

Insulation Industry Fall 2021 Washington Update

Friday, September 17th, 2021



Congress: Infrastructure Legislation

Energy Efficiency Provisions

- \$3.5 billion (FY2022) for the State Weatherization Assistance Program
- \$550 million (FY2022) for the Energy Efficiency and Conservation Block Grant Program
- \$250 million annual revolving loan fund (FY 2022-26) to promote energy efficiency in energy intensive states
- \$500 million (FY2022-26) to retrofit schools
- \$120 million (FY 2022-26) to optimize energy efficiency at manufacturing and industrial facilities;
- \$45 million annual grant program (FY 2022-26) to implement cost-effective building codes for efficiency and resilience;
- \$10 million grant program (FY 2022) to establish building training and assessment centers
- \$10 million grant program (FY 2022) for career training programs for energy efficient buildings technologies;
- \$8 million annual grant program (FY2022-26) for energy auditor training
- Technical assessments for manufacturers to maximize energy efficiency



Congress: Reconciliation Legislation

What's in it for the Insulation Industry?

25C Homeowner Energy Efficiency Tax Credit

Current Law	Proposed New Law
<ul style="list-style-type: none">◆ Covers only material (no labor)◆ 10 percent up to \$500◆ Expires on December 31, 2021	<ul style="list-style-type: none">◆ Covers material (including air sealing products) and labor◆ 30 percent up to \$1,200◆ Expires on December 31, 2031

45L Builder Energy Efficient New Home Tax Credit

Current Law	Proposed New Law
<ul style="list-style-type: none">◆ \$2,000 per home◆ 50% better than 2006 IECC◆ Expires on December 31, 2021	<ul style="list-style-type: none">◆ \$2,500 /\$5000◆ Meet Energy Star / DOE Zero Energy Ready Home standard◆ Expires December 31, 2031



Congress: Reconciliation Legislation

What's in it for the Insulation Industry?

179D Commercial Buildings Energy-Efficiency Tax Deduction

Current Law	Proposed New Law
<ul style="list-style-type: none">◆ \$1.80 per ft² (50% better than 90.1)◆ \$0.60 per ft² partial deduction for individual component replacement◆ Permanent	<ul style="list-style-type: none">◆ \$2.50-5.00 per ft² (25-50% better than 90.1; sliding scale)◆ Retrofits can access deduction based on actual energy use of building◆ Prevailing wage requirement for full deduction (reduced to \$0.50-1.00)◆ Senate bill addresses REITs and multi-family buildings



Congress: Reconciliation Legislation

What's in it for the Insulation Industry (continued)

- **State rebates for whole-house energy retrofits (\$9 billion)**
- **State rebates for home electrification (\$9 billion)**
- **Weatherization Assistance Program (\$3.5 billion)**
- **Grants for resiliency, energy efficiency and renewable energy upgrades (\$3.2 billion)**
- **State Assistance on model building energy code adoption (\$100 million)**
- **State Assistance on stretch codes (\$200 million)**
- **Clean Energy Payment Program (\$150 billion)**
 - **Payments to utilities who increase their clean electricity capacity by 4% each year**
 - **Fines to utilities who fall short**



Congress: FY 2022 Appropriations

House Energy and Water FY 2022 Appropriations

- \$520 million for industrial decarbonization
- 25 percent budget increase in the Office of Energy Efficiency and Renewable Energy (EERE)

Energy Efficiency Spending

- \$375 million (17 percent increase) for Weatherization Assistance Program
- \$350 million (18 percent increase) for Building Technology Office (\$380 million in Senate bill)
- \$10 million for Building Code Program activities (\$20 million in Senate bill)
- \$10 million for assessment of environmental impacts of construction materials
- \$55 million for the “Better Industrial Plants” Program
- \$60 million in cost-share grants to manufacturers to install underutilized, existing low-carbon technologies
- \$30 million for energy efficiency workforce development
- \$40 million to accelerate adoption of electric heat pumps



Administration: 2021 IECC / 2019 ASHRAE 90.1 Determinations

Table ES.3. Impacts on Consumers' Cash Flow from Compliance with the 2021 IECC

Climate Zone	Compared to the 2018 IECC	
	Net Annual Cash Flow Savings (\$ for Year 1)	Years to Cumulative Positive Cash Flow
1	145	1
2	108	2
3	101	3
4	59	5
5	7	10
6	44	4
7	138	3
8	239	2
National Average	76	4



Administration: Department of Energy Efficiency Standards for Manufactured Housing (*proposed*)

Proposed Tier 1 Prescriptive Envelope Requirements (under \$55,000)

Climate Zone	Exterior Wall Insulation <i>R</i> -value	Exterior Ceiling Insulation <i>R</i> -value	Exterior Floor Insulation <i>R</i> -value
1	13	22	22
2	13	22	19
3	19	22	22

Proposed Tier 2 Prescriptive Envelope Requirements (over \$55,000)

Climate Zone	Exterior Wall Insulation <i>R</i> -value	Exterior Ceiling Insulation <i>R</i> -value	Exterior Floor Insulation <i>R</i> -value
1	13	30	13
2	20+5	30	19
3	20+5	38	30



Administration: General Services Administration: Federal Building Performance Standards

- Office of Federal High-Performance Green Buildings:
 - Pending review of Green Building Certification Systems
 - Pending update to facility design standards (P-100)
- Opportunity to expand guidance for energy-efficient retrofits of federal buildings (below prospectus threshold of \$3.095M).
- Green Building Advisory Committee:
 - Advice Letter – Procurement of Low Embodied Energy and Carbon Materials by Federal Agencies
- Challenge: Preferred financing option for retrofits to government buildings is not well-tailored to underwrite improvements to the building envelope.



Administration: Department of Housing and Urban Development energy efficiency code requirements for new home mortgages

Table 1. Estimated market share of federal single-family home mortgages

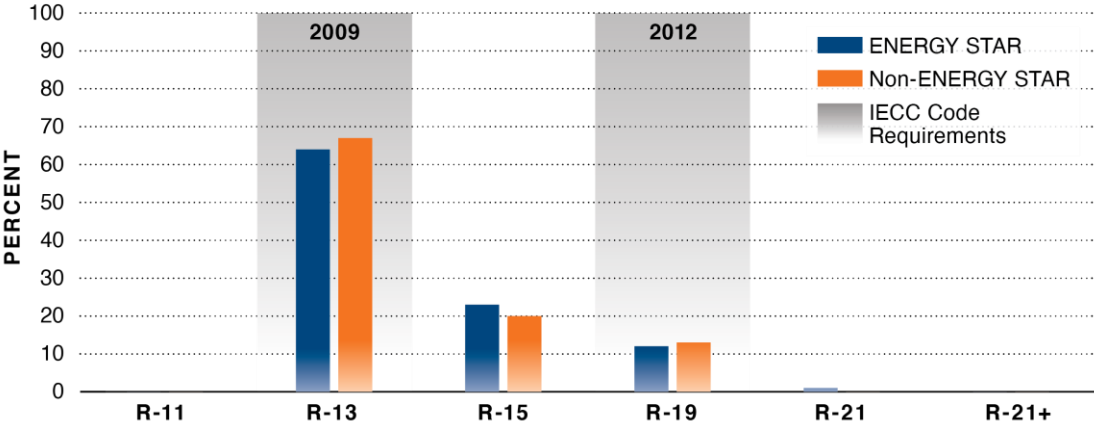
	Number of new homes	% of new homes built	% of home purchase mortgages
<i>Federal mortgages and guarantees</i>			
FHA insured mortgages	74,000	9	17
VA mortgages	43,000	5	8
USDA mortgages			~2
<i>Conventional mortgages</i>			
Fannie Mae			26
Freddie Mac			21

Sources: U.S. Census Survey of Construction (2018 data); FHA, VA, Fannie Mae, and Freddie Mac annual or quarterly reports (2019 data).



Administration: Environmental Protection Agency Energy Star for New Homes Program

Wall Cavity Insulation: Climate Zone 3



Continuous Wall Insulation: Climate Zone 3

