Supplement No. 2. The second supplement to the 1997 provisions (AISC 2000) attempted to incorporate many of the final recommendations generated by the SAC Joint Venture. Among other things, this supplement:

- Added requirements to avoid material discontinuities created by fabrication or erection errors, the placement of welded shear studs, or the attachment of other construction in the plastic hinging zone, all of which can lead to premature fracture (Part I, section 7.4)
- Changed the connection test acceptance criteria from inelastic rotation to interstory drift angle and modified the testing appendix (Part I, section 9.2a and Appendix S)
- Revised the requirements for panel zone shear strength in Special Moment Frames, such that excessively weak panel zones would be avoided (Part I, section 9.3a)
- Tightened the column width-thickness ratio and lateral bracing requirements where column inelasticity is possible, recognizing that limited column hinging can not be precluded for moment-resisting frames unless the columns are significantly stronger than the beams (Part I, section 9.4b)
- Redefined Intermediate Moment Frame systems to be more consistent with the tested connection system previously defined as part of Ordinary Moment Frames (Part I, section 10)
- Redefined Ordinary Moment Frame systems and further limited their use (Part I, section 11)
- Further limited the use of Ordinary Concentrically Braced Frames, reflecting their limited ductility capacity (Part I, section 14.2).

The 2002 AISC Seismic Provisions

In 2002, recognizing the breadth of changes made since 1997, the AISC Seismic Provisions were republished in their entirety. The 2002 Provisions (AISC 2002) incorporated the results of the SAC Joint Venture that had been published as FEMA 350 in 2000. In addition, the provisions were modified for consistency with ASCE 7-02. This would allow the document to be incorporated by reference into the IBC and NFPA (National Fire Protection Association) model codes, improving uniformity of practice and limiting the divergence between the two model code organizations.

For consistency with FEMA 350 and FEMA 353, the 2002 Seismic Provisions include new requirements for:

- Toughness of filler metals in certain welds (Part I, section 7.3)
- Moment frame column splices (Part I, sections 7.3, 8.4, and 9.9)
- Beam web-to-column connections in special moment frames (Part I, section 9.2a)
- Weld access holes in ordinary moment frames (Part I, section 11.2)
- Pre-qualification of moment connections, to be administered by an AISC committee established specifically for this purpose (Part I, Appendix P).

Other new requirements address:

- Chords and collectors, now subject to the provisions as seismic force resisting system components (Part I, Glossary and section 1)
- Member slenderness ratio, in coordination with the LRFD specification (Part I, section 8.2)
- Column base design demands (Part I, section 8.5)
- Lateral bracing requirements for special moment frame beams (Part I, section 9.8)
- Slenderness ratios in steel H-piles subjected to seismic demands (Part I, section 8.6).

The 2005 AISC Seismic Provisions

Consistent with the changes to the main design specification, the 2005 Seismic Provisions (AISC 2005a) combine ASD and LRFD into a single specification. As such, Part III in previous editions (which addressed ASD) of the Seismic Provisions has been absorbed into Part I. In addition to adding provisions for BRBF and SPSW systems, a number of significant technical modifications occurred. These include the following:

- Clarifying the scope of structures to be covered include “building-like non-building structures”
- Clarifying that all steel buildings designed with an *R* factor of greater than 3 must comply with the Seismic Provisions (see discussion below)