

Having trouble viewing this email? [Click here](#)

You're receiving this email because of your relationship with Building Science Corporation. Please [confirm](#) your continued interest in receiving email from us.

You may [unsubscribe](#) if you no longer wish to receive our emails.

information consulting bookstore seminars

# building science.com e-news

Changing the way the world builds. People. Ideas. Integrity.

October 16, 2009 Issue # 18

Dear Jeffrey,

It is constant mental effort for most architects, code officials, builders and manufacturers to keep up with changing and out-of-date building enclosure terminology, much of which was arbitrarily chosen to begin with. Now add the challenge of understanding how enclosure layers work or are supposed to work. Or even worse, try to understand how they all work together....arghhhhh!

Dr. Joe takes a stab at a revolutionary way to define these layers--based on, well, how they work--in our featured article "Vocabulary" below.

BSC's seminar series with John Straube and Joseph Lstiburek wraps up in December. Please see our announcement below about our Experts' Session.

To view a list of past newsletters, click [here](#) for our archives.

Happy reading!



Jeff Melvin  
Editor, buildingscience.com e-news

[Forward buildingscience.com e-news to a friend!](#)

**Featured Article** by Joe Lstiburek, Ph.D., P.Eng., Fellow ASHRAE

## Vocabulary

Building Science Insight No. 024

If we don't call things by their right names we don't really understand how things work. If we don't understand how things work how can we prevent problems from happening? Or how can we fix problems when they do occur? And how can we possibly make things work better?

We are all guilty of bad-name-itus, but the Model Building Codes take the cake. They are examples of bad wording and misunderstandings. We mostly put up with the bad wording and misunderstandings in code documents because they also are the law of the land and therefore scary. In one chapter alone of the International Residential Code the same enclosure element is called three different things--none of which

are defined. Why this occurs particularly in the Model Building Codes should be no surprise if you understand how they are made, modified and adopted. The fact that the Codes work as well as they do is due more to the good will of the Code Officials than the brilliance of their terminology.

I am going to attempt to do something completely arbitrary, unilateral, annoying to others and otherwise typical for me because we have to start somewhere to clear up the mess. I am going to take a run at this language thing and try to get everyone to agree. Each one of the terms we typically use or should use needs to be not just defined but defined with a performance metric. This is not easy, but necessary. Here goes.

They are building enclosures-they are not building envelopes. You put letters in an envelope not people. Building enclosures need four principle control layers: a water control layer, an air control layer, a vapor control layer and a thermal control layer. These control layers can be combined in one material or be separate. [article continues]

To read the entire feature article and find a downloadable PDF version, click [here](#) to visit our web page.

## 2009 Building Science Experts' Session Announcement

The agenda for the Experts' Session is now posted at the link below. In brief:

John Straube will present "Deep Energy Retrofits - Tools, Techniques and Technologies". Given the recent increases in energy costs, concerns regarding energy security, and greater demands for low-energy/low-carbon buildings, energy-efficient buildings are in demand. To meet this need, existing buildings need retrofits designed to reduce current energy consumption by 50% or more. John will address windows, roofs, walls, HVAC, lighting, and interior loads for large and small commercial and residential buildings.

Joseph Lstiburek will present "Where Buildings Meet the Ground". Dr. Lstiburek will examine slabs, basements, crawlspaces and slab on grade foundation problems and design solutions. Osmosis, capillarity, vapor diffusion, hydrostatic pressure and soil gas migration case studies will be presented. Interior and exterior rehabilitation and insulation strategies will be discussed. Old structures and new structures will be placed in context. How much insulation is too much? How much is too little? Do you make the decisions based on energy or durability or comfort or what? Do frost protected shallow foundations make any sense anymore?

Our [Building Science Experts' Session](#) is intended to provide thought provoking professional development for experienced building industry professionals who are interested in healthy, durable and energy efficient new and old buildings.

### Rounding up 2009

[Designing Low Energy Buildings -December 16- in Toronto](#)

[Figuring Stuff Out -December 17- in Toronto](#)

For the complete list of seminars, click [here](#).

[Sign Up For This Newsletter!](#)

[About BSC](#)

**Building Science Corporation** is a Boston, MA and Waterloo, Ontario based architecture and building science consulting firm with clients throughout North America.

**Building Science Corporation** specializes in building technology consulting. Our focus is preventing and resolving problems related to building design, construction and operation.

We are internationally recognized for our expertise in moisture dynamics, indoor air quality, and forensic (building failure) investigations. We are also on the leading edge of the design of sustainable communities and buildings.

We believe in promoting energy efficiency and environmental responsibility within the constraints of marketable and affordable building technology.

Read More About Us: [www.buildingscience.com](http://www.buildingscience.com)



You are receiving this newsletter either because you have requested it or because of your relationship with Building Science Corporation.

To opt out any time from receiving this newsletter, click on the "unsubscribe" link below. Otherwise, to ensure that you continue to receive this newsletter, please add [newsletter@buildingscience.com](mailto:newsletter@buildingscience.com) to your address book now.

Your privacy matters to us.  
We are not going to sell, rent, lend or share your information with others.

Copyright © 2009 Building Science Corporation, All rights reserved

You may reproduce this article by including this copyright.

**[Forward email](#)**

** SafeUnsubscribe®**

This email was sent to [jeff@buildingscience.com](mailto:jeff@buildingscience.com) by [newsletter@buildingscience.com](mailto:newsletter@buildingscience.com).  
[Update Profile/Email Address](#) | Instant removal with [SafeUnsubscribe™](#) | [Privacy Policy](#).

Email Marketing by



Building Science Corporation | 30 Forest St | Somerville | MA | 02143