## **Executive Summary**

This Handbook updates and revises the <u>Permanent Foundation Guide for Manufactured Housing: Handbook 4930.3, August, 1989.</u> This work was commissioned by the U.S. Department of Housing and Urban Development, Office of Policy Development and Research. The Handbook has received a critical review and has been somewhat reorganized and supplemented with additional graphics to simplify its application. The major revisions include:

- The definition of Permanent Foundation has been expanded and clarified in Chapter 1.
- Design loads have been updated to the current loading requirements for snow, wind and seismic forces of the <u>Minimum Design Loads for Buildings</u> <u>and Other Structures</u>, <u>ASCE 7-93 Edition</u>. The load maps of Appendix H have been replaced by the new maps in ASCE 7-93.
- The Seismic portion of the Handbook, which showed no influence over wind in the previous code, has now become a significant factor in the ASCE 7-93 for consideration of overturning and sliding. Thus, the Tables of Appendix B have required reorganization and expansion. Seismic table values are grayed over to indicate that seismic controls over wind for the parameters of a given Table.
- All of the Foundation Concepts, except Type E2, have been retained in this
  updated edition. A survey was sent to all HUD field offices which
  substantiated this decision. Appendix D has been expanded to include
  sample formula derivations for all of these Foundation Concepts; this includes
  text and graphics for all single-section and multi-section units for added
  clarity.
- Appendix A Foundation Concept Details have been redrawn and revised to reflect the new ASCE 7-93 Loads document and their relationship to Appendix B Tables.
- This update now includes consideration of large openings along the length of marriage walls in multi-section units. Appendix B Tables includes openings that range from 10 to 20 feet in 2 foot increments.

Although many pages have been added, the Handbook has become a logically organized and easy to use reference in the permanent foundation selection process and in the anchorage design to assure adequate structural performance for Manufactured Homes.