



PUBLIC CODE CHANGE PROPOSAL FORM FOR PUBLIC PROPOSALS IN THE INTERNATIONAL CODES

2006/2007 CODE DEVELOPMENT CYCLE

CLOSING DATE: All Proposals Must Be Received by March 24, 2006

**The 2006/2007 Code Development Hearings are scheduled for
September 20 to 30, 2006 in Orlando, FL**

- 1) **Name:** Ronald Majette **Date:** March 24, 2006
Jurisdiction/Company: United States Department of Energy
Submitted on Behalf of: United States Department of Energy
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- 2) ***Signature:** _____
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Signature for electronic submittal: When submitting proposals electronically, to complete the submittal process, print a copy of the ICC Electronic [Copyright Release](http://www.iccsafe.org) form found at www.iccsafe.org, fill in the requested information, send to ICC. One completed form is required. This must be done for each code change cycle and can be used for code changes and public comments.

- 3) Indicate appropriate International Code(s) associated with this Public Proposal – Please use Acronym: IRC
 If you have also submitted a separate coordination change to another I-Code, please indicate the code: _____
 (See section below for list of names and acronyms for the International Codes).

- 4) **Be sure to format your proposal and include all information as indicated on Page 2 of this form.**

- 5) Proposals should be sent to the following offices via regular mail or email. An e-mail submittal is preferred, including an electronic version, in either Wordperfect or Word. The only formatting that is needed is **BOLDING**, ~~STRIKEOUT~~ AND UNDERLINING. Please do not provide additional formatting such as tabs, columns, etc., as this will be done by ICC

Please use a separate form for each proposal submitted. Note: All code changes received will receive an acknowledgment.

Please check here if separate graphic file provided.

Graphic materials (Graphs, maps, drawings, charts, photographs, etc.) must be submitted as separate electronic files in .CDR,.IA,.TIF or .JPG format (300 DPI Minimum resolution; 600 DPI or more preferred) even though they may also be embedded in your Word or Wordperfect submittal.

Code	Send to:	Acronym	ICC Code Name
IBC	International Code Council	IBC	International Building Code
ICC EC	Chicago District Office	ICC EC	ICC Electrical Code–Administrative Provisions
IEBC	Attn: Diane Schoonover	IECC	International Energy Conservation Code
IFC	4051 West Flossmoor Road	IEBC	International Existing Building Code
IFGC	Country Club Hills, IL 60478-5795	IFC	International Fire Code
IPC	Fax: 708/799-0320	IFGC	International Fuel Gas Code
IPSDC	codechanges@iccsafe.org	IMC	International Mechanical Code
IPMC		ICC PC	ICC Performance Code
IWUIC		IPC	International Plumbing Code
IZC		IPSDC	International Private Sewage Disposal Code
		IPMC	International Property Maintenance Code
IECC	International Code Council	IRC	International Residential Code
ICC PC	Birmingham District Office	IWUIC	International Wildland-Urban Interface Code
IMC	Attn: Annette Sundberg	IZC	International Zoning Code
IRC	900 Montclair Road Birmingham, AL 35213-1206 Fax: 205/592-7001 codechangesbhm@iccsafe.org		

CODE CHANGE PROPOSAL

Please provide all of the following items in your code change proposal. Your proposal may be entered on the following form, or you may attach a separate file. However, please read the instructions provided for each part of the code change proposal. The sections identified in parentheses are the applicable sections from CP #28 Code Development. The full procedures can be downloaded from www.iccsafe.org.

Code Sections/Tables/Figures Proposed for Revision (3.3.2): R403.3, R403.3.1.1, R403.3.1.2, Table R403.3 and (new) Table R403.3(2)

Name/Company/Representing (3.3.1): Ronald Majette/United States Department of Energy

Proposal:

- Revise R403.3 as follows:

R403.3 Frost-protected Shallow Foundations. For buildings where the monthly mean temperature of the building is maintained at a minimum of 64°F (18°C), footings are not required to extend below the frost line when protected from frost by insulation in accordance with Figure R403.3(1) and Table R403.3(1). Foundations protected from frost in accordance with Figure R403.3(1) and Table R403.3(1) shall not be used ...

- Revise Table R403.3 title as follows:

TABLE R403.3(1)

- Revise Footnote 'b' of Table R403.3 as follows:

b. See Figure R403.3(2) or Table R403.3(2) for Air Freezing Index values.

- Revise R403.3.1.1 as follows:

R403.3.1.1 Attachment to unheated slab-on-ground structure. Vertical wall insulation and horizontal insulation of frost protected shallow foundations that adjoin a slab-on-ground foundation that does not have a monthly mean temperature maintained at a minimum of 64°F (18°C), shall be in accordance with Figure R403.3(3) and Table R403.3(1). ...

- Revise R403.3.1.2 as follows:

R403.3.1.2 Attachment to heated structure. ... Where the frost protected shallow foundation abuts the heated structure, the horizontal insulation and vertical wall insulation shall extend along the adjoining foundation in accordance with Figure R403.3(4) a distance of not less than Dimension A in Table R403.3(1). ...

- Add new Table R403.3(2) as shown on attached pages.

Note: Show the proposal using ~~strikeout~~, underline format. At the beginning of each section, one of the following instruction lines are also needed:

- Revise as follows
- Add new text as follows
- Delete and substitute as follows
- Delete without substitution

Supporting Information (3.3.4 & 3.4):

Purpose: Simplify the Code. This proposed change adds a county-based table as an alternative source for Air-Freezing Index values.

Reason: The air-freezing index (AFI) contour map in Figure R403.3(2) is difficult to read and use for many locations. This proposal adds an alternative table that lists AFI by county. The proposed code change will help code users determine the air-freezing index range for any given location easily and correctly based on the county.

Substantiation: The National Climatic Data Center makes available the AFI data that underlie Figure R403.3(2) for 3110 distinct locations (cities) in the U.S. The geographical coverage of these "AFI cities" was expanded by mapping each location in the USGS "Populated

Places" (PPL) dataset (about 165,000 locations) to its nearest neighboring AFI city (with ties broken based on elevation).

The proposed table categorizes each county based on the maximum (i.e., worst-case) AFI occurring for any PPL location within its boundaries.

Bibliography: The data underlying the new Table R403.3(2) are available from:

1. <http://www4.ncdc.noaa.gov/ol/9712/AFI-pubreturn.xls>
2. <http://www4.ncdc.noaa.gov/ol/9712/AFI-pubreturn.pdf>
3. <http://geonames.usgs.gov/fips55.html>

Referenced Standards (3.4 & 3.6): N/A

Cost Impact (3.3.4.6): The code change proposal has no impact on the cost of construction.

TABLE 403.3(2) AIR-FREEZING INDEX FOR U.S. LOCATIONS BY COUNTY

ALABAMA

1,500 or less: *All counties*

ALASKA

1,500 or less: Ketchikan
Gateway, Prince of Wales-
Outer Ketchikan (CA), Sitka,
Wrangell-Petersburg (CA)
2,500: Aleutians West (CA),
Haines, Juneau, Skagway-
Hoonah-Angoon (CA),
Yakutat
4,000: *All counties not listed*

ARIZONA

1,500 or less: *All counties*

ARKANSAS

1,500 or less: *All counties*

CALIFORNIA

1,500 or less: *All counties not listed*
2,000: Nevada, Sierra

COLORADO

1,500 or less: *All counties not listed*
2,000: Archuleta, Custer,
Fremont, Huerfano, Las
Animas, Ouray, Pitkin, San
Miguel
2,500: Clear Creek, Conejos,
Costilla, Dolores, Eagle, La
Plata, Park, Routt, San Juan,
Summit
3,000: Alamosa, Grand, Jackson,
Larimer, Moffat, Rio Blanco,
Rio Grande
3,500: Chaffee, Gunnison, Lake,
Saguache
4,000: Hinsdale, Mineral

CONNECTICUT

1,500 or less: *All counties not listed*
2,000: Hartford, Litchfield

DELAWARE

1,500 or less: *All counties*

DISTRICT OF COLUMBIA

1,500 or less: *All counties*

FLORIDA

1,500 or less: *All counties*

GEORGIA

1,500 or less: *All counties*

HAWAII

1,500 or less: *All counties*

IDAHO

1,500 or less: *All counties not listed*
2,000: Adams, Bannock, Blaine,
Clearwater, Idaho, Lincoln,
Oneida, Power, Valley,
Washington
2,500: Bingham, Bonneville,
Camas, Caribou, Elmore,
Franklin, Jefferson, Madison,
Teton
3,000: Bear Lake, Butte, Custer,
Fremont, Lemhi
3,500: Clark

ILLINOIS

1,500 or less: *All counties not listed*
2,000: Boone, Bureau, Cook,
DeKalb, DuPage, Fulton,
Grundy, Henderson, Henry,
Iroquois, Jo Daviess, Kane,
Kankakee, Kendall, Knox, La
Salle, Lake, Lee, Livingston,
Marshall, Mason, McHenry,
McLean, Mercer, Peoria,
Putnam, Rock Island, Stark,
Tazewell, Warren, Whiteside,
Will, Woodford
2,500: Carroll, Ogle,
Stephenson, Winnebago

INDIANA

1,500 or less: *All counties not listed*
2,000: Allen, Benton, Cass,
Fountain, Fulton, Howard,
Jasper, Kosciusko, La Porte,
Lake, Marshall, Miami,
Newton, Porter, Pulaski,
Starke, Steuben, Tippecanoe,

Tipton, Wabash, Warren,
White

IOWA

1,500 or less: Appanoose, Davis,
Fremont, Lee, Van Buren
2,000: *All counties not listed*
2,500: Allamakee, Black Hawk,
Boone, Bremer, Buchanan,
Buena Vista, Butler, Calhoun,
Cerro Gordo, Cherokee,
Chickasaw, Clay, Clayton,
Delaware, Dubuque, Fayette,
Floyd, Franklin, Grundy,
Hamilton, Hancock, Hardin,
Humboldt, Ida, Jackson,
Jasper, Jones, Linn, Marshall,
Palo Alto, Plymouth,
Pocahontas, Poweshiek, Sac,
Sioux, Story, Tama, Webster,
Winnebago, Woodbury,
Worth, Wright
3,000: Dickinson, Emmet,
Howard, Kossuth, Lyon,
Mitchell, O'Brien, Osceola,
Winneshiek

KANSAS

1,500 or less: *All counties*

KENTUCKY

1,500 or less: *All counties*

LOUISIANA

1,500 or less: *All counties*

MAINE

1,500 or less: York
2,000: Knox, Lincoln,
Sagadahoc
2,500: Androscoggin,
Cumberland, Hancock,
Kennebec, Waldo,
Washington
3,000: Aroostook, Franklin,
Oxford, Penobscot,
Piscataquis, Somerset

MARYLAND

1,500 or less: *All counties*

MASSACHUSETTS

1,500 or less: *All counties not listed*

2,000: Berkshire, Franklin, Hampden, Worcester

MICHIGAN

1,500 or less: Berrien, Branch, Cass, Kalamazoo, Macomb, Ottawa, St. Clair, St. Joseph

2,000: *All counties not listed*

2,500: Alger, Charlevoix, Cheboygan, Chippewa, Crawford, Delta, Emmet, Iosco, Kalkaska, Lake, Luce, Mackinac, Menominee, Missaukee, Montmorency, Ogemaw, Osceola, Otsego, Roscommon, Schoolcraft, Wexford

3,000: Baraga, Dickinson, Iron, Keweenaw, Marquette

3,500: Gogebic, Houghton, Ontonagon

MINNESOTA

2,500: Houston, Winona

3,000: *All counties not listed*

3,500: Aitkin, Big Stone, Carlton, Crow Wing, Douglas, Itasca, Kanabec, Lake, Morrison, Pine, Pope, Stearns, Stevens, Swift, Todd, Wadena

4,000: Becker, Beltrami, Cass, Clay, Clearwater, Grant, Hubbard, Kittson, Koochiching, Lake of the Woods, Mahnomon, Marshall, Norman, Otter Tail, Pennington, Polk, Red Lake, Roseau, St. Louis, Traverse, Wilkin

MISSISSIPPI

1,500 or less: *All counties*

MISSOURI

1,500 or less: *All counties not listed*

2,000: Atchison, Mercer, Nodaway, Putnam

MONTANA

1,500 or less: Mineral

2,000: Broadwater, Golden Valley, Granite, Lake,

Lincoln, Missoula, Ravalli, Sanders, Sweet Grass

2,500: Big Horn, Carbon, Jefferson, Judith Basin, Lewis and Clark, Meagher, Musselshell, Powder River, Powell, Silver Bow, Stillwater, Wheatland

3,000: Carter, Cascade, Deer Lodge, Fallon, Fergus, Flathead, Gallatin, Glacier, Madison, Park, Petroleum, Pondera, Rosebud, Teton, Treasure, Yellowstone

3,500: Beaverhead, Blaine, Chouteau, Custer, Dawson, Garfield, Liberty, McCone, Prairie, Toole, Wibaux

4,000: Daniels, Hill, Phillips, Richland, Roosevelt, Sheridan, Valley

NEBRASKA

1,500 or less: Adams, Banner, Chase, Cheyenne, Clay, Deuel, Dundy, Fillmore, Franklin, Frontier, Furnas, Gage, Garden, Gosper, Harlan, Hayes, Hitchcock, Jefferson, Kimball, Morrill, Nemaha, Nuckolls, Pawnee, Perkins, Phelps, Red Willow, Richardson, Saline, Scotts Bluff, Seward, Thayer, Webster

2,000: *All counties not listed*

2,500: Boyd, Burt, Cedar, Cuming, Dakota, Dixon, Dodge, Knox, Thurston

NEVADA

1,500 or less: *All counties not listed*

2,000: Elko, Eureka, Nye, Washoe, White Pine

NEW HAMPSHIRE

2,000: *All counties not listed*

4,000: Carroll, Coos, Grafton

NEW JERSEY

1,500 or less: *All counties*

NEW MEXICO

1,500 or less: *All counties not listed*

2,000: Rio Arriba

2,500: Colfax, Mora, Taos

NEW YORK

1,500 or less: Albany, Bronx, Cayuga, Columbia, Cortland, Dutchess, Genesee, Kings, Livingston, Monroe, Nassau, New York, Niagara, Onondaga, Ontario, Orange, Orleans, Putnam, Queens, Richmond, Rockland, Seneca, Suffolk, Wayne, Westchester, Yates

2,000: *All counties not listed*

2,500: Clinton, Essex, Franklin, Hamilton, Herkimer, Jefferson, Lewis, St. Lawrence, Warren

NORTH CAROLINA

1,500 or less: *All counties*

NORTH DAKOTA

3,000: Billings, Bowman

3,500: Adams, Dickey, Golden Valley, Hettinger, LaMoure, McIntosh, Oliver, Ransom, Sargent, Sioux, Slope, Stark

4,000: *All counties not listed*

OHIO

1,500 or less: *All counties not listed*

2,000: Ashland, Crawford, Defiance, Holmes, Huron, Knox, Licking, Morrow, Paulding, Putnam, Richland, Seneca, Williams

OKLAHOMA

1,500 or less: *All counties*

OREGON

1,500 or less: *All counties not listed*

2,000: Baker, Crook, Grant, Harney

PENNSYLVANIA

1,500 or less: *All counties not listed*

2,000: Berks, Blair, Bradford, Cambria, Cameron, Centre, Clarion, Clearfield, Clinton, Crawford, Elk, Forest,

Huntingdon, Indiana,
Jefferson, Lackawanna,
Lycoming, McKean, Pike,
Potter, Susquehanna, Tioga,
Venango, Warren, Wayne,
Wyoming

RHODE ISLAND

1,500 or less: *All counties*

SOUTH CAROLINA

1,500 or less: *All counties*

SOUTH DAKOTA

2,000: Bennett, Custer, Fall
River, Lawrence, Mellette,
Shannon, Todd, Tripp

2,500: Bon Homme, Charles
Mix, Davison, Douglas,
Gregory, Jackson, Jones,
Lyman

3,000: *All counties not listed*

3,500: Beadle, Brookings,
Brown, Campbell, Codington,
Corson, Day, Deuel,
Edmunds, Faulk, Grant,
Hamlin, Kingsbury, Marshall,
McPherson, Perkins, Roberts,
Spink, Walworth

TENNESSEE

1,500 or less: *All counties*

TEXAS

1,500 or less: *All counties*

UTAH

1,500 or less: *All counties not
listed*

2,000: Box Elder, Morgan,
Weber

2,500: Garfield, Salt Lake,
Summit

3,000: Carbon, Daggett,
Duchesne, Rich, Sanpete,
Uintah, Utah, Wasatch

VERMONT

2,000: Bennington, Grand Isle,
Rutland, Windham

2,500: Addison, Chittenden,
Franklin, Orange,
Washington, Windsor

3,000: Caledonia, Essex,
Lamoille, Orleans

VIRGINIA

1,500 or less: *All counties*

WASHINGTON

1,500 or less: *All counties not
listed*

2,000: Chelan, Douglas, Ferry,
Okanogan

WEST VIRGINIA

1,500 or less: *All counties*

WISCONSIN

2,000: Kenosha, Kewaunee,
Racine, Sheboygan,
Walworth

2,500: *All counties not listed*

3,000: Ashland, Barron, Burnett,
Chippewa, Clark, Dunn, Eau
Claire, Florence, Forest, Iron,
Jackson, La Crosse,
Langlade, Marathon, Monroe,
Pepin, Pierce, Polk, Portage,
Price, Rusk, St. Croix,
Taylor, Trempealeau, Vilas,
Wood

3,500: Bayfield, Douglas,
Lincoln, Oneida, Sawyer,
Washburn

WYOMING

1,500 or less: Goshen, Platte

2,000: Converse, Crook,
Laramie, Niobrara

2,500: Campbell, Carbon, Hot
Springs, Johnson, Natrona,
Sheridan, Uinta, Weston

3,000: Albany, Big Horn, Park,
Washakie

3,500: Fremont, Teton

4,000: Lincoln, Sublette,
Sweetwater