

1 Section 302.1 of the International Energy Conservation Code is amended
2 to read as follows:

3 302.1 Exterior Design Conditions. The following design parameters shall
4 be used for calculations required under this code.

5
6 EXTERIOR DESIGN CONDITIONS

7	8	9	10	11	12	13	14	15	16	17	18	19
	Winter	Design	Dry-Bulb		-2	F						
	Summer	Design	Dry-Bulb		91	F						
	Summer	Design	Wet-Bulb		64	F						
	Degree Days Heating				6083							
	Degree Days Cooling				567							
	Climate Zone				13	b						

19 16.22.040 Table-502.2 Amended.

20 Table 502.2 of the International Energy Conservation Code is amended by
21 the inclusion of the values, as follows:

22 TABLE 502.2

23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
	<u>Element</u>	<u>Mode</u>	<u>Type A-1 Buildings U</u>	<u>Type A-2 Building U</u>												
	Walls	Htg & Cooling	.125	.22												
	Roof/Ceiling	Htg & Cooling	.026	.026												
	Floors Over Unheated Spaces	Htg & Cooling	.050	.050												
	Heated Slab on Grade	Heating	R-Value 7.1	R-Value 7.1												
	Unheated Slab on Grade	Heating	R-Value 5.0	R-Value 5.0												
	Basement Wall	Htg or Cooling	U-Value .096	U-Value .096												
	Crawl Wall	Htg or Cooling	U-Value .096	U-Value .096												

40 16.22.050 Section 506 added--Building Design.

41 Section 506 of the International Energy Conservation Code is added to
42 read as follows:

43 506.1 Compliance

1 a). Adherence to all requirements of this section constitutes compliance
 2 with this code.

3 b). Alternate Materials and Methods of Construction. The provisions of
 4 this section are not intended to prevent the use of any material or method not
 5 specifically prescribed. The building official may approve variances from the
 6 prescriptive standards through the methods described in Chapters 4 and 5
 7 whereby the owner or the owner’s agent provides calculations as evidence that the
 8 alternate materials and/or methods will not result in any greater overall thermal
 9 transmittance and/or use of energy from depletable sources than if the same
 10 structure were to be constructed in accordance with the prescriptive standards
 11 found herein.

12 c). Achievement of a score, established by the building official, on the
 13 Colorado E-Star Program is equivalent to full compliance with this code.

14 16.22.060 Tables 802.2(1), 802.2(2),802.2(3) and 802.2(4) Amended.

15 Tables 802.2(1), 802.2(2), 802.2(3) and 802.2(4) of the International
 16 Energy Conservation Code are amended to read as follows:

17 TABLE 802.2(1)
 18 BUILDING ENVELOPE REQUIREMENTS ^{A through E}
 19 GLAZING AREA 10 PERCENT OR LESS OF ABOVE-GRADE WALL AREA
 20

ELEMENT	CONDITION/VALUE	
Skylights (U-value)	0.8	
Slab or below-grade wall (R-value)	R-0	
Windows and glass doors PF < 0.25 0.25 < PF < 0.50 PF > 0.50	SHGC	U-value
	ANY	ANY
	“	“
	“	“
Roof assemblies (R-value) All-wood joist/truss Metal joist/truss Concrete slab or deck Metal purlin with thermal block Metal purlin without thermal block	Insulation between framing	Continuous Insulation
	R-25	R-18
	R-25	R-19
	N/A	R-18
	R-30	R-19
	N/A	R-19
Floors over outdoor air or	Insulation between framing	Continuous Insulation

Unconditioned space (R-value) All-wood joist/truss Metal joist/truss Concrete slab or deck	R-19		R-17
	R-25		R-17
	NA		R-17
	No Framing Metal Framing Wood Framing		
Above-Grade Walls (R-value) Framed R-value cavity R-value continuous	NA	R-13	R-11
	NA	R-0	R-0
CMU, >8 in, with integral insulation R-value cavity R-value continuous	NA	R-11	R-11
	R-5	R-0	R-0
Other Masonry Walls R-value cavity R-value continuous	NA	R-11	R-11
	R-5	R-0	R-0

For SI: 1 inch = 25.4 mm.

a Values shall be determined from Tables 802.2(5) through 802.2(37) using the climate zone(s) specified in Table 302.1. (Note: The tables begin on page 78.)

b "NA" indicates the condition is not applicable.

c An R-value of zero indicates no insulation is required.

d "Any" indicates any available product will comply.

e "X" indicates no complying option exists for this condition.

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TABLE 802.2(2)
BUILDING ENVELOPE REQUIREMENTS ^{a through e}
GLAZING AREA OVER 10 PERCENT BUT NOT GREATER THAN 25 PERCENT OF
ABOVE-GRADE WALL AREA

ELEMENT	CONDITION/VALUE		
Skylights (U-value)	0.8		
Slab or below-grade wall (R-value)	R-0		
Windows and glass doors PF < 0.25 0.25 < PF < 0.50 PF > 0.50	SHGC	U-value	
	0.5	0.5	
	0.6	0.5	
	0.7	0.5	
Roof assemblies (R-value) All-wood joist/truss Metal joist/truss Concrete slab or deck Metal purlin with thermal block Metal purlin without thermal block	Insulation between framing	Continuous Insulation	
	R-25	R-19	
	R-25	R-20	
	N/A	R-19	
	R-30	R-20	
	X	R-20	
Floors over outdoor air or Unconditioned space (R-value) All-wood joist/truss Metal joist/truss Concrete slab or deck	Insulation between framing	Continuous Insulation	
	R-19	R-17	
	R-25	R-17	
	NA	R-17	
Above-Grade Walls (R-value) Framed R-value cavity R-value continuous CMU, >8 in, with integral insulation R-value cavity R-value continuous Other Masonry Walls R-value cavity R-value continuous	No Framing	Metal Framing	Wood Framing
	NA	R-13	R-11
	NA	R-0	R-0
	NA	R-11	R-11
	R-5	R-0	R-0
	NA	R-11	R-11
	R-5	R-0	R-0

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For SI: 1 inch = 25.4 mm.
a Values shall be determined from Tables 802.2(5) through 802.2(37) using the climate zone(s) specified in Table 302.1. (Note: The tables begin on page 78.)
b "NA" indicates the condition is not applicable.
c An R-value of zero indicates no insulation is required.
d "Any" indicates any available product will comply.
e "X" indicates no complying option exists for this condition.

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TABLE 802.2(3)
BUILDING ENVELOPE REQUIREMENTS ^{a through e}
GLAZING AREA OVER 25 PERCENT BUT NOT GREATER THAN 40 PERCENT OF
ABOVE-GRADE WALL AREA

ELEMENT	CONDITION/VALUE		
Skylights (U-value)	0.8		
Slab or below-grade wall (R-value)	R-8		
Windows and glass doors PF < 0.25 0.25 < PF < 0.50 PF > 0.50	SHGC	U-value	
	0.4	0.5	
	0.5	0.5	
	0.6	0.5	
Roof assemblies (R-value) All-wood joist/truss Metal joist/truss Concrete slab or deck Metal purlin with thermal block Metal purlin without thermal block	Insulation between framing	Continuous Insulation	
	R-30	R-23	
	R-30	R-24	
	N/A	R-23	
	X	R-24	
	X	R-24	
Floors over outdoor air or Unconditioned space (R-value) All-wood joist/truss Metal joist/truss Concrete slab or deck	Insulation between framing	Continuous Insulation	
	R-19	R-17	
	R-25	R-17	
	NA	R-17	
Above-Grade Walls (R-value) Framed R-value cavity R-value continuous CMU, >8 in, with integral insulation R-value cavity R-value continuous Other Masonry Walls R-value cavity R-value continuous	No Framing	Metal Framing	Wood Framing
	NA	R-13	R-11
	NA	R-0	R-0
	NA	R-11	R-11
	R-5	R-0	R-0
	NA	R-11	R-11
	R-5	R-0	R-0

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For SI: 1 inch = 25.4 mm.
a Values shall be determined from Tables 802.2(5) through 802.2(37) using the climate zone(s) specified in Table 302.1. (Note: The tables begin on page 78.)
b "NA" indicates the condition is not applicable.
c An R-value of zero indicates no insulation is required.
d "Any" indicates any available product will comply.
e "X" indicates no complying option exists for this condition.

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TABLE 802.2(4)
BUILDING ENVELOPE REQUIREMENTS ^{a through e}
GLAZING AREA OVER 40 PERCENT BUT NOT GREATER THAN 50 PERCENT OF
ABOVE-GRADE WALL AREA

ELEMENT	CONDITION/VALUE		
Skylights (U-value)	0.8		
Slab or below-grade wall (R-value)	R-8		
Windows and glass doors PF < 0.25 0.25 < PF < 0.50 PF > 0.50	SHGC	U-value	
	0.4	0.4	
	0.5	0.4	
	0.6	0.4	
Roof assemblies (R-value) All-wood joist/truss Metal joist/truss Concrete slab or deck Metal purlin with thermal block Metal purlin without thermal block	Insulation between framing	Continuous Insulation	
	R-30	R-23	
	R-30	R-24	
	N/A	R-23	
	R-38	R-24	
	R-49	R-24	
Floors over outdoor air or Unconditioned space (R-value) All-wood joist/truss Metal joist/truss Concrete slab or deck	Insulation between framing	Continuous Insulation	
	R-19	R-17	
	R-25	R-17	
	NA	R-17	
Above-Grade Walls (R-value) Framed R-value cavity R-value continuous CMU, >8 in, with integral insulation R-value cavity R-value continuous Other Masonry Walls R-value cavity R-value continuous	No Framing	Metal Framing	Wood Framing
	NA	R-13	R-13
	NA	R-7	R-3
	NA	R-11	R-11
	R-5	R-0	R-0
	NA	R-11	R-11
	R-5	R-0	R-0
	NA	R-11	R-11
	R-5	R-0	R-0
	R-5	R-0	R-0

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For SI: 1 inch = 25.4 mm.
a Values shall be determined from Tables 802.2(5) through 802.2(37) using the climate zone(s) specified in Table 302.1. (Note: The tables begin on page 78.)
b "NA" indicates the condition is not applicable.
c An R-value of zero indicates no insulation is required.
d "Any" indicates any available product will comply.
e "X" indicates no complying option exists for this condition.