

NEW GENERATION OF POLYISO

THE SUSTAINABLE INSULATION FOR THE 21ST CENTURY

BY JARED BLUM

Throughout the country, polyiso continues as the product of choice for the commercial roofing industry with an impressive 55% market share, according to an annual NRCA survey. This excellent track record reflects polyiso's superior performance qualities:

- Polyiso is the most cost-effective insulation with the highest R-value per inch that has long term performance validation.
- Polyiso's high quality ensures it is compatible with virtually all types of roofing systems.
- Polyiso meets FM 4450 and UL 1256 for direct application over steel decks.

Effective January 1, 2003, the polyiso industry is converting to zero ozone depleting blowing agents in compliance with regulations under the Clean Air Act Amendments implemented by the United States Environmental Protection Agency. The present blowing agent, HCFC-141b, will no longer be manufactured in or imported to the United States for use in polyiso.

Blowing agents are used to expand the foam and create cells that account for its excellent thermal performance. New hydrocarbon blowing agents, which do not contribute to the depletion of the ozone (ODP-free) and have zero global warming potential, have been successfully utilized in Europe for nearly a decade. Polyiso with the new HC (pentane) blowing agents contains no HCFC and has been shown to perform equally or superior to the HCFC blowing agents in laboratory testing. In addition, over one billion board feet of polyiso have been installed throughout North America by PIMA members that transitioned early to the new blowing agent over the past three years without any difference in performance being observed.

This is the second successful blowing agent transition that the polyiso industry has undergone in the last seven years. The first occurred on 1993 with the removal of CFCs that were replaced with HCFC141b. The experience gained during that first transition has contributed to the ability of the polyiso industry to move forward again this time. While there are several different issues in this second conversion, and all plants

manufacturing the new polyiso require significant retrofits, the process of product testing, code, fire test approvals with FM and UL, and contractor/market education are remarkably similar to 1993. Therefore, the polyiso industry is confident about the successful, seamless nature of the new product's introduction to the roofing marketplace.

Summary

Polyiso that is HCFC-free is readily available today, and many building owners and specifiers prefer this new environmentally friendly insulation on projects.

The ability of polyiso manufacturers to successfully make this transition is a testament to the ingenuity and commitment of the industry in achieving the highest possible environmental performance for its products. The combination of blowing agents with both zero ozone depletion and zero global warming potential with polyiso's excellent performance in reducing energy use and reducing CO₂ emissions will solidify its place as the premier insulation well into the 21st century. ■

ABOUT THE AUTHOR

Jared O. Blum is the President of the Polyisocyanurate Insulation Manufacturers Association (PIMA), the Washington-based national trade association representing manufacturers of polyiso foam insulation, the most energy efficient insulation on the market today. The Association is committed to working independently and with public and private organizations to educate Americans about the critical importance of national energy conservation. To learn more about polyiso and PIMA, visit the association's website at www.pima.org.



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