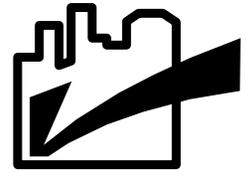


State Maps and Prescriptive Packages



COMcheck-EZ™

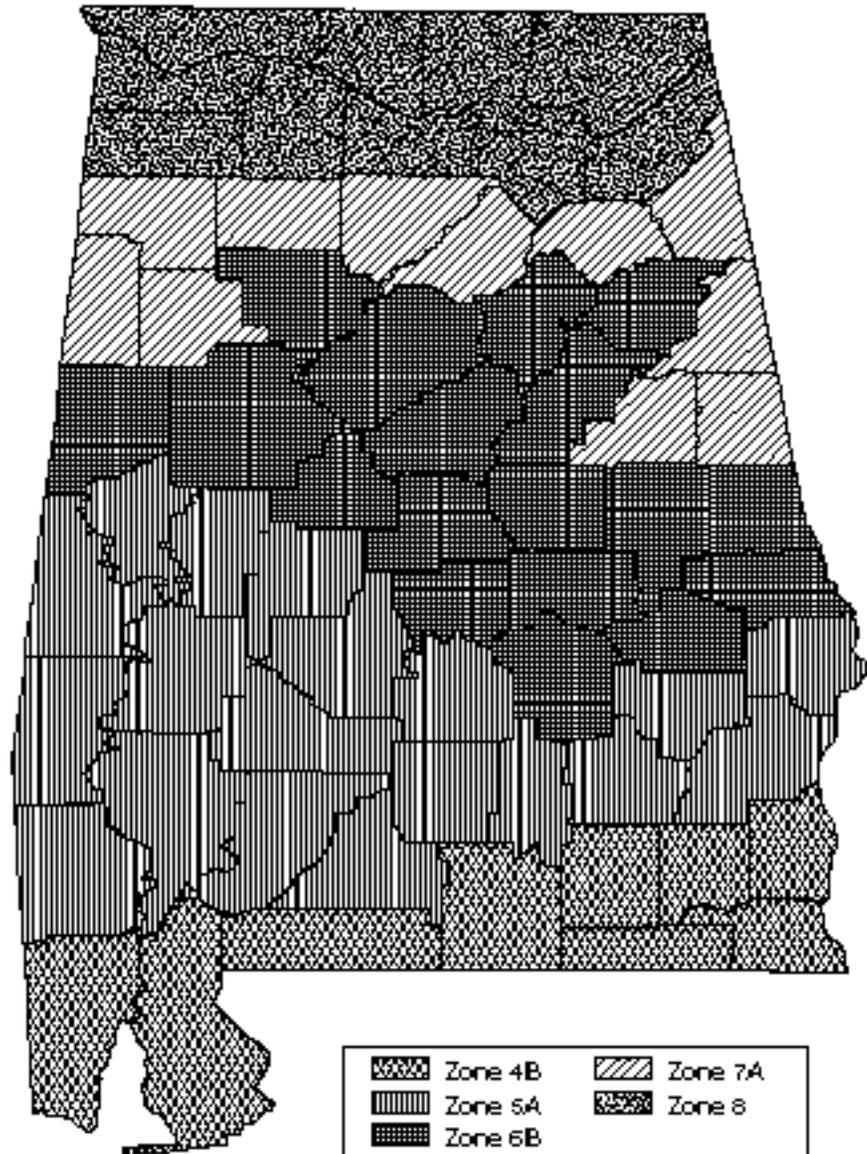
January 1997

The COMcheck-EZ™ State Maps and Prescriptive Packages contain supporting materials that are needed when using the Envelope and Mechanical Compliance Guides. Insulation and other building envelope requirements and mechanical system requirements vary with climate. The COMcheck-EZ State Maps divide the United States into 33 different climate zones at a county level. Zones are numbered from 1 through 19 (for consistency with the MECcheck climate zones) and have a, b, and c designations to reflect climate differences that affect cooling.

To determine the climate zone to use with your building, locate the map for your state and identify the zone number from the legend or county list.

To determine insulation and other building envelope requirements, find the prescriptive package number corresponding to your climate zone. The Envelope Compliance Guide employs a package approach that requires all components in your design meet or exceed the prescribed efficiency levels contained in the prescriptive package. If you find the prescriptive packages too constraining, consider using the COMcheck-EZ software, which allows tradeoffs among building envelope components.

ALABAMA



Zone	County	Zone	County
6B	Autauga	4B	Houston
4B	Baldwin	8	Jackson
5A	Barbour	6B	Jefferson
6B	Bibb	7A	Lamar
7A	Blount	8	Lauderdale
5A	Bullock	8	Lawrence
5A	Butler	6B	Lee
6B	Calhoun	8	Limestone
6B	Chambers	5A	Lowndes
7A	Cherokee	6B	Macon
6B	Chilton	8	Madison
5A	Chocoma	5A	Marengo
5A	Clarke	7A	Marion
7A	Clay	8	Marshall
7A	Cleburne	4B	Mobile
4B	Coffee	5A	Monroe
8	Colbert	6B	Montgomery
5A	Conecuh	8	Morgan
6B	Coosa	5A	Perry
4B	Covington	6B	Pickens
5A	Crenshaw	5A	Pike
7A	Cullman	7A	Randolph
4B	Dale	5A	Russell
5A	Dallas	6B	Shelby
8	De Kalb	6B	St Clair
6B	Elmore	5A	Sumter
4B	Escambia	6B	Talladega
7A	Etowah	6B	Tallapoosa
7A	Fayette	6B	Tuscaloosa
8	Franklin	6B	Walker
4B	Geneva	5A	Washington
5A	Greene	5A	Wilcox
5A	Hale	7A	Winston
4B	Henry		

COMcheck-EZ™ Prescriptive Packages

Climate Zone 4b

Envelope Component	Low Fenestration Area (0-10% Window-Wall Ratio)			Medium Fenestration Area (10%-25% Window-Wall Ratio)			High Fenestration Area (25%-40% Window-Wall Ratio)		
	No Framing	Metal Framing	Wood Framing	No Framing	Metal Framing	Wood Framing	No Framing	Metal Framing	Wood Framing
Walls ^(a)									
Framed Any Spacing <i>Minimum R-value</i>	NA	11	11	NA	11	11	NA	11	11
CMU, 8" or greater with Integral Insulation(b) <i>Minimum R-value</i>	0	0	0	0	0	0	0	0	0
All Other Masonry Walls <i>Minimum R-value</i>	0	0	0	5	11	11	5	11	11
Windows									
<i>Maximum Solar Heat Gain Coefficient</i>	No Projection	≥.25 Projection	≥.5 Projection	No Projection	≥.25 Projection	≥.5 Projection	No Projection	≥.25 Projection	≥.5 Projection
<i>Maximum U-Factor</i>	Any	Any	Any	0.6	0.7	Any	0.4	0.5	0.6
	Any	Any	Any	Any	Any	Any	0.7	0.7	0.7
Skylight (Limit 3% of Roof Area)									
<i>Maximum U-Factor</i>	1			1			1		
Roof									
All-Wood Joist/Truss <i>Minimum R-Value</i>	Continuous Insulation		Roof Cavity Insulation	Continuous Insulation		Roof Cavity Insulation	Continuous Insulation		Roof Cavity Insulation
Nonwood Joist/Truss <i>Minimum R-Value</i>	16		19	16		19	16		19
Concrete Slab or Deck <i>Minimum R-Value</i>	17		25	17		25	17		25
Metal Purlin with Thermal Break <i>Minimum R-Value</i>	16		NA	16		NA	16		NA
Metal Purlin without Thermal Break <i>Minimum R-Value</i>	17		25	17		25	17		25
	17		X	17		X	17		X
Floor									
All-Wood Joist/Truss <i>Minimum R-Value</i>	Continuous Insulation		Floor Cavity Insulation	Continuous Insulation		Floor Cavity Insulation	Continuous Insulation		Floor Cavity Insulation
Nonwood Joist/Truss <i>Minimum R-Value</i>	4		11	4		11	4		11
Concrete Slab or Deck <i>Minimum R-Value</i>	4		11	4		11	4		11
	4		NA	4		NA	4		NA
Slab Edge or Basement Walls									
<i>Minimum R-Value</i>	Insulation			Insulation			Insulation		
	0			0			0		

Notes:

- (a) For walls next to unconditioned spaces, use the Low Fenestration Area wall requirements.
- (b) Integral insulation in concrete masonry units may be perlite, vermiculite, or other insulating material.

- "NA" indicates the category is not applicable.
- A minimum R-value of zero indicates no insulation is required.
- "Any" indicates any available product will comply.
- "X" indicates no complying option exists in the prescriptive packages.

COMcheck-EZ™ Prescriptive Packages

Climate Zone 5a

Envelope Component	Low Fenestration Area (0-10% Window-Wall Ratio)			Medium Fenestration Area (10%-25% Window-Wall Ratio)			High Fenestration Area (25%-40% Window-Wall Ratio)		
	No Framing	Metal Framing	Wood Framing	No Framing	Metal Framing	Wood Framing	No Framing	Metal Framing	Wood Framing
Walls ^(a)									
Framed Any Spacing <i>Minimum R-value</i>	NA	11	11	NA	11	11	NA	11	11
CMU, 8" or greater with Integral Insulation(b) <i>Minimum R-value</i>	0	0	0	0	0	0	0	0	0
All Other Masonry Walls <i>Minimum R-value</i>	0	0	0	5	11	11	5	11	11
Windows									
<i>Maximum Solar Heat Gain Coefficient</i>	No Projection	≥.25 Projection	≥.5 Projection	No Projection	≥.25 Projection	≥.5 Projection	No Projection	≥.25 Projection	≥.5 Projection
<i>Maximum U-Factor</i>	Any	Any	Any	0.6	0.7	Any	0.5	0.6	0.7
	Any	Any	Any	Any	Any	Any	0.7	0.7	0.7
Skylight (Limit 3% of Roof Area)									
<i>Maximum U-Factor</i>		1			1			1	
Roof									
All-Wood Joist/Truss <i>Minimum R-Value</i>	Continuous Insulation	or	Roof Cavity Insulation	Continuous Insulation	or	Roof Cavity Insulation	Continuous Insulation	or	Roof Cavity Insulation
Nonwood Joist/Truss <i>Minimum R-Value</i>	14		19	16		19	16		19
Concrete Slab or Deck <i>Minimum R-Value</i>	15		19	17		25	17		25
Metal Purlin with Thermal Break <i>Minimum R-Value</i>	14		NA	16		NA	16		NA
Metal Purlin without Thermal Break <i>Minimum R-Value</i>	15		25	17		25	17		25
	15		X	17		X	17		X
Floor									
All-Wood Joist/Truss <i>Minimum R-Value</i>	Continuous Insulation	or	Floor Cavity Insulation	Continuous Insulation	or	Floor Cavity Insulation	Continuous Insulation	or	Floor Cavity Insulation
Nonwood Joist/Truss <i>Minimum R-Value</i>	5		11	5		11	5		11
Concrete Slab or Deck <i>Minimum R-Value</i>	6		11	6		11	6		11
	5		NA	5		NA	5		NA
Slab Edge or Basement Walls									
<i>Minimum R-Value</i>	Insulation			Insulation			Insulation		
	0			0			0		

Notes:

- (a) For walls next to unconditioned spaces, use the Low Fenestration Area wall requirements.
- (b) Integral insulation in concrete masonry units may be perlite, vermiculite, or other insulating material.

- "NA" indicates the category is not applicable.
- A minimum R-value of zero indicates no insulation is required.
- "Any" indicates any available product will comply.
- "X" indicates no complying option exists in the prescriptive packages.

COMcheck-EZ™ Prescriptive Packages

Climate Zone 6b

Envelope Component	Low Fenestration Area (0-10% Window-Wall Ratio)			Medium Fenestration Area (10%-25% Window-Wall Ratio)			High Fenestration Area (25%-40% Window-Wall Ratio)		
	No Framing	Metal Framing	Wood Framing	No Framing	Metal Framing	Wood Framing	No Framing	Metal Framing	Wood Framing
Walls ^(a)									
Framed Any Spacing <i>Minimum R-value</i>	NA	11	11	NA	11	11	NA	11	11
CMU, 8" or greater with Integral Insulation(b) <i>Minimum R-value</i>	0	0	0	0	0	0	0	0	0
All Other Masonry Walls <i>Minimum R-value</i>	0	0	0	5	11	11	5	11	11
Windows	No Projection	≥.25 Projection	≥.5 Projection	No Projection	≥.25 Projection	≥.5 Projection	No Projection	≥.25 Projection	≥.5 Projection
<i>Maximum Solar Heat Gain Coefficient</i>	Any	Any	Any	0.6	0.7	Any	0.5	0.6	0.7
<i>Maximum U-Factor</i>	Any	Any	Any	Any	Any	Any	0.7	0.7	0.7
Skylight (Limit 3% of Roof Area)									
<i>Maximum U-Factor</i>	1			1			1		
Roof	Continuous Insulation	or	Roof Cavity Insulation	Continuous Insulation	or	Roof Cavity Insulation	Continuous Insulation	or	Roof Cavity Insulation
All-Wood Joist/Truss <i>Minimum R-Value</i>	16		19	16		19	19		25
Nonwood Joist/Truss <i>Minimum R-Value</i>	17		25	17		25	20		25
Concrete Slab or Deck <i>Minimum R-Value</i>	16		NA	16		NA	19		NA
Metal Purlin with Thermal Break <i>Minimum R-Value</i>	17		25	17		25	20		30
Metal Purlin without Thermal Break <i>Minimum R-Value</i>	17		X	17		X	20		X
Floor	Continuous Insulation	or	Floor Cavity Insulation	Continuous Insulation	or	Floor Cavity Insulation	Continuous Insulation	or	Floor Cavity Insulation
All-Wood Joist/Truss <i>Minimum R-Value</i>	6		11	6		11	6		11
Nonwood Joist/Truss <i>Minimum R-Value</i>	6		11	6		11	6		11
Concrete Slab or Deck <i>Minimum R-Value</i>	6		NA	6		NA	6		NA
Slab Edge or Basement Walls	Insulation			Insulation			Insulation		
<i>Minimum R-Value</i>	0			0			0		

Notes:

- (a) For walls next to unconditioned spaces, use the Low Fenestration Area wall requirements.
- (b) Integral insulation in concrete masonry units may be perlite, vermiculite, or other insulating material.

- "NA" indicates the category is not applicable.
- A minimum R-value of zero indicates no insulation is required.
- "Any" indicates any available product will comply.
- "X" indicates no complying option exists in the prescriptive packages.

COMcheck-EZ™ Prescriptive Packages

Climate Zone 7a

Envelope Component	Low Fenestration Area (0-10% Window-Wall Ratio)			Medium Fenestration Area (10%-25% Window-Wall Ratio)			High Fenestration Area (25%-40% Window-Wall Ratio)		
	No Framing	Metal Framing	Wood Framing	No Framing	Metal Framing	Wood Framing	No Framing	Metal Framing	Wood Framing
Walls ^(a)									
Framed Any Spacing <i>Minimum R-value</i>	NA	11	11	NA	11	11	NA	11	11
CMU, 8" or greater with Integral Insulation(b) <i>Minimum R-value</i>	0	0	0	0	0	0	5	11	11
All Other Masonry Walls <i>Minimum R-value</i>	5	11	11	5	11	11	5	11	11
Windows									
<i>Maximum Solar Heat Gain Coefficient</i>	No Projection	≥.25 Projection	≥.5 Projection	No Projection	≥.25 Projection	≥.5 Projection	No Projection	≥.25 Projection	≥.5 Projection
<i>Maximum U-Factor</i>	Any	Any	Any	0.5	0.6	0.7	0.4	0.5	0.6
	Any	Any	Any	0.7	0.7	0.7	0.7	0.7	0.7
Skylight (Limit 3% of Roof Area)									
<i>Maximum U-Factor</i>	0.8			0.8			0.8		
Roof									
All-Wood Joist/Truss <i>Minimum R-Value</i>	Continuous Insulation	or	Roof Cavity Insulation	Continuous Insulation	or	Roof Cavity Insulation	Continuous Insulation	or	Roof Cavity Insulation
Nonwood Joist/Truss <i>Minimum R-Value</i>	14		19	19		25	19		25
Concrete Slab or Deck <i>Minimum R-Value</i>	15		19	20		25	20		25
Metal Purlin with Thermal Break <i>Minimum R-Value</i>	14		NA	19		NA	19		NA
Metal Purlin without Thermal Break <i>Minimum R-Value</i>	15		25	20		30	20		30
	15		X	20		X	20		X
Floor									
All-Wood Joist/Truss <i>Minimum R-Value</i>	Continuous Insulation	or	Floor Cavity Insulation	Continuous Insulation	or	Floor Cavity Insulation	Continuous Insulation	or	Floor Cavity Insulation
Nonwood Joist/Truss <i>Minimum R-Value</i>	8		11	8		11	8		11
Concrete Slab or Deck <i>Minimum R-Value</i>	9		11	9		11	9		11
	8		NA	8		NA	8		NA
Slab Edge or Basement Walls									
<i>Minimum R-Value</i>	Insulation			Insulation			Insulation		
	0			0			0		

Notes:

- (a) For walls next to unconditioned spaces, use the Low Fenestration Area wall requirements.
- (b) Integral insulation in concrete masonry units may be perlite, vermiculite, or other insulating material.

- "NA" indicates the category is not applicable.
- A minimum R-value of zero indicates no insulation is required.
- "Any" indicates any available product will comply.
- "X" indicates no complying option exists in the prescriptive packages.

COMcheck-EZ™ Prescriptive Packages Climate Zone 8

Envelope Component	Low Fenestration Area (0-10% Window-Wall Ratio)			Medium Fenestration Area (10%-25% Window-Wall Ratio)			High Fenestration Area (25%-40% Window-Wall Ratio)		
	No Framing	Metal Framing	Wood Framing	No Framing	Metal Framing	Wood Framing	No Framing	Metal Framing	Wood Framing
Walls ^(a)									
Framed Any Spacing <i>Minimum R-value</i>	NA	11	11	NA	13	11	NA	13	11
CMU, 8" or greater with Integral Insulation(b) <i>Minimum R-value</i>	5	11	11	5	11	11	5	11	11
All Other Masonry Walls <i>Minimum R-value</i>	5	11	11	6	13	11	6	13	11
Windows									
<i>Maximum Solar Heat Gain Coefficient</i>	No Projection	≥.25 Projection	≥.5 Projection	No Projection	≥.25 Projection	≥.5 Projection	No Projection	≥.25 Projection	≥.5 Projection
<i>Maximum U-Factor</i>	Any	Any	Any	0.5	0.6	0.7	0.4	0.5	0.6
	Any	Any	Any	0.7	0.7	0.7	0.5	0.5	0.5
Skylight (Limit 3% of Roof Area)									
<i>Maximum U-Factor</i>	0.8			0.8			0.8		
Roof									
All-Wood Joist/Truss <i>Minimum R-Value</i>	Continuous Insulation	or	Roof Cavity Insulation	Continuous Insulation	or	Roof Cavity Insulation	Continuous Insulation	or	Roof Cavity Insulation
Nonwood Joist/Truss <i>Minimum R-Value</i>	14		19	19		25	19		25
Concrete Slab or Deck <i>Minimum R-Value</i>	15		19	20		25	20		25
Metal Purlin with Thermal Break <i>Minimum R-Value</i>	14		NA	19		NA	19		NA
Metal Purlin without Thermal Break <i>Minimum R-Value</i>	15		25	20		30	20		30
	15		X	20		X	20		X
Floor									
All-Wood Joist/Truss <i>Minimum R-Value</i>	Continuous Insulation	or	Floor Cavity Insulation	Continuous Insulation	or	Floor Cavity Insulation	Continuous Insulation	or	Floor Cavity Insulation
Nonwood Joist/Truss <i>Minimum R-Value</i>	9		11	9		11	9		11
Concrete Slab or Deck <i>Minimum R-Value</i>	10		11	10		11	10		11
	9		NA	9		NA	9		NA
Slab Edge or Basement Walls									
<i>Minimum R-Value</i>	Insulation			Insulation			Insulation		
	0			0			0		

Notes:

- (a) For walls next to unconditioned spaces, use the Low Fenestration Area wall requirements.
- (b) Integral insulation in concrete masonry units may be perlite, vermiculite, or other insulating material.

- "NA" indicates the category is not applicable.
- A minimum R-value of zero indicates no insulation is required.
- "Any" indicates any available product will comply.
- "X" indicates no complying option exists in the prescriptive packages.