

# Beyond Blocks and Bricks

Number Three

**Ronald J. Hunsicker**

**Professional Engineer**

**Masonry Investigations**

P. O. Box 6615

Wyomissing, PA 19610-2102

484-332-1164

rjhpe@ptd.net

## Energy efficiency in houses

A recent article in **The Washington Post** explored the energy efficiency of American homes, asking and answering a question: "Are American homes more energy efficient? Not exactly." The gist was that as we are presented, and accept, ways to save energy, we take these savings and use them to buy things that have to be plugged in. Also, many of our necessities—televisions, cable TV modems, coffee makers—draw power even when they are "off." (*I bought test device that shows the power consumption of an appliance that is plugged into the test device. The cable TV modem in my kitchen draws 11 watts when "off." 11 watts per hour X 24 hours in a day X 365 days in a year = 69,960 watts => 70 kilowatt hours. 70 kwh x \$0.13 per kwh = \$9.10 a year. Add a VCR and the "off" power consumption doubles. Every wall-wart power supply is worth five to ten watts, too.*)

I thought this a little too simple an explanation. Energy requirements for houses did not really become demanding until the release of the 2003 International Residential Code. I wondered if there are just a lot of poorly insulated houses in the housing stock, so many poorly insulated houses that they overwhelm the impact of the newer, better insulated houses.

The Bureau of Census shows 130 million housing units in 2009. The NAHB believes that 8.6 million housing units were built from 2004 through 2009. No more than 7% of the housing unit stock has been built according to the more demanding codes. Because of the preponderance of older housing units, the basic energy consumption of the housing stock—what it takes to heat and cool the housing stock, not what is plugged-in—will not change much for many years.

This, I found, is also too simple an explanation. An article from **The New York Times** addressed a greater problem: in 2009, at least seven states did not have a residential energy code and energy-efficient appliances and construction often were not installed and used by builders because the first cost was too great.

So, "Are American homes more energy efficient? Not exactly."

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<http://www.washingtonpost.com/wp-dyn/content/article/2010/09/29/AR2010092906585.html>

Bureau of Census Quick Facts

(<http://quickfacts.census.gov/qfd/states/00000.html>)

"A New Enforcer in Buildings, the Energy Inspector"

<http://www.nytimes.com/2009/07/18/business/energy-environment/18codes.html>