



## R. Christopher Mathis

President  
MC2 – Mathis Consulting Company  
P.O. Box 18055  
Asheville, NC 28814  
United States  
(828) 678-3500  
Region: IV  
Honarium: \$250 to ASHRAE Research  
Gift checks should have the following verbiage :  
“Gift made on behalf of DL NAME,  
visiting Distinguished Lecturer to  
CHAPTER on DATE”  
[chris@mathisconsulting.com](mailto:chris@mathisconsulting.com)

R. Christopher “Chris” Mathis has spent the past 30 years focusing on how buildings and building products perform – from energy efficiency to code compliance to sustainability and long-term performance durability.

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, particularly fenestration performance testing.

Chris is an active participant in Standards and Code development at ASHRAE, NFRC, ASTM and the ICC. He was a founding member and served for four years as the first Director of the National Fenestration Rating Council, the non-profit organization that developed the nation’s energy performance rating and labeling system for windows, doors and skylights.

Chris has been a member and active participant in ASTM committee E06 on Performance of Buildings since 1984. During his tenure at ASTM he has worked on numerous task groups and subcommittees developing a range of standards and test methods addressing window performance, window installation, thermal testing of windows, wall system performance and whole building performance. He currently chairs E06.51.11 addressing window installation standards. He is also a member of committee C16 on Insulation and E60 on Sustainability. Chris currently chairs the Built Environment Advisory Committee at ASTM.

Chris is a 30-year member of the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE). In ASHRAE he has worked on window thermal test standards, national model codes for commercial buildings (ASHRAE 90.1), model codes for residential buildings (ASHRAE 90.2) and is the energy consultant to Standard 189.1 – ASHRAE’s model code for sustainable commercial buildings. He is also the energy consultant to the Chapter Technology Transfer Committee. Chris has been recognized as an ASHRAE Distinguished Lecturer, conducting seminars on a variety of building science, energy efficiency and sustainability topics across the US and worldwide.

Chris has published numerous technical papers at ASHRAE and presented his work at a variety of national and international conferences. His publications include technical papers on: advanced test methods for insulation materials and wall systems; daylighting design and assessment techniques; off-peak cooling techniques for commercial office buildings; new residential and commercial energy codes; and metrics for environmentally preferable products. He has written numerous engineer-, architect-, builder- and consumer-targeted articles and guides on various building and product performance issues. He is the author of *Insulating Guide* - a book for home builders providing insulating best practices for many of the most common home building details. He is the co-author of *Is Your Home Protected from Water Damage? A Homeowner's Guide to Water Damage Prevention* published by the Insurance Institute for Business and Home Safety.

Chris has been involved in state and national code development since 1988. He was selected four times to serve on the International Energy Conservation Code Committee of the ICC, working to refine and improve the IECC – our national model energy code. He was also selected to be a member of ICC's Sustainable Building Technology Committee helping to draft a national model code for sustainable buildings. He served on the ICC's first Code Development Committee for the International Green Construction Code.

Chris is a member of the Board of Directors of BETEC – the Building Enclosure Technology and Environment Council, a council of the National Institute of Building Sciences. He also served six years on the Board of Directors of the Energy and Environmental Building Association (EEBA).

Chris provides a number of accredited training seminars for architects, engineers, builders, manufacturers, code officials, utility program developers and others addressing these myriad building science and building performance issues – from improved building energy efficiency and comfort to energy and power planning to improved building and energy codes to the challenges of sustainability and green building. He is a frequent keynote speaker at various national conferences and events.

Chris is also an on-going student of about 90 million years of sustainability and building science through his activities as a beekeeper. He lives and works near the farm he grew up on in the beautiful mountains of Western North Carolina.

TOPIC:

## Building Science Lessons from the Honey Bee

This informative and entertaining presentation is 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."