



**HOME BUILDERS & REMODELERS ASSOCIATION
OF CONNECTICUT, INC.**

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*Your Home
Is Our
Business*

March 4, 2014

To: Senator Bob Duff, Co-Chairman
Representative Lonnie Reed, Co-Chairman
Members of the Energy & Technology Committee

From: Bill Ethier, CAE, Chief Executive Officer

Re: **Raised Bill 352, AAC the State Building Code**

The HBRA of Connecticut is a professional trade association with nine hundred (900) member firms statewide employing tens of thousands of CT's citizens. Our members, all small businesses, are residential and commercial builders, land developers, remodelers, subcontractors, suppliers and businesses and professionals that provide services to our industry and to consumers. Our members build between 70% and 80% of all new homes and apartments in the state each year and perform countless home improvements. **We created and run the HBRACT Green Homes Council and work to promote green home construction standards and building practices, including energy efficiency practices.** See our program at www.hbact.org/HBRACTGreenHomesCouncil.

In summary, we strongly oppose SB 352 because it:

- **Fails to appreciate the rigorous process required for adopting and amending model building codes;**
- **Imposes excess costs and requirements on the building industry, our consumers and municipal building officials;**
- **Demands the adoption of a specific model code (2015 IECC) that has yet to be published and, therefore, not yet reviewed by all CT stakeholders nor CT's Codes and Standards Committee;**
- **Demands the adoption of an expensive Home Energy Rating System (HERS) analysis and the achievement of an unspecified HERS rating, as an alternative to the IECC, to be chosen by DEEP;**
- **Misplaces CT's energy efficiency policy emphasis on new construction rather than on older existing buildings where more emphasis should be placed.**

CT's Code Adoption Process: CT's Codes and Standards Committee (CSC), a statutory body of 21 building code experts, works with the Office of State Building Inspector, to produce CT's State Building Code (SBC). Our SBC is based on model codes produced by book publishers, primarily the International Code Council (ICC) and others. One such model code is the International Energy Conservation Code (IECC). None of the model codes are perfect and, in fact, are subject to the same lobbying influences as is any legislation or regulation. **Therefore, each model code book must be reviewed - and is usually amended - by the CSC to ensure it is appropriate for CT's built environment, the public's health and safety, the building industry and building officials who have to enforce these codes.** The review process takes longer than a year due primarily to the

frequency of model version publications, the multitude of model codes that make up our SBC and the breadth of technical information contained in these codes.

SB 352 continues an unwise and potentially harmful and expensive policy precedent of specifying the adoption of a specific version of a model code (i.e., the 2015 IECC). Some provisions in certain model code versions may not be appropriate for CT. Some versions may add such minor provisions as to not warrant adoption, because the adoption process itself is expensive and time consuming. **SB 352 also creates an impossible task on the code adoption process by specifying the 2015 IECC version is to be done within one year of publication.**

Rather than adopt the requirements of this bill, we urge you to merely place a period on line 40 after “building” and delete the rest of the sentence to remove any reference to a specific code version or a specific timeline for adoption.

Moreover, the continuous and costly push for marginally greater energy efficiency standards in new buildings will not only impose unnecessary costs but also will likely worsen our overall energy demands. Since new homes are built to much higher energy efficiency standards, even under the current 2009 IECC, SB 352 is likely to have the unintended consequence of keeping some people in older, less efficient homes because they cannot afford the higher costs SB 352 imposes on a new home purchase.

Each code version can, but not always, produce significant cost increases on builders and consumers. While CT adopted the 2009 IECC in October 2011, the CSC is currently reviewing the 2012 IECC, slated for adoption later this year. National research shows that for Climate Zone 5 (which includes Connecticut), the 2012 IECC will add \$4,653 to the cost of an average single family home while producing energy savings of \$505/yr., for a simple payback of 9.2 years. In addition, there is a steep learning curve and consequent costs for both the construction industry and building officials whenever any new code is adopted. Many are just catching up with the 2009 IECC adopted just over two years ago. **To counter the frequency of model code versions published by the ICC, which depends on its code book sales for its revenues, many states are moving to a six-year code cycle and skipping every other model version. We encourage CT to move to a six-year code adoption cycle so that the progression of our codes is more reasonable and allows both the industry and code officials to catch up with and reasonably implement our code changes.**

We also urge you to also delete the reference to the Home Energy Rating System (HERS) score as an alternative to following the IECC. HERS, created by the non-profit organization, RESNET (Residential Energy Services Network) is not a building code and cannot be equated to a code. In order to meet the unspecified HERS rating demanded by SB 352, which in itself creates tremendous uncertainty (i.e., how often will DEEP recommend a new HERS score?), you need to conduct a HERS evaluation by a RESNET certified HERS rater. The market rate to conduct a HERS evaluation is \$700 to \$1,200 per home. This is a large new cost that is just for an evaluation added to the cost of every new home. **While a number of builders conduct a HERS evaluation to better market their green homes, it should not be mandated on all new homes. The housing market is still struggling to recover after 7 to 8 years of recession and we**

can barely keep up with the costs of new code requirements, let alone what is supposed to be a voluntary energy efficiency rating system.

Finally, the emphasis on improving the energy efficiency of new homes is misplaced for two reasons. Since new construction has been constantly improved by the code adoption cycle, to the point where we are approaching diminishing returns, **we urge you to place much greater emphasis on assisting the energy renovation of our older housing stock.** Greater energy efficiency codes imposed on new housing construction will have an insignificant, at best, impact on the total greenhouse gas emission reduction targets in the state. Greenhouse gas emissions include emissions from autos and other transportation facilities, from all existing buildings, from all industrial and commercial operations, as well as all other human activities. The contribution to CO₂ emissions from all existing residential uses amounts to 21.1%.¹ And, of all residential uses, **most of the CO₂ emissions come from single family and multifamily housing built prior to 1991.** All housing built between 1991 and 2001 contributed 2.5% of the total fossil fuel consumption in the nation, which can be roughly correlated to contributions toward CO₂ emissions.

Energy consumption in homes has steadily and significantly been decreasing over time. The average energy consumption per home (in California where this study was conducted) has steadily decreased with each decade.

- Homes built in the 1970s had an average energy consumption of over 160 kBTU/sqft-year, while
- the average for all homes built in the 1980s was 80 kBTU/sqft-year,
- in the 1990s was just over 60 kBTU/sqft-year, and
- the 2000s has been 40 kBTU/sqft-year.

Energy consumption by new housing that is being built under the new 2009 IECC is unknown but it will clearly be improved over the housing built in the 2000s and will be much less than the 2.5% of all fossil fuel consumption experienced by housing built between 1991 and 2001.

Moreover, the effects of occupant behavior on energy consumption can be highly significant regardless of the statutory or building code requirement or incentive-based upgrades a consumer chooses, which would defeat any of the already marginal gains in energy efficiency sought by the proposed legislation.

Therefore, please do not place an unnecessary and additional demand on home builders, home buyers and building officials. Please do not adopt SB 352.

Thank you for the opportunity to comment on this legislation.

¹ Industrial uses comprise 30%, transportation 31.2% and commercial uses 17.7% of all CO₂ emissions.