ExtrAXION

Extracting drawing data

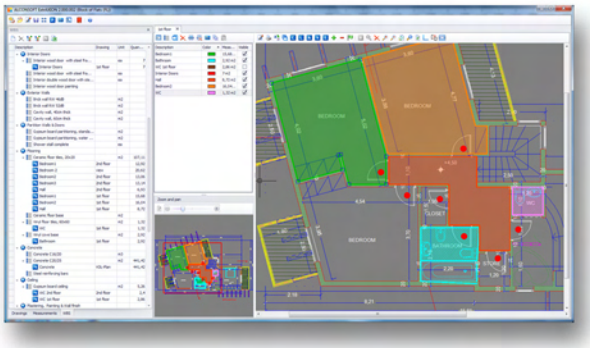
ExtrAXION is the simplest quantity surveying and cost estimating software tool. It is the perfect solution for the AEC industry professional who requires accuracy, speed, efficiency and emphasis on detail when preparing project cost estimates, especially in renovation projects, where digital drawings may not be available.

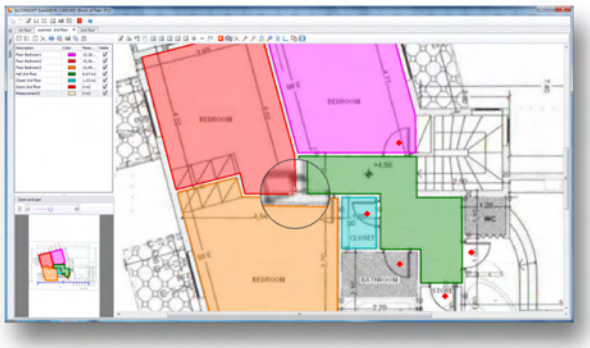
ExtrAXION offers the ability to rapidly measure linear elements, areas, volumes and item counts, with great accuracy. It supports a large number of CAD (.dwg, .dxf etc.) and image files such as scanned drawings and digital photographs (.bmp, .gif, .jpg etc.).
Measurements can be associated with Work Breakdown Structure (WBS) work items at any time, resulting in an automatic and comprehensive integration of the quantity takeoff and cost estimating procedures. WBS data can be imported from or exported to MS Excel and quantity takeoff and cost estimation results can also be extracted to MS Excel.

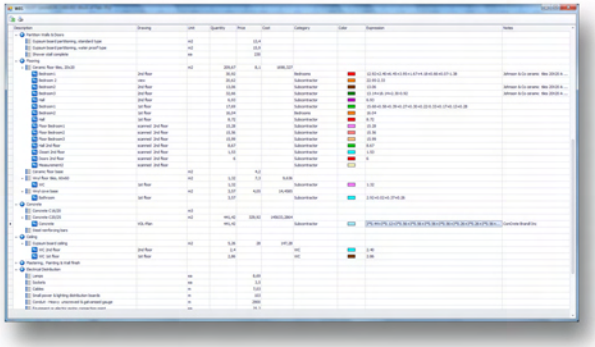
ExtrAXION can be used by general contractors, architects, quantity surveyors, cost estimators and any professional in the construction trade involved in quantity takeoff and cost estimating.

Measure with just a few clicks:

1. Linear and arc elements.
2. Areas either on the drawing's level or perpendicularly to it by specifying a fixed height, or even variable height at each polyline node.
3. Volumes based on areas, specifying height and width, if necessary.
4. Count elements using individual or group selection marking. Blocks of CAD drawings may be used for automatic count.







Features and Benefits

1. ExtrAXION is easy to learn and does not require any specialization in the use of CAD software. One can start using it with minimum training and get results fast.

2. Optimize the quantity takeoff procedure based on digital plans, using several measurement methods.

3. Minimize the time required to complete the takeoffs.

4. Built-in tools (zoom, magnifier, snaps to objects etc.) for speed and accuracy.

5. Each measurement is colored and labeled and can be visible or hidden. This greatly minimizes the possibility of unintended omissions or double measurements.

6. Work Breakdown Structure (WBS) may be built within **ExtrAXION** or imported from Excel. Work items may be added even during the course of a measurement.

7. WBS work items may be linked to their corresponding measurements. Measurements and their details are displayed directly under the work item. Total or per-drawing work item quantity is automatically calculated and access to work item measurements is just a click away: by double-clicking on a measurement under a specific work item, the corresponding drawing is opened, and all measurement layers that relate to this work item in this drawing are enabled.

8. All project measurement data are efficiently stored in a single location (data file or database). Project plans (be they CAD drawings or scanned plans), WBS, takeoff quantities and any other relevant information are easily accessible.

9. ExtrAXION's quantity takeoff engine minimizes the use of paper plans, rulers and highlighters that traditional methods require.

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10. Work on either CAD (dwg, dxf, dgn etc) drawings or image files (bmp, gif, jpg etc). No CAD software such as AutoCAD is required.

11. Elements of "intelligent" CAD drawings such as lines, polylines and blocks may be used in combination with the built-in selection tools for extra fast measurements.

12. Each measurement may be composed of several parts, combining different measurement methods e.g. measuring area in different parts or directions of the plan.

13. The measurement result may be adjusted by specifying a factor or even an entire MS Excel-like formula.

14. Using the built-in filtering and sorting capabilities, measurement views can be customized and extracted to MS Excel.

15. It is possible to mark already measured parts of the drawing, using an auxiliary layer, so that they are clearly visible.

16. It is possible to try different budget scenarios by readjusting library parameter values in each project.

17. A measurement can be linked to one or more work items.

18. Measurement results can be derived from primary measurement results using even complex mathematical expressions.

19. Custom measurements can be created by using basic measurement types. In a custom measurement, the user can set measurement parameters, whose values can either be typed in or marked on the drawing. For example, in order to calculate the total weight of slab reinforcement bars where the main measurement is the length of each steel reinforcement bar, the parameter "slab width", which should be defined, can be marked on the drawing.

20. It is possible to copy measurements from one drawing to another. This is greatly helpful, for example, in the case where a drawing you've been working on has been altered by its creator, but the quantity takeoff progress you've made in the original drawing is significant.

Available versions

ExtrAXION's V2 comes in three different versions: LT, Standard, and Professional. Each is optimized to meet users' different needs, offering a balance of available features and price. View the versions' comparative table to see which version is right for you!

The following are provided:
In-depth user manual.
On-screen help.
Detailed video lessons.

www.alconsoft.com

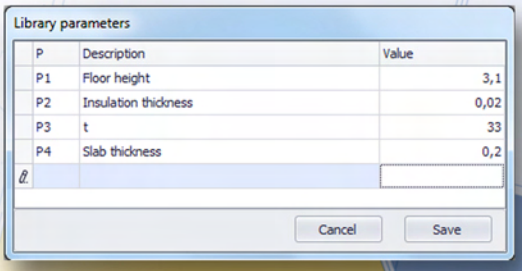
ALCONSOFT

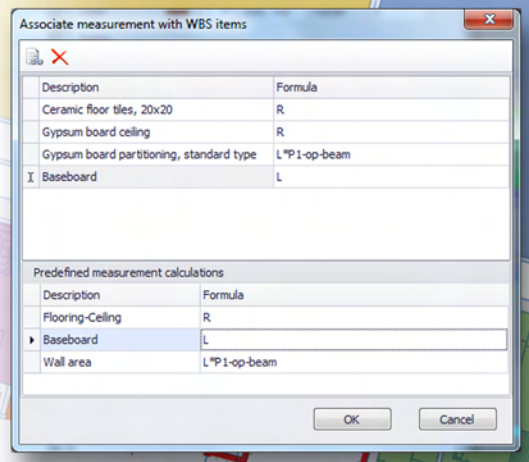
Microsoft Partner
Silver Independent Software Vendor (ISV)

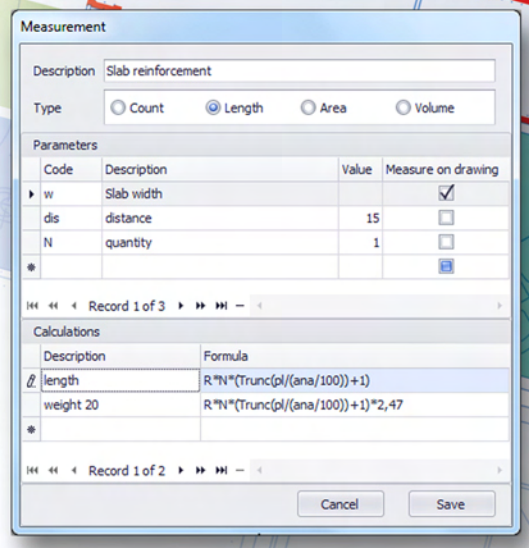
EXTRA Features of

ExtrAXION Pro

Extracting drawing data







- Custom measurements can be created by using basic measurements' results in user-created formulas. These formulas can utilize long, complex expressions and functions. Functions work like Microsoft Excel functions (examples: ROUND, TRUNC, SQRT, etc.).
- Each measurement can be linked to one or more WBS work items through the straight use of its result, or by the use of an edited result through a user-created formula, which can be different for each linked work item.
- All general parameters and extra measurements, which are freely set by the user and can be used in any project, are conveniently organized in a Library.

Through the general parameters, certain values that are constant and appear in various calculations used in all projects can be set. Such values can include storey height, for example. The preset value can be changed from project to project.

Using custom measurement formulas, the user is able to produce accurate results even in situations where the four basic types of measurements normally do not apply. For instance, this provides the following capabilities:

- The floor joint along the floor's perimeter as well as the surface area of the walls can be calculated from the measurement of a room's surface area.
- The insulation and total metal weight of an air pipe can be calculated from the measurement of the pipe's length.
- The surface coating can be calculated from the measurement of beam concrete volume.
- The total weight of slab reinforcement bars can be calculated from the measurement of each steel reinforcement bar's length.

It is possible for the user to set parameters for each customized measurement. Their values can either be typed in (i.e. distance between each set of vertical stirrups), or they can be obtained by marking on the drawing (in the same example, measuring slab width).

The library includes model extra measurements that are supplied by ALCONSOFT as examples.

Measurement recalculation can be performed, so that the results are automatically updated so that they correspond to the existing data, even if something is altered, like a general parameter, the drawing scale, etc. Therefore, by simply changing a general parameter value, such as level height, different cost estimations (that correspond to different heights) can be performed.

Selective or extensive copy of measurements from one drawing to another can be performed. This results in:

- Time-saving solutions, i.e. when the floor plans of different floors are similar.
- Faster measurement completion, even if subsequent changes are made to the drawings.

For example, if a drawing is changed by the drawing's creator while some measurements have already been performed, it is not necessary for them to be remade on the final drawing. The user can add the updated drawing, copy already performed measurements to it, and then make the necessary changes.