

## **New Developments in North America**

### **ABSTRACT**

An overview will be presented covering some of the key trends influencing new materials' development across the North America market. These include energy management, climate-based customization, robust design, environmental health & quality (IAQ), product stewardship, and renewable resources. These trends, coupled with code & insurability trends, government regulatory activity, and market expectations of product performance and durability, often present conflicting design challenges for new development.

One example of such conflict is in the area of energy management and efficiency. Manufactures have been extending the use of radiant barriers beyond the roof down onto the whole building enclosure as a means of managing heat load more effectively. The common materials used for managing radiant heat (*e.g.* insulated aluminum sheets & foils) often undergo compromising modifications to meet the code requirements for walls such as permeance and moisture management. Such material modifications have an impact on cost, durability and long-term performance.

These emerging challenges should be viewed by manufactures as an opportunity to drive innovation, not as a threat to current core materials that must be circumvented. Sustainable growth will require manufacturers to integrate functionality while balancing complexity and simplifying their market message.

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