

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 **Structure of the Everyday** Teaching tool is divided into three distinct areas that loosely correspond to different courses in a typical architectural curriculum. These tools and corresponding areas are:

The Material Steel is most useful for Materials and Methods of Construction Courses. This module covers basic facts about structural steel. Included in this module is an introduction to the chemical properties and production of steel. In addition to a broad survey of the structural steel shapes produced by mills in the United States, the topics of corrosion and fire protection of steel are also covered. This module also addresses issues of recyclability, sustainability, appropriate technology and LEED criteria as they specifically pertain to steel products.

Steel Structural Members and Systems is intended for use in introductory courses that focus on structural analysis of steel framing. It describes the structural properties of steel shapes through a presentation of different structural steel systems. In this module students will learn about space frames, open web joists, trusses, piles, beams, columns and base plates.

Structural Steel Connections illustrates methods of connecting steel members to each other. The details presented are animations of the AISC Steel Sculpture that is found on many campuses across the US and Canada. In addition to steel-to-steel connections, this module also illustrates the connection of a glass curtain wall to a steel frame. An animated illustration of a roller connection under a steel girder rounds out this module.

We hope that these teaching tools will be of help to 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.

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