

16 February 2014

General Assembly
State of Connecticut
United States of America

RE: *Bill No. 5100 - An Act Concerning Safety and Certification Standards for the Spray Foam Insulation Industry*

Dear Sirs:

Polyurethane, spray-on insulation is an extremely unforgiving material with an inherent fire risk. As Doug Stewart, loss prevention trainer for *Federated Insurance of Canada* explains, polyurethane spray-on insulation is, essentially, "solid gasoline."

On May 25th 2010, two individuals from a certified contracting firm spent the entire work-day spraying polyurethane in a building for which I, an architect, was supervising construction. The two applicators and I were the only ones on the construction site that day. At the end of the day, an hour after we all left the site, a neighbor called the local fire department to report smoke billowing out of the building. The building was totally destroyed by fire that day.

Building professionals, such as architects and engineers, are seduced by the high insulation-value and air-tightness of polyurethane, spray-on foam. Most of us are unaware of the inherent risks of this product — a testament to the successful marketing campaign of polyurethane chemical manufacturers such as BASF.

Following the fire that destroyed the above-mentioned building, I learned, through my own research, some fundamental characteristics about polyurethane:

- ▶ "The heat created by the exothermic reaction during application creates a risk of scorching and/or fire" (*Application Guidelines* for Walltite Eco, BASF);
- ▶ "... [it] must not be applied in a thickness exceeding three inches in a single pass. If this thickness is exceeded, it will seriously affect the quality and physical properties of the finished product and the internal temperature building up within the foam may cause charring inside the foam bun and bread loafing. (Under certain conditions, applications exceeding this thickness may cause spontaneous combustion of the foam to occur, even hours after product was applied.)" (Product guidelines for JM Corbond III, Johns Manville);

- ▶ “Once a polyurethane fire is started, there is usually a total loss of the property.” (“Safely Speaking” by Doug Stewart, Loss prevention trainer for Federated Insurance of Canada).

Knowing what I know today, I question the wisdom of using polyurethane at all — a product that, if applied improperly, may cause a catastrophic fire and the total loss of a building. After all, if cellulose or batt insulation are applied improperly, they do not cause catastrophic events. Nevertheless, if we accept polyurethane as a legitimate building product available on the market, I strongly urge you, as legislators, to require that it be applied only by well-trained and certified installers. Furthermore, I urge you to require that such installers carry sufficient insurance because things can go badly even with certified applicators.

Thank you.

Montréal ZERO Inc.

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President