

# THE SECRET INSIDE

A Bayer MaterialScience LLC and Deceuninck Collaboration





#### The High-Performing Alternative to Aluminum Inserts

Superior performance doesn't get much easier than this.

Innergy<sup>™</sup> Rigid Thermal Reinforcements are advanced fiber glass reinforced resin inserts, designed to slide easily into window and door frame chambers for greater support and insulation.

The result is a new, more efficient system with all the strength and structural reinforcement of aluminum, but with a whole new set of high performance benefits for the home.

#### Green Nside and Out

Innergy looks green because it is – starting with a 20-percent bio-based resin component in its proprietary formulation. Incorporating soy and other renewable sources, the composite offers strength, stability and flexibility without using styrene or peroxide.

But the real green story is the superior thermal performance which enables Innergy to be an excellent energy saving addition to every window and door – virtually impermeable to cold or heat and extremely resistant to condensation.

Innergy enables this Bayer MaterialScience and Deceuninck collaboration to be a green innovation every homeowner can be proud of.



### Novative Thermal Performance 700 Times Better Than Aluminum

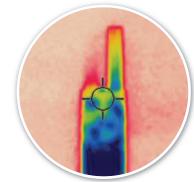
Innergy is the innovative, energy-efficient alternative to aluminum.

As the next-generation of thermal reinforcement for the industry, Innergy is able to deliver a quantum leap above aluminum in how windows and doors perform:

- Better thermal performance
  Up to 700 times better than aluminum in material-to-material comparisions.
- Better thermal break
  Impervious to cold or heat
- Better protection against condensation Helps prevent staining that can occur with metal reinforcements
- Better impact testing Resistance to impact versus other reinforcement products
- Better flexibility
  Will not permanently set when impacted



Innergy and Aluminum in a 32 degree ice bath



Infrared analysis shows major conductivity in aluminum and virtually none with Innergy\*

\* Photos taken after one hour ice bath



Unparalled Benefits INline with Expectional Features for the Home

Inside Innergy is the power to change the way to think about what goes on inside windows and doors.

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### **FEATURES**

Direct replacement for aluminum reinforcements with better performance characteristics

Co-developed under an exclusive agreement with Bayer MaterialScience

Fiber glass reinforced pultruded product made with resin that is 20% bio-based, made from soy and other renewable resources

Up to 700 times better thermal performance versus aluminum (when comparing material to material)

Resists condensation

Superior impact performance



### **BENEFITS**

Improves window thermal and structural performance

Tested & proven technology backed by a global materials manufacturer

Utilizes materials that are renewable and bio-based

Virtually eliminates the thermal bridge that exists with other metal reinforcements

Helps prevent staining that can occur with other metal reinforcements

Will not permanent set under sustained high winds



#### Side the Science

Innergy is the result of a collaboration with Bayer MaterialScience LLC as part of an exclusive agreement between Bayer and Deceuninck. The collaboration brought together Bayer's expertise in custom polyurethane resin system development and Deceuninck's experience in window systems design and manufacturing.



For more information, call 877-563-4251 or email support@deceuninck-info.com

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#### www.deceuninck-americas.com



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