Soy Goes "Extreme"

T.V. personality Ty Pennington discusses the benefits of soy-based spray-foam insulations during a taping of ABC's "Extreme Makeover: Home Edition."
It's official: Soy has made its way into reality TV. It may not be as dramatic as being cast on a remote island or competing among contestants for the chance at a dream job, but for one unique Californian family, soy-based foam insulation became a success story that will provide a healthy environment for their daughter.

ABC's "Extreme Makeover: Home Edition" lent a helping hand to the Pope family, whose daughter has a skin ailment preventing her from being in direct contact with sunlight. Her disorder limits her time outdoors, and so a healthy environment indoors is critical. To address this sensitive condition, the family's home was completely overhauled with environmentally safe, state-of-the-art products, including soy-based spray-foam insulation from Construction Polymers International, LLC (CPI). Ty Pennington, host of "Extreme Makeover: Home Edition," discussed the benefits of soy products, focusing on the safety of the product for all consumers.

"Extreme Makeover: Home Edition" is a "beat the clock" reality show where designers, contractors and hundreds of other specialty construction workers have seven days to do four months worth of renovations to a single home. Pennington and the crew work as a team to enhance each home in a seemingly impossible amount of time.

Getting the Job Done
Since 1999, the soybean checkoff has worked with Urethane Soy Systems Company (USSC) in Volga, South Dakota, to advance the commercialization of soy-based plastics by creating a unique soy polyol called SoyOyl®. Through checkoff funding, USSC developed and patented SoyOyl®, which is used in soy-based foam insulation.

Soy-based polyurethane plastics are created when an isocyanate (a special type of salt) is combined with a soybean oil-based polyol, thereby creating a chemical reaction. Depending on the application, various mixtures of soy-based polyols with isocyanates can cause plastics to be rigid or flexible.

In addition to CPI's product featured on "Extreme Makeover: Home Edition," BioPolymers, LLC, and Biobased Systems, LLC, also manufacture and retail soy-based spray-foam insulation. Biobased Systems, LLC, utilizes technology supported by the soybean checkoff in its Biobased 501 and 1702 insulations. BioPolymers, LLC, employs the same technology in its Healthysell 500.

Soy-based foam insulation is applied as a liquid and expands 100 times in size to seal wall surfaces. It contains none of the formaldehyde found in most fiberglass batt insulation. In addition, soy insulation is not affected by time or moisture, will not settle and is completely resistant to mold and mildew. Soy-based spray foam insulation is less expensive than traditional spray-foam insulations, is class 1 fire rated and increases the indoor air quality in buildings.

Environmental awareness is increasing each year, adding to the overall demand for high-quality, high-performance green products. The soybean checkoff continues to invest in research and development of soy-based products that meet the demands of the construction industry.

Going the Distance
Companies that manufacture soy-based foam insulation are making conscious efforts to provide an economically and environmentally competitive product that will become a staple used in the commercial and residential construction industry.

According to Biobased Systems, LLC, the seamless airright thermal seal does not allow air to penetrate past the surfaces on which it is applied. Harmful mold and mildew are not given the same opportunities to grow. Mold not only contributes to unhealthy indoor air quality, but it also contributes to rot. Fiberglass batts must be cut around electrical wire and duct outlets, leaving openings that air can penetrate. Toxic mold growth behind homeowners' walls has been a major health threat to homeowners. Homes in Washington, D.C. and Michigan insulated with soy spray-foam insulation have been showcased to the media to demonstrate these health benefits.

Consumers realize the safety and security of a healthy alternative to fiberglass insulation and are now demanding soy-based foam insulation to protect their businesses and homes from the elements while enhancing their living environment.

It seems that everywhere you look lately, soybeans are positively impacting people's lives. Soy seems to be the solution to reducing the amount of petrochemicals used in products made for the building and construction industry. Thanks in part to the efforts of USB and the soybean checkoff, this healthy alternative has quickly proven how our quality of life can be enhanced as it continues to work its way beyond the farm and into consumer hands.

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