

## Estimated Costs of the 2018 IRC / IECC Code Change

## SUMMARY OF COST IMPACT RANGES

CODE SECTION	CODE CHANGE	Additional Construction Cost (savings)			
		HIGH	LOW	APPLICABILITY	
<b>R602.7.5</b>	Wall Construction	Support for headers: revises table for minimum number of king studs; now only requires 1 or 2 for low-wind urban and suburban conditions.	\$0	(\$516)	Houses with wall openings greater than 3 feet.
<b>R703.8.4</b>	Wall Covering	Masonry veneer: adds new provisions for brick tie attachment over foam sheathing and direct to 7/16" sheathing.	\$325	(\$73)	Houses with brick veneer and continuous insulation
<b>Table N1102.1.2</b>	Energy Efficiency	Reduces the maximum window U-factor requirement in Climate Zones 3-8.	\$85	\$74	Houses in Climate Zones 3-8
<b>N1104.1</b>	Energy Efficiency	Lighting efficiency: increases the percent of permanently installed lighting fixtures that must contain high-efficacy lamps from 75% to 90%.	\$8	\$8	Houses in all climate zones
<b>M1601.4.1</b>	Duct Systems	Duct sealing: eliminates the requirement for sealing longitudinal seams of snap-lock and button-lock types of HVAC ducts located inside conditioned space	\$0	(\$471)	Houses with metal HVAC ducts located inside conditioned space
		<b>Overall cost change for typical construction</b>	<b>\$93</b>	<b>(\$637)</b>	

## COST IMPACTS FOR NON-TYPICAL FEATURES

CODE SECTION	CODE CHANGE	Additional Construction Cost (savings)			
		HIGH	LOW	APPLICABILITY	
<b>R301.2.2.1</b>	Building Planning, Seismic Design Category	Seismic Design Categories: updates the seismic design maps in Section R301.2 to be consistent with those in the 2014 NEHRP Provisions and ASCE 7-16.	\$7,111	\$2,446	Applicable where the revised map triggers a change in the assigned SDC
<b>R322.3.4</b>	Building Planning, Flood-Resistant Construction	Flood-Resistant Construction: adds new requirements for exterior slabs (e.g. parking pads, sidewalks) based on ASCE 24.	\$2,092	(\$1,084)	Applicable in coastal high-hazard areas (Zone V) and Coastal A Zones.
<b>R322.3.6</b>	Building Planning, Flood-Resistant Construction	Flood-Resistant Construction: adds new provisions requiring stairways and ramps to be flood resistant, breakaway or be able to be raised.	\$11,107	(\$823)	Applicable in coastal high-hazard areas (Zone V) and Coastal A Zones.
<b>R507</b>	Floors, Exterior Decks	Decks: reorganizes deck beam requirements and adds minimum spans for single ply beams.	\$0	(\$101)	Applicable if a deck is installed
<b>R507.3</b>	Floors, Exterior Decks	Decks: adds minimum footing size table for decks and pointer to frost depth requirements.	\$127	(\$72)	Applicable if a deck is installed
<b>R507.4</b>	Exterior Decks	Decks: relocates deck post section and adds 8x8 posts to the table. Clarifies maximum height for 4x4 posts.	\$199	\$0	Applicable if a deck is installed
<b>R602.3.1</b>	Wall Construction	Stud Size, Height & Spacing: adds new table for 11' and 12' tall load-bearing studs.	(\$435)	(\$998)	Applicable for bearing walls exceeding 10' tall but not exceeding 12' tall.
<b>R702.7.3</b>	Wall Covering	Vapor Retarders: adds polypropylene siding to list of vented cladding products.	(\$119)	(\$381)	Applicable in CZ 4C (Marine) and 5 through 8
<b>R703.2</b>	Wall Covering	Water-Resistive Barriers: deletes exception for detached accessory buildings.	\$271	\$51	Applicable for detached accessory buildings
<b>R703.8</b>	Wall Covering	Masonry Veneer: adds new provisions for brick tie attachment over foam sheathing and direct to 7/16" sheathing.	\$325	(\$73)	Houses with brick veneer and continuous insulation
<b>R806.5</b>	Roof-Ceiling Construction	Unvented Attics: adds new option for constructing an unvented attic with air-permeable insulation if vapor diffusion ports and minimum air flow is provided.	(\$1,583)	(\$9,185)	Houses with unvented attics in CZ 1-3
<b>N1103.3.6</b>	Energy Efficiency	Introduces criteria to allow buried or partially buried ducts and to model buried ducts as R-25.	\$2,057	(\$731)	Optional method for houses with HVAC ducts in vented attics

<b>N1103.3.6</b>	Energy Efficiency	Introduces criteria to allow buried ducts to be performance modeled as if inside conditioned space.	\$2,866	(\$4,064)	Optional method for houses with HVAC ducts in vented attics
<b>N1103.6.1</b>	Energy Efficiency	Introduces minimum fan efficacy for HRVs and ERVs.	\$0	(\$857)	Applicable where an HRV/ERV is installed
<b>N1106.4</b>	Energy Efficiency	Increases ERI values approximately 10%; also adds a backstop for homes complying with the ERI using on-site generation.	N/A	N/A	Applicable in all climate zones