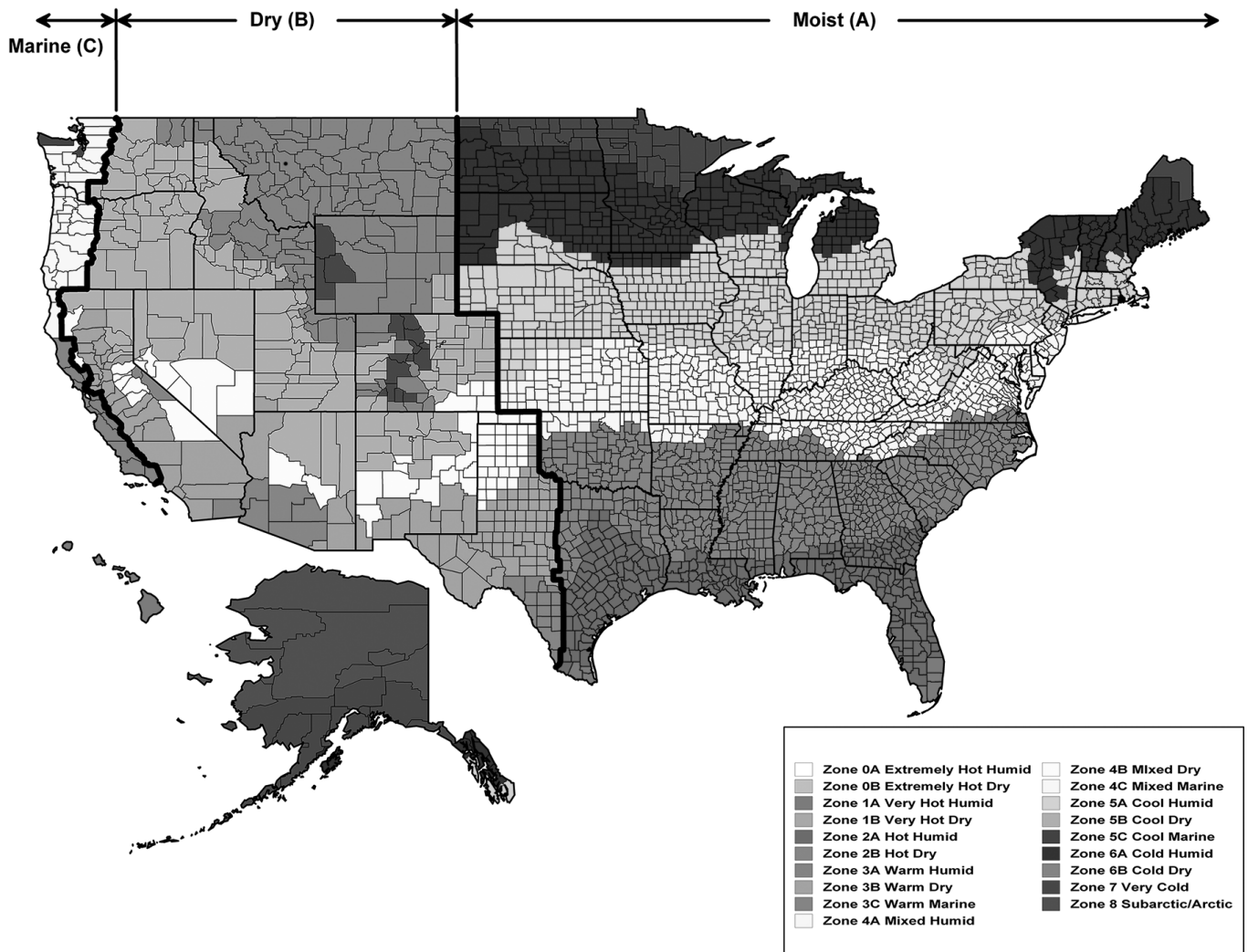


GENERAL REQUIREMENTS

SECTION C301—CLIMATE ZONES

C301.1 General. *Climate zones* from Figure C301.1 or Table C301.1 shall be used for determining the applicable requirements from Chapter 4. Locations not indicated in Table C301.1 shall be assigned a *climate zone* in accordance with Section C301.3.

FIGURE C301.1—CLIMATE ZONES



**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a**

US STATES	
ALABAMA	
3A Autauga*	3A Madison
2A Baldwin*	3A Marengo*
3A Barbour*	3A Marion
3A Bibb	3A Marshall
3A Blount	2A Mobile*
3A Bullock*	3A Monroe*
3A Butler*	3A Montgomery*
3A Calhoun	3A Morgan
3A Chambers	3A Perry*
3A Cherokee	3A Pickens
3A Chilton	3A Pike*
3A Choctaw*	3A Randolph
3A Clarke*	3A Russell*
3A Clay	3A Shelby
3A Cleburne	3A St. Clair
2A Coffee*	3A Sumter
3A Colbert	3A Talladega
3A Conecuh*	3A Tallapoosa
3A Coosa	3A Tuscaloosa
2A Covington*	3A Walker
3A Crenshaw*	3A Washington*
3A Cullman	3A Wilcox*
2A Dale*	3A Winston
3A Dallas*	
3A DeKalb	ALASKA
3A Elmore*	7 Aleutians East
2A Escambia*	7 Aleutians West
3A Etowah	7 Anchorage
3A Fayette	7 Bethel
3A Franklin	7 Bristol Bay
2A Geneva*	8 Denali
3A Greene	7 Dillingham
3A Hale	8 Fairbanks North Star
2A Henry*	6A Haines
2A Houston*	6A Juneau
3A Jackson	7 Kenai Peninsula
3A Jefferson	5C Ketchikan Gateway
3A Lamar	6A Kodiak Island
3A Lauderdale	7 Lake and Peninsula
3A Lawrence	7 Matanuska-Susitna
3A Lee	8 Nome
3A Limestone	8 North Slope
3A Lowndes*	8 Northwest Arctic
3A Macon*	5C Prince of Wales Outer Ketchikan
	5C Sitka
	6A Skagway-Hoonah-Angoon
	8 Southeast Fairbanks

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued		3A Faulkner
ALASKA <i>(continued)</i>		3A Franklin
7 Valdez-Cordova		4A Fulton
8 Wade Hampton		3A Garland
6A Wrangell-Petersburg		3A Grant
7 Yakutat		3A Greene
8 Yukon-Koyukuk		3A Hempstead*
ARIZONA		3A Hot Spring
5B Apache		3A Howard
3B Cochise		3A Independence
5B Coconino		4A Izard
4B Gila		3A Jackson
3B Graham		3A Jefferson
3B Greenlee		3A Johnson
2B La Paz		3A Lafayette*
2B Maricopa		3A Lawrence
3B Mohave		3A Lee
5B Navajo		3A Lincoln
2B Pima		3A Little River*
2B Pinal		3A Logan
3B Santa Cruz		3A Lonoke
4B Yavapai		4A Madison
2B Yuma		4A Marion
ARKANSAS		3A Miller*
3A Arkansas		3A Mississippi
3A Ashley		3A Monroe
4A Baxter		3A Montgomery
4A Benton		3A Nevada
4A Boone		4A Newton
3A Bradley		3A Ouachita
3A Calhoun		3A Perry
4A Carroll		3A Phillips
3A Chicot		3A Pike
3A Clark		3A Poinsett
3A Clay		3A Polk
3A Cleburne		3A Pope
3A Cleveland		3A Prairie
3A Columbia*		3A Pulaski
3A Conway		3A Randolph
3A Craighead		3A Saline
3A Crawford		3A Scott
3A Crittenden		4A Searcy
3A Cross		3A Sebastian
3A Dallas		3A Sevier*
3A Desha		3A Sharp
3A Drew		3A St. Francis

COLORADO MODEL LOW ENERGY AND CARBON CODE

US STATES—continued	3B San Diego
ARKANSAS (continued)	3C San Francisco
4A Stone	3B San Joaquin
3A Union*	3C San Luis Obispo
3A Van Buren	3C San Mateo
4A Washington	3C Santa Barbara
3A White	3C Santa Clara
3A Woodruff	3C Santa Cruz
3A Yell	3B Shasta
CALIFORNIA	5B Sierra
3C Alameda	5B Siskiyou
6B Alpine	3B Solano
4B Amador	3C Sonoma
3B Butte	3B Stanislaus
4B Calaveras	3B Sutter
3B Colusa	3B Tehama
3B Contra Costa	4B Trinity
4C Del Norte	3B Tulare
4B El Dorado	4B Tuolumne
3B Fresno	3C Ventura
3B Glenn	3B Yolo
4C Humboldt	3B Yuba
2B Imperial	COLORADO
4B Inyo	5B Adams
3B Kern	6B Alamosa
3B Kings	5B Arapahoe
4B Lake	6B Archuleta
5B Lassen	4B Baca
3B Los Angeles	4B Bent
3B Madera	5B Boulder
3C Marin	5B Broomfield
4B Mariposa	6B Chaffee
3C Mendocino	5B Cheyenne
3B Merced	7 Clear Creek
5B Modoc	6B Conejos
6B Mono	6B Costilla
3C Monterey	5B Crowley
3C Napa	5B Custer
5B Nevada	5B Delta
3B Orange	5B Denver
3B Placer	6B Dolores
5B Plumas	5B Douglas
3B Riverside	6B Eagle
3B Sacramento	5B Elbert
3C San Benito	5B El Paso
3B San Bernardino	5B Fremont

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued		DELAWARE	
COLORADO <i>(continued)</i>		4A (all)	
5B Garfield		DISTRICT OF COLUMBIA	
5B Gilpin		4A (all)	
7 Grand		FLORIDA	
7 Gunnison		2A Alachua*	
7 Hinsdale		2A Baker*	
5B Huerfano		2A Bay*	
7 Jackson		2A Bradford*	
5B Jefferson		2A Brevard*	
5B Kiowa		1A Broward*	
5B Kit Carson		2A Calhoun*	
7 Lake		2A Charlotte*	
5B La Plata		2A Citrus*	
5B Larimer		2A Clay*	
4B Las Animas		2A Collier*	
5B Lincoln		2A Columbia*	
5B Logan		2A DeSoto*	
5B Mesa		2A Dixie*	
7 Mineral		2A Duval*	
6B Moffat		2A Escambia*	
5B Montezuma		2A Flagler*	
5B Montrose		2A Franklin*	
5B Morgan		2A Gadsden*	
4B Otero		2A Gilchrist*	
6B Ouray		2A Glades*	
7 Park		2A Gulf*	
5B Phillips		2A Hamilton*	
7 Pitkin		2A Hardee*	
4B Prowers		2A Hendry*	
5B Pueblo		2A Hernando*	
6B Rio Blanco		2A Highlands*	
7 Rio Grande		2A Hillsborough*	
7 Routt		2A Holmes*	
6B Saguache		2A Indian River*	
7 San Juan		2A Jackson*	
6B San Miguel		2A Jefferson*	
5B Sedgwick		2A Lafayette*	
7 Summit		2A Lake*	
5B Teller		2A Lee*	
5B Washington		2A Leon*	
5B Weld		2A Levy*	
5B Yuma		2A Liberty*	
CONNECTICUT		2A Madison*	
5A (all)		2A Manatee*	

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
FLORIDA (continued)	
2A Marion*	3A Burke
2A Martin*	3A Butts
1A Miami-Dade*	2A Calhoun*
1A Monroe*	2A Camden*
2A Nassau*	3A Candler*
2A Okaloosa*	3A Carroll
2A Okeechobee*	3A Catoosa
2A Orange*	2A Charlton*
2A Osceola*	2A Chatham*
1A Palm Beach*	3A Chattahoochee*
2A Pasco*	3A Chattooga
2A Pinellas*	3A Cherokee
2A Polk*	3A Clarke
2A Putnam*	3A Clay*
2A Santa Rosa*	3A Clayton
2A Sarasota*	2A Clinch*
2A Seminole*	3A Cobb
2A St. Johns*	2A Coffee*
2A St. Lucie*	2A Colquitt*
2A Sumter*	3A Columbia
2A Suwannee*	2A Cook*
2A Taylor*	3A Coweta
2A Union*	3A Crawford
2A Volusia*	3A Crisp*
2A Wakulla*	3A Dade
2A Walton*	3A Dawson
2A Washington*	2A Decatur*
	3A DeKalb
	3A Dodge*
	3A Dooly*
	2A Dougherty*
	3A Douglas
	2A Early*
	2A Echols*
	2A Effingham*
	3A Elbert
	3A Emanuel*
	2A Evans*
	3A Fannin
	3A Fayette
	3A Floyd
	3A Forsyth
	3A Franklin
	3A Fulton
	3A Gilmer
	3A Glascock
GEORGIA	
2A Appling*	
2A Atkinson*	
2A Bacon*	
2A Baker*	
3A Baldwin	
3A Banks	
3A Barrow	
3A Bartow	
3A Ben Hill*	
2A Berrien*	
3A Bibb	
3A Bleckley*	
2A Brantley*	
2A Brooks*	
2A Bryan*	
3A Bulloch*	

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
GEORGIA (continued)	
2A Glynn*	3A Newton
3A Gordon	3A Oconee
2A Grady*	3A Oglethorpe
3A Greene	3A Paulding
3A Gwinnett	3A Peach*
3A Habersham	3A Pickens
3A Hall	2A Pierce*
3A Hancock	3A Pike
3A Haralson	3A Polk
3A Harris	3A Pulaski*
3A Hart	3A Putnam
3A Heard	3A Quitman*
3A Henry	3A Rabun
3A Houston*	3A Randolph*
3A Irwin*	3A Richmond
3A Jackson	3A Rockdale
3A Jasper	3A Schley*
2A Jeff Davis*	3A Screven*
3A Jefferson	2A Seminole*
3A Jenkins*	3A Spalding
3A Johnson*	3A Stephens
3A Jones	3A Stewart*
3A Lamar	3A Sumter*
2A Lanier*	3A Talbot
3A Laurens*	3A Taliaferro
3A Lee*	2A Tattnall*
2A Liberty*	3A Taylor*
3A Lincoln	3A Telfair*
2A Long*	3A Terrell*
2A Lowndes*	2A Thomas*
3A Lumpkin	2A Tift*
3A Macon*	2A Toombs*
3A Madison	3A Towns
3A Marion*	3A Treutlen*
3A McDuffie	3A Troup
2A McIntosh*	3A Turner*
3A Meriwether	3A Twiggs*
2A Miller*	3A Union
2A Mitchell*	3A Upson
3A Monroe	3A Walker
3A Montgomery*	3A Walton
3A Morgan	2A Ware*
3A Murray	3A Warren
3A Muscogee	3A Washington
	2A Wayne*
	3A Webster*

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
GEORGIA (continued)	
3A Wheeler*	
3A White	
3A Whitfield	
3A Wilcox*	
3A Wilkes	
3A Wilkinson	
2A Worth*	
HAWAII	
1A (all)*	
IDAHO	
5B Ada	
6B Adams	
6B Bannock	
6B Bear Lake	
5B Benewah	
6B Bingham	
6B Blaine	
6B Boise	
6B Bonner	
6B Bonneville	
6B Boundary	
6B Butte	
6B Camas	
5B Canyon	
6B Caribou	
5B Cassia	
6B Clark	
5B Clearwater	
6B Custer	
5B Elmore	
6B Franklin	
6B Fremont	
5B Gem	
5B Gooding	
5B Idaho	
6B Jefferson	
5B Jerome	
5B Kootenai	
5B Latah	
6B Lemhi	
5B Lewis	
5B Lincoln	
6B Madison	
5B Minidoka	

5B Nez Perce
6B Oneida
5B Owyhee
5B Payette
5B Power
5B Shoshone
6B Teton
5B Twin Falls
6B Valley
5B Washington
ILLINOIS
5A Adams
4A Alexander
4A Bond
5A Boone
5A Brown
5A Bureau
4A Calhoun
5A Carroll
5A Cass
5A Champaign
4A Christian
4A Clark
4A Clay
4A Clinton
4A Coles
5A Cook
4A Crawford
4A Cumberland
5A DeKalb
5A De Witt
5A Douglas
5A DuPage
5A Edgar
4A Edwards
4A Effingham
4A Fayette
5A Ford
4A Franklin
5A Fulton
4A Gallatin
4A Greene
5A Grundy
4A Hamilton
5A Hancock
4A Hardin

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
ILLINOIS (continued)	
5A Henderson	4A Richland
5A Henry	5A Rock Island
5A Iroquois	4A Saline
4A Jackson	5A Sangamon
4A Jasper	5A Schuyler
4A Jefferson	5A Scott
4A Jersey	4A Shelby
5A Jo Daviess	5A Stark
4A Johnson	4A St. Clair
5A Kane	5A Stephenson
5A Kankakee	5A Tazewell
5A Kendall	4A Union
5A Knox	5A Vermilion
5A Lake	4A Wabash
5A La Salle	5A Warren
4A Lawrence	4A Washington
5A Lee	4A Wayne
5A Livingston	4A White
5A Logan	5A Whiteside
5A Macon	5A Will
4A Macoupin	4A Williamson
4A Madison	5A Winnebago
4A Marion	5A Woodford
5A Marshall	
5A Mason	INDIANA
4A Massac	5A Adams
5A McDonough	5A Allen
5A McHenry	4A Bartholomew
5A McLean	5A Benton
5A Menard	5A Blackford
5A Mercer	5A Boone
4A Monroe	4A Brown
4A Montgomery	5A Carroll
5A Morgan	5A Cass
5A Moultrie	4A Clark
5A Ogle	4A Clay
5A Peoria	5A Clinton
4A Perry	4A Crawford
5A Piatt	4A Daviess
5A Pike	4A Dearborn
4A Pope	4A Decatur
4A Pulaski	5A De Kalb
5A Putnam	5A Delaware
4A Randolph	4A Dubois
	5A Elkhart
	4A Fayette
	4A Floyd

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
INDIANA (continued)	
5A Fountain	4A Putnam
4A Franklin	5A Randolph
5A Fulton	4A Ripley
4A Gibson	4A Rush
5A Grant	4A Scott
4A Greene	4A Shelby
5A Hamilton	4A Spencer
5A Hancock	5A Starke
4A Harrison	5A Steuben
4A Hendricks	5A St. Joseph
5A Henry	4A Sullivan
5A Howard	4A Switzerland
5A Huntington	5A Tippecanoe
4A Jackson	5A Tipton
5A Jasper	4A Union
5A Jay	4A Vanderburgh
4A Jefferson	5A Vermillion
4A Jennings	4A Vigo
4A Johnson	5A Wabash
4A Knox	5A Warren
5A Kosciusko	4A Warrick
5A LaGrange	4A Washington
5A Lake	5A Wayne
5A LaPorte	5A Wells
4A Lawrence	5A White
5A Madison	5A Whitley
4A Marion	IOWA
5A Marshall	5A Adair
4A Martin	5A Adams
5A Miami	5A Allamakee
4A Monroe	5A Appanoose
5A Montgomery	5A Audubon
4A Morgan	5A Benton
5A Newton	6A Black Hawk
5A Noble	5A Boone
4A Ohio	5A Bremer
4A Orange	5A Buchanan
4A Owen	5A Buena Vista
5A Parke	5A Butler
4A Perry	5A Calhoun
4A Pike	5A Carroll
5A Porter	5A Cass
4A Posey	5A Cedar
5A Pulaski	6A Cerro Gordo
	5A Cherokee
	5A Chickasaw

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
IOWA (continued)	
5A Clarke	5A Marshall
6A Clay	5A Mills
5A Clayton	6A Mitchell
5A Clinton	5A Monona
5A Crawford	5A Monroe
5A Dallas	5A Montgomery
5A Davis	5A Muscatine
5A Decatur	6A O'Brien
5A Delaware	6A Osceola
5A Des Moines	5A Page
6A Dickinson	6A Palo Alto
5A Dubuque	5A Plymouth
6A Emmet	5A Pocahontas
5A Fayette	5A Polk
5A Floyd	5A Pottawattamie
5A Franklin	5A Poweshiek
5A Fremont	5A Ringgold
5A Greene	5A Sac
5A Grundy	5A Scott
5A Guthrie	5A Shelby
5A Hamilton	6A Sioux
6A Hancock	5A Story
5A Hardin	5A Tama
5A Harrison	5A Taylor
5A Henry	5A Union
5A Howard	5A Van Buren
5A Humboldt	5A Wapello
5A Ida	5A Warren
5A Iowa	5A Washington
5A Jackson	5A Wayne
5A Jasper	5A Webster
5A Jefferson	6A Winnebago
5A Johnson	5A Winneshiek
5A Jones	5A Woodbury
5A Keokuk	6A Worth
6A Kossuth	5A Wright
5A Lee	KANSAS
5A Linn	4A Allen
5A Louisa	4A Anderson
5A Lucas	4A Atchison
6A Lyon	4A Barber
5A Madison	4A Barton
5A Mahaska	4A Bourbon
5A Marion	4A Brown
	4A Butler
	4A Chase

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
KANSAS (continued)	
4A Chautauqua	4A Linn
4A Cherokee	5A Logan
5A Cheyenne	4A Lyon
4A Clark	4A Marion
4A Clay	4A Marshall
4A Cloud	4A McPherson
4A Coffey	4A Meade
4A Comanche	4A Miami
4A Cowley	4A Mitchell
4A Crawford	4A Montgomery
5A Decatur	4A Morris
4A Dickinson	4A Morton
4A Doniphan	4A Nemaha
4A Douglas	4A Neosho
4A Edwards	4A Ness
4A Elk	5A Norton
4A Ellis	4A Osage
4A Ellsworth	4A Osborne
4A Finney	4A Ottawa
4A Ford	4A Pawnee
4A Franklin	5A Phillips
4A Geary	4A Pottawatomie
5A Gove	4A Pratt
4A Graham	5A Rawlins
4A Grant	4A Reno
4A Gray	5A Republic
5A Greeley	4A Rice
4A Greenwood	4A Riley
4A Hamilton	4A Rooks
4A Harper	4A Rush
4A Harvey	4A Russell
4A Haskell	4A Saline
4A Hodgeman	5A Scott
4A Jackson	4A Sedgwick
4A Jefferson	4A Seward
5A Jewell	4A Shawnee
4A Johnson	5A Sheridan
4A Kearny	5A Sherman
4A Kingman	5A Smith
4A Kiowa	4A Stafford
4A Labette	4A Stanton
4A Lane	4A Stevens
4A Leavenworth	4A Sumner
4A Lincoln	5A Thomas
	4A Trego
	4A Wabaunsee

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
KANSAS (continued)	
5A Wallace	
4A Washington	
5A Wichita	
4A Wilson	
4A Woodson	
4A Wyandotte	
KENTUCKY	
4A (all)	
LOUISIANA	
2A Acadia*	
2A Allen*	
2A Ascension*	
2A Assumption*	
2A Avoyelles*	
2A Beauregard*	
3A Bienville*	
3A Bossier*	
3A Caddo*	
2A Calcasieu*	
3A Caldwell*	
2A Cameron*	
3A Catahoula*	
3A Claiborne*	
3A Concordia*	
3A De Soto*	
2A East Baton Rouge*	
3A East Carroll	
2A East Feliciana*	
2A Evangeline*	
3A Franklin*	
3A Grant*	
2A Iberia*	
2A Iberville*	
3A Jackson*	
2A Jefferson*	
2A Jefferson Davis*	
2A Lafayette*	
2A Lafourche*	
3A La Salle*	
3A Lincoln*	
2A Livingston*	
3A Madison*	
3A Morehouse	
3A Natchitoches*	

2A Orleans*	
3A Ouachita*	
2A Plaquemines*	
2A Pointe Coupee*	
2A Rapides*	
3A Red River*	
3A Richland*	
3A Sabine*	
2A St. Bernard*	
2A St. Charles*	
2A St. Helena*	
2A St. James*	
2A St. John the Baptist*	
2A St. Landry*	
2A St. Martin*	
2A St. Mary*	
2A St. Tammany*	
2A Tangipahoa*	
3A Tensas*	
2A Terrebonne*	
3A Union*	
2A Vermilion*	
3A Vernon*	
2A Washington*	
3A Webster*	
2A West Baton Rouge*	
3A West Carroll	
2A West Feliciana*	
3A Winn*	
MAINE	
6A Androscoggin	
7 Aroostook	
6A Cumberland	
6A Franklin	
6A Hancock	
6A Kennebec	
6A Knox	
6A Lincoln	
6A Oxford	
6A Penobscot	
6A Piscataquis	
6A Sagadahoc	
6A Somerset	
6A Waldo	
6A Washington	
6A York	

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
MARYLAND	
5A Allegany	6A Clare
4A Anne Arundel	5A Clinton
4A Baltimore	6A Crawford
4A Baltimore (city)	6A Delta
4A Calvert	6A Dickinson
4A Caroline	5A Eaton
4A Carroll	6A Emmet
4A Cecil	5A Genesee
4A Charles	6A Gladwin
4A Dorchester	6A Gogebic
4A Frederick	6A Grand Traverse
5A Garrett	5A Gratiot
4A Harford	5A Hillsdale
4A Howard	6A Houghton
4A Kent	5A Huron
4A Montgomery	5A Ingham
4A Prince George's	5A Ionia
4A Queen Anne's	6A Iosco
4A Somerset	6A Iron
4A St. Mary's	6A Isabella
4A Talbot	5A Jackson
4A Washington	5A Kalamazoo
4A Wicomico	6A Kalkaska
4A Worcester	5A Kent
MASSACHUSETTS	
5A (all)	7 Keweenaw
MICHIGAN	
6A Alcona	6A Lake
6A Alger	5A Lapeer
5A Allegan	6A Leelanau
6A Alpena	5A Lenawee
6A Antrim	5A Livingston
6A Arenac	6A Luce
6A Baraga	6A Mackinac
5A Barry	5A Macomb
5A Bay	6A Manistee
6A Benzie	7 Marquette
5A Berrien	6A Mason
5A Branch	6A Mecosta
5A Calhoun	6A Menominee
5A Cass	5A Midland
6A Charlevoix	6A Missaukee
6A Cheboygan	5A Monroe
6A Chippewa	5A Montcalm
	6A Montmorency
	5A Muskegon
	6A Newaygo
	5A Oakland

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
MICHIGAN (continued)	
6A Oceana	6A Freeborn
6A Ogemaw	6A Goodhue
6A Ontonagon	6A Grant
6A Osceola	6A Hennepin
6A Oscoda	5A Houston
6A Otsego	7 Hubbard
5A Ottawa	6A Isanti
6A Presque Isle	7 Itasca
6A Roscommon	6A Jackson
5A Saginaw	6A Kanabec
5A Sanilac	6A Kandiyohi
6A Schoolcraft	7 Kittson
5A Shiawassee	7 Koochiching
5A St. Clair	6A Lac qui Parle
5A St. Joseph	7 Lake
5A Tuscola	7 Lake of the Woods
5A Van Buren	6A Le Sueur
5A Washtenaw	6A Lincoln
5A Wayne	6A Lyon
6A Wexford	7 Mahnommen
MINNESOTA	
7 Aitkin	7 Marshall
6A Anoka	6A Martin
6A Becker	6A McLeod
7 Beltrami	6A Meeker
6A Benton	6A Mille Lacs
6A Big Stone	6A Morrison
6A Blue Earth	6A Mower
6A Brown	6A Murray
7 Carlton	6A Nicollet
6A Carver	6A Nobles
7 Cass	7 Norman
6A Chippewa	6A Olmsted
6A Chisago	6A Otter Tail
6A Clay	7 Pennington
7 Clearwater	7 Pine
7 Cook	6A Pipestone
6A Cottonwood	7 Polk
7 Crow Wing	6A Pope
6A Dakota	6A Ramsey
6A Dodge	7 Red Lake
6A Douglas	6A Redwood
6A Faribault	6A Renville
5A Fillmore	6A Rice
	6A Rock
	7 Roseau
	6A Scott

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
MINNESOTA (continued)	
6A Sherburne	3A Holmes
6A Sibley	3A Humphreys
6A Stearns	3A Issaquena
6A Steele	3A Itawamba
6A Stevens	2A Jackson*
7 St. Louis	3A Jasper
6A Swift	3A Jefferson*
6A Todd	3A Jefferson Davis*
6A Traverse	3A Jones*
6A Wabasha	3A Kemper
7 Wadena	3A Lafayette
6A Waseca	3A Lamar*
6A Washington	3A Lauderdale
6A Watonwan	3A Lawrence*
6A Wilkin	3A Leake
5A Winona	3A Lee
6A Wright	3A Leflore
6A Yellow Medicine	3A Lincoln*
MISSISSIPPI	
3A Adams*	3A Lowndes
3A Alcorn	3A Madison
3A Amite*	3A Marion*
3A Attala	3A Marshall
3A Benton	3A Monroe
3A Bolivar	3A Montgomery
3A Calhoun	3A Neshoba
3A Carroll	3A Newton
3A Chickasaw	3A Noxubee
3A Choctaw	3A Oktibbeha
3A Claiborne*	3A Panola
3A Clarke	2A Pearl River*
3A Clay	3A Perry*
3A Coahoma	3A Pike*
3A Copiah*	3A Pontotoc
3A Covington*	3A Prentiss
3A DeSoto	3A Quitman
3A Forrest*	3A Rankin*
3A Franklin*	3A Scott
2A George*	3A Sharkey
3A Greene*	3A Simpson*
3A Grenada	3A Smith*
2A Hancock*	2A Stone*
2A Harrison*	3A Sunflower
3A Hinds*	3A Tallahatchie
	3A Tate
	3A Tippah
	3A Tishomingo

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
MISSISSIPPI (continued)	
3A Tunica	4A Dent
3A Union	4A Douglas
3A Walthall*	3A Dunklin
3A Warren*	4A Franklin
3A Washington	4A Gasconade
3A Wayne*	5A Gentry
3A Webster	4A Greene
3A Wilkinson*	5A Grundy
3A Winston	5A Harrison
3A Yalobusha	4A Henry
3A Yazoo	4A Hickory
MISSOURI	5A Holt
5A Adair	4A Howard
5A Andrew	4A Howell
5A Atchison	4A Iron
4A Audrain	4A Jackson
4A Barry	4A Jasper
4A Barton	4A Jefferson
4A Bates	4A Johnson
4A Benton	5A Knox
4A Bollinger	4A Laclede
4A Boone	4A Lafayette
4A Buchanan	4A Lawrence
4A Butler	5A Lewis
4A Caldwell	4A Lincoln
4A Callaway	5A Linn
4A Camden	5A Livingston
4A Cape Girardeau	5A Macon
4A Carroll	4A Madison
4A Carter	4A Maries
4A Cass	5A Marion
4A Cedar	4A McDonald
4A Chariton	5A Mercer
4A Christian	4A Miller
5A Clark	4A Mississippi
4A Clay	4A Moniteau
4A Clinton	4A Monroe
4A Cole	4A Montgomery
4A Cooper	4A Morgan
4A Crawford	4A New Madrid
4A Dade	4A Newton
4A Dallas	5A Nodaway
5A Daviess	4A Oregon
5A DeKalb	4A Osage
	4A Ozark
	3A Pemiscot

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
MISSOURI <i>(continued)</i>	
4A Perry	3B Clark
4A Pettis	4B Douglas
4A Phelps	5B Elko
5A Pike	4B Esmeralda
4A Platte	5B Eureka
4A Polk	5B Humboldt
4A Pulaski	5B Lander
5A Putnam	4B Lincoln
5A Ralls	4B Lyon
4A Randolph	4B Mineral
4A Ray	4B Nye
4A Reynolds	5B Pershing
4A Ripley	5B Storey
4A Saline	5B Washoe
5A Schuyler	5B White Pine
5A Scotland	
4A Scott	NEW HAMPSHIRE
4A Shannon	6A Belknap
5A Shelby	6A Carroll
4A St. Charles	5A Cheshire
4A St. Clair	6A Coos
4A St. Francois	6A Grafton
4A St. Louis	5A Hillsborough
4A St. Louis (city)	5A Merrimack
4A Ste. Genevieve	5A Rockingham
4A Stoddard	5A Strafford
4A Stone	6A Sullivan
5A Sullivan	
4A Taney	NEW JERSEY
4A Texas	4A Atlantic
4A Vernon	5A Bergen
4A Warren	4A Burlington
4A Washington	4A Camden
4A Wayne	4A Cape May
4A Webster	4A Cumberland
5A Worth	4A Essex
4A Wright	4A Gloucester
	4A Hudson
MONTANA	5A Hunterdon
6B (all)	4A Mercer
NEBRASKA	4A Middlesex
5A (all)	4A Monmouth
NEVADA	5A Morris
4B Carson City (city)	4A Ocean
5B Churchill	5A Passaic
	4A Salem
	5A Somerset
	5A Sussex

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued		5A Chemung
NEW JERSEY (continued)		6A Chenango
4A Union		6A Clinton
5A Warren		5A Columbia
NEW MEXICO		5A Cortland
4B Bernalillo		6A Delaware
4B Catron		5A Dutchess
3B Chaves		5A Erie
4B Cibola		6A Essex
5B Colfax		6A Franklin
4B Curry		6A Fulton
4B DeBaca		5A Genesee
3B Doña Ana		5A Greene
3B Eddy		6A Hamilton
4B Grant		6A Herkimer
4B Guadalupe		6A Jefferson
5B Harding		4A Kings
3B Hidalgo		6A Lewis
3B Lea		5A Livingston
4B Lincoln		6A Madison
5B Los Alamos		5A Monroe
3B Luna		6A Montgomery
5B McKinley		4A Nassau
5B Mora		4A New York
3B Otero		5A Niagara
4B Quay		6A Oneida
5B Rio Arriba		5A Onondaga
4B Roosevelt		5A Ontario
5B Sandoval		5A Orange
5B San Juan		5A Orleans
5B San Miguel		5A Oswego
5B Santa Fe		6A Otsego
3B Sierra		5A Putnam
4B Socorro		4A Queens
5B Taos		5A Rensselaer
5B Torrance		4A Richmond
4B Union		5A Rockland
4B Valencia		5A Saratoga
NEW YORK		5A Schenectady
5A Albany		5A Schoharie
5A Allegany		5A Schuyler
4A Bronx		5A Seneca
5A Broome		5A Steuben
5A Cattaraugus		6A St. Lawrence
5A Cayuga		4A Suffolk
5A Chautauqua		6A Sullivan

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	3A Franklin
NEW YORK (continued)	3A Gaston
5A Tioga	3A Gates
5A Tompkins	4A Graham
6A Ulster	3A Granville
6A Warren	3A Greene
5A Washington	3A Guilford
5A Wayne	3A Halifax
4A Westchester	3A Harnett
5A Wyoming	4A Haywood
5A Yates	4A Henderson
NORTH CAROLINA	3A Hertford
3A Alamance	3A Hoke
3A Alexander	3A Hyde
5A Alleghany	3A Iredell
3A Anson	4A Jackson
5A Ashe	3A Johnston
5A Avery	3A Jones
3A Beaufort	3A Lee
3A Bertie	3A Lenoir
3A Bladen	3A Lincoln
3A Brunswick*	4A Macon
4A Buncombe	4A Madison
4A Burke	3A Martin
3A Cabarrus	4A McDowell
4A Caldwell	3A Mecklenburg
3A Camden	4A Mitchell
3A Carteret*	3A Montgomery
3A Caswell	3A Moore
3A Catawba	3A Nash
3A Chatham	3A New Hanover*
3A Cherokee	3A Northampton
3A Chowan	3A Onslow*
3A Clay	3A Orange
3A Cleveland	3A Pamlico
3A Columbus*	3A Pasquotank
3A Craven	3A Pender*
3A Cumberland	3A Perquimans
3A Currituck	3A Person
3A Dare	3A Pitt
3A Davidson	3A Polk
3A Davie	3A Randolph
3A Duplin	3A Richmond
3A Durham	3A Robeson
3A Edgecombe	3A Rockingham
3A Forsyth	3A Rowan

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued		
NORTH CAROLINA (continued)		
3A Rutherford	6A Logan	
3A Sampson	7 McHenry	
3A Scotland	6A McIntosh	
3A Stanly	6A McKenzie	
4A Stokes	6A McLean	
4A Surry	6A Mercer	
4A Swain	6A Morton	
4A Transylvania	6A Mountrail	
3A Tyrrell	7 Nelson	
3A Union	6A Oliver	
3A Vance	7 Pembina	
3A Wake	7 Pierce	
3A Warren	7 Ramsey	
3A Washington	6A Ransom	
5A Watauga	7 Renville	
3A Wayne	6A Richland	
3A Wilkes	7 Rolette	
3A Wilson	6A Sargent	
4A Yadkin	6A Sheridan	
5A Yancey	6A Sioux	
NORTH DAKOTA		
6A Adams	6A Slope	
6A Barnes	6A Stark	
7 Benson	6A Steele	
6A Billings	6A Stutsman	
7 Bottineau	7 Towner	
6A Bowman	6A Traill	
7 Burke	7 Walsh	
6A Burleigh	7 Ward	
6A Cass	6A Wells	
7 Cavalier	6A Williams	
6A Dickey	OHIO	
7 Divide	4A Adams	
6A Dunn	5A Allen	
6A Eddy	5A Ashland	
6A Emmons	5A Ashtabula	
6A Foster	4A Athens	
6A Golden Valley	5A Auglaize	
7 Grand Forks	5A Belmont	
6A Grant	4A Brown	
6A Griggs	4A Butler	
6A Hettinger	5A Carroll	
6A Kidder	5A Champaign	
6A LaMoure	5A Clark	
	4A Clermont	
	4A Clinton	
	5A Columbiana	

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
OHIO (continued)	
5A Coshocton	5A Muskingum
5A Crawford	5A Noble
5A Cuyahoga	5A Ottawa
5A Darke	5A Paulding
5A Defiance	5A Perry
5A Delaware	4A Pickaway
5A Erie	4A Pike
5A Fairfield	5A Portage
4A Fayette	5A Preble
4A Franklin	5A Putnam
5A Fulton	5A Richland
4A Gallia	4A Ross
5A Geauga	5A Sandusky
4A Greene	4A Scioto
5A Guernsey	5A Seneca
4A Hamilton	5A Shelby
5A Hancock	5A Stark
5A Hardin	5A Summit
5A Harrison	5A Trumbull
5A Henry	5A Tuscarawas
4A Highland	5A Union
4A Hocking	5A Van Wert
5A Holmes	4A Vinton
5A Huron	4A Warren
4A Jackson	4A Washington
5A Jefferson	5A Wayne
5A Knox	5A Williams
5A Lake	5A Wood
4A Lawrence	5A Wyandot
5A Licking	
5A Logan	OKLAHOMA
5A Lorain	3A Adair
5A Lucas	4A Alfalfa
4A Madison	3A Atoka
5A Mahoning	4B Beaver
5A Marion	3A Beckham
5A Medina	3A Blaine
4A Meigs	3A Bryan
5A Mercer	3A Caddo
5A Miami	3A Canadian
5A Monroe	3A Carter
5A Montgomery	3A Cherokee
5A Morgan	3A Choctaw
5A Morrow	4B Cimarron
	3A Cleveland
	3A Coal
	3A Comanche

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
OKLAHOMA (continued)	
3A Cotton	3A Pittsburg
4A Craig	3A Pontotoc
3A Creek	3A Pottawatomie
3A Custer	3A Pushmataha
4A Delaware	3A Roger Mills
3A Dewey	3A Rogers
4A Ellis	3A Seminole
4A Garfield	3A Sequoyah
3A Garvin	3A Stephens
3A Grady	4B Texas
4A Grant	3A Tillman
3A Greer	3A Tulsa
3A Harmon	3A Wagoner
4A Harper	4A Washington
3A Haskell	3A Washita
3A Hughes	4A Woods
3A Jackson	4A Woodward
3A Jefferson	OREGON
3A Johnston	5B Baker
4A Kay	4C Benton
3A Kingfisher	4C Clackamas
3A Kiowa	4C Clatsop
3A Latimer	4C Columbia
3A Le Flore	4C Coos
3A Lincoln	5B Crook
3A Logan	4C Curry
3A Love	5B Deschutes
4A Major	4C Douglas
3A Marshall	5B Gilliam
3A Mayes	5B Grant
3A McClain	5B Harney
3A McCurtain	5B Hood River
3A McIntosh	4C Jackson
3A Murray	5B Jefferson
3A Muskogee	4C Josephine
3A Noble	5B Klamath
4A Nowata	5B Lake
3A Okfuskee	4C Lane
3A Oklahoma	4C Lincoln
3A Okmulgee	4C Linn
4A Osage	5B Malheur
4A Ottawa	4C Marion
3A Pawnee	5B Morrow
3A Payne	4C Multnomah
	4C Polk
	5B Sherman

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
OREGON <i>(continued)</i>	
4C Tillamook	4A Lancaster
5B Umatilla	5A Lawrence
5B Union	4A Lebanon
5B Wallowa	5A Lehigh
5B Wasco	5A Luzerne
4C Washington	5A Lycoming
5B Wheeler	5A McKean
4C Yamhill	5A Mercer
	5A Mifflin
	5A Monroe
PENNSYLVANIA	
4A Adams	4A Montgomery
5A Allegheny	5A Montour
5A Armstrong	5A Northampton
5A Beaver	5A Northumberland
5A Bedford	4A Perry
4A Berks	4A Philadelphia
5A Blair	5A Pike
5A Bradford	5A Potter
4A Bucks	5A Schuylkill
5A Butler	5A Snyder
5A Cambria	5A Somerset
5A Cameron	5A Sullivan
5A Carbon	5A Susquehanna
5A Centre	5A Tioga
4A Chester	5A Union
5A Clarion	5A Venango
5A Clearfield	5A Warren
5A Clinton	5A Washington
5A Columbia	5A Wayne
5A Crawford	5A Westmoreland
4A Cumberland	5A Wyoming
4A Dauphin	4A York
4A Delaware	
5A Elk	RHODE ISLAND
5A Erie	5A (all)
5A Fayette	
5A Forest	SOUTH CAROLINA
4A Franklin	3A Abbeville
5A Fulton	3A Aiken
5A Greene	3A Allendale*
5A Huntingdon	3A Anderson
5A Indiana	3A Bamberg*
5A Jefferson	3A Barnwell*
5A Juniata	2A Beaufort*
5A Lackawanna	3A Berkeley*
	3A Calhoun
	3A Charleston*
	3A Cherokee

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
SOUTH CAROLINA <i>(continued)</i>	
3A Chester	6A Butte
3A Chesterfield	6A Campbell
3A Clarendon	5A Charles Mix
3A Colleton*	6A Clark
3A Darlington	5A Clay
3A Dillon	6A Codrington
3A Dorchester*	6A Corson
3A Edgefield	6A Custer
3A Fairfield	6A Davison
3A Florence	6A Day
3A Georgetown*	6A Deuel
3A Greenville	6A Dewey
3A Greenwood	5A Douglas
3A Hampton*	6A Edmunds
3A Horry*	6A Fall River
2A Jasper*	6A Faulk
3A Kershaw	6A Grant
3A Lancaster	5A Gregory
3A Laurens	5A Haakon
3A Lee	6A Hamlin
3A Lexington	6A Hand
3A Marion	6A Hanson
3A Marlboro	6A Harding
3A McCormick	6A Hughes
3A Newberry	5A Hutchinson
3A Oconee	6A Hyde
3A Orangeburg	5A Jackson
3A Pickens	6A Jerauld
3A Richland	5A Jones
3A Saluda	6A Kingsbury
3A Spartanburg	6A Lake
3A Sumter	6A Lawrence
3A Union	6A Lincoln
3A Williamsburg	5A Lyman
3A York	6A Marshall
SOUTH DAKOTA	
6A Aurora	6A McCook
6A Beadle	6A McPherson
5A Bennett	6A Meade
5A Bon Homme	5A Mellette
6A Brookings	6A Miner
6A Brown	6A Minnehaha
5A Brule	6A Moody
6A Buffalo	6A Pennington
	6A Perkins
	6A Potter
	6A Roberts

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
SOUTH DAKOTA <i>(continued)</i>	
6A Sanborn	4A Hamblen
6A Shannon	3A Hamilton
6A Spink	4A Hancock
5A Stanley	3A Hardeman
6A Sully	3A Hardin
5A Todd	4A Hawkins
5A Tripp	3A Haywood
6A Turner	3A Henderson
5A Union	4A Henry
6A Walworth	3A Hickman
5A Yankton	4A Houston
6A Ziebach	4A Humphreys
TENNESSEE	
4A Anderson	4A Jackson
3A Bedford	4A Jefferson
4A Benton	4A Johnson
4A Bledsoe	4A Knox
4A Blount	4A Lake
4A Bradley	3A Lauderdale
4A Campbell	3A Lawrence
4A Cannon	3A Lewis
4A Carroll	3A Lincoln
4A Carter	4A Loudon
4A Cheatham	4A Macon
3A Chester	3A Madison
4A Claiborne	3A Marion
4A Clay	3A Marshall
4A Cocke	3A Maury
3A Coffee	4A McMinn
3A Crockett	3A McNairy
4A Cumberland	4A Meigs
3A Davidson	4A Monroe
3A Decatur	4A Montgomery
4A DeKalb	3A Moore
4A Dickson	4A Morgan
3A Dyer	4A Obion
3A Fayette	4A Overton
4A Fentress	3A Perry
3A Franklin	4A Pickett
3A Gibson	4A Polk
3A Giles	4A Putnam
4A Grainger	4A Rhea
4A Greene	4A Roane
3A Grundy	4A Robertson
	3A Rutherford
	4A Scott
	4A Sequatchie

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
TENNESSEE <i>(continued)</i>	
4A Sevier	2A Burleson*
3A Shelby	3A Burnet*
4A Smith	2A Caldwell*
4A Stewart	2A Calhoun*
4A Sullivan	3B Callahan
4A Sumner	1A Cameron*
3A Tipton	3A Camp*
4A Trousdale	4B Carson
4A Unicoi	3A Cass*
4A Union	4B Castro
4A Van Buren	2A Chambers*
4A Warren	2A Cherokee*
4A Washington	3B Childress
3A Wayne	3A Clay
4A Weakley	4B Cochran
4A White	3B Coke
3A Williamson	3B Coleman
4A Wilson	3A Collin*
TEXAS	
2A Anderson*	3B Collingsworth
3B Andrews	2A Colorado*
2A Angelina*	2A Comal*
2A Aransas*	3A Comanche*
3A Archer	3B Concho
4B Armstrong	3A Cooke
2A Atascosa*	2A Coryell*
2A Austin*	3B Cottle
4B Bailey	3B Crane
2B Bandera	3B Crockett
2A Bastrop*	3B Crosby
3B Baylor	3B Culberson
2A Bee*	4B Dallam
2A Bell*	2A Dallas*
2A Bexar*	3B Dawson
3A Blanco*	4B Deaf Smith
3B Borden	3A Delta
2A Bosque*	3A Denton*
3A Bowie*	2A DeWitt*
2A Brazoria*	3B Dickens
2A Brazos*	2B Dimmit
3B Brewster	4B Donley
4B Briscoe	2A Duval*
2A Brooks*	3A Eastland
3A Brown*	3B Ector
	2B Edwards
	2A Ellis*
	3B El Paso

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
TEXAS (continued)	
3A Erath*	3A Hunt*
2A Falls*	4B Hutchinson
3A Fannin	3B Irion
2A Fayette*	3A Jack
3B Fisher	2A Jackson*
4B Floyd	2A Jasper*
3B Foard	3B Jeff Davis
2A Fort Bend*	2A Jefferson*
3A Franklin*	2A Jim Hogg*
2A Freestone*	2A Jim Wells*
2B Frio	2A Johnson*
3B Gaines	3B Jones
2A Galveston*	2A Karnes*
3B Garza	3A Kaufman*
3A Gillespie*	3A Kendall*
3B Glasscock	2A Kenedy*
2A Goliad*	3B Kent
2A Gonzales*	3B Kerr
4B Gray	3B Kimble
3A Grayson	3B King
3A Gregg*	2B Kinney
2A Grimes*	2A Kleberg*
2A Guadalupe*	3B Knox
4B Hale	3A Lamar*
3B Hall	4B Lamb
3A Hamilton*	3A Lampasas*
4B Hansford	2B La Salle
3B Hardeman	2A Lavaca*
2A Hardin*	2A Lee*
2A Harris*	2A Leon*
3A Harrison*	2A Liberty*
4B Hartley	2A Limestone*
3B Haskell	4B Lipscomb
2A Hays*	2A Live Oak*
3B Hemphill	3A Llano*
3A Henderson*	3B Loving
1A Hidalgo*	3B Lubbock
2A Hill*	3B Lynn
4B Hockley	2A Madison*
3A Hood*	3A Marion*
3A Hopkins*	3B Martin
2A Houston*	3B Mason
3B Howard	2A Matagorda*
3B Hudspeth	2B Maverick
	3B McCulloch
	2A McLennan*

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
TEXAS (continued)	
2A McMullen*	3A San Saba*
2B Medina	3B Schleicher
3B Menard	3B Scurry
3B Midland	3B Shackelford
2A Milam*	3A Shelby*
3A Mills*	4B Sherman
3B Mitchell	3A Smith*
3A Montague	3A Somervell*
2A Montgomery*	2A Starr*
4B Moore	3A Stephens
3A Morris*	3B Sterling
3B Motley	3B Stonewall
3A Nacogdoches*	3B Sutton
2A Navarro*	4B Swisher
2A Newton*	2A Tarrant*
3B Nolan	3B Taylor
2A Nueces*	3B Terrell
4B Ochiltree	3B Terry
4B Oldham	3B Throckmorton
2A Orange*	3A Titus*
3A Palo Pinto*	3B Tom Green
3A Panola*	2A Travis*
3A Parker*	2A Trinity*
4B Parmer	2A Tyler*
3B Pecos	3A Upshur*
2A Polk*	3B Upton
4B Potter	2B Uvalde
3B Presidio	2B Val Verde
3A Rains*	3A Van Zandt*
4B Randall	2A Victoria*
3B Reagan	2A Walker*
2B Real	2A Waller*
3A Red River*	3B Ward
3B Reeves	2A Washington*
2A Refugio*	2B Webb
4B Roberts	2A Wharton*
2A Robertson*	3B Wheeler
3A Rockwall*	3A Wichita
3B Runnels	3B Wilbarger
3A Rusk*	1A Willacy*
3A Sabine*	2A Williamson*
3A San Augustine*	2A Wilson*
2A San Jacinto*	3B Winkler
2A San Patricio*	3A Wise
	3A Wood*
	4B Yoakum

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
TEXAS <i>(continued)</i>	
3A Young	3A Franklin
2B Zapata	3A Greenville
2B Zavala	3A Halifax
	3A Hampton
UTAH	5A Highland
5B Beaver	3A Isle of Wight
5B Box Elder	3A Mecklenburg
5B Cache	3A Newport News
5B Carbon	3A Norfolk
6B Daggett	3A Pittsylvania
5B Davis	3A Portsmouth
6B Duchesne	3A South Boston
5B Emery	3A Southampton
5B Garfield	3A Suffolk
5B Grand	3A Surry
5B Iron	3A Sussex
5B Juab	3A Virginia Beach
5B Kane	WASHINGTON
5B Millard	5B Adams
6B Morgan	5B Asotin
5B Piute	5B Benton
6B Rich	5B Chelan
5B Salt Lake	5C Clallam
5B San Juan	4C Clark
5B Sanpete	5B Columbia
5B Sevier	4C Cowlitz
6B Summit	5B Douglas
5B Tooele	6B Ferry
6B Uintah	5B Franklin
5B Utah	5B Garfield
6B Wasatch	5B Grant
3B Washington	4C Grays Harbor
5B Wayne	5C Island
5B Weber	4C Jefferson
VERMONT	4C King
6A (all)	5C Kitsap
VIRGINIA	5B Kittitas
4A (all except as follows:)	5B Klickitat
5A Alleghany	4C Lewis
5A Bath	5B Lincoln
3A Brunswick	4C Mason
3A Chesapeake	5B Okanogan
5A Clifton Forge	4C Pacific
5A Covington	6B Pend Oreille
3A Emporia	4C Pierce
	5C San Juan

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
WASHINGTON (continued)	
4C Skagit	
5B Skamania	
4C Snohomish	
5B Spokane	
6B Stevens	
4C Thurston	
4C Wahkiakum	
5B Walla Walla	
4C Whatcom	
5B Whitman	
5B Yakima	
WEST VIRGINIA	
5A Barbour	
4A Berkeley	
4A Boone	
4A Braxton	
5A Brooke	
4A Cabell	
4A Calhoun	
4A Clay	
4A Doddridge	
4A Fayette	
4A Gilmer	
5A Grant	
4A Greenbrier	
5A Hampshire	
5A Hancock	
5A Hardy	
5A Harrison	
4A Jackson	
4A Jefferson	
4A Kanawha	
4A Lewis	
4A Lincoln	
4A Logan	
5A Marion	
5A Marshall	
4A Mason	
4A McDowell	
4A Mercer	
5A Mineral	
4A Mingo	
5A Monongalia	
4A Monroe	

4A Morgan
4A Nicholas
5A Ohio
5A Pendleton
4A Pleasants
5A Pocahontas
5A Preston
4A Putnam
4A Raleigh
5A Randolph
4A Ritchie
4A Roane
4A Summers
5A Taylor
5A Tucker
4A Tyler
4A Upshur
4A Wayne
4A Webster
5A Wetzel
4A Wirt
4A Wood
4A Wyoming
WISCONSIN
5A Adams
6A Ashland
6A Barron
6A Bayfield
6A Brown
6A Buffalo
6A Burnett
5A Calumet
6A Chippewa
6A Clark
5A Columbia
5A Crawford
5A Dane
5A Dodge
6A Door
6A Douglas
6A Dunn
6A Eau Claire
6A Florence
5A Fond du Lac
6A Forest
5A Grant

**TABLE C301.1—CLIMATE ZONES, MOISTURE REGIMES AND WARM HUMID DESIGNATIONS
BY STATE, COUNTY AND TERRITORY^a—continued**

US STATES—continued	
WISCONSIN (continued)	
5A Green	5A Washington
5A Green Lake	5A Waukesha
5A Iowa	6A Waupaca
6A Iron	5A Waushara
6A Jackson	5A Winnebago
5A Jefferson	6A Wood
5A Juneau	WYOMING
5A Kenosha	6B Albany
6A Kewaunee	6B Big Horn
5A La Crosse	6B Campbell
5A Lafayette	6B Carbon
6A Langlade	6B Converse
6A Lincoln	6B Crook
6A Manitowoc	6B Fremont
6A Marathon	5B Goshen
6A Marinette	6B Hot Springs
6A Marquette	6B Johnson
6A Menominee	5B Laramie
5A Milwaukee	7 Lincoln
5A Monroe	6B Natrona
6A Oconto	6B Niobrara
6A Oneida	6B Park
5A Outagamie	5B Platte
5A Ozaukee	6B Sheridan
6A Pepin	7 Sublette
6A Pierce	6B Sweetwater
6A Polk	7 Teton
6A Portage	6B Uinta
6A Price	6B Washakie
5A Racine	6B Weston
5A Richland	US TERRITORIES
5A Rock	AMERICAN SAMOA
6A Rusk	1A (all)*
5A Sauk	GUAM
6A Sawyer	1A (all)*
6A Shawano	NORTHERN MARIANA ISLANDS
6A Sheboygan	1A (all)*
6A St. Croix	PUERTO RICO
6A Taylor	1A (all except as follows:)*
6A Trempealeau	2B Barraquitas
5A Vernon	2B Cayey
6A Vilas	VIRGIN ISLANDS
5A Walworth	1A (all)*
6A Washburn	a. Key: A – Moist, B – Dry, C – Marine. Absence of moisture designation indicates moisture regime is irrelevant. Asterisk (*) indicates a Warm Humid location.

C301.2 Warm Humid counties. In Table C301.1, Warm Humid counties are identified by an asterisk.

C301.3 Climate zone definitions. To determine the *climate zones* for locations not listed in this code, use the following information to determine *climate zone* numbers and letters in accordance with Items 1 through 5.

1. Determine the thermal climate zone, 0 through 8, from Table C301.3 using the heating (HDD) and cooling degree-days (CDD) for the location.
2. Determine the moisture zone (Marine, Dry or Humid) in accordance with Items 2.1 through 2.3.
 - 2.1. If monthly average temperature and precipitation data are available, use the Marine, Dry and Humid definitions to determine the moisture zone (C, B or A).
 - 2.2. If annual average temperature information (including degree-days) and annual precipitation (i.e., annual mean) are available, use Items 2.2.1 through 2.2.3 to determine the moisture zone. If the moisture zone is not Marine, then use the Dry definition to determine whether Dry or Humid.
 - 2.2.1. If thermal climate zone is 3 and $CDD_{50^{\circ}F} \leq 4,500$ ($CDD_{10^{\circ}C} \leq 2500$), climate zone is Marine (3C).
 - 2.2.2. If thermal climate zone is 4 and $CDD_{50^{\circ}F} \leq 2,700$ ($CDD_{10^{\circ}C} \leq 1500$), climate zone is Marine (4C).
 - 2.2.3. If thermal climate zone is 5 and $CDD_{50^{\circ}F} \leq 1,800$ ($CDD_{10^{\circ}C} \leq 1000$), climate zone is Marine (5C).
 - 2.3. If only degree-day information is available, use Items 2.3.1 through 2.3.3 to determine the moisture zone. If the moisture zone is not Marine, then it is not possible to assign Humid or Dry moisture zone for this location.
 - 2.3.1. If thermal climate zone is 3 and $CDD_{50^{\circ}F} \leq 4,500$ ($CDD_{10^{\circ}C} \leq 2500$), climate zone is Marine (3C).
 - 2.3.2. If thermal climate zone is 4 and $CDD_{50^{\circ}F} \leq 2,700$ ($CDD_{10^{\circ}C} \leq 1500$), climate zone is Marine (4C).
 - 2.3.3. If thermal climate zone is 5 and $CDD_{50^{\circ}F} \leq 1,800$ ($CDD_{10^{\circ}C} \leq 1000$), climate zone is Marine (5C).
3. Marine (C) Zone definition: Locations meeting all the criteria in Items 3.1 through 3.4.
 - 3.1. Mean temperature of coldest month between $27^{\circ}F$ ($-3^{\circ}C$) and $65^{\circ}F$ ($18^{\circ}C$).
 - 3.2. Warmest month mean $< 72^{\circ}F$ ($22^{\circ}C$).
 - 3.3. Not fewer than four months with mean temperatures over $50^{\circ}F$ ($10^{\circ}C$).
 - 3.4. Dry season in summer. The month with the heaviest precipitation in the cold season has at least three times as much precipitation as the month with the least precipitation in the rest of the year. The cold season is October through March in the Northern Hemisphere and April through September in the Southern Hemisphere.
4. Dry (B) definition: Locations meeting the criteria in Items 4.1 through 4.4.
 - 4.1. Not Marine (C).
 - 4.2. If 70 percent or more of the precipitation, P , occurs during the high sun period, defined as April through September in the Northern Hemisphere and October through March in the Southern Hemisphere, then the dry/humid threshold is in accordance with Equation 3-1.

Equation 3-1 $P < 0.44 \times (T - 7)$
 $[P < 20.0 \times (T + 14) \text{ in SI units}]$

where:

P = Annual precipitation, inches (mm).

T = Annual mean temperature, $^{\circ}F$ ($^{\circ}C$).

- 4.3. If between 30 and 70 percent of the precipitation, P , occurs during the high sun period, defined as April through September in the Northern Hemisphere and October through March in the Southern Hemisphere, then the dry/humid threshold is in accordance with Equation 3-2.

Equation 3-2 $P < 0.44 \times (T - 19.5)$
 $[P < 20.0 \times (T + 7) \text{ in SI units}]$

where:

P = Annual precipitation, inches (mm).

T = Annual mean temperature, $^{\circ}F$ ($^{\circ}C$).

- 4.4. If 30 percent or less of the precipitation, P , occurs during the high sun period, defined as April through September in the Northern Hemisphere and October through March in the Southern Hemisphere, then the dry/humid threshold is in accordance with Equation 3-3.

Equation 3-3 $P < 0.44 \times (T - 32)$
 $[P < 20.0 \times T \text{ in SI units}]$

where:

P = Annual precipitation, inches (mm).

T = Annual mean temperature, $^{\circ}F$ ($^{\circ}C$).

5. Humid (A) definition: Locations that are not Marine (C) or Dry (B).

TABLE C301.3—THERMAL CLIMATE ZONE DEFINITIONS

ZONE NUMBER	THERMAL CRITERIA	
	IP Units	SI Units
0	10,800 < CDD50°F	6000 < CDD10°C
1	9,000 < CDD50°F < 10,800	5000 < CDD10°C < 6000
2	6,300 < CDD50°F ≤ 9,000	3500 < CDD10°C ≤ 5000
3	CDD50°F ≤ 6,300 AND HDD65°F ≤ 3,600	CDD10°C < 3500 AND HDD18°C ≤ 2000
4	CDD50°F ≤ 6,300 AND 3,600 < HDD65°F ≤ 5,400	CDD10°C < 3500 AND 2000 < HDD18°C ≤ 3000
5	CDD50°F < 6,300 AND 5,400 < HDD65°F ≤ 7,200	CDD10°C < 3500 AND 3000 < HDD18°C ≤ 4000
6	7,200 < HDD65°F ≤ 9,000	4000 < HDD18°C ≤ 5000
7	9,000 < HDD65°F ≤ 12,600	5000 < HDD18°C ≤ 7000
8	12,600 < HDD65°F	7000 < HDD18°C

For SI: °C = [(°F) – 32]/1.8.

C301.4 Tropical climate region. The tropical climate region shall be defined as:

1. Hawaii, Puerto Rico, Guam, American Samoa, US Virgin Islands, Commonwealth of Northern Mariana Islands; and
2. Islands in the area between the Tropic of Cancer and the Tropic of Capricorn.

SECTION C302—DESIGN CONDITIONS

C302.1 Interior design conditions. The interior design temperatures used for heating and cooling load calculations shall be a maximum of 72°F (22°C) for heating and minimum of 75°F (24°C) for cooling.

SECTION C303—MATERIALS, SYSTEMS AND EQUIPMENT

C303.1 Identification. Materials, systems and equipment shall be identified in a manner that will allow a determination of compliance with the applicable provisions of this code.

C303.1.1 Building thermal envelope insulation. An *R-value* identification mark shall be applied by the manufacturer to each piece of *building thermal envelope* insulation 12 inches (305 mm) or greater in width. Alternatively, the insulation installers shall provide a certification listing the type, manufacturer and *R-value* of insulation installed in each element of the *building thermal envelope*. For blown-in or sprayed fiberglass and cellulose insulation, the initial installed thickness, settled thickness, settled *R-value*, installed density, coverage area and number of bags installed shall be indicated on the certification. For sprayed polyurethane foam (SPF) insulation, the installed thickness of the areas covered and *R-value* of installed thickness shall be indicated on the certification. For insulated siding, the *R-value* shall be *labeled* on the product's package and shall be indicated on the certification. The insulation installer shall sign, date and post the certification in a conspicuous location on the job site.

Exception: For roof insulation installed above the deck, the *R-value* shall be *labeled* as required by the material standards specified in Table 1508.2 of the *International Building Code*.

C303.1.1.1 Blown-in or sprayed roof/ceiling insulation. The thickness of blown-in or sprayed fiberglass and cellulose roof/ceiling insulation shall be written in inches (mm) on markers and one or more of such markers shall be installed for every 300 square feet (28 m²) of attic area throughout the attic space. The markers shall be affixed to the trusses or joists and marked with the minimum initial installed thickness with numbers not less than 1 inch (25 mm) in height. Each marker shall face the attic access opening. Spray polyurethane foam thickness and installed *R-value* shall be indicated on certification provided by the insulation installer.

C303.1.2 Insulation mark installation. Insulating materials shall be installed such that the manufacturer's *R-value* mark is readily observable upon inspection. For insulation materials that are installed without an observable manufacturer's *R-value* mark, such as blown or draped products, an insulation certificate complying with Section C303.1.1 shall be left immediately after installation by the installer, in a conspicuous location within the *building*, to certify the installed *R-value* of the insulation material.

Exception: For roof insulation installed above the deck, the *R-value* shall be *labeled* as specified by the material standards in Table 1508.2 of the *International Building Code*.

C303.1.3 Fenestration product rating. *U-factors*, *solar heat gain coefficient* (SHGC) and visible transmittance (VT) of fenestration products shall be determined as follows:

1. For windows, doors and skylights, *U-factor*, SHGC and VT ratings shall be determined in accordance with NFRC 100 and NFRC 200.
2. Where required for garage doors and rolling doors, *U-factor* ratings shall be determined in accordance with either NFRC 100 or ANSI/DASMA 105.

U-factors, SHGC and VT shall be determined by an accredited, independent laboratory, and *labeled* and certified by the manufacturer with a label affixed to the product or a label certificate specific to the products in the project.

Products lacking such a *labeled U-factor* shall be assigned a default *U-factor* from Table C303.1.3(1) or Table C303.1.3(2). Products lacking such a *labeled SHGC* or VT shall be assigned a default SHGC or VT from Table C303.1.3(3). For Tubular Daylighting Devices, VT_{annual} shall be measured and rated in accordance with NFRC 203.

TABLE C303.1.3(1)—DEFAULT GLAZED WINDOW, GLASS DOOR AND SKYLIGHT *U*-FACTORS

FRAME TYPE	WINDOW AND GLASS DOOR		SKYLIGHT	
	Single	Double	Single	Double
Metal	1.20	0.80	2.00	1.30
Metal with thermal break	1.10	0.65	1.90	1.10
Nonmetal or metal clad	0.95	0.55	1.75	1.05
Glass block	0.60			

TABLE C303.1.3(2)—DEFAULT OPAQUE DOOR *U*-FACTORS

DOOR TYPE	OPAQUE <i>U</i> -FACTOR
Uninsulated metal	1.20
Insulated metal (rolling)	0.90
Insulated metal (other)	0.60
Wood	0.50
Insulated, nonmetal edge, max 45% glazing, any glazing double pane	0.35

TABLE C303.1.3(3)—DEFAULT GLAZED FENESTRATION SHGC AND VT

	SINGLE GLAZED		DOUBLE GLAZED		GLAZED BLOCK
	Clear	Tinted	Clear	Tinted	
SHGC	0.8	0.7	0.7	0.6	0.6
VT	0.6	0.3	0.6	0.3	0.6

C303.1.4 Insulation product rating. The thermal resistance (*R-value*) of insulation shall be determined in accordance with the US Federal Trade Commission *R-value* rule (CFR Title 16, Part 460) in units of $h \times ft^2 \times ^\circ F/Btu$ at a mean temperature of 75°F (24°C).

C303.1.4.1 Insulated siding. The thermal resistance (*R-value*) of insulated siding shall be determined in accordance with ASTM C1363. Installation for testing shall be in accordance with the manufacturer's instructions.

C303.2 Installation. Materials, systems and equipment shall be installed in accordance with the manufacturer's instructions and the *International Building Code*.

C303.2.1 Protection of exposed foundation insulation. Insulation applied to the exterior of basement walls, *crawl space walls* and the perimeter of slab-on-grade floors shall have a rigid, opaque and weather-resistant protective covering to prevent the degradation of the insulation's thermal performance. The protective covering shall cover the exposed exterior insulation and extend not less than 6 inches (153 mm) below grade.

C303.2.2 Multiple layers of continuous insulation board. Where two or more layers of continuous insulation board are used in a construction assembly, the continuous insulation boards shall be installed in accordance with Section C303.2. Where the continuous insulation board manufacturer's instructions do not address installation of two or more layers, the edge joints between each layer of continuous insulation boards shall be staggered.