

**WHAT:** [90 Million Years of Building Science – Lessons from the Honey Bee](#)  
**WHERE:** The Stern Center, College of Charleston, 71 George Street, Charleston, SC  
**WHEN:** Friday, October 28, 2011 from 7:30am – 4:30pm  
**COST:** \$125 (7 AIA Learning Units, HSW/SD), \$150 after October 14, 2011

### About the Speaker:

R. Christopher Mathis is the President of Mathis Consulting Company in Asheville, N.C.

Chris received his undergraduate degree in Physics from the University of North Carolina at Asheville. He received a Master of Science in Architecture Studies from MIT where his graduate work focused on energy use in buildings. He has served as a Scientist in the Insulation Technology Laboratory at the Owens-Corning Fiberglas Technical Center, was the Director of the Thermal Testing Laboratory for the National Association of Home Builders Research Center, and Director of Marketing for Architectural Testing, Inc., a private laboratory specializing in the performance of buildings and building products.

Chris has published a variety of technical papers on topics including: advanced test methods for insulation materials and wall systems; day lighting design and assessment techniques; off-peak cooling techniques for commercial office buildings; new residential and commercial energy codes; and metrics for environmentally preferable products. His most recent publication is "Insulating Guide" - a book for home builders providing insulating best practices for many of the most common home building details. He served 6 years on the Board of Directors of EEBA – the Energy and Environmental Building Association. Chris has been selected four times to serve on the International Energy Conservation Code Committee of the ICC, working to refine and improve the national model energy code.

### Course Description:

Over the past 6 years, BEC-Charleston's fall seminars have given us opportunities to learn from outstanding international speakers on the topic of high-performance buildings in our hot, humid climate. This year's program will be an informative and entertaining presentation based on an ASHRAE published paper addressing lessons we might learn from the 90 million years of evolution and building science embodied in the work and structures of the honey bee. From temperature management, thermal storage, indoor air quality, active and passive ventilation techniques and energy efficiency, the honey bee has developed a highly efficient construction system to support its biological needs. Attendees will be challenged to consider how we might employ these time-tested building science lessons into today's architecture and engineering practice, as well as challenging our current definitions of "sustainability".

### Topics Covered:

1. Why Buildings Matter (things that should keep us up at night...)
2. Trends in Building Performance: *Good & Bad*
3. Regional Trends in Regulation: *Good and Bad*
4. The Challenge of Sustainability: What constitutes a "Green Building Product"
5. Building Science Lessons from the Honey Bee
6. Where do we go from here?

### A Call for Problems **\*\***(Photos / Details Submission):

In an effort to tailor his presentation specifically for our audience, Chris would like attendees to submit photos and/or details for inclusion into the program as talking points. These practical examples should convey either a successful use of a system/design/construction detail or an unsuccessful experience that could be a "Show and Tell" learning moment for all.

**\*\***Photos and/or Details should be submitted by October 10, 2011 to the following email address:

[wbutler@appliedbuildingsciences.com](mailto:wbutler@appliedbuildingsciences.com)

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