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PIMA Applauds Reps. Larson and Heller for Introduction of HR 2615 – *Energy Efficient Commercial Roofs Act of 2009*

30% Tax Credit for Building Owners Who Increase Insulation Levels in New and Existing Buildings

May 27, 2009, Bethesda, MD –U.S. Reps. John Larson (D-CT) and Dean Heller (R-NV) last week introduced H.R. 2615 – *The Energy Efficient Commercial Roofs Act of 2009*. This bill provides a 30 percent tax credit for building owners who increase the roof insulation levels for new and existing buildings. These levels, as set out in the proposed law, are significantly higher than the recently adopted ASHRAE 90.1-2007 level for most jurisdictions.

Under this legislation, a qualified roof must have minimum R-values that, on average, are at least 75 percent more stringent than the R-values required under state and local building codes used today. R-value is a measurement of thermal resistance and is commonly used to describe the level of insulation in building walls and roofs. A higher R-value results in greater insulating effectiveness.

"This bill is an excellent first step in ensuring that the high performance roof can take its place in the list of strategies to make buildings more cost effective, energy efficient and environmentally friendly," said Jared O. Blum, President of the Polyisocyanurate Insulation Manufacturers Association (PIMA). "Reps. Larson and Heller have exhibited a keen understanding of the increasingly critical role that roofs play in the nation's climate and energy security efforts. Whether it is storm water runoff, urban heat island, energy efficiency or energy production, it is clear that public policy needs to drive the design of our nation's commercial buildings, and building owners must focus on the untapped potential of high performance roofs."

Most state and local building energy codes currently require low-slope roofs to have R-15. Under this legislation, the required R-values would range from R-20 in the far south to R-35 in the far north. Buildings in Baltimore (climate zone 4), for instance, would be required to have R-25 in order to qualify for the tax credit. The R-values chosen for this legislation are set at levels to achieve maximum energy efficiency without being so costly that building owners would ignore the credit.

Significant energy savings and carbon dioxide emission reductions can be achieved through higher insulation levels in commercial building roofs according to a recent study prepared by Bayer MaterialScience. For the study, Bayer used DOE's EnergyPlus simulation software modeling 10 categories of commercial buildings in 13 different climates indicates. 1/

There is approximately 72 billion square feet of building floor space in the US which equates to 60 billion square feet of roof space. It is assumed that almost all existing buildings are under insulated and need to be reroofed. Bayer's market data, which was substantiated by the Department of Energy's Commercial Buildings Energy Consumption Survey, indicates that 1.5 billion square feet of the existing 60 billion square feet of roofs are replaced yearly.

1/ Energy and Environmental Impact Reduction Opportunities for Existing Buildings with Low-Slope Roofs (April 2009), Jerry Phelan (Project Leader), George Pavlovich, Eric Ma.

According to the study, if 1.5 billion square feet of roofs are replaced for each of the next five years (for a total of 7.5 billion square feet of roofs):

- The energy saved over five years would be 0.08 quads (0.17 quads of source energy) and the 20-year cumulative energy saved from that 7.5 billion feet of roofs would be 0.47 quads (1.03 quads of source energy). 2/
- The energy cost savings for the first 5 years would be $1.2 billion and the cumulative energy cost savings over 20 years would be $10 billion.
- The reduction in carbon dioxide emissions, based on source energy, over the first five years would be 12.2 million metric tons (MMT) and 73.5 MMT over the cumulative 20-year time period. The 73.5 MMT is equal to the carbon dioxide emissions from an average coal-fired power plant over 16 years.

The Bayer report only considers the impact of roof replacements on existing buildings. However, the legislation would cover new and existing buildings, which would result in benefits which Bayer estimates to be approximately 15 percent to 25 percent higher.

"Roof insulation levels can significantly reduce the amount of energy used in our commercial building stock. However, current state and local building energy codes for roof insulation use were set two decades ago. This type of federal tax incentive will help the nation achieve the net-zero energy goals for commercial buildings that were set out under section 422 of the Energy Independence and Security Act of 2007," added Blum.

For more information, please see the PIMA website at www.polyiso.org.

About PIMA
For over 20 years, the Polyisocyanurate Insulation Manufacturers Association (PIMA) has served as the unified voice of the rigid polyiso industry proactively advocating for safe, cost-effective, sustainable and energy efficient construction. PIMA's members, who first came together in 1987, include a synergistic partnership of polyiso manufacturers and industry suppliers. Polyiso is one of the Nation's most widely used and cost-effective insulation products available.

2/ One quad is equal to one quadrillion Btu, about 1 percent of the total U.S. energy consumption in 2005.