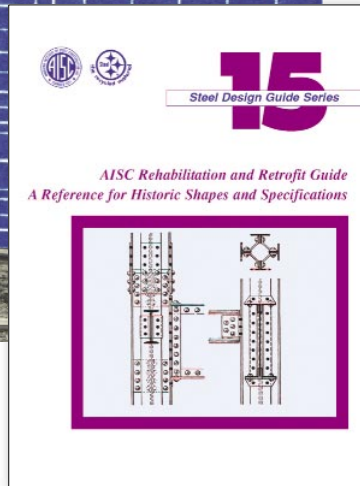


MISSING LINK

Christopher M. Hewitt



AISC's new Design Guide 15 is the industry's most complete reference on the rehabilitation and retrofit of steel structures

Are you looking for section properties for steel fabricated when color television was new and slide rules were king? AISC's new Design Guide 15, now on the shelves of the AISC bookstore, closes the generation gap on steel.

The new publication offers designers a one-stop resource for the evaluation and analysis of steel in existing structures. Particular attention is given to steel and wrought iron sections produced between the years 1873 and 2000. The text contains improvements on the knowledge base in the 1953 AISC publication *Iron and Steel Beams 1873 to 1952*.

The new text is the brainchild of Mr. Roger Brockenbrough, P.E., former senior research consultant for U.S. Steel. Mr. Brockenbrough is a member of the AISC Committee on Specifications and Chair of the AISI Committee on Specifications for the Design of Cold-Formed Steel Structural members.

WHAT'S INSIDE

More than an update. Many in the industry now turn to the retrofit and

rehabilitation of existing structures to sustain their businesses through difficult economic times. Design Guide 15 is a reference to aid a new generation of designers with pertinent material never before addressed in AISC publications.

Design Guide 15 is the industry's most complete reference for the historic dimension, property, material and specification information needed in the rehabilitation and retrofit of steel structures. Procedures are included for the enhancement of structural connections including the design strength of bolts, rivets and welds. Tables have been added to simplify steel producer information, giving new order to volumes of detached mill tables. Methods are provided with references for additional information, to address seismic concerns in existing structures for their compliance with the current codes. The text presents strategies for adding new steel members with existing structures, including the welding, cutting, and drilling existing members.

Section Properties. Properties of steel shapes produced between the years 1887 and 2000 and wrought iron

sections produced from 1873 to 1900 are included in the design guide. Tables are provided for each of the three historic families of steel sections which include the physical dimensions of each section, compact section criteria, elastic properties and the plastic modulus. Section producer information has also been compiled from previous texts for use in the current design guide.

Evaluation and enhancement of existing structures. The new design guide includes methods for the inspection and evaluation of structures with respect to their ability to resist lateral and gravity loadings. The evaluation and strengthening of connections is addressed and procedures are given for the welding, cutting, and drilling of existing members.

References on Rehabilitation and Retrofit. If the information that you are looking for is not included in the design guide, an extensive listing is provided with other useful resources along with abstracts of the material addressed in each text. References are provided for other texts and for case

Mr. Hegeman Rivets the Tower to the Sky

President of the Metropolitan Life
Drives Final Bolt on Forty-First
Floor of Building.

SCORE OF GUESTS PRESENT

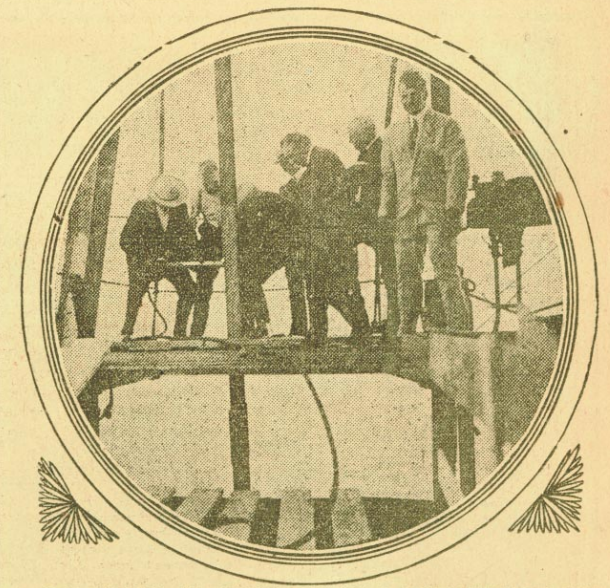
Looking Down on the Earth Far Below
They Experience Sensation Like
on a Balloon Trip.

In a stiff gale a score of persons stood
528 feet 5¼ inches above the level of the
street yesterday forenoon and watched
John R. Hegeman, president of the
Metropolitan Life Insurance Company,
place a final rivet in one of the great
girders of the tallest office structure in
the world.

The rivet hole was on the northwest cor-
ner of the forty-first floor of the new
tower, and there was a special platform
outside for the ceremony.

Several men who reached the landing
by the one elevator that has been extended
so far expressed the opinion that they had
been in a balloon. They hesitated about
looking below, within half a mile of where
they stood, and their first bird's-eye
glances showed them the city and its
neighborhood as they had never seen it
before. In the line of roofs up Madison
avenue there were few that looked tall.
Central Park seemed a comparatively
small green patch, the North River a silver
thread and the Statue of Liberty a speck
in the bay.

Among the officials of the Metropolitan



J. R. HEGEMAN DRIVING THE LAST RIVET ON THE
41ST STORY

studies on successful rehabilitation and retrofit projects.

Specification Changes. The design guide provides a historic review of changes to the AISC Specification, the Code of Standard Practice, welding and joint specifications and the AISC Manual of Steel Construction from 1923 to 2000.

WHERE TO GET IT

Design Guide 15 is available from AISC's publications department at 800.644.2400 or from AISC's online bookstore at www.aisc.org. At \$26 + shipping for AISC members, or \$39 + shipping for non-members, this is one reference you won't want to be without.

Christopher M. Hewitt, Staff Engineer—Structures in AISC's Engineering and Research department in Chicago, managed the production of Design Guide 15.

From the AISC archives: J. R. Hegeman, president of the Metropolitan Life Insurance Co., drives the last rivet into the company's new headquarters (then the tallest office structure in the world) on July 8, 1908. AISC's new Design Guide 15 tells us that rivet steel was covered by ASTM A9 in 1908, which at the time had a specified minimum tensile stress of 50 ksi.