

COMPUTER PROGRAM FOR ANALYSIS OF RETAINING WALL

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ABSTRACT

This particular software is a very simple, attractive and a user-friendly type of system, which is developed using the *Turbo Pascal* programming language. A flexible, versatile and powerful general-purpose language for developing system software, as well as the application software. On top of that, this language is very efficient as it compiles and runs program very fast compared to other languages. It is among faster of all high-level languages but remains one of the easiest to use.

Over here I am using this programming language to develop an application, which can receive data from the user and perform calculation for designing a simple retaining wall. This application will first gather the information from the user, and later on. Runs the required procedure and also some other consideration before it can actually compute out the cross-sectional area of the tension reinforcement for each part of retaining wall.

This application is also included with a preliminary analysis of the active lateral earth pressure due to the failure of the retaining wall, called as the Trial Wedge method. It has a high accuracy procedure for calculating the lateral earth pressure. Moreover, there is a graphical solution for estimating the lateral forces when the backfill is irregular-shaped so loads are concentrated.