



**WISCONSIN DEPARTMENT OF  
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Attn: Buildings Technologies Program-Building Energy Codes Program Manager  
Office of Energy Efficiency and Renewable Energy, EE-2J  
U.S. Department of Energy  
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Washington, D.C. 20585-0121

By mail and email to [kym.carey@ee.doe.gov](mailto:kym.carey@ee.doe.gov)

RE: State Certification of Residential and Commercial Building Codes Regarding Energy  
Efficiency

To Whom It May Concern:

This letter is in response to the letter from the U.S. Department of Energy to Governor Walker dated May 31, 2013. Your letter regards certification of residential and commercial building energy codes pursuant to 42 U.S.C. 6833(c). The Wisconsin Department of Safety and Professional Services (DSPS) reviews building codes every three to five years for possible updates. Any suggested modification of the code is developed in accordance with Chapter 227 of the Wisconsin State Statutes and is subject to public comment.

In 2010, Wisconsin was chosen to participate in the DOE Building Energy Code Program's (BECP's) Compliance Evaluation Pilot Study. The State of WI, Dept. of Commerce completed committee meetings on the proposed 2009 IECC codes with WI amendments. Draft of the code for reference for future public hearings was issued. Public hearings were held. The Dept. addressed comments taken at the public hearings. The Dept. completed committee meetings on the proposed 2009 IECC codes with WI amendments.

This letter will serve as certification that 2009 IECC code with Wisconsin amendments as contained in SPS chapters 360-366 were implemented on Sept. 1, 2011. Attached to this letter is an analysis of current Wisconsin UDC versus the 2012 IECC (prepared by the Midwest Energy Efficiency Alliance), which Wisconsin is in the process of evaluating.

Changes to the Wisconsin Commercial Building Code were also implemented on September 1, 2011. This letter certifies that Wisconsin Commercial Building Code adopted the 2009 editions of the International Building Code and the International Energy Conservation Code, with amendments as addressed in SPS Chapters 360-366.

Please note that under the Wisconsin Commercial Building Code residential buildings such as apartments, condominiums, hotels and motels, containing three or more dwelling units are considered commercial buildings. All these structures, including those three stories or less in height are also required to conform to the 2009 IECC.

Please do not hesitate to contact me if you have questions or concerns.

Christopher P. Schoenherr  
Deputy Secretary



# Residential Energy Code Comparison Between 2012 IECC and Wisconsin Energy Code

Note: This document does not contain all provisions of each code; Only the major portions of the prescriptive code are listed below:

Requirements by Component	2012 IECC	Wisconsin Code	
		80% Furnace	90% Furnace
Fenestration U-factor	0.32	0.30	0.35
Skylight U-factor	0.55	0.60	0.60
Glazed fenestration SHGC	NR	NR	NR
Ceiling R-value	R-49	R-49	R-49
Wood frame wall R-value	20 + 5 or 13+10	21 or 19+5	19 or 13 + 5
Floor R-value	R-30	R-30	R-30
Basement wall and Crawl Space R-value	15/19: Insulation down 10 ft or full depth	15/19	10/13
Thermal Envelope Testing	Requires blower door test to confirm air leakage of less than 3 ACH50 (R402.4.1.2)	No blower door requirement; minimum 0.2 natural air changes (around 4 ACH50) in heated space without mechanical ventilation;  Air Sealing requirements: SPS 322.37	



Requirements by Component	2012 IECC	Wisconsin Code
Eave Baffle	Requirement at (R402.2.3)	No Requirement
Wood- Burning Fireplaces	Requires tight fitting flue dampers and outdoor combustion air. (402.4.2)	No Requirement
Duct Insulation	Ducts :R-6 Supply ducts in attics: R-8 (R403.2.1); Exception: Ducts completely inside thermal envelope	Supply and Return Ducts, or portions thereof, not within thermal envelope: R-8 SPS 322.42 (1)
Duct Leakage Requirements (if ducts are not in conditioned space)	Post Construction Test: Total: 4 CFM25/100 sq. ft  Rough In Test: Total: 4 CFM25/100 sq. ft	Ducts must be sealed, according to SPS 322.43  No Testing Requirement
Building Cavities	Building framing cavities shall not be used as ducts or plenums. (R403.2.3)	Building framing cavities shall not be used as Supply ducts. SPS 322.42 (2)
Mechanical system piping insulation	R-3 (R403.3)	R-4 in unheated space (SPS 322.44)
Hot water pipe insulation	R-3, with exceptions (R403.4.2)	No Requirement
Mechanical Ventilation	Requirement for ventilation that meets the IRC or IMC – equivalent to ASHRAE 62.2. (R403.5)	Required if less than 0.2 (around 4 ACH50) natural air changes in heated space
Equipment sizing	In accordance with ACCA Manual S and J (R403.6)	Must follow REScheck or REM/RATE software or ASHRAE Handbook of Fundamentals. SPS 322.40(3)
Lighting Equipment	Minimum 75 percent high-efficacy lamps	No Requirement