

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.

February 26, 2010 Issue # 22

Dear Jeffrey,

How did we get here from where we were? Early advanced framing appeared at the Paris Exhibition of 1867. How do we know that modern framing has taken a step backwards since then? Because we still need to put "Advanced" in front of it to quantify it. At this point, shouldn't it just be called "framing?"

Advanced framing is an essential ingredient in the "house-as-a-system" approach. Why? Dr. Joe provides the answers in "Advanced Framing" below.

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

## Advanced Framing

Building Science Insight No. 030

After one hundred and fifty years the Illinois cottage is undergoing some pretty interesting changes and the ghosts of George Washington Snow and Augustine Taylor are cautiously eyeing the result.

The current industry standard wall - a 2x4 frame at 16-inch centers with double top plates, three stud corners, jack studs, cripples and double headers - is being replaced by a 2x6 frame at 24-inch centers with single top plates, two stud corners, no jack studs, no cripples and single headers (and in many cases no headers at all).

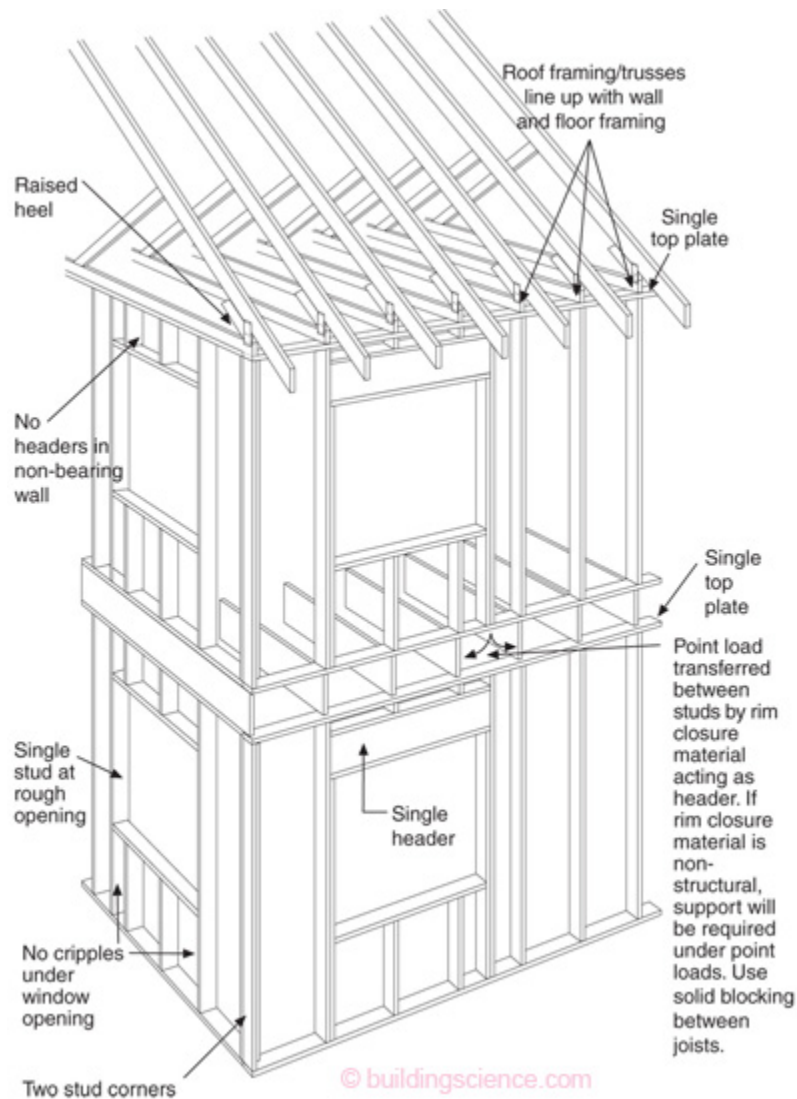
It is cheaper and faster to build and saves energy. What is not to like? It is cheaper because it uses 5 to 10 percent less lumber (board-feet) and it is faster because it uses 30 percent fewer pieces. It saves energy because it provides a 60 percent deeper cavity (which allows 60 percent more cavity insulation) and because it reduces the framing factor from 25 percent to 15 percent.

The framing elements are farther apart allowing easier installation of services - everything fits easier making the plumber and tin-basher happier - the electrician drills fewer holes and the insulator insulates faster because there are fewer cavities even though the cavities are wider and deeper. Everything lines up so the load paths are direct leading to fewer but stronger connections and the lines are cleaner so it just looks and feels better.

Tastes great - less filling.

Some of the advanced frame technology goes back to the very beginnings of framing - "in-line" framing or "stack" framing where everything lines up is not new. [article continues]

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



Advanced Framing - 2x6 frame at 24 inch centers with single top plates, two stud corners, no jack studs, no cripples and single headers in load bearing walls and no headers in non-load bearing walls.

## 2010 Building Science Seminars

The schedule for our 2010 seminars will be announced here. If you are receiving this newsletter, you are in the right place and will be the first to know.

**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 © 2010 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 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