NAHB construction savings claims related to ICC code changes:

October 2014 report: (www.valueofnahb.org, accessed 1-31-2017)

Ongoing efforts on building codes. NAHB's Construction, Codes and Standards (CC&S) department maintains an intensive ongoing effort to keep costly requirements out of the model codes. When successful, this saves builders significant money in subsequent years in areas built to those codes. At International Code Council hearings held in early October 2013, for example, NAHB was successful on 78% of the code proposals for the 2015 IRC that the association either supported or rejected in its efforts to keep building codes flexible, cost-effective and product-neutral. NAHB members will directly benefit from these victories when local jurisdictions begin to adopt the 2015 version of the code. However, in 2013, members realized benefits from key accessibility proposals that NAHB kept out of the 2009 and 2012 IRC that would have required builders to provide elevators or lifts in all townhomes and split level homes with entrances that do not open into a living space and porches on all homes (to satisfy a proposal to require that all new homes have zero clearance entrances). NAHB estimates that in 2013, this saved builders \$825.9 million in costs of including elevators and \$175.9 million in costs of building porches on homes where they otherwise would not be necessary.

January 2017 report: (<u>https://www.nahb.org/~/media/Sites/NAHB/industry-professionals/detailed-analysis-membership-savings.ashx</u>, accessed 1-31-2017)

Costly Provisions Kept Out of Building Codes Estimated Value: \$1.52 billion in cost savings for home builders in 2017 total. Approximately \$1,200 per housing start.

The Construction, Codes and Standards (CC&S) department of NAHB continues its strong, successful effort to keep unnecessary costly items out of building codes. Recently, for example, NAHB was successful in keeping numerous provisions out of the 2018 International Residential Code (IRC), the 2018 International Energy Conservation Code (IECC), the 2018 International Building Code (IBC), and the 2018 International Existing Building Code (IEBC) that would have increased costs of many homes by more than \$10,000. However, NAHB members won't directly benefit from these particular actions until the 2018 codes are published and jurisdictions begin to adopt them. Meanwhile, NAHB's previous successes in keeping costly provisions out of the 2015 version of the codes are translating into cost savings, as these have now been adopted in various states.

As of this writing, NAHB's Economics and Housing Policy Group has, with the help of CC&S staff, estimated cost savings for only a select number of these provisions in 2017. Their cumulative impact is nevertheless substantial:

Specific Provisions Kept Out of Codes Cost per Home Number of New Homes Affected in 2017

Mandatory requirements for new homes to facilitate future	\$1,500	167,565
solar energy system		
installations.		
Fenestration-U-Factor in	\$3,000	82,700
Climate Zones 5, 6, 7 and 8		
increased to triple pane levels		

No electric heat or ducts in conditioned space	\$1,500	131,459
High efficiency water heating equipment required	\$1,500	143,084
A provision that would have required draftstopping every 1,500 square feet in attics	\$500	156,857
A provision that would have made whole-house mechanical ventilation mandatory	\$2,800	113,961
A provision that would have required motorized dampers connected to kitchen exhaust systems instead of gravity dampers	\$250	149,014
A provision that would have prohibited stud-wall and joist cavity plenums for return air	\$1,750	66,351
Removal of the underside sheathing exemption for floors with joists 2x10 or larger	\$1,981	29,366

The estimated number of homes impacted is based on NAHB forecast of single-family housing starts for 2017 in the jurisdictions that have adopted the 2015 versions of the code as we approach 2017. For each defeated provision, the number of homes impacted is reduced to account for the share of homes built for which a provision doesn't apply (e.g. a home built in an unaffected climate zone) or for which there are no additional cost savings because the homes are already being built to that standard. Information on characteristics of new homes comes from the Census Bureau/HUD Survey of Construction of new single-family homes started in 2015, the 2015 Builder Practices Survey conducted by Home Innovation Research Labs, and the special questions on builders' use of green features, weighted by housing starts, for the November 2013 NAHB/Wells Fargo Housing Market Index.

In total, estimated savings generated by avoiding the code provisions listed above equals \$1.52 billion. Dividing by NAHB's forecast of 1,241,782 housing starts for 2017 produces an estimate of \$1,200 per start.