



No-Burn® Incorporated

## **NEWS RELEASE**

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### **Cincinnati Eighth-Grader Displays Improved Home Fire Safety Methods Using High Performance Coatings Over Engineered Wood I-Beams**

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AutumnGrace Peterson, an eighth-grader at St. Andrew-St. Elizabeth Ann Seton School in Milford, OH, is a budding young scientist at 14 years of age, and her recent discovery may save a great many lives. The process actually started for AutumnGrace last school year as she pursued a science fair project displaying the tendency of engineered wood I-Beams to fail in a fire situation much more quickly than solid beams. This is highly significant because a majority of homes built in the United States, as well as other countries, use these engineered I-beams for a support structure under floors.

Thankfully, she wasn't content to simply identify the problem. For her science fair



project this year she decided to take her mission one step further and seek a way to solve it. She enlisted the assistance of No-Burn, Inc. of Wadsworth, Ohio, to incorporate one of their high performance coatings into



the experiment for the purpose of providing fire protection to a sample structure representing typical I-beam floor construction. She then built a separate structure of exactly the same design, but provided no added fire protection. She initiated a high intensity fire under each structure and recorded the results.

The outcome displayed a method of protecting these I-Beam flooring systems that adds nearly 30 minutes of time before the floor structure failed. In a fire situation, when every second counts in getting residents out and allowing firefighters to gain control, this could literally be the difference between life and death.

“I am very impressed with AutumnGrace, and the results she has produced supports the beginning of a more involved look at improving life safety in the residential environment that has been the focus of the fire service,” said Robert Davidson of Davidson Code Concepts, LLC, a nationally recognized code consulting firm. “The fire service has been seeking solutions for the structural failure due to fire exposure problem with engineered wood beam construction for some time because the failure of the flooring systems is one of the chief concerns faced by inhabitants and first responders alike in a fire situation. AutumnGrace has done an excellent job of highlighting a practical and easily implemented solution.”

The material AutumnGrace used to protect the flooring system was an intumescent fire reactant paint manufactured by No-Burn<sup>®</sup> that is designed to provide a protective layer between the flame and the wood. It is not harmful to humans or the environment, and can be applied to flooring systems for new and existing homes in a short time and at a fairly low cost. “Last year I was alarmed to discover that some floor systems are more vulnerable to fire, and then this year I was extremely pleased to find a solution to protect them,” responded AutumnGrace Peterson when asked about her experiments. She added, “One of my goals for both my academic activities and, ultimately, for my professional career, is to utilize scientific pursuits to improve people’s lives. I’m very glad that the attention my experiments have received may be one significant step in that direction.”

No surprise, AutumnGrace received a “Superior” grade on her project and has moved on to the Regional Science Fair that will take place at the University of Cincinnati on March 14. From there, she may move on to the Ohio State Science Fair on May 9.

No-Burn, Inc has been leading the way in the field of fire retardant technology since 1998. By removing the fuel a fire needs to burn, these products dramatically reduce the possibility of a fire ever starting when applied over substrates such as wood, drywall, fabric, carpet, furniture, fiber-reinforced plastic and many other materials. Equally important, No-Burn<sup>®</sup> can reduce toxic smoke by as much as 80 percent. All No-Burn<sup>®</sup> products carry a “Class A” rating and are completely non-toxic and non-carcinogenic. Several No-Burn products also offer a dual level of protection, reducing the risk of fire and inhibiting the growth of toxic-black mold. All No-Burn<sup>®</sup> products are available exclusively through a network of dealers, certified for professional application. To learn more, please visit our Web site: [www.noburn.com](http://www.noburn.com), or contact us at 800-989-8577 / 330-336-1500

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