Thank you for taking your time to learn how Spray Polyurethane foam is not only the most efficient insulating product on the market but it will also comply with local building codes without the need to install the foam to meet the typical prescriptive IRC/IBC R-value requirements.

Spray foam is a superior insulation product and it works differently than traditional fibrous insulation product. First, we need to look at the way spray foam naturally air seals a building. Air infiltration equates to 40-50% of the energy loss in an average building and spray foam addresses this issue. Plus, Spray foam has superior thermal resistance. We measure it in a heatflow reduction scale (see attached). Here it shows that there is a diminishing rate of return of efficiency. 5 1/2" of our Open Cell Spray Foam or 3" Closed Cell Foam gives us a 96% heatflow reduction which is roughly an R-20…. If we double that thickness to reach over an R-38, we only gain 2% in efficiency. That 2% may equal as much as $5 to $10 per year in energy savings. So, this is why we generally only recommend installing 3 ½" of open cell or 2" Closed Cell foam in the walls and 5 ½" Open Cell or 3" Closed Cell Foam under the roof or attic areas. Also attached is an engineering report that supports these principles and states that 5 ½" of open cell or 3" closed cell spray polyurethane foam will outperform an R-60 of a fiberglass insulation.

Spray foam has been around since the 1950's and we've been involved in thousands of building insulation projects and literally hundreds of projects in the tri-state area. We will not meet the prescriptive IRC/IBC codes by spraying to our recommended thicknesses but fortunately, the Energy Codes (IECC) does make the necessary provision to allow a performance approach to insulating the Building Envelope. The attached "Meeting the Energy Code" document further illustrates code compliance through chapter 405 of the 2018 IECC energy codes.

Please review the attached documents and feel free to call me to discuss the compliance methods for spray foam insulation.

Thank you for your time,

Energy Modeling Agency

Energy Modeling Agency
A Division of GreenBroker, LLC
www.EnergyModelingAgency.com
info@EnergyModelingAgency.com
1-800-524-2145