



Brock Environmental Center

Sustainability in action





Resting on 118 acres of undeveloped salt marsh land, the Brock Environmental Center was built as a regional home for the Chesapeake Bay Foundation’s environmental education programs. Through student field trips and tours for the general public, the building serves as a tool to teach those within the community about the Chesapeake Bay and why its conservation is so important.

“Many of the kids of Hampton Roads have never been on our waterways, even though they live right next to it. This is what is around us. This is the treasure we have. This is also something we need to take care of.

We see this building as a model. So, when people come to the site and they see what we’ve done, we hope we will be able to inform them of why we did it and how important it is to change the way we build.

**-Christy Everett,
Chesapeake Bay Foundation
Hampton Roads Director**

What makes the Brock Center unique is that it was constructed with the goals of receiving the Net Zero Energy Building Certification™ and meeting the guidelines specified by the much more demanding Living Building Challenge™.

To attain these goals, stringent specifications had to be followed. One requirement included using on-site renewable energy to achieve 100% of the building’s energy needs on a net annual basis. Another important requirement was to utilize functional, efficient building materials, that contributed to the sustainability of the building such as FOAMULAR® 400 insulation, throughout the project.



The Chesapeake Bay Foundation Brock Environmental Center in Virginia Beach, Virginia

Brock Environmental Center Sustainability Facts

- Uses 80% less energy than most office buildings
- 70% of energy comes from photovoltaic solar panels and 30% comes from two residential wind turbines
- Does not use any water other than what is captured on-site in rain cisterns and for all drinking needs
- Utilizes geothermal wells, composting toilets and reclaimed materials

All trademarks are the property of their respective owners.



THE CHALLENGE

How to meet strict material specifications

The Living Building Challenge™ has very strict specifications when it comes to the building materials being used in construction. Beyond the consideration of energy efficiency and performance, architects and contractors must also be aware of material toxicity and sustainability.

There were countless hours of research involved. “Finding materials that were compliant [with the Living Building Challenge™] was definitely the hardest thing,” recounted Tyler Park of Hourigan Construction. Every product had to be closely studied and scrutinized, and thermal insulation was no different.



The Chesapeake Bay Foundation Brock Environmental Center
in Virginia Beach, Virginia



FOAMULAR® 400 insulation installed in the Brock Center

THE SOLUTION

Choose FOAMULAR® 400 Insulation

One of the reasons FOAMULAR® insulation was chosen for the project was it had excellent insulation value and thermal break capability, but beyond the performance of FOAMULAR® insulation, Owens Corning also offered a recycling option that was critical to the project.

There were a few insulation manufacturers considered for the project, but Owens Corning was the only manufacturer that offered to recycle all scrap insulation. “One of our mandatory goals was to limit the amount of materials going to the landfill,” explained Janet Harrison, the project’s Green Consultant. Leftover material was shipped back to Owens Corning Insulating Systems, where it was reground to produce new FOAMULAR® insulation.



About FOAMULAR® Insulation

Owens Corning® FOAMULAR® 400 insulation extruded polystyrene (XPS) insulation saves energy* and reduces greenhouse gas emissions by providing a durable exterior insulation that is resistant to moisture, and provides an insulating value of R-5 per inch.

FOAMULAR® insulation carries a 3rd party certified Environmental Product Declaration. Product certification information can be found at www.ocbuildingspec.com.

FOAMULAR® is the only XPS foam with certified recycled content – certified by SCS Global Services to contain a minimum 20% recycled content.

To learn more about Owens Corning® FOAMULAR® insulation and applications that can benefit from XPS insulation, please visit: www.ocbuildingspec.com.



Home Innovation
NGBS GREEN CERTIFIED™

¹ Chesapeake Bay Foundation. Accessed 11/25/2015. <<http://www.cbf.org/how-we-save-the-bay/programs-initiatives/brock-environmental-center>>.

*Savings vary. Find out why in the seller's fact sheet on R-value. Higher R-values mean greater insulating power.

*Savings vary. Find out why in the seller's fact sheet on R-value. Higher R-values mean greater insulating power.

ENERGY STAR and the ENERGY STAR mark are registered trademarks of the U.S. Environmental Protection Agency.

The GREENGUARD INDOOR AIR QUALITY CERTIFIED mark is a registered certification mark used under license through the GREENGUARD Environmental Institute.

LEED is a registered trademark of the U.S. Green Building Council.

This NAHB Research Center Green Approved mark is your assurance that a product is eligible for points toward National Green Building Certification. Visit www.GreenApprovedProducts.com for details.



OWENS CORNING INSULATING SYSTEMS, LLC
ONE OWENS CORNING PARKWAY
TOLEDO, OHIO, USA 43659
1-800-438-7465 (1-800-GET-PINK®)
www.owenscorning.com

Pub. No. 10020633. Printed in U.S.A. January 2016. THE PINK PANTHER™ & © 1964–2015 Metro-Goldwyn-Mayer Studios Inc. All Rights Reserved. The color PINK is a registered trademark of Owens Corning. © 2015 Owens Corning. All Rights Reserved.