu of providing fire sprinklers in these multifamily buildings. Also, the IBC's building area and height limits would apply individually, but not cumulatively, to each portion that is separated in this fashion by these fire walls. [Comm 62.0903 (2)]
- 10. An exception is proposed to allow omitting smoke dampers in health care facilities that have integrated fire protection and mechanical systems which eliminate the need for the dampers. [See page 62B-5]
- 11. Chapter 10 of the IBC contains the means of egress requirements for all buildings, including specific occupancy requirements. The means of egress requirements in the IBC consist of three separate and distinct parts, which are the exit access, the exit, and the exit discharge. While the current Wisconsin Commercial Building Code uses these same terms, they have not been applied consistently, especially in the occupancy chapters. It is anticipated that the overall impact of the means of egress chapter will be very small for most public buildings and places of employment. A few minor modifications are proposed relating to determination of occupant load for outdoor areas, guard tower exiting, and safe dispersal areas for buildings located more than 100 feet to a public way. [Comm 62.1003, 62.1005, and 62.1006]
- 12. There are a number of IBC means of egress requirements that differ from the means of egress requirements currently applied to multifamily housing. This rule package maintains the IBC language without modification. The criteria that differ from the current Multifamily Dwelling Code requirements include the following:

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- The IBC requires all raised platforms greater than 30 inches above the floor to be protected with guardrails with a height of 42 inches (current requirement is 36 inches). This requirement applies to raised platform areas within the dwelling unit as well as those in the common-use areas of the building. [IBC 1003.2.12.1]
- Open guards must have balusters or ornamental patterns such that a 4-inch diameter sphere cannot pass through any opening up to 34 inches above the floor. From a height of 34 inches to 42 inches above the floor, a sphere not more than 8 inches must not pass through the openings (current requirement is 6-inch sphere). [IBC 1003.2.12.2]
- In the IBC, the stair tread must be at least 11 inches in depth and the riser height is limited to 7 inches (current requirements of 9 inches by 8 inches). These stairway tread and riser dimensions apply to stairways within the dwelling units and in all the common use areas. [IBC 1003.3.3.3]
- The IBC does not recognize the use of a "rescue/jump" platform as a means of egress component for any occupancy, including dwelling units. However, the IBC does provide options for one exit under IBC 1005.2.2.
- The current Multifamily code requires at least 2 ways out of every sleeping room. One of the means of egress may be a window. The IBC, in addition to the means of egress required to be provided, also mandates that basements and sleeping rooms below the fourth story have at least one exterior emergency and rescue opening. [IBC 1009.1]
- 13. The IBC chapter 11 accessibility requirements are substantially equivalent to the federal Americans with Disabilities Act Accessibility Guidelines (ADAAG). Currently, the federal Access Board is rewriting the ADAAG standards to be consistent with the IBC format. Chapter Comm 69 currently uses the ADAAG standards as the base accessibility construction standards; therefore users of the code are familiar with the standards in the IBC, except for the new format. A number of minor changes are proposed to clarify the application of the code to certain occupancies, such as government-owned facilities, and to require parking signs to comply with Wisconsin Department of Transportation requirements. [Comm 62.1104 and Comm 62.1109]
- 14. The accessibility requirements in the 2000 edition of the IBC relating to multifamily housing are not substantially equivalent to the federal fair housing law or to the state fair housing law. A number of changes are being proposed to establish construction requirements that are substantially equivalent to the state fair housing law, such as applying the fair housing rules to housing with 3 or more dwelling units. The ICC has issued a 2001 IBC Supplement, which contains numerous rule changes to ensure the accessibility rules comply with the federal fair housing law. The Department feels it is important to include these IBC changes so designers and owners are complying with rules that are substantially equivalent to the federal law. The Department is in the process of developing a separate rule package to include the 2001 IBC Supplement changes and the state fair housing changes. The projected effective date is July 1, 2002, the same effective date as this rule

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- package, Clearinghouse Rule number 00-179. [Comm 62.1101, Comm 62.1106, and Comm 62.1107]
- 15. The current multifamily accessibility requirements require that at least one bathroom be designed for a higher level of accessibility, with all other bathrooms complying with the basic level of accessibility. This requirement is not part of the federal or state fair housing laws or the IBC accessibility requirements. This rule package proposes to discontinue this requirement and to instead use the ICC/ANSI A117.1 bathroom design requirements without modification. [Comm 62.1107 and ICC/ANSI A117.1 1003.11.3.1 and 1003.11.3.2]
- 16. Text is proposed that deletes an IBC requirement for providing a unisex toilet room in certain assembly and mercantile occupancies. In accordance with s. 101.13 (1m) (b), Stats., the Department may not promulgate a rule requiring unisex toilet rooms in any public building or place of employment. [Comm 62.1108]
- 17. Minor changes are proposed for clarifying the requirements for temperature control in interior environments and for drainage of interior courts. [Comm 62.1203 and Comm 62.1205]
- 18. Based on Wisconsin's potential for extreme climate, and due to concern for the structural deterioration and associated health and welfare problems that can result from migration of moist, interior air into outside walls, air barrier requirements are proposed for exterior walls. [Comm 62.1403 and Comm 62.0202 (a)]
- 19. Reference to the Urban Wildland Interface Code is deleted because adoption of that code is not included in this rule package. [Comm 62.1505]
- 20. Several modifications to the IBC were developed by the Structural Review Council to clarify or simplify, but not weaken, the structural requirements, particularly for smaller buildings. These modifications include posting of live loads [Comm 62.1603 (1)], ground snow load alternatives [Comm 62.1608 (1)], an alternative snow exposure factor [Comm 62.1608 (2)], a wind load alternative [Comm 62.1609], a soil lateral load alternative [Comm 62.1610], clarification of earthquake loads [Comm 62.1614], alternative earthquake loads [Comm 62.1615], refinement of allowable pile and pier loads [Comm 62.1807 (3)], an alternative pile and pier load test [Comm 62.1807 (4)], a driven-pile alternative [Comm 62.1808], clarification of cast stone masonry [Comm 62.2103].
- 21. Proposed text excludes the IBC requirements for structural tests and special inspections, except for joist hangers and roof tiles, due to belief that these requirements are substantially met by continuing Wisconsin's current construction oversight by registered professionals. [Comm 62.1700 (and Comm 61.50)]
- 22. Three modifications developed by the Structural Review Council would improve inadequacies in the IBC. These modifications address piles and piers in subsiding areas [Comm 62.1807 (1), (2), and (5)], empirical design of masonry [Comm 62.2109], and

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- moisture barriers for nondurable wood bearing on exterior masonry or concrete [Comm 62.2304].
- 23. Several modifications provide alternative or minor additional plumbing requirements. These modifications address privacy and access to toilet rooms [Comm 62.1209], waiver of toilet rooms for unattended gasoline stations [Comm 62.1209 (2) (b)], maintenance of toilet rooms [Comm 62.2900 (1) and (2)], permanent and portable outdoor toilets [Comm 62.2900 (3)], enclosure of toilet fixtures [Comm 62.2900 (4)], substitution of urinals for water closets [Comm 62.2902 (1) (a)], cross-references to plumbing fixture requirements by other agencies [Comm 62.2902 (1) (b) and (5)], lavatories for toilet rooms [Comm 62.2902 (3)], signage for toilet rooms [Comm 62.2902 (4)], remote toilet rooms for small retail stores [Comm 62.2902 (4)], and direct access to toilet rooms for customers in stores [Comm 62.2902 (6)].
- 24. Three modifications are proposed for continuing Wisconsin's current practice of not applying or enforcing requirements for the design or installation of conveyors and personnel or material hoists. [Comm 62.3001]
- 25. Proposed text requires that where ventilation openings are provided in hoistway walls, the openings must have guards securely fastened to the hoistway, to prevent creation of a shear point for maintenance and elevator inspectors. [Comm 62.3004 (1)]
- 26. Floor drains, sumps, and sump pumps are permitted by the IBC in a hoistway shaft if they are directly connected to the storm or clear water drain system. Proposed text clarifies that a connection to a sanitary system is prohibited and that plumbing systems not used in connection with the operation of the elevator may not be located in the elevator equipment rooms. [Comm 62.3004 (2) and Comm 62.3006 (2)]
- 27. Proposed text clarifies that where elevator machine rooms serve pressurized elevator hoistways and are not directly connected to the hoistway, the machine rooms are not required to be pressurized. [Comm 62.3006 (1)]
- 28. Proposed text would continue the current code's requirement to annually inspect and repair assembly seating facilities. [Comm 62.3100]
- 29. Proposed text clarifies that buildings connected by pedestrian access structures are considered separate structures. [Comm 62.3104]
- 30. Proposed text would continue Wisconsin's current practice of not regulating encroachments into a public right-of-way. [Comm 62.3200]
- 31. Proposed text would continue Wisconsin's current practice of not regulating safeguards during private-sector construction, except for maintaining egress, preventing water accumulation, and protecting adjoining property. [Comm 62.3300]

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- 32. Three National Fire Protection Association standards that are adopted in the IBC are proposed to be replaced with more recent versions which are currently adopted in Wisconsin. [Comm 62.3500 (1)]
- 33. Proposed text would continue to incorporate one National Fire Protection Association standard which is currently adopted in Wisconsin but which is not adopted in the IBC [Comm 62.3500 (2)]
- 34. Proposed text would continue Wisconsin's current practice of not regulating employee qualifications, boards of appeals, farming-related buildings, fire districts, supplemental barrier-free accessibility, rodent proofing, flood-resistant construction, signs, and patio covers. [Comm 62.3600 (1)]
- 35. Proposed text clarifies that IBC Appendix C may be applied to nonfarming agricultural buildings, such as horse stables and greenhouses that are open to the public.

Chapter Comm 63

The International Energy Conservation Code™ (IECC) contains energy conservation requirements relating to the design of building envelopes for adequate thermal resistance and low air leakage, and the design and selection of mechanical, electrical, service water-heating and illumination systems and equipment, which will enable the effective use of energy in new and altered building construction. The IECC is divided into chapters that apply to low-rise residential buildings (3 stories or less in height), and to commercial buildings, which includes high-rise residential buildings (4 stories or more in height), and non-residential buildings of any height.

The IECC is applied based on the occupancy classification of the building (residential or commercial) and how compliance with the energy conservation requirements will be demonstrated. The intent is that any of the options chosen will provide the same levels of energy conservation. The following is how the IECC is to be applied:

- Chapter 4, 5 or 6 of the IECC may be used for low-rise residential buildings.
- Chapter 7 or 8 of the IECC may be used for high-rise residential buildings and all commercial buildings.

IECC chapter 7 requires commercial buildings to comply with ASHRAE/EIS, Energy Code for Commercial and High-rise Residential Buildings. The existing chapter Comm 63 is basically the ASHRAE 90.1 Standard with various modifications and additions to improve energy conservation, and application and code enforcement. Therefore, the existing chapter Comm 63 with the improvements is substantially equivalent to chapter 7 of the IECC. It is proposed to maintain the existing Comm 63 requirements and locate them in subchapter III of the new proposed chapter Comm 63. Commercial buildings may be designed for compliance with the energy conservation requirements in chapter Comm 63, subchapter III as one option, or with the requirements in IECC chapter 8 as the other option. It is also the intent of these rule changes to ensure that either option chosen will result in equivalent energy conservation.

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The following is a summary of the major concerns identified by the Energy Conservation Specialty Council relating to the use and application of the IECC and recommendations for changes and additions to or omissions from the IECC:

- 1. In general, the IECC requirements are substantially equivalent to the energy conservation requirements specified in the existing chapter Comm 63 for commercial buildings. However, the IECC has more stringent energy conservation requirements for low-rise residential buildings, especially the building envelope requirements. To evaluate how the IECC requirements would impact the design of residential buildings, the Department performed a survey of current construction plans for residential buildings located throughout the state to see if the buildings complied with the stricter IECC requirements. The results showed that 90% of the new construction plans surveyed already met the stricter building envelope requirements and most designers and owners would not be affected adversely by using the IECC requirements. These changes are viewed as useful and beneficial to the owners of residential buildings.
- 2. Under IECC chapter 1 a requirement has been added to determine the R-value of insulation in accordance with the methods given in Comm 63.1018. This change maintains an equivalency between the IECC methods and Comm 63, subchapter III. [See Comm 63.0102 (2)]
- 3. Approved vapor retarders are required on all frame walls, floor and ceilings, instead of permitting the option to ventilate these areas. This change is necessary for both infiltration and condensation control in Wisconsin's severe climate. [Comm 63.0502, 63.0802 (2) and 63.1011 (4)]
- 4. Floors over outdoor air are required to have the same U-values as floors over unheated spaces. The minimum levels of insulation in the IECC are not cost effective for the owner. All other insulation levels were determined to be cost effective using a life-cycle cost economics analysis. A review of residential plans received by the Department indicated that 90% of new construction already meets the IECC thermal envelope requirements. [Comm 63.0502]
- 5. The prohibition of duct tape use on all ducts was modified to apply only to metal ducts. This way the sealing requirements for residential and commercial buildings are consistent. [See Comm 63.0503 (2) (c) and Comm 63.0803 (2) (f) 3.]
- 6. The heating load calculations are to be determined in accordance with the requirements in s. Comm 63.1023. Both Comm 63.1023 and IECC section 503.3.1 follow the ASHRAE Handbook of Fundamentals; however, Comm 63.1023 includes specific parameters for areas such as indoor and outdoor design conditions, envelope conditions and lighting loads not included in the ASHRAE Handbook. Comm 63.1023 provides better direction to the users in the application of the code. [Comm 63.0503 and 63.1023]
- 7. When a system is equipped with a means for adding moisture into a building, a humidistat shall be provided. [See Comm 63.0803 (2) (c) and Comm 63.1028]

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- 8. Interior design temperatures are to be maintained as specified in chapter Comm 64, Heating, Ventilating and Air Conditioning Code. [Comm 63.003 (3)]
- 9. Adjustments for local exterior design conditions are to be determined through local weather resources, including computer programs for equipment sizing. [Comm 63.0302 (1)]
- 10. Figure Comm 63.1015-1 showing the degree-day regions has been modified from 11 zones to 3 zones to correspond with the ACP Tables. This will decrease the possibility for errors. [See Figures Comm 63.1015-1.]
- 11. The wording in Comm 63.1015 (5) and in Figure Comm 63.1015 ACP Tables have been changed to also specify insulation for ceilings adjacent to unconditioned spaces. [See Figures Comm 63.1015-2 to 63.1015-4]
- 12. The IECC contains more current fenestration default U-values. To maintain consistency a cross-reference to IECC Table 102.5.2 has been added under Comm 63.1019. [See Comm 63.1019 (3) (b) 2.]
- 13. The zone-control exceptions in Comm 63.1027 (2) (f) have been modified to recognize that direct expansion cooling systems cannot reset the cold air supply temperature, they can only cycle on and off through the compressor stages. The exception now allows direct expansion cooling systems to reheat or re-cool where cooling is cycled based on the zone requiring the coolest air or by average room temperature for all zones. [See Comm 63.1027 (2) (f)]
- 14. Pipe insulation for both commercial and residential buildings is to be provided in accordance with ASHRAE 90.1, Table 403.2.9.1. The new table for pipe insulation will be applied in all the options available for showing compliance with the energy conservation requirements. Table 63.1029 translates the inches of insulation required into R-values. This reduces the need for all parties involved from performing cumbersome calculations. [Comm Table 63.1029]
- 15. Supply ducts located in the plenum and within the building envelope are to be insulated to R-4 in addition to the requirements for unconditioned areas and outdoor areas. Moisture damage to building materials may occur from condensation from uninsulated ducts within a plenum. There is little, if any, additional cost to go from uninsulated sheet metal material to an R-4 insulated duct material. [Comm 63.0503 (2) (b) and Comm 63.0803 (2) (e)]
- 16. The requirement in IECC 804.3 relating to water temperature controls of lavatories has been eliminated to maintain consistency with the requirements in Comm 63, subchapter III and with the Wisconsin Plumbing Code. [See Comm 63.0804 (1)]
- 17. The IECC requires ducts in unconditioned areas to be insulated to R-5; however, the typically available R-5 ductwrap is only R-4.6 after it is installed in accordance with the manufacturer's instructions. This discrepancy has caused problems in the application and enforcement of the code. It is proposed to require ducts in these areas to be insulated to R-

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- 4. This requirement will be applicable in all options used to show compliance with the energy conservation requirements. [Comm 63.0503 (2) (b) and Comm 63.0803 (2) (e)]
- 18. Recessed lighting installed in the building envelope must be sealed to reduce infiltration. [Comm 63.1011 (3), Comm 63.0602 (2) and Comm 63.0802 (4)]]
- 19. Automatic dampers are required on all outdoor air intakes. The IECC allows gravity or automatic dampers to be used. Experience indicates that gravity dampers are opened by wind subjecting occupants to drafts and results in higher energy costs to owners. [Comm 63.0503 (2) (c) and Comm 63.0803 (2) (d) and (3) (b)]
- 20. Light power budgets and controls requirements are to comply with Comm 63, subchapter III, Part 5, even if the IECC chapter 8 option is chosen. The lighting requirements in Comm 63 are in an improved format and provide for the most efficient use of lighting for energy conservation. [Comm 63.0504 (4) and 63.0805]
- 21. The shut-off control lighting exemption for large areas has been modified to include large retail areas, auditoriums and gymnasiums. [See Comm 63.1050 (4) (c) 5.]
- 22. Owners of commercial buildings are given options for showing compliance with the energy conservation code. One option is to show compliance with ASHRAE 90.1. Since chapter Comm 63, subchapter III is essentially ASHRAE 90.1 with various amendments for improving energy conservation, application and enforcement, it is proposed to substitute language for IECC chapter 7 to require compliance with Comm 63. [Comm 63.0701]
- 23. A modification was made to Table 63.1049 relating to interior lighting power allowances for merchandising display lighting. It is proposed to allow the smaller of the actual wattage of the lighting equipment for displays or a 0.8 W/ft² times the floor area of the display area to be added to the interior lighting power. [Table 63.1049, Part b]
- 24. In commercial buildings, each fan system is required to have economizer controls that comply with s. Comm 63.1031. The IECC does not provide for the most efficient use of that equipment and the owner would be missing opportunities to save energy and money. This requirement for the use of economizers will not be applied to low-rise residential buildings. [Comm 63.0803 (2) (c) and Comm 63.0803 (3) (b) and (d)]
- 25. Currently, under chapter Comm 63 off-hour or set-back HVAC controls are required in both residential and commercial buildings. However, in the IECC off-hour controls are required only in commercial facilities. Since it was the goal the Department to stay as close as possible to the IECC requirements and limit Wisconsin based requirements, it was decided not to apply the off-hour controls to residential buildings.
- 26. The IECC energy conserving requirements for residential pool water heaters will not be applied. They are inconsistent with requirements for commercial facilities, the on-off switch requirements are covered by other codes; the pool cover requirement is too vague to enforce and the need for a time switch to allow for lower time-of-day utility rates should be based on consumer economics. [Comm 63.0504 (3)]

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(A more detailed comparison of the current and proposed requirements for chapter Comm 63 is available at the Safety and Buildings' web site at www.commerce.state.wi.us. or can be obtained from Roberta Ward at rward@commerce.state.wi.us or at 608/266-8741 and 608/264-8777, TTY.)

Chapter Comm 64

This rule revision, which repeals and recreates chapter Comm 64, relating to heating, ventilating and air conditioning, includes adoption of the 2000 *International Mechanical Code*[®], with various omissions, additions or substitutions.

The following listing is a summary of the major concerns identified by the Department and the HVAC Specialty Council relating to the use and application of the IMC and recommendations for changes and additions to or omissions from the IMC.

- 1. The proposal is to continue to have the designer or installer provide the owner or operator with written instructions on the operation and maintenance of the equipment. The IMC is silent on this issue and experience proves that properly maintained equipment is less costly to operate and increases the life of the equipment. [Comm 64.0102]
- 2. The IMC requires that all appliances be listed and labeled unless approved as a modification; the proposal is to retain the current provisions for approval of unlisted equipment. [Comm 64.0301]
- 3. The proposal is to maintain the equipment testing and balancing provisions of the current code to assure proper operation of equipment; a note is added for clarification on the most restrictive applies. [Comm 64.0304]
- 4. The proposal is to keep indoor design temperatures below 68°F for some occupancies as currently allowed. Current provisions allow spot heating, and waiving of heating requirements for seasonal occupancies. Such allowances are in recognition high costs of operation during the Wisconsin heating season. [Comm 64.0309]
- 5. The proposal is to recognize that natural ventilation of some occupancies in Wisconsin may be ineffective and may thus compromise indoor air quality. Under the IMC, natural ventilation is allowed as an option in all spaces, except for: smoking lounges, toilet rooms, multifamily parking structures and public locker rooms. Current requirements for mechanical ventilation in many more occupancies are proposed to be maintained. [Comm 64.0401 (1)]
- 6. The proposal maintains current requirements for required building exhaust ventilating systems to operate continuously when people are in the building. An option is also proposed to allow rooms with 2 or fewer toilet fixtures to be exhausted only when such rooms are occupied. The exhaust fan could then be interconnected with the light switch. [Comm 64.0401 (2)]

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- 7. The proposal also is to continue allowing current exceptions for reducing clearances for intake and exhaust openings that have been found to not compromise indoor air quality, but can reduce installation costs. [Comm 64.0401 (4)]
- 8. This proposal is to allow an option to use an engineered system that will produce the same indoor air quality as following the outdoor air ventilation rates as prescribed in the code. [Comm 64.0403 (2)]
- 9. A revised IMC Table 403.3 is proposed which includes the following: requires the same outdoor air requirements for similar occupancies; makes additional entries for common occupancies from the current Table Comm 64.05; reduces outside air to 7.5 cfm/person in most occupancies as under the current code requires the use of AIA Guidelines for Hospitals and Nursing Home Occupancies; and garage ventilation is reduced from 1.5 cfm/sf to 0.5 cfm/sf of exhaust. [Table 64.0403]
- 10. Some occupancy requirements are proposed to be maintained from the current code: natural ventilation may be used in smaller toilet rooms or janitor closets; and pool ventilation may be reduced with humidity control. [Comm 64.0403]
- 11. The proposal allows alternatives to IMC 403.3.2 that requires the amount of outside air to be based on a complex set of room by room calculations. It may be replaced with current provisions that allow the amount of outside air to be based on the total number of occupants served by the system, rather than separate calculations for each room. The minimum air change rate is also retained. This is necessary when the outside air is based on the total number of occupants served by the system. The proposal provides for the movement of 'cleaner' air from areas of low occupancy to those of high occupancy. The air movement also increases filter effectiveness. For VAV systems, a minimum movement is needed. [Comm 64.0403 (6)]
- 12. Wisconsin experienced failure in automatic sensing devices installed in place of continuous exhaust in parking garages. The proposal includes additional provisions including the requirement to operate exhaust for at least five hours per day to assure effective exhaust results. [Comm 64.0404]
- 13. The proposal is to delete the requirement for an exhaust system where contamination may be simply "irritating." The current code provision does not require a system to accommodate those individuals who may have high sensitivity to contaminants. Where contamination is injurious to health or safety, an exhaust system must be installed. [Comm 64.0502]
- 14. Under the IMC, areas with required exhaust are required to maintain negative or neutral air pressure, with the exception of one- and two-family dwellings. Under the proposal, that exception is expanded to apply to all dwelling units that have individual HVAC systems. [Comm 64.0501]
- 15. The IMC has more, more detailed requirements for commercial kitchen exhaust than the current chapter Comm 64. The proposal is to provide a performance requirement for

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- alternatives to welded seams and joints which will provide more flexibility in installation and lower costs. [Comm 64.0500, Comm 64.0506, and Comm 64.0507]
- 16. Another proposal relating to commercial kitchen exhaust is to require commercial kitchen fans for use in grease-laden air to be so listed. [Comm 64.0506]
- 17. The proposal is to allow the reduction in the clearances between heaters and duct lining when the lining is so listed. [Comm 64.0604]
- 18. The proposal adds a requirement for some healthcare facilities to comply with AIA (American Institute of Architects) guidelines for filtration. [Comm 64.0605]
- 19. The definition of 'unusually tight construction' has been modified for chs. Comm 64 and 65 to reflect current Wisconsin building construction standards. In referencing this modification, the requirement for outside air for combustion has also been modified to allow greater use of inside air for combustion purposes (with restrictions). [Comm 64.0702]
- 20. The IMC prohibits the use of unvented, permanently installed liquid- and solid-fueled equipment. As under the current code, both installed and portable unvented equipment is prohibited under the proposal. [Comm 64.0801]
- 21. The proposal is to make the chapter internally consistent and consistent with the International Fuel Gas Code (IFGC), chapter Comm 65 for the following situations: location of combustion air openings, setback between intakes and exhausts and contaminant sources. [Comm 64.0710 and Comm 64.0918]
- 22. The proposal substitutes chapter Comm 41 for IMC boiler and hydronic piping requirements. Only minor revisions are proposed for the IMC requirements for water heaters used in space heating systems. The IMC, unlike the current chapter Comm 64, does not limit the use of such water heaters to 100,000 Btu/hour input. [Comm 64.1001 and Comm 64.1201]
- 23. The proposal substitutes chapter Comm 45 for IMC refrigeration requirements. [Comm 64.1101]
- 24. The proposal does not include IMC fuel oil requirements; these requirements are contained in chapter Comm 10. [Comm 64.1301]
- 25. The IBC requirements for fire resistive construction such as equipment enclosure, fire rated resistive damper placement, and air movement in rated corridors, may impact HVAC system design and installation.
- 26. In addition to the AIA Standard R673, standards, either newer than that adopted in the IMC or not adopted in the IMC, are adopted; they are: NFPA 13-1999, Installation of Sprinkler Systems; and NFPA 54-1999, National Fuel Gas Code.

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(A more detailed comparison of the 2000 IMC and IFGC, the current chapter Comm 64, and this proposal is available at the Safety and Buildings' web site at www.commerce.state.wi.us. or can be obtained from Roberta Ward at rward@commerce.state.wi.us or at telephone 608/266-8741 and 608/264-8777, TTY.)

Chapter Comm 65

This rule revision, which creates chapter Comm 65, relating to Fuel Gas Appliances, includes adoption of the 2000 *International Fuel Gas Code*[®], with various omissions, additions or substitutions.

The following listing is a summary of the major concerns identified by the Department and the HVAC Specialty Council relating to the use and application of the IFGC and recommendations for changes and additions to or omissions from the IFGC.

- 1. Like the *International Mechanical Code*®, the IFGC requires that all appliances be listed and labeled unless approved as a modification. The proposal is to retain current code provisions which outline the Wisconsin process and the information and testing needed for this review. The IFGC is silent on what rule applies when the manufacturer's instructions may be in conflict with rule provisions. The proposal is to duplicate the provision in chapter Comm 64 and provide consistency for all fuel types. The IFGC is also silent on the clearances, guarding, appliance marking, and piping supports; the proposal is to duplicate the provisions proposed in chapter Comm 64. As in chapter Comm 64, a requirement for written instructions on operation and maintenance is proposed. [See ss. Comm 65.0301 and 65.0304]
- 2. Current Wisconsin provisions prohibit the use of unvented space heaters because of the tight construction of Wisconsin buildings; this prohibition is proposed for both chapters Comm 64 and 65. [Comm 65.0303 (2) and 65.0620]
- 3. As in chapter Comm 64, the proposal is to retain current provisions that recognize Wisconsin's severe climate in that heat exchangers and burners must be made of corrosion resistant material. [Comm 65.0303 (1)]
- 4. As in chapter Comm 64, the equipment testing and balancing provisions are proposed such that these two chapters will be consistent for all fuel types. [Comm 65.0305]
- 5. The proposal is to continue some current Wisconsin provisions for use of indoor air for combustion in "tight" construction, consistent with provisions for other fuel types under chapter Comm 64. [Comm 65.0304]
- 6. The 2000 IFGC does not include the various provisions previously contained in 1998 IMC with regard to combustion air; the proposal is to maintain these requirements and be consistent for all fuel types. [Comm 65.0304]

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- 7. The IFGC is also silent on various requirements for safe installation of combustion air ducts and outside air intake openings. The proposal is to duplicate these provisions from chapter Comm 64. [Comm 65.0304 and Comm 65.0620]
- 8. The proposal is to be consistent with chapter Comm 64 and not require platforms for fan only installations. [Comm 65.0306]
- 9. The current requirements for gas piping (using the NFPA 54 standard) are proposed to be retained. [Comm 65.0400]
- 10. The proposal is to not allow the installation of a number of unvented appliances as under the current code. Products of combustion in buildings may cause concern for safety and health and structural damage. [Comm 65.0501]
- 11. The proposal is to be consistent for all fuel types in termination of venting system and setback distances between outside air intakes and containment sources. [Comm 65.0503]
- 12. The proposal is also consistent for all fuel types for requirements for suspended duct furnaces. [Comm 65.0609]

(A more detailed comparison of the 2000 IMC and IFGC, the current chapter Comm 64, and this proposal is available at the Safety and Buildings' web site at www.commerce.state.wi.us. or can be obtained from Roberta Ward at rward@commerce.state.wi.us or at telephone 608/266-8741 and 608/264-8777, TTY.)

File reference: IBC/Analysis lr

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SECTION 1. Chapter Comm 4 is repealed.

SECTION 2. Chapter Comm 14 is repealed and recreated to read:

CHAPTER Comm 14 FIRE PREVENTION

SUBCHAPTER I, SCOPE AND APPLICATION

Comm 14.001 Purpose of code. Pursuant to statutory provisions under ch. 101, Stats., the purpose of this code is to protect the public, employees, firefighters and property from the hazards of fire and explosion by establishing minimum standards for the use, operation, maintenance and inspection of buildings, structures and premises.

Comm 14.002 Scope. (1) Except as provided in subs. (2) and (3), this code applies to all public buildings and places of employment.

Note: Under s. 101.01 (11), Stats., "place of employment" includes every place, whether indoors or out or underground and the premises appurtenant thereto where either temporarily or permanently any industry, trade or business is carried on, or where any process or operation, directly or indirectly related to any industry, trade or business, is carried on, and where any person is, directly or indirectly, employed by another for direct or indirect gain or profit, but does not include any place where persons are employed in private domestic service which does not involve the use of mechanical power or in farming. "Farming" includes those activities specified in s. 102.04 (3), and also includes the transportation of farm products, supplies or equipment directly to the farm by the operator of said farm or employes for use thereon, if such activities are directly or indirectly for the purpose of producing commodities for market, or as an accessory to such production. When used with relation to building codes, "place of employment" does not include an adult family home, as defined in s. 50.01 (1), or, except for the purposes of s. 101.11, a previously constructed building used as a community-based residential facility, as defined in s. 50.01 (1g), which serves 20 or fewer residents who are not related to the operator or administrator.

Under s. 101.01 (12), Stats., "public building" means any structure, including exterior parts of such building, such as a porch, exterior platform or steps providing means of ingress or egress, used in whole or in part as a place of resort, assemblage, lodging, trade, traffic, occupancy, or use by the public or by 3 or more tenants. When used in relation to building codes, "public building" does not include a previously constructed building used as a community-based residential facility as defined in s. 50.01 (1g) which serves 20 or fewer residents who are not related to the operator or administrator or an adult family home, as defined in s. 50.01 (1).

(2) This code does not apply to buildings or situations listed under the exclusions in ss. 101.01 (11) and 101.01(12), Stats., or under the exemptions in s. 101.05, Stats.

Note: Section 102.04 (3), Stats., as referenced in s. 101.01 (11), Stats., reads as follows: "As used in this chapter 'farming' means the operation of farm premises owned or rented by the operator. 'Farm premises' means areas used for operations herein set forth, but does not include other areas, greenhouses or other similar structures unless used principally for the production of food and farm plants. 'Farmer' means any person engaged in farming as defined. Operation of farm premises shall be deemed to be the planting and cultivating of the soil thereof; the raising and harvesting of agricultural, horticultural or arboricultural crops thereon; the raising, breeding, tending, training and management of livestock, bees, poultry, fur-bearing animals, wildlife or aquatic life, or their products, thereon;

the processing, drying, packing, packaging, freezing, grading, storing, delivering to storage, to market or to a carrier for transportation to market, distributing directly to consumers or marketing any of the above-named commodities, substantially all of which have been planted or produced thereon; the clearing of such premises and the salvaging of timber and management and use of wood lots thereon, but not including logging, lumbering or wood cutting operations unless conducted as an accessory to other farming operations; the managing, conserving, improving and maintaining of such premises or the tools, equipment and improvements thereon and the exchange of labor, services or the exchange of use of equipment with other farmers in pursuing such activities. The operation for not to exceed 30 days during any calendar year, by any person deriving the person's principal income from farming, of farm machinery in performing farming services for other farmers for a consideration other than exchange of labor shall be deemed farming. Operation of such premises shall be deemed to include also any other activities commonly considered to be farming whether conducted on or off such premises by the farm operator."

Note: Under s. 50.01 (1), Stats., as referenced in s. 101.01 (12), Stats., "adult family home" means one of the following:

(a) A private residence to which all of the following apply:

- 1. Care and maintenance above the level of room and board but not including nursing care are provided in the private residence by the care provider whose primary domicile is this residence for 3 or 4 adults, or more adults if all of the adults are siblings, each of whom has a developmental disability, as defined in s. 51.01 (5), or, if the residence is licensed as a foster home, care and maintenance are provided to children, the combined total of adults and children so served being no more than 4, or more adults or children if all of the adults or all of the children are siblings, or, if the residence is licensed as a treatment foster home, care and maintenance are provided to children, the combined total of adults and children so served being no more than 4.
- 2. The private residence was licensed under s. 48.62 as a foster home or treatment foster home for the care of the adults specified in subd. 1. at least 12 months before any of the adults attained 18 years of age.
- (b) A place where 3 or 4 adults who are not related to the operator reside and receive care, treatment or services that are above the level of room and board and that may include up to 7 hours per week of nursing care per resident. "Adult family home" does not include a place that is specified in sub. (1g) (a) to (d), (f) or (g).

Under s. 50.01 (1g), Stats., as referenced in s. 101.01 (12), Stats., "community-based residential facility" means a place where 5 or more adults who are not related to the operator or administrator and who do not require care above intermediate level nursing care reside and receive care, treatment or services that are above the level of room and board but that include no more than 3 hours of nursing care per week per resident. "Community-based residential facility" does not include any of the following:

(a) A convent or facility owned or operated by members of a religious order exclusively for the reception

and care or treatment of members of that order.

(b) A facility or private home that provides care, treatment and services only for victims of domestic abuse, as defined in s. 46.95 (1) (a), and their children.

(c) A shelter facility as defined under s. 16.352 (1) (d).

- (d) A place that provides lodging for individuals and in which all of the following conditions are met:
- 1. Each lodged individual is able to exit the place under emergency conditions without the assistance of another individual.
- 2. No lodged individual receives from the owner, manager or operator of the place or the owner's, manager's or operator's agent or employe any of the following:
 - a. Personal care, supervision or treatment, or management, control or supervision of prescription
- medications.
- b. Care or services other than board, information, referral, advocacy or job guidance; location and coordination of social services by an agency that is not affiliated with the owner, manager or operator, for which arrangements were made for an individual before he or she lodged in the place; or, in the case of an emergency, arrangement for the provision of health care or social services by an agency that is not affiliated with the owner, manager or operator.
 - (e) An adult family home.
 - (f) A residential care apartment complex.

(g) A residential facility in the village of Union Grove that was authorized to operate without a license under a final judgment entered by a court before January 1, 1982, and that continues to comply with the judgment notwithstanding the expiration of the judgment.

Note: Section 101.05, Stats., reads as follows: "Exempt buildings and projects. (1) No building code adopted by the department under this chapter shall affect buildings located on research or laboratory farms of public universities or other state institutions and used primarily for housing livestock or other agricultural purposes.

"(2) A bed and breakfast establishment, as defined under s. 254.61 (1), is not subject to building codes adopted by the department under this subchapter.

"(3) No standard, rule, code or regulation of the department under this subchapter applies to construction undertaken by the state for the purpose of renovation of the state capitol building.

"(4) No standard, rule, order, code or regulation adopted, promulgated, enforced or administered by the department under this chapter applies to a rural school building if all of the following are satisfied:

"(a) The school building consists of one classroom.

"(b) The school building is used as a school that is operated by and for members of a bona fide religious denomination in accordance with the teachings and beliefs of the denomination.

"(c) The teachings and beliefs of the bona fide religious denomination that operates the school prohibit the use of certain products, devices or designs that are necessary to comply with a standard, rule, order, code or regulation adopted, promulgated, enforced or administered by the department under this chapter."

Under s. 254.16 (1) Stats., as referenced in 101.05, Stats., "bed and breakfast establishment" means any place of lodging that:

(a) Provides 8 or fewer rooms for rent to no more than a total of 20 tourists or transients;

(b) Provides no meals other than breakfast and provides the breakfast only to renters of the place;

(c) Is the owner's personal residence;

(d) Is occupied by the owner at the time of rental;

(e) Was originally built and occupied as a single-family residence, or, prior to use as a place of lodging, was converted to use and occupied as a single-family residence; and

(f) Has had completed, before May 11, 1990, any structural additions to the dimensions of the original structure, including by renovation, except that this limit does not apply to any of the following:

1. A structural addition, including a renovation, made to a structure after May 11, 1990, within the dimensions of the original structure.

- 2. A structural addition, made to a structure that was originally constructed at least 50 years before an initial or renewal application for a permit under s. 254.64 (1) (b) is made and for which no use other than as a bed and breakfast establishment is proposed. The structural addition under this subdivision shall comply with the rules under s. 101.63 (1) and (1m).
- (3) This code does not apply to all of the following types of buildings, structures or situations:
- (a) A temporary building or structure used exclusively for construction purposes, not exceeding 2 stories in height, and not used as living quarters.
- (b) A building or structure located on Indian reservation land held in trust by the United States.
 - (c) Buildings and portions of buildings that are exempted by federal statutes or treaties.
- (d) Portions of buildings leased to the federal government provided all of the following conditions are met:

- 1. A statement is filed with the register of deeds that describes the steps necessary for compliance to this code if the space is converted to a nonexempt use.
- 2. The statement filed with the register of deeds is recorded in a manner that will permit the existence of the statement to be determined by reference to the property where the building is located.
- 3. The owner of the building submits a copy of the recorded document to the department or its authorized representative.
- (e) Buildings and structures that are on a farm premises and used exclusively for farming purposes, provided any use of the building or structure by the public consists only of consumers directly receiving farm commodities, substantially all of which have been planted or produced on the farm premises. In this application, "substantially all" means at least 90 percent of the commodities were planted or produced on the farm premises.
- (f) Community-based residential facilities providing care, treatment and services for 3 to 8 unrelated adults.
- (g) A one- or 2-family dwelling used as a foster home, treatment foster home, or group home, or as a child caring institution having a capacity for 8 or fewer children, all as defined in s. 48.02, Stats.

Note: The definitions in s. 48.02, Stats., limit foster homes to no more than 4 children unless all the children are siblings, limit treatment foster homes to no more than 4 children, and limit group homes to no more than 8 children. Where permitted by the department of health and family services, a group home or a child caring institution having a capacity for 8 or fewer children may be located in a one- and 2-family dwelling as a community living arrangement, as defined in s. 46.03 (22), Stats.

- (h) A one- or 2-family dwelling in which a public or private day care center for 8 or fewer children is located.
- (i) That portion of or space within a one- or 2-family dwelling in which a home occupation is located.
- (4) In this section, "home occupation" means any business, profession, trade or employment conducted in a person's dwelling unit, that may involve the person's immediate family or household and a maximum of one other unrelated person, but does not involve any of the following:
 - (a) Explosives, fireworks or repair of motor vehicles.
 - (b) More than 25% of the habitable floor area of the dwelling unit.

Comm 14.003 Application. (1) GENERAL. (a) This chapter applies to all of the following unless specifically stated otherwise in a rule:

- 1. The use and operation of all public buildings and places of employment that exist on or after the effective dates of the rules.
- 2. The inspection, testing and maintenance of all fire safety features as specified in this chapter, for all public buildings and places of employment, that exist on or after the effective dates of the rules.
- (b) The design and construction requirements in NFPA 1 that apply to public buildings or places of employment are not included as part of this chapter.

Note: See chs. Comm 61 to 65 for design and construction requirements for public buildings and places of employment.

- (2) CONFLICTS. (a) Where rules of the department specify conflicting requirements, types of materials, methods, processes or procedures, the most restrictive rule shall govern, except as provided in pars. (b) to (d).
- (b) Where there is a conflict between a rule that prescribes a general requirement and a rule that prescribes a specific or more detailed requirement, the specific or more detailed requirement shall govern, except as provided in par. (c).
- (c) Where differences occur between the requirements of this chapter and referenced codes or standards, the requirements of this chapter shall govern.
- (d) Where differences occur between the requirements of this chapter and chs. Comm 61 to 65, the requirements of chs. Comm 61 to 65 shall govern.
- (3) DEPARTMENT AUTHORITY. Pursuant to s. 101.02 (1), Stats., the department reserves the right to interpret the requirements in this chapter and in all adopted codes and standards.

Note: Section 101.02 (1), Stats., reads as follows: "The department shall adopt reasonable and proper rules and regulations relative to the exercise of its powers and authorities and proper rules to govern its proceedings and to regulate the mode and manner of all investigations and hearings."

- (4) LOCAL ORDINANCES. (a) Except as provided in par. (c), pursuant to s. 101.02 (7), Stats., a city, village, town or local board of health may enact and enforce additional or more restrictive requirements for public buildings and places of employment, provided the requirements do not conflict with this chapter.
- (b) Nothing in this chapter affects the authority of a municipality or county to enact and enforce requirements for fire districts, land use, or zoning under ss. 59.69, 60.61, 60.62, 61.35, and 62.23 (7), Stats.

(c) An ordinance for multifamily buildings shall be limited as specified in ch. Comm 61 and s. 101.02 (7m), Stats.

Note: Section 101.02 (7m), Stats., reads as follows: "Notwithstanding sub. (7) (a), no city, village or town may make or enforce any ordinance that is applied to any multifamily dwelling, as defined in s. 101.971 (2), and that does not conform to subch. VI and this section or is contrary to an order of the department under this subchapter, except that if a city, village or town has a preexisting stricter sprinkler ordinance, as defined in s. 101.975 (3) (a), that ordinance remains in effect, except that the city, village or town may take any action with regard to that ordinance that a political subdivision may take under s. 101.975 (3) (b)."

- (5) ALTERNATIVES. Nothing in this chapter is intended to prohibit or discourage the design and use of new materials or components, or new processes, elements or systems, provided written approval from the department is obtained first.
- (6) TEMPORARY USE. A municipal fire or building code official may allow a building or a portion of a building to be used temporarily in a manner that differs from the approved use for the building or space, or may approve a temporary building to be used by the public, subject to all of the following provisions:
- (a) The official shall determine the time frame within which the temporary use is permitted, based on the extent hazards are created by the temporary use. This time frame may not exceed 180 days, except the official may grant extensions for demonstrated cause.
- (b) Except as provided in par. (c), buildings or spaces considered for temporary use shall conform to the requirements of this chapter as necessary to ensure the public safety, health and general welfare.
- (c) The official may require additional safety requirements for a temporary use as a tradeoff for any safety provisions that may be lacking.
- (d) The official may terminate the approval for a temporary use at any time and order immediate discontinuance of the use or complete evacuation of the building or space.

Note: The department and other state agencies have other rules that may affect the design, construction, maintenance and use of public buildings, places of employment and premises, including chs. Comm 5, Licenses, Certifications, and Registrations; Comm 7, Explosive Materials; Comm 9, Manufacture of Fireworks; Comm 10, Flammable and Combustible Liquids; Comm 16, Electrical; Comm 18, Elevators; Comm 40, Gas Systems; Comm 41, Boilers and Pressure Vessels; Comm 43, Anhydrous Ammonia; Comm 45, Mechanical Refrigeration; Comm 61 to 65, Commercial Building Code; Comm 70, Historic Buildings; and Comm 75 to 79, Existing Buildings.

Comm 14.004 Adoption of Model Fire Code. (1) ADOPTION. (a) General. NFPA 1, Fire Prevention Code – 2000, subject to the modifications specified in this chapter is hereby incorporated by reference into this chapter.

Note: A copy of the NFPA 1 Fire Prevention Code is on file in the offices of the department, the secretary of state, and the revisor of statutes. Copies of the NFPA Fire Prevention Code may be purchased from the National Fire Protection Association, 1 Batterymarch Park, Box 9101, Quincy, MA, 02269-9101.

- (b) Alternate Model Fire Code. Upon written request from a municipality, the department may grant by a written special order the use of the International Fire Code® 2000 in lieu of NFPA 1 and subch. III of this chapter, provided that IFC chapters 3 to 10, 12 to 21, 23 to 29, 36 and 39 to 42 have been adopted by ordinance.
- (2) EXCLUSIONS. (a) Except as provided in par. (b), the requirements in NFPA 1 chapter 1 are not included as part of this chapter.
 - (b) 1. NFPA 1 sections 1-4.14, 1-5.2, and 1-13.3 are included as part of this chapter.
- 2. Any permit required in NFPA 1 section 1-16 and subsequently referred to elsewhere under this chapter is not required by this chapter but may be required by local ordinance.
- 3. Any certificate of fitness required in NFPA 1 section 1-17 and subsequently referred to elsewhere under this chapter is not required by this chapter but may be required by local ordinance.
- (c) Any requirement in NFPA 1 chapter 1 which is not specified in par. (b) and which is subsequently referred to elsewhere under this chapter is not included as part of this chapter.

Comm 14.005 Fees. Fees for petitions for variance and for inspection of buildings, structures, and premises shall be submitted as specified in ch. Comm 2.

SUBCHAPTER II, RESPONSIBILITIES, APPEALS, PETITIONS AND PENALTIES

Comm 14.006 Owner's responsibility. The owner of each building, structure and premises shall be responsible for maintaining the property in compliance with this chapter. Compliance with this chapter does not relieve the owner of a public building or place of employment from compliance with the other administrative rules established by the department or other state agencies.

Note: Pursuant to s. 101.11 (2) (a), Stats., no employer or owner, or other person shall hereafter construct or occupy or maintain any place of employment, or public building, that is not safe, nor prepare plans which shall fail to provide for making the same safe.

Comm 14.007 Appeals. (1) APPEAL OF DEPARTMENT ORDER. Pursuant to s. 101.02 (6) (e), Stats., any person who owns or occupies a property that is affected by an order of the department may petition the department on the reasonableness of the order.

(2) APPEAL OF LOCAL ORDER. Pursuant to s. 101.02 (7) (b), Stats., any person affected by a local order that is in conflict with an order of the department may petition the department for a hearing.

Note: Section 101.01 (8), Stats., defines "local order" as any ordinance, order, rule or determination of any common council, board of alders, board of trustees or the village board, of any village or city, or the board of health of any municipality, or an order or direction of any official of such municipality, upon any matter over which the department has jurisdiction.

Section 101.02 (7) (c) reads: "Upon receipt of such petition the department shall order a hearing thereon, to consider and determine the issues raised by such appeal, such hearing to be held in the village, city or municipality where the local order appealed from was made. Notice of the time and place of such hearing shall be given to the petitioner and such other persons as the department may find directly interested in such decision, including the clerk of the municipality or town from which such appeal comes. If upon such investigation it shall be found that the local order appealed from is unreasonable and in conflict with the order of the department, the department may modify its order and shall substitute for the local order appealed from such order as shall be reasonable and legal in the premises, and thereafter the said local order shall, in such particulars, be void and of no effect."

Comm 14.008 Petition for variance. The department shall consider and may grant a variance to a provision of this chapter in accordance with ch. Comm 3. The petition for variance shall include, where applicable, a position statement from the fire department having jurisdiction.

Note: Chapter Comm 3 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 which 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.

Note: The department forms required in this chapter are available from the Safety and Buildings Division at P.O. Box 7162, Madison, WI 53707, or at telephone 608/266-1818. Some of the department forms are also available from the Division's web site at www.commerce.state.wi.us.

Comm 14.009 Revocation of Approval. (1) DEPARTMENT REVOCATION. The department may revoke any approval, issued under the provisions of this chapter, for any false statements or misrepresentation of facts on which the approval was based.

(2) LOCAL REVOCATION. The fire chief, or in first class cities the commissioner of building inspection, may revoke any local approval issued by them under the provisions of this chapter, for any false statements or misrepresentation of facts on which the approval was based. The fire chief, and in first class cities the commissioner of building inspection, may not revoke an approval issued by the department.

Comm 14.010 Penalties. Penalties for violations of this chapter shall be assessed in accordance with s. 101.02 (12) and (13) (a), Stats.

Note: Section 101.02 (12), Stats., indicates that each day during which any person, persons, corporation or any officer, agent or employee thereof, fails to observe and comply with an order of the department will constitute a separate and distinct violation of such order.

Section 101.02 (13) (a), Stats., indicates penalties will be assessed against any employer, employee, owner or other person who fails or refuses to perform any duty lawfully enjoined, within the time prescribed by the department, for which no penalty has been specifically provided, or who fails, neglects or refuses to comply with any lawful order made by the department, or any judgment or decree made by any court in connection with ss. 101.01 to 101.25. For each such violation, failure or refusal, such employee, owner or other person must forfeit and pay into the state treasury a sum not less than \$10 nor more than \$100 for each violation.

SUBCHAPTER III, CHANGES, ADDITIONS OR OMISSIONS TO NFPA 1 - FIRE PREVENTION CODE

Note: The sections in this subchapter are generally numbered to correspond to the section numbering of NFPA 1; e.g. Comm 14.03 corresponds to NFPA 1, chapter 3 and Comm 14.31 corresponds to NFPA 1, chapter 31.

Comm 14.02 Definitions. ADDITIONS. These are department definitions in addition to the definitions in NFPA 1 chapter 2:

- (1) "Department" means the department of commerce.
- (2) "Fire chief" means the chief or authorized representative of the fire department serving the unit of government having authority over the public building or place of employment. Fire chief also means the representative designated by the local unit of government to carry out the duties of this chapter.
- (3) "Fire department" means a municipal fire department, public safety department, or public or private organization, such as a fire association, fire district, fire company or fire corporation, organized or created for the purpose of extinguishing fires and preventing fire hazards.
 - (4) "Multifamily dwelling" has the meaning as defined in s. 101.971 (2), Stats.

Note: Section 101.971 (2), Stats., reads as follows: "Multifamily dwelling" means an apartment building, rowhouse, town house, condominium or manufactured building, as defined in s. 101.71 (6), that does not exceed 60 feet in height or 6 stories and that consists of 3 or more attached dwelling units the initial construction of which is begun on or after January 1, 1993. "Multifamily dwelling" does not include a facility licensed under ch. 50, (Stats.).

- (5) "Municipality" means a city, village or town.
- (6) "NFPA 1" means the 2000 edition of NFPA 1, Fire Prevention Code, as adopted and modified in this chapter.
- (7) "One- and 2-family dwelling" has the meaning as defined for dwelling in s. 101.61 (1), Stats.

Note: Section 101.61 (1), Stats., reads as follows: "Dwelling" means any building that contains one or 2 dwelling units. "Dwelling unit" means a structure or that part of a structure which is used or intended to be used as a home, residence or sleeping place by one person or by 2 or more persons maintaining a common household, to the exclusion of all others.

(8) "Place of employment" has the meaning as defined in s. 101.01(11), Stats.

Note: See s. Comm 14.002 (1) for a reprint of s. 101.01 (11), Stats.

(9) "Public building" has the meaning as defined in s. 101.01 (12), Stats.

Note: See s. Comm 14.002 (1) for a reprint of s. 101.01 (12), Stats.

Comm 14.03 General provisions. (1) PROHIBITIONS. This is a department rule in addition to the requirements in NFPA 1 section 3-1.1: The following activities are prohibited:

- (a) Interfering with the proper functioning of a fire alarm system.
- (b) Interfering with the lawful efforts of a firefighter to extinguish a fire.
- (c) Interfering with, tampering with or removing a fire extinguisher, hose or other fire fighting equipment without proper authorization.
 - (d) Interfering with the accessibility of a fire hydrant.
 - (e) Intentionally giving a false alarm to any public officer or employee.

Note: Section 941.12, Stats., reads as follows: "Interfering with fire fighting. (1) Whoever intentionally interferes with the proper functioning of a fire alarm system or the lawful efforts of fire fighters to extinguish a fire is guilty of a Class E felony.

(2) Whoever interferes with, tampers with or removes, without authorization, any fire extinguisher, fire hose

or any other fire fighting equipment, is guilty of a Class A misdemeanor.

(3) Whoever interferes with accessibility to a fire hydrant by piling or dumping material near it without first obtaining permission from the appropriate municipal authority is guilty of a Class C misdemeanor. Every day during which the interference continues constitutes a separate offense."

Section 941.13, Stats., reads as follows: "False alarms. Whoever intentionally gives a false alarm to any public officer or employee, whether by means of a fire alarm system or otherwise, is guilty of a Class A misdemeanor."

(2) MATCHES. This is a department rule in addition to the requirements in NFPA 1 section 3-1.1: The manufacture, storage and distribution of matches shall comply with s. 167.07, Stats.

Note: Section 167.07, Stats., reads as follows: Manufacture, storage and distribution of matches. (1) No person may manufacture, store, offer for sale, sell, or otherwise dispose of or distribute, any of the following:

(a) White phosphorus, single-dipped, strike-anywhere matches of the type popularly known as "parlor

matches".

- (b) White phosphorus, double-dipped, strike-anywhere matches, or other type of double-dipped matches, unless the bulb or first dip of such match is composed of a so-called safety or inert composition, nonignitible on an abrasive surface.
- (c) Matches which, when packed in a carton of 500 approximate capacity and placed in an oven maintained at a constant temperature of 200 degrees Fahrenheit, will ignite in 8 hours.
 - (d) Blazer, or so-called wind matches, whether of the so-called safety or strike-anywhere type.

(2) (a) No person may do any of the following:

1. Offer for sale, sell or otherwise dispose of or distribute any matches, unless the package or container in which such matches are packed bears plainly marked on the outside thereof the name of the manufacturer and the brand or trademark under which such matches are sold, disposed of or distributed.

- 2. Open more than one case of each brand of matches of any type or manufacture at any one time in a retail store where matches are sold or otherwise disposed of.
- 3. Keep loose boxes or paper-wrapped packages of matches on shelves or stored in a retail store at a height exceeding 5 feet from the floor.
- (b) All matches stored in warehouses, except manufacturers' warehouses at the place of manufacture, that contain automatic sprinkler equipment shall be subject to each of the following conditions:
 - 1. The matches shall be kept only in properly secured cases.
 - 2. The matches shall not be piled to a height exceeding 10 feet from the floor.
 - 3. The matches shall not be stored within a horizontal distance of 10 feet from any boiler, furnace, stove or other similar heating apparatus.
 - 4. The matches shall not be within a horizontal distance of 25 feet from any explosive material kept or stored on the same floor.
- (c) All matches shall be packed in boxes or suitable packages, containing not more than 700 matches in any one box or package. If more than 300 matches are packed in any one box or package, the matches shall be arranged in 2 nearly equal portions, with the heads of the matches in the 2 portions placed in opposite directions. All boxes containing 350 or more matches shall have placed over the matches a center holding or protecting strip, made of chipboard, not less than 1.25 inches wide and the strip shall be flanged down to hold the matches in position when the box is nested into the shuck or withdrawn from it.
- (3) All match boxes or packages shall be packed in strong shipping containers or cases; maximum number of match boxes or packages contained in any one shipping container or case, shall not exceed the following number:

NUMBER OF BOXES	NOMINAL NUMBER OF MATCHES PER BOX	
One-half gross	700	
One gross	500	
Two gross	400	
Three gross	300	
Five gross	200	
Twelve gross		
Twenty gross	over fifty and under 100	
Twenty-five gross	under 50	

- (4) No shipping container or case constructed of fiber board, corrugated fiber board, or wood, nailed or wirebound, shall exceed a weight, including its contents, of 75 pounds; and no lock-cornered wooden case containing matches shall have a weight, including its contents, exceeding 85 pounds; nor shall any other article or commodity be packed with matches in any such container or case; and all such containers and cases in which matches are packed shall have plainly marked on the outside of the container or case the words "Strike-Anywhere Matches" or "Strike-on-the-Box Matches".
- (5) Any person, association or corporation violating this section shall be fined for the first offense not less than \$5 nor more than \$25, and for each subsequent violation not less than \$25.
- (3) OPEN FLAME OR LIGHT. This is a department rule in addition to the requirements in NFPA 1 section 3-1.1: (a) *General*. No person may take an open flame or non-approved light into any room or area, or other place where flammable, highly combustible or explosive material is kept.
- (b) Open flame candles and fixtures. 1. Except as provided in subds. 2. to 7., the use of open flame candles or open flame fixtures in public buildings and places of employment is prohibited.
- 2. Open flame candles or open flame fixtures may be used in churches, fraternal lodges and other buildings as part of a religious, fraternal, or ceremonial ritual.

- 3. Candles may be used in restaurants, supper clubs and similar occupancies provided the candle is enclosed on all sides with glass or similar noncombustible material and the enclosure extends at least one inch above the tip of the flame.
- 4. Open flame candles and open flame fixtures may be used in the seating areas of public assembly buildings provided the following conditions are satisfied:
- a. The stand upon which the candle is placed is a nontipping weighted stand or is securely attached to the end of fixed seating in at least 2 places.
 - b. The base of the candle is at least 78 inches from the floor.
 - c. The candle is guarded on top and sides at all times.

Note: Compliance with this subparagraph may be attained by the use of a glass chimney and a perforated metal cap.

- d. The aisle where the candles are placed is at least 5 feet wide.
- 5. Open flame food warming candles may be used in restaurants, supper clubs and similar occupancies.
- 6. The use of decorative or other lights, which are fueled by flammable or combustible liquids, may be used provided they are self-extinguishing.
- 7. The use of open flames other than those uses specified in subds. 2. to 6. shall be subject to the approval of the fire chief.
- (4) RESURFACING OF BOWLING LANES. This is a department rule in addition to the requirements in NFPA 1 section 3-1.1:
- (a) Fire department notification. The fire chief shall be notified when bowling lanes are to be resurfaced.
- (b) Business hours. Resurfacing of bowling lanes may not be carried on while the establishment is open for business.
- (c) Recirculation of air. Heating, ventilating or cooling systems employing recirculation of air may not be operated during resurfacing of bowling lanes or within one hour following the application of flammable finishes to the lanes.
- (d) Sources of ignition. All electric motors or other equipment in the area of the bowling lanes which might be a source of ignition shall be shut down, and all smoking and use of open flames shall be prohibited during the application of flammable finishes to the lanes and for one hour thereafter.

- (5) LUMBER YARDS. This is a department rule in addition to the requirements in NFPA 1 section 3-1.1: (a) *Scope*. This subsection applies to all lumberyards.
- (b) Burning of waste or refuse materials. 1. Where approved by the department of natural resources and the fire chief, the burning of shavings, sawdust and refuse materials shall be only in boilers, furnaces, incinerators or refuse burners, safely constructed and located.
- 2. At the boiler or other points where sawdust or shavings are used as fuel, a storage bin of noncombustible construction with raised sill shall be provided.
- 3. Stacks shall be provided with approved spark arresters having openings not greater than ³/₄-inch, or other effective means provided, such as an expansion chamber, baffle walls or other effective arrangement, which will eliminate the danger from sparks.
- (c) *Smoking prohibited*. Smoking shall be prohibited except in specified safe locations in buildings. "No Smoking" signs shall be posted on exterior building walls and at the edges of driveways. "No Smoking" signs shall be posted throughout all buildings except in specific locations designated as safe for smoking purposes.
- (d) Combustible vegetation. Weeds shall be kept down throughout the entire yard and shall be sprayed, cut or dug out. Dead weeds shall be removed.
- (e) Combustible debris. Debris, such as sawdust, chips and scrap pieces shall be removed regularly from piling areas and not less frequently than quarterly. Proper housekeeping shall be maintained at all times.
- (f) *Fire extinguishing equipment*. All fork lifts and industrial trucks operating in lumberyards shall be equipped with a minimum 4-A:40-B:C type fire extinguisher. All other trucks operating in the yard shall be equipped with a minimum 2-A:20-B:C type fire extinguisher.
- (6) WOODWORKING PLANTS. This is a department rule in addition to the requirements in NFPA 1 section 3-1.1: (a) *Scope*. This subsection applies to woodworking plants or machines that are directly related to the main operation or product of the building or company.
- (b) Removal system or bins. Sawmills, planing mills and other woodworking plants shall comply with one of the following:
- 1. Be equipped with refuse removal systems which will collect and remove sawdust and shavings as produced.

- 2. Have suitable metal or metal-lined bins, provided with normally closed covers or automatically closing covers, installed at or near such machines. Shavings and sawdust shall be swept up and deposited in the bins at sufficiently frequent intervals as to keep the premises clean.
- (c) Fire protection. Fire fighting equipment, either portable fire extinguishers or minimum ¹/₂-inch diameter hose supplied from a water system, shall be provided near any machine producing shavings or sawdust.
- (7) NEGLIGENT HANDLING OF BURNING MATERIAL. This is a department rule in addition to the requirements in NFPA 1 section 3-1.3: The negligent handling of burning material is prohibited. The consequences for violations shall be as specified in ss. 941.10 and 943.05, Stats.

Note: Section 941.10, Stats., reads as follows: Negligent handling of burning material. (1) Whoever handles burning material in a highly negligent manner is guilty of a Class A misdemeanor.

(2) Burning material is handled in a highly negligent manner if handled with criminal negligence under s. 939.25 or under circumstances in which the person should realize that a substantial and unreasonable risk of serious damage to another's property is created.

Section 943.05, Stats., reads as follows: Placing of combustible materials an attempt. Whoever places any combustible or explosive material or device in or near any property with intent to set fire to or blow up such property is guilty of an attempt to violate either s. 943.01, 943.012, 943.013, 943.02, 943.03 or 943.04, depending on the facts of the particular case.

(8) BURNING OF BUILDINGS OR PROPERTY. This is a department rule in addition to the requirements in NFPA 1 section 3-1.3: The unsafe burning of buildings or property is prohibited. The consequences for violations shall be as specified in ss. 941.11, 943.02 and 943.03, Stats.

Note: Section 941.11, Stats., reads as follows: Unsafe burning of buildings. Whoever does either of the following is guilty of a Class D felony:

(1) Intentionally burns his or her own building under circumstances in which he or she should realize he or she is creating an unreasonable risk of death or great bodily harm to another or serious damage to another's property; or

(2) Intentionally burns a building of one who has consented to the destruction thereof but does so under circumstances in which he or she should realize he or she is creating an unreasonable risk of death or great bodily harm to another or serious damage to a 3rd person's property.

Section 943.02, Stats., reads as follows: Arson of buildings; damage of property by explosives. (1) Whoever does any of the following is guilty of a Class B felony:

(a) By means of fire, intentionally damages any building of another without the other's consent; or

(b) By means of fire, intentionally damages any building with intent to defraud an insurer of that building; or

(c) By means of explosives, intentionally damages any property of another without the other's consent.

(2) In this section "building of another" means a building in which a person other than the actor has a legal or equitable interest which the actor has no right to defeat or impair, even though the actor may also have a legal or equitable interest in the building. Proof that the actor recovered or attempted to recover on a policy of insurance by reason of the fire is relevant but not essential to establish the actor's intent to defraud the insurer.