

1. Introduction – basic information about the theoretical guide

The theoretical guide addresses users of the GEO4 software. It explains in several chapters what programs do and their behavior so that the program does not appear as a black box, but rather serves as an efficient tool for the design of structures. Besides the program description the guide also includes recommended approaches in the design and modeling of engineering problems (e.g., terrain inclination behind the wall greater than the frictional angle of soil, water behind structure, etc.). We recommend the user to become familiar with this guide prior to running individual programs.

The first part of this text is concerned with the analysis of earth pressures in programs GEO4. This introductory chapter addresses all the programs and is referenced in subsequent chapters. Therefore, the reader should pay a special attention to this particular chapter.