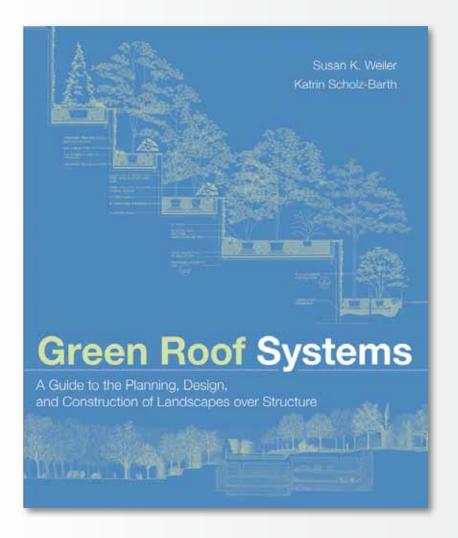
## **Green Roof Systems:**

## A Guide to the Planning, Design, and Construction of Landscapes over Structure by Susan K. Weiler and Katrin Scholz-Barth (John Wiley & Sons, Inc., 2009)

Review By: Judy Nauseef, APLD & APLD Immediate Past President



Green Roof Systems provides technical information for the planning, construction and maintenance of green roofs. The authors provide a lucid introduction with basic definitions of green roofs and a discussion of the serious effects that conventional roofs can have on the environment. They describe the value of using green roofs for stormwater management and for the creation of usable landscapes over structure.

The authors explain the term "green roof system" as an "overarching description of a more environmentally, culturally, and economically sustainable use of a roof at any elevation." A "Living green roof" is a thin-profile system where the primary use is stormwater management. "Landscape over structure" has a deeper profile and is used as accessible open space. These definitions help to simplify what can be a complex concept and help the landscape designer approach the topic by considering use and environmental impact.

Although most of the examples used are large municipal projects, the discussions of process and specifications will be helpful to any landscape designer seeking to understand the purpose and structure of green roof systems. The authors emphasize the importance of collaboration between planners, designers and builders whether the project is large or small. These projects require the participants to understand the requirements of other design disciplines.

The chapter on concept design and schematic design provides a detailed checklist of the steps that need to be taken. Refinement of the designs and construction documentation and the coordination of the construction phases are necessary for a successful project and are detailed later in the book.

The authors show a great sensitivity of the need for merging architecture and landscape. These roofs offer not only environmental benefits but also health benefits for those living and working nearby. Green roof systems help to link the spaces between buildings in the urban environment.

They include a chapter on building the structural systems for green roofs. There is information on calculating loading factors and the characteristics of the materials used in the construction such as plants, media, and paving. Figures and equations are presented and explained. In addition, understanding what is below the surface in important as much of it is invisible. The book emphasizes the necessity to work as a team with the other design and construction professionals so that nothing is overlooked and all aspects of the project are well integrated.

Green Roof Systems provides a textbook-like source for the building of green roofs. It also incorporates the themes of environmental responsibility, solid design practices and coordination of the many professionals involved in a green roof project. It may not be the best introduction to the green roof concept, but for those interested in the process of large projects it would be very helpful.