

Another Shade of Green



By *Keith Lindemulder*

One of the main goals of “Another Shade of Green” is to communicate the various ways Nucon, Nucor and the steel industry are working to educate the marketplace about sustainability and the role steel can play. The Steel Framing Alliance recently published a four-page brochure called “Steel and the Environment”.

The brochure is designed as a communication tool which can be handed out at tradeshow and other events to highlight the main focus points of cold-formed steel. Included is an in-depth discussion about the specific credits which are directly affected by cold-formed steel in all the major green building programs – LEED, Green Globes and NAHB – similar to what we’ve seen here the last few weeks.

Also included is a section about Thermal Performance of cold-formed steel assemblies. Any material used to create the structure of a wall can act as a “thermal bridge” that provides a path to conduct heat through a wall. Steel can conduct heat much more efficiently than wood and needs to be addressed somewhat differently than wood framing to achieve the target “R-ratings” required by the building codes.

Another section discusses Life-Cycle Assessment and Embodied Energy. Life-Cycle Assessment, or LCA, is a detailed look at the resources required and the environmental impact of building materials and assemblies over the entire life-span of a building. The goal is to include everything from “cradle-to-grave” but developing complete information that can be easily used by building designers is quite a task. Currently there are a couple ‘calculators’ or ‘estimators’ available which include several common materials and assemblies and while they’re far from perfect, they’re a start. The AISI Construction Sustainability Task Group is working hard to improve and update this information for the entire steel industry.

The last section deals with Durability. Cold-Formed Steel framing is dimensionally stable, fire, insect and mold resistant, and provides superior ductility which helps allow cold-formed steel to perform better in seismic and high wind conditions. Durability is something that I believe we need to exploit more. The building that has the least impact on the environment is one that doesn’t have to be rebuilt and needs less maintenance.

Over the next several weeks I’ll dig into each of these topics further. In the meantime, if anyone would like to see the SFA brochure, “Steel and the Environment”, please let me know.

Finally, after last week’s issue was sent, I realized that the links that were included didn’t work when the PDF was created so I’m including them here again. *The Bad News About Green Architecture* (<http://www.newsweek.com/id/157576>) is the article I mentioned and the California Academy of Sciences (<http://www.calacademy.org/>) is the LEED Platinum museum which just opened in California. If you get a chance, check them out!

Have a SAFE and Sustainable week!

Reduce!

Reuse!

Recycle!



STEEL
IS THE NEW GREEN.



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