

Hardwoods Should be a Natural Fit in Green Home Building

Philip A. Araman^{1*}, Matt F. Winn¹, and Daniel P. Hindman²

¹Southern Research Station
U.S. Forest Service
Blacksburg, VA 24060 USA

²Department of Wood Science
and Forest Products
Virginia Tech
Blacksburg, VA 24061 USA

ABSTRACT

A short description of the Green Home Building movement in the U.S. is given. The movement, through the development and implementation of "Green Building Certification Systems," is wood friendly to both hardwood and softwood products to varying degrees. Local wood products, low VOC finishes, certified wood products, finger jointing, and engineered wood products are all given points in the Systems. Recovery and recycling of wood waste is also rewarded. We will also present wood use observations and the results on construction waste of a typical 2000 square foot single family home. Solid-sawn wood, engineered wood products (EWP) and hardwoods were studied. The results are from a research partnership with an EarthCraft House (A "Green" housing system) certified builder to determine the wood construction waste generated for each house at a new green housing development in Blacksburg, VA are also presented. The purpose was to quantify the construction waste and explore options for the reuse or recycling of these wood products. The EarthCraft certification system rewards these activities and discourages landfilling. We will present the results and observations from over 10 houses as well as discuss some other certification systems such as LEED for Homes and the NHBA system. We will finish with the rise of green building and why hardwoods should be a natural fit.

* Corresponding author: Tel.: (001) 540.231-5341; Fax: (001) 540.231-1383; E-mail: paraman@vt.edu