

ICYNENE LD-R-50™

Established in 1986, Icynene Inc. is the leading manufacturer of open-cell spray foam insulation products, designed to help create healthier, quieter, more energy efficient environments.

What is the innovation and why is it innovative?

ICYNENE LD-R-50™ is Icynene's next generation of spray foam insulation that is renewable-based, 100% water-blown, and qualifies as an air barrier. ICYNENE LD-R-50 takes insulation performance to a higher level due to its eco-conscious formulation. It is responsibly made using rapidly renewable (as per the USGBC's definition) castor oil content which is a 100% organic material. Why castor oil?

- Castor oil is 100% naturally filtered, with no chemical additives required
- The production process of the castor oil has low energy dependence, consisting simply of de-husking and pressing. Harvesting can be done manually
- Castor crops are non-irrigated (relying only on natural rainfall), saving scarce water supplies
- Castor crops do not require treatment with pesticides or fungicides
- Castor beans are a rapidly renewable material, as per the U.S. Green Building Councils (USGBC) definition, which requires a 10-year or shorter re-growth time frame
- A cradle-to-gate study commissioned by the Department of Energy (DOE) reported that there are essentially zero net greenhouse gas emissions from the production of the castor oil.

ICYNENE LD-R-50 exceeds the minimum renewable requirement for a bio-based material based on the criteria set forth by the United States Department of Agriculture (USDA) and the International Code Council Evaluation Services). In fact, ICYNENE LD-R-50™ is the first product to receive a Verification of Attributes Report (VAR) from the ICC-ES SAVE™ program for exceeding bio-based requirements.

What has ICYNENE LD-R-50™ changed or replaced?

ICYNENE LD-R-50™ is an enhancement of Icynene's classic original formulation (ICYNENE LD-C-50™). While both products deliver high-performance advantages such as moisture management, superior energy efficiency, and improved indoor air quality, ICYNENE LD-R-50™ adds another layer of green consciousness to an already superior product.

When did ICYNENE LD-R-50™ originate, where has it been used, and where is expected to be used in the future?

Developed by Icynene® R&D Technician Saverio Cybulski, ICYNENE LD-R-50™ was released in the U.S. on March 1, 2009 and has already been used in numerous building projects. ICYNENE LD-R-50™ was recently installed and displayed in the exterior walls, ceilings and attic of the media room in the Show Village 2009 Quiet Living Home (a demonstration home at the 2009 International Builders' Show in Las Vegas). ICYNENE LD-R-50 is ideal for use in residential, commercial and architect-specified projects. And because ICYNENE LD-R-50™ helps building projects achieve higher levels of certification under national green building programs such as LEED and ICC-700 National Green Building Standard (NGBS), the product is expected to maintain its stronghold in the spray foam insulation market.

For more information visit <http://www.icynene.com/icynene-ld-r-50/>

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