2015 IECC and the ERI – Blaine County, Idaho

March 23, 2016

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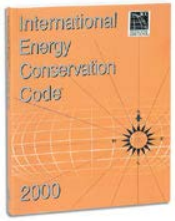
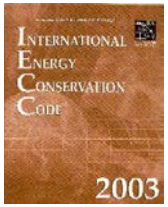
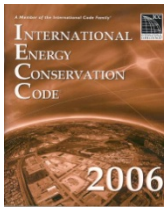
Energy Code History in Idaho



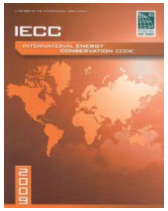
Effective July 1, 2002



Effective Jan 1, 2005

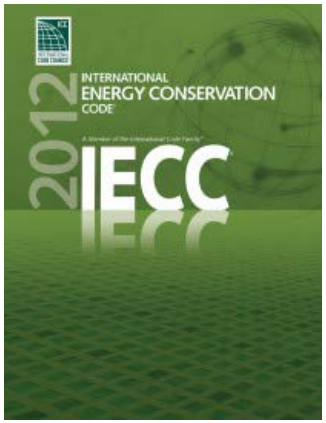


Effective Jan 1, 2008



Effective Jan 1, 2011

Blaine County launched Build Smart



Effective Jan 1, 2015

One year late

Heavily amended

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Location

Remote location, dangerously close to transmission capacity

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Blaine County BuildSmart

- Public Hearing – January 25, 2011, Adopted March 15, 2011
- Sliding HERS scale based on home size
- Scale starts at 70 for homes 2500 sq ft or smaller
- Prescriptive path is 2009 IECC with high efficiency furnace (90 AFUE), water heater (0.62 EF) and $5ACH_{50}$
- Rebate 50% of final permit fee up to $500 for first year
- LEED and NGBS alternative compliance path

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Background on BuildSmart

- Two-year long program creation process
- Address issue of second home owners using disproportionate share of resources, especially on luxury items such as pools, snow melt and spas
- Committee made up of 2/3 builders/subs
- Builder created scale; 3 scenarios presented, mid option chosen. Set HERS 70 and 2500 sf as baseline. Over 20,000 sf then HERS 10.
- Held charrettes with community
- Compared to Boulder, WA, Telluride, Aspen, Santa Fe
- Political will of County Commissioners critical

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Justification for BuildSmart

- Blaine County is a “State and National Leader”
- DOE predicts energy demand to increase, supply to decrease, cost to increase (hydro due to climate change), creating energy security issues
- 2030 Challenge
- Energy conservation can result in consumer cost savings and improvements to environmental quality, national security , personal security and comfort
- Gas / electrical transmission infrastructure nearing capacity
- HERS is a more robust tool than REScheck
- National average home size 1900 sq ft vs. Blaine County average of 4,000-4,500 sq ft

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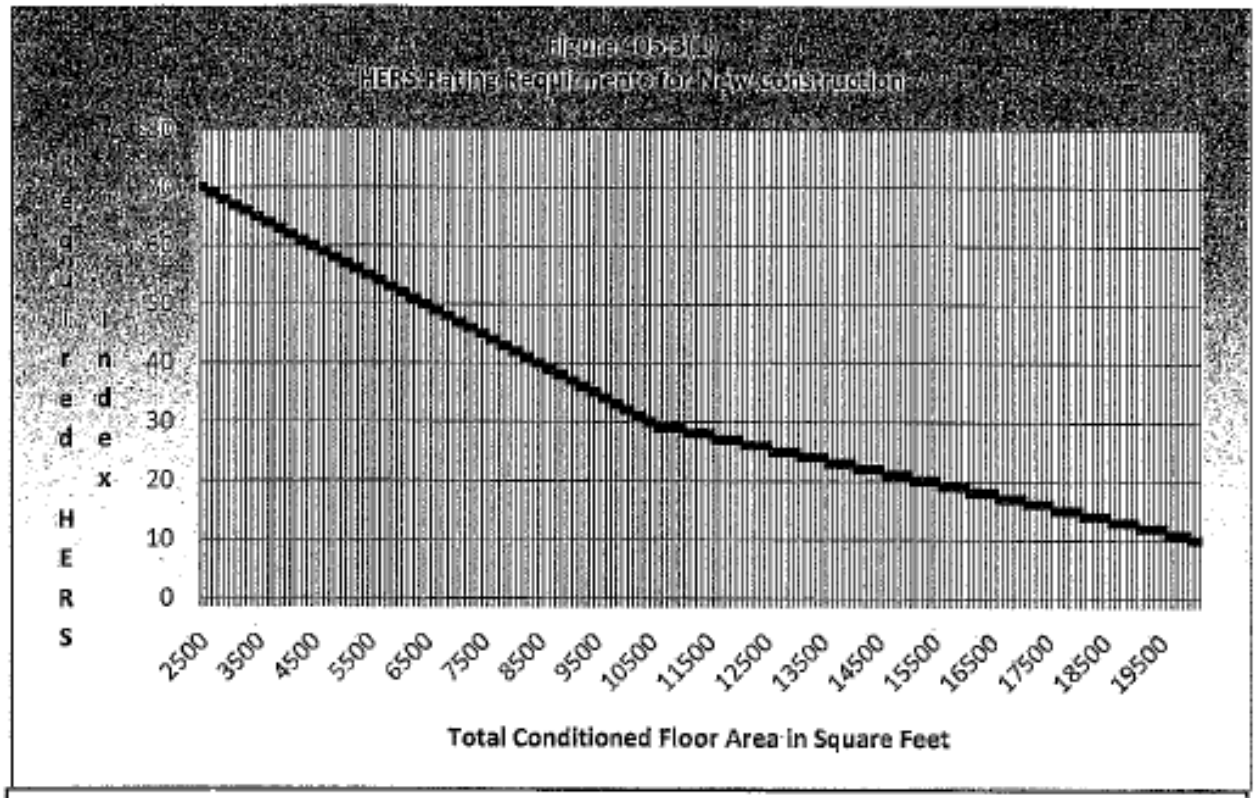
HERS Scale based on Home Size



From HERS 70 to 10

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HERS Scale based on Home Size

Table 405.3(1)
HERS Rating Requirements for New Construction

SQ. FT. of Home is less than:	Required HERS Score	SQ. FT. of Home is less than:	Required HERS Score	SQ. FT. of Home is less than:	Required HERS Score	SQ. FT. of Home is less than:	Required HERS Score
2,500	70	5,400	56	8,400	41	13,100	25
2,800	69	5,600	55	8,600	40	13,600	24
3,000	68	5,800	54	8,800	39	14,100	23
3,200	67	6,000	53	9,000	38	14,600	22
3,400	66	6,200	52	9,200	37	15,100	21
3,600	65	6,400	51	9,400	36	15,600	20
3,800	64	6,600	50	9,600	35	16,100	19
4,000	63	6,800	49	9,800	34	16,600	18
4,200	62	7,000	48	10,000	33	17,100	17
4,400	61	7,200	47	10,200	32	17,600	16
4,600	60	7,400	46	10,400	31	18,100	15
4,800	59	7,600	45	10,600	30	18,600	14
5,000	58	7,800	44	11,100	29	19,100	13
5,200	57	8,000	43	11,600	28	19,600	12
		8,200	42	12,100	27	20,000	11
				12,600	26	Greater than 20,000	10

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Our Mission

- The Idaho Energy Code Collaborative facilitates energy code implementation through education, outreach and technical assistance and prepares for the adoption of new energy codes by vetting changes and providing an open forum for stakeholders to voice concerns and reach consensus.

Our Vision

- Be the forward-thinking and trusted resource for adopting and implementing energy codes that are consistent with national standards and appropriate for Idaho on a regular and predictable schedule.

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Code Adoption Process

- The code adoption process is dictated by Title 39 Health and Safety Chapter 41 Idaho Building Code Act. Codes are evaluated by the Idaho Building Code Board through the negotiated rulemaking process as established in section 67-5221 of the Idaho Code, which requires two public hearings that are not less than 60 days apart before they make a formal recommendation regarding adoption to the Idaho Legislature before the next session begins. The collaborative actively participates in this process.

Circuit Rider – *A Free Resource for the State of Idaho!*

- To support energy code implementation, there is a Circuit Rider who is the key resource for Idaho energy code questions and answers, code interpretations and enforcement strategies. He provides cost free energy code assistance through technical support and training.

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Statewide Outlook

Idaho Energy Code Collaborative just issued a proposal to adopt the 2015 IECC with only a few amendments:

- Modify Table R402.1.1 to change the ceiling R-value R-38 and wall value to R-21
- BlowerDoor testing is optional – 7ACH50
- Hot water pipe insulation only required on supply and return piping in recirculation other than demand recirculation systems

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Statewide Outlook

- ERI Compliance Option based on Home Size

Climate Zone	Energy Rating Index
1	52
2	52
3	51
4	54
5	1,500 sq. ft. or less – 70 1,501 sq. ft. to 2,500 sq. ft. – 65 2,501 sq. ft. to 5,000 sq. ft. – 60 5,001 sq. ft. or greater – 55
6	1,500 sq. ft. or less – 69 1,501 sq. ft. to 2,500 sq. ft. – 64 2,501 sq. ft. to 5,000 sq. ft. – 59 5,001 sq. ft. or greater – 54
7	53
8	53

Earliest possible adoption is Jan 1, 2018

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