

**Smart Wall\* Technology**

Numerous wall types are available, from cavity walls to timber, to concrete, and partitioning. All features such as height, width, rate, code and even linetype, colour and layer may be altered by the user. Wall types not catered for are easily added to the list by the user. Straight or curved walls can be drawn with automatic intersection clean-up. Windows, doors or any openings cut into walls are automatic whether viewed in 2D or 3D. The user may elect to include hatching when drawing the walls or hatch walls after the event. Hatching will look after itself at all intersections and openings. All the standard CAD editing commands can be used on walls, eg copy, move, offset, fillet, grow, trim, join, break, etc, thus reducing the learning curve and not increasing the number of commands to be used.

**Doors and Windows**

An extensive range of door and window styles and configurations is available. Dialogue boxes are clearly laid out and simple to use allowing for alterations to sills, thresholds, mullions, jambs, door swings, etc. Drawing a simple outline is all that is needed to create a new style of door or window that is not included in the list. Each entity that makes up the door or window can be modified after insertion. There are automatic numbering and elevation routines. A schedule for doors and windows is automatically tabled and each item is elevated with dimensions. (Schedules not available in Smart Architect LT).

**Elevations and Sections**

Sections can be cut through buildings to include all entities from 3D furniture to roofs, windows, doors and floors. Internal or external elevations can also be peeled off. All ceiling and floor RL settings will be reflected. Sections and elevations will also account for any externally referenced files that may have been used to make up the model.

**Automatic Layer Assignment**

All entities automatically default to a predefined layer. This means that a user can load the software without having to give any thought to layer configuration and can simply begin drawing. The layering convention provided in the software can be altered to match the convention of the user or the office standard. If the assigned layer for a particular entity does not exist in a drawing, it is automatically created and the entity will default to it. The system will also allow for entities to default to the current layer.

**User Block Library**

The Smart Architect User Block Library provides the ability to sort all the blocks, used in a drawing office, into categories. This library can be located on a particular machine or placed on the server allowing all users access to a single location.

**Command Access**

Commands can be accessed through pull down menus, tool bars and the keyboard. The keyboard comes with many pre-configured hot keys, but is completely programmable through the use of a dialogue box. The pull down menus are structured to follow a typical drawing method and along with the description of the command, provide the keyboard short cuts. The software takes advantage of the Windows® environment by providing tool bars which can be modified to the preference of the user.

**Quantities**

Apart from the objects behaving intuitively, all building elements retain particular information for extraction into bills of quantities and schedules. All materials, finishes, codes and rates can be adjusted to match the current prices and meet the office standards. The resulting information can be opened by most quantities packages or spread sheets.

**MINIMUM SYSTEM REQUIREMENTS**

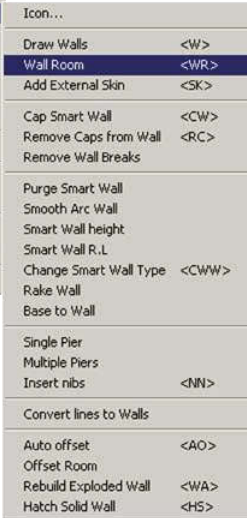
AutoCAD® or AutoCAD LT® 2000 or Later.

75Mb of Available Hard-Disk Space

Compatible with all Windows operating systems on which AutoCAD® is supported.



Command Access in Smart Architect is intuitive and easy. The design pull-down menu (shown here) houses the wall command-set.



**Drawing Documentation**

The laborious and repetitive tasks of labelling and dimensioning a drawing are alleviated with a drag and drop labelling system which is categorised and an automatic dimension command. A label can now be added to a list and never needs to be typed into a drawing again, with the drag and drop dialogue boxes making label placement very easy.

**Commercial & Concrete**

Although Smart Architect has a great strength in domestic drawings and models, it also focuses very strongly on commercial routines, with grid and column layouts, parking layouts and curtain walling. There are many routines and symbols to cater for commercial interiors and ceiling grid set-outs.

**Roof Builder**

Smart Architect is able to generate a roof of virtually any style and shape. The dialogue box provides a range of standard roof styles as well as the ability to generate a profiled roof. The roof can have planes added to it at a later stage, the shape can be manipulated and stretched to suit and shapes can be cut out of it. With all this flexibility, the roof does not lose its intelligence, and all quantities will automatically update with the alterations.

**2D and 3D Stairs and Escalators**

All the parameters for stairs and escalators can be adjusted to meet the specifications of the project. The dialogue boxes are self explanatory with common building terminology. The stairs and escalators can be drawn in render quality 3D, 2D and section to graphically reflect the information provided by the user.

**Shadow Diagrams**

The shadow casting routine will automatically project shadows from three-dimensional models, or from a 2D plan with datum level input from the user. If a series of contour points or a surface terrain exist, the shadow will be cast to meet it. The dialogue box provides a range of cities and countries with corresponding latitudes, however, this list can be added to or altered to suit any location. Azimuth and sun angle are calculated automatically.

**Surface Terrain**

Surface terrain models can be generated from information provided by a surveyor, or by the user specifying the individual spot levels. A grid or triangulated terrain model can be produced to include contour lines. Contour lines can also be used to create the terrain model. Shadows can be cast onto a terrain, walls projected down to them and foundations constructed to align with them. Cut and fill calculations and volumetrics can be performed, roads can be cut in and sections derived.

**Database**

The Database can be tied into your title block and changed or updated as the drawing progresses. The information in the database is reflected in the Drawing Manager when opening a drawing.

**Project Management**

Extra floors can be added to a building with a single command, creating a new drawing of the next level and automatically cross referencing it back into the master file. An XREF Manager is provided for moving from drawing to drawing within a project tree. To save confusion, an external reference file can be opened by simply selecting it with your cursor.