ASCE’s Codes and Standards Program

Overview

Nearly 50 different standards have been developed and published through ASCE’s Codes and Standards program covering a wide range of civil engineering areas, including structural, water and wastewater, fire protection, transportation, and utilities.

Accreditation

Accredited by the American National Standards Institute (ANSI), ASCE’s Codes and Standards development program operates under a well-defined and managed procedures. By strictly adhering to these procedures, ASCE ensures that due process exists for reaching consensus, that there is open participation, and that a particular interest group does not dominate the process.

Standards Development

Using a well-defined consensus process, ASCE’s seven Institutes develop the Society’s Codes and Standards: Structural Engineering; Geotechnical; Environmental and Water Resources; Construction; Transportation & Development; Coastal, Oceans, Ports, and Rivers; and Architectural Engineering. ASCE’s Codes and Standards Activities Committee oversees the program and works with the Institutes to ensure adherence to ANSI’s requirements.

Within ASCE’s more than forty standards committees, there are approximately 2,500 individual participants, with the largest committee having over 150 members and the smallest having 12 members. Membership in each committee is completely open to members and non-members of ASCE. To ensure balanced representation, the committees must be comprised of between 20 and 40 percent of three primary interest groups: producers, consumers, and general interest.

A series of ballots are conducted to achieved consensus. ASCE Rules require that in order to achieve consensus, 75 percent of a committee return their ballot and that 65 percent of those casting a vote (excluding abstentions) must vote affirmatively. The rules further require that all comments submitted with the ballots must be addressed, and that the committee vote as to whether a comment was or was not persuasive. Once the committee achieves consensus, the standard is open for public comment wherein the committee must also address all comments.

Operating on a volunteer basis, ASCE’s standards program is extremely successful. The most recognized standard, ASCE 7 Minimum Design Loads for Buildings and Other Structures, has become a critical part of structural engineering in the U.S. Other ASCE standards are commonly being required by regulatory agencies or through contract documents.

ASCE is also involved in developing international standards by participating in International Standards Organization (ISO) committees, through membership in ANSI. ASCE has been involved in the ISO masonry design, engineered wood, and design load activity.