

The American Institute of Steel Construction (AISC) is a non-profit technical institute and trade association established in 1921 to serve the structural steel design community and construction industry in the United States. AISC is offering these teaching tools to aid faculty and students in learning about different aspects of the steel construction industry. These teaching tools are basic and are meant to stimulate more in-depth discussion and to facilitate learning. They may be customized by the instructor to meet his or her needs. Please feel free to adjust the text, add images, re-arrange the order of the slides or any other method that will help students learn about steel. These tools are specific to academic settings and are not intended for use outside of academia.

There are several animations that illustrate construction sequences or systems assemblies. The animations are typically on a white background for easy identification. Please double click the animation illustration to initiate the animation sequence. Clicking on the animation while it is running will cause it to pause so you can bring the students' attention to a particular issue. Clicking again will make the animation sequence continue where it left off.

The **Design Studio Case Studies** is a result of a survey of schools of architecture in North America that was conducted in 2005. In that survey the instructors who teach architectural design studios involving structural steel overwhelmingly indicated a desire to have case studies that explore the creative uses of steel. This teaching tool was created in response to the desire expressed in the survey. This teaching tool is organized around three case study investigations. The buildings presented have all won an AISC IDEAS (Innovative Design and Excellence in Architecture with Steel) award. The following three projects were specifically selected to show diversity in scale and creativity in the use of structural steel.

The case studies presented are:

The Creekside Residence case study profiles a house in Houston, Texas, designed by Lake | Flato Architects in San Antonio. In addition to receiving a 2005 Merit Award from the AISC's I.D.E.A.S. Program, it has also received Architecture Magazine's 2004 Home of the Year. Lake | Flato Architects received the 2004 AIA Firm of the Year Award. The Creekside Residence is an outstanding design that brilliantly illustrates the creative use of structural steel.

The Tunica River Park case study is an exploration of a park along the Mississippi River in Tunica County, designed by Williamson Pounders Architects of Memphis, Tennessee. The Park was created specifically as a place from which to appreciate the beauty of the Mississippi. The Visitors Center at the Park is a jewel along the river. In addition to receiving a 2004 Merit Award from the AISC's I.D.E.A.S. Program, this project also received the following awards:

2005 Honor Citation from the AIA Gulf States Region

2005 Award of Excellence from the AIA Memphis Chapter

2005 Award of Excellence from the ASLA - Texas

The Reiman Gardens case study focuses on the expansion of Reiman Gardens on the campus of Iowa State University in Ames, Iowa. Architects Smith Metzger of Des Moines, Iowa designed the project. The Conservatory and Exotic Butterfly House demonstrate innovative and unusual applications of structural steel. This project received a 2004 National Winner Award from the AISC's I.D.E.A.S. Program.

We hope that these case studies will help you in teaching topics on structural steel. For additional information on other available teaching tools from AISC please visit www.aisc.org or contact Fromy Rosenberg (Rosenberg@aisc.org).

Thank you and enjoy the show.

David Thaddeus, AIA, NCARB
Associate Professor
College of Architecture
University of North Carolina-Charlotte
9201 University City Boulevard
Charlotte, NC 28223-0001
704.687.4021
Thaddeus@email.uncc.edu