AIA Document D503™ – 2013 Appendix H

AIA Resources for Sustainable Design and Construction Projects

Architects are positioned to be leaders with regard to an expanded view of health, safety and welfare. As an Institute we must provide the access to knowledge, research, and professional collaborations that are critical to ensure our members become more informed and better prepared to lead. The AIA will advance, disseminate, and advocate—to the profession, the building industry, the academy, and the public—design practices that integrate built and natural systems and enhance both the design quality and environmental performance of the built environment.

AIA Sustainable Architectural Practice Position Statement

The foundation of the AIA's sustainability initiatives are based on a position statement adopted by the Board of Directors in 2005 which acknowledged the fact that buildings are the largest single contributor to production of greenhouse gases and almost half of the total annual production. The statement also outlines goals for 2030.

Energy Reduction Baseline

The agreed upon baseline for measuring progress: national averages established by the 2003 Commercial Building Energy Consumption Survey (CBECS). CBECS measures energy consumption in kBtu/sf/yr. Endorsed by the AIA, USGBC, ASHRAE, IESNA, and Architecture 2030, and supported by DOE.

Sustainable Design CE Requirement

In March 2008 the Board of Directors approved a motion to require that AIA members earn learning units in sustainable design. The structure of the new requirement consists of four hours (units) within the current eight required in health, safety and welfare. Courses must meet the requirements of HSW in order to then be considered for sustainable design status.

Sustainable Design Resources

Since 2007, the AIA has developed sustainable design resources for members. The following list of AIA sustainable design resources will be revised periodically to reflect changing industry standards. The date of the revision will appear after the document number in the footer.

50to50

Originally developed in 2007, a resource to help our members move toward the Institute's 50 percent energy reduction targets. The 50 strategies were selected based on the highest and most immediate impact on carbon reduction for elements that are within the architect's control during the design process.

AIA Guide to Building Life Cycle Assessment

Details the tools and tactics of balancing the costs and benefits of material and systems selection based on resource consumption and pollution from fabrication, shipping, construction, operations, and end-of-life deconstruction.

Performance by Design

This study investigates the energy performance of buildings recognized by the Top Ten Green Projects award from the American Institute of Architects Committee on the Environment (COTE).

Local Leaders in Sustainability

Local Leaders in Sustainability is a national research project on green building policy in local communities. A series of reports, begun in 2007, has included four reports focused on green cities, green counties, green incentives, and green building policy in a changing economic environment.

Rating Systems Study

A primary objective of the position statement on rating systems was to encourage outcome and performance-based thinking as the central approach to a building project. In 2007 the SDiG chose to examine three broadly accepted rating systems that provide scoring of sustainable features in building design and construction.

Green Meeting Guidelines

The Green Meeting Guidelines is a document with tips and resources for meeting planning to reduce the environmental impact of events hosted by AIA components.

An Architect's Guide to Integrating Energy Modeling in the Design Process

In order to help architects more accurately predict the energy consumption in their design projects, the American Institute of Architects (AIA) has put together An Architect's Guide to Integrating Energy Modeling in the Design Process. The guide is an exhaustive, step-by-step map to predicting (and thus reducing) the energy usage of buildings.

The AIA Guide to the International Green Construction Code

The AIA Guide to the IgCC outlines the AIA's long involvement with the initiative and explains the structure and mechanics of the code, and its potential effects on the design and practice of architecture. Each chapter of the IgCC is also given a succinct summary. Most importantly, the guide also contains a chapter on how to advocate for the IgCC to local code officials and elected leaders.

Sustainable Design Initiatives and Programs

2030 Commitment

An AIA National initiative for firms to voluntarily make a pledge to advance the AIA's 2030 goals. The purpose is to drive change in practice by focusing on the entire design portfolio, rather than exemplary projects, and asks firms to track annual progress. Reporting tool debuted at the 2010 AIA National Convention.

COTE Top Ten

Regarded as the profession's best known recognition program for sustainable design excellence, Top Ten demonstrates how architects are uniquely qualified to address environmental challenges thought design that integrates architecture, technology, and natural systems. Beyond an awards

program, Top Ten has a strong focus on knowledge delivery through case studies. Unlike any other program, Top Ten measures both qualitative and quantitative aspects of sustainable design.

AIA+2030 Professional Series

A successful, road-tested high performance design curriculum developed by AIA Seattle that AIA National has identified as feasible to expand at a national scale. Ten, 4-hour sessions offer strategies to reach a 50 percent reduction in fossil fuel greenhouse gas emissions, giving design professionals the knowledge and leverage to create next-generation, super-efficient buildings.

IgCC

Once adopted by local jurisdictions, IgCC will have a game-changing impact on the practice of architecture by taking what has been a best practices approach to design and making it the minimum requirement for every project. See The AIA Guide to the IGCC for a more detailed discussion.

ASHRAE Advanced Energy Design Guides (AEDG)

A series of publications designed to provide recommendations for achieving energy savings over the minimum code requirements of ANSI/ASHRAE/IESNA Standard 90.1-1999. The guides have been developed in collaboration with The American Institute of Architects (AIA), the Illuminating Engineering Society of North America (IES), the U.S. Green Building Council (USGBC), and the U.S. Department of Energy (DOE).

Integrated Project Delivery

High performance sustainable buildings are composed of a myriad of complex and densely interconnected subsystems, each with its own requirements for optimization in resources, material, space and time of installation and operation. The requirements of one subsystem may be directly opposed to the requirements of another. To optimize the performance of the whole, the needs of every subsystem must be taken into account and carefully balanced. This can best be achieved through highly collaborative delivery models, where all expertise necessary to optimize the performance of the whole is on board and contributing early. Integrated Project Delivery is often seen as the most collaborative delivery model. Learn more at the AIA Center for Integrated Practice and get a copy of Integrated Project Delivery: A Guide.