HOUSE BILL 377 PRINTER'S NO. 884

SPONSOR: Rep. Everett

The legislation makes several changes to the Act of November 10, 1999 (P.L. 491, No.45) as amended, known as the Pennsylvania Construction Code Act.

Section 901(a) of the act is amended to provide for consistency with the Industrialized Housing Act, which governs such housing in addition to the Uniform Construction Code. This language was in two bills approved by the Senate last session – House Bill 1196 and Senate Bill 1077. The language is requested by DCED as administrator of the Act.

Section 901 (f) of the Act is amended to include language relating to log home construction.

Since 2006, energy efficiency trade-offs have been allowed under the International Energy Conservation Code, which is adopted tri-annually as part of Pennsylvania's Uniform Construction Code. Changes to the 2009 Code will no longer allow such trade-offs, although Pennsylvania's Code allows for prescriptive construction methods for residential construction to meet overall energy standards for homes (see Section 301(c) of Act 45 and 34 Pa. Code, Section 403.21(d)). This is different from performance standards where all components of construction must meet individual energy standards.

Structures with log walls will not be able to comply with new residential exterior wall energy efficiency requirements, specifically because interior walls cannot be insulated and Pennsylvania is located in climate zones requiring additional energy efficiency steps to be taken in new construction. Essentially, this means that log home construction would cease in the Commonwealth. While log home construction comprises about one to two percent of single home new sales in the Commonwealth, Pennsylvania is a leading "exporter" in log home sales outside of the Commonwealth. According to the Log Home Council, the economic impact of the industry generates nearly \$500 million in annual state revenues.

The proposed amendment will allow log home construction to continue to meet the prescriptive energy standards provided for in Act 45 and the regulations governing the Code. Walls must be at least five inches thick or greater, stringent window glazing and heating efficiency requirements must be met, and all other component requirements are maintained Explanation of terms:

ICC 400 – standards for design and construction of log structures.

Window glazing U-factor – the rate of heat loss is indicted by the U-factor. It is recommended that this factor be at least .35 or lower in northern climates. A lower number indicates less heat loss.

AFUE – Annual Fuel Utilization Efficiency rating that applies to oil and gas heating systems. A higher number indicates better efficiency.

DGX - Direct Geo Exchange, which is the most used type of geothermal technology

HSPF – Heating Seasonal Performance Factor – the most commonly used measure of heating efficiency. Since 2005, new heat pumps manufactured are required to have an HSPF of at least 7.7. The higher the number, the greater the efficiency.

EER – Energy Efficiency Rating for geothermal system cooling efficiency, recommended to be at least 13 or greater. The higher the number, the greater the efficiency.

COP – Coefficient of performance measures the heating efficiency for geothermal systems, recommended to be at least 2.8 or greater. The higher the number, the greater the efficiency.

This language was also approved last session by the Senate in House Bill 1196 and Senate Bill 1077.

Applicants for building permits submitted prior to the effective date of the act may opt to utilize the above referenced standards.

Requirements to install automatic fire sprinkler systems, imposed under the ICC 2009 edition, are excluded from the Pennsylvania Construction Code Act. Builders of one and two family dwellings shall offer a buyer the option to install an automatic fire sprinkler system. Builders shall also provide to buyers information relating to the costs and benefits of automatic sprinkler systems.

Applicants for building permits between January 1, 2011 and the effective date of the act may opt not to install automatic fire sprinkler systems.

Requires builders to utilize increased flooring standards in homes in which the permit holder elects not to install automatic sprinkler systems by including Section R502.3 of the International Residential Code.

Effective immediately.

Todd B. Roup March 30, 2011

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