

# **BILLEST : COMPUTER AIDED ESTIMATING SOFTWARE**

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The concepts of Computer Aided Estimating were first presented as far as late 1970 and very good software is now available. However, the use of Computer Aided Estimating Software in the Sri Lanka's construction industry is still at a very low level. Some organisations do use systems based on spreadsheets, databases and programs but lack facilities beyond the calculations of unit rates and preparation of simple bills of quantities. One of the main reasons for the limited use of Computer Aided Estimating software is the price, which is generally more than Rupees three hundred thousand. The software available is developed in other countries and has the problem of proper implementation.

With this background, Billest Computer Aided Estimating system was developed with the prime objective of offering software at a reasonable price and to suit estimating and tendering methods of Sri Lanka. Special effort was made to develop a system with very user friendly working methods and to avoid difficult procedures such as coding which is common in many Computer Aided Estimating Systems. Billest software was developed using Visual Basic Programming language and EXCEL spread sheets database.

The system maintains a library for the unit rate calculations, which can be updated for price variations of materials, labour, plant and subcontract items. If necessary separate libraries can be maintained for Building works and Civil Engineering works. Facilities are available to insert new library items for unit rates, new material, labour, plant and subcontract items. The operation manual and all the technical help required are incorporated into the system.

New BOQs can be created and descriptions can be imported from old project files or from the unit rate library. If descriptions and units are identical to the library items pricing will be done automatically. Otherwise pricing can be done by matching BOQ items and items in the library. Once the pricing is complete, a complete list of items of materials, labour, plant and subcontract items will be created and these could be updated to suit a particular project. Further last minute tendering adjustments such as mark-up, discounts can be made. Facilities are available to obtain reports of material usage and material where used. Finally, cash flow of the project considering cash flow variables can be performed using Billest software.