
Preface to the Second Edition

This second edition of the *Electrical Engineer's Portable Handbook* includes a number of significant updates and a few worthy additions and enhancements.

All *National Electrical Code*® articles, tables, data, references, and so on have been updated to the 2002 edition of the *Code* in Chap. 2 and elsewhere where they occur. Two major changes throughout the latest edition of the *NEC* are the system of nomenclature/paragraphing hierarchy and the metrification of units as primary in tables and data.

Chapter 3 contains updated motor circuit feeder schedules, a transformer primary and secondary feeder schedule, and a new table of three-phase, three-wire, and four-wire plus ground feeder schedules sized to the overcurrent protection rating. These should prove to be time-saving tools.

The grounding electrode system (main service grounding detail) diagram in Chap. 4 has been updated and an introductory overview of a dissipation array system (DAS) for lightning protection has been added. This is an emerging technology application of a long-known theory that is gaining popularity in some critical installations.

Telecommunications-structured cabling systems information in Chap. 8 has been completely replaced with the latest BICSI standards (including tables, diagrams, and illustrations). An introductory overview to blown optical fiber technology (BOFT) provides insight into this very interesting, cost-competitive, and extremely flexible optical fiber technology. It is particularly amenable to renovation/retrofit applications because of its flexibility and avoids initial capitalization for installing future capacity in new construction.

I hope you will find this second edition of the *Electrical Engineer's Portable Handbook* a truly useful addition to your design tools library.

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