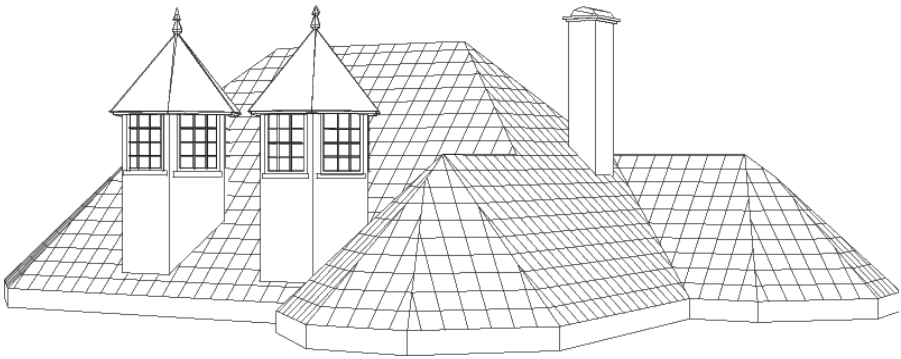
Quick automatic Roof Designer



DesignSoft

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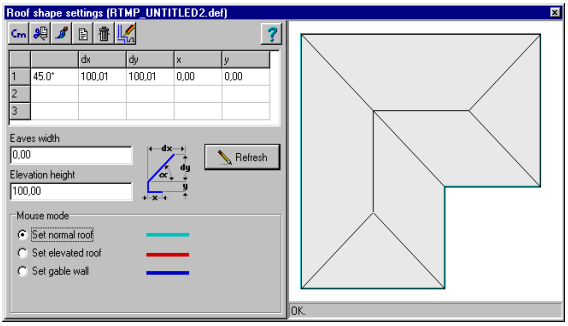
You can start this function by clicking the  icon in the floorplan editor. If you start making a new roof, after pressing the  icon you have to define a roof contour in the floorplan editor. You can do this by using the mouse. To close the contour either double-click or click to the first point of the contour. You can edit an existing roof by selecting it, and clicking to the icon. The appearing dialog:



The elements of the dialog

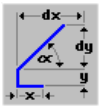
  Switch between cm and inch measure units.

 The function clears the definition field and the roof parameters.

 You can set the surface properties of the roof.

 Quit editing, erase the roof and return to the floorplan editor.

 Save the roof and return to the floorplan editor.

In the definition field, the program defines a series of sections in one line as shown in the icon. The 

icon shows a cross-section of the roof as if we looked at it parallel with the wall.

The data definitions are as follows:

X	horizontal overhang
Y	vertical elevation
Alpha	degree of the sloping ledge
dx	length of the sloping ledge in the x direction
dy	length of the sloping ledge in the y direction

In one line you can see a definition of a series of sections shown in the icon. The roof can be built up by the side of these ledges as intersections of planes. To all the roofedge-contours, a definition must be assigned, which can be:

- normal roof setting
- elevated roof or
- gable end.

A rising roof edge can be composed of three successive sections as shown in the icon. In each line, the X, Y values can be entered or omitted. The degree, the value of dx, dy are interdependent on each other. When entering values, you can choose which two values of the three you know and wish to enter, and the program will calculate the required third value. If you wish the program to calculate that required value, then you need to fill in the other two and after entering the third field, clear that (use Delete or Backspace keys) and hit the Enter key. The program will calculate the new value and write it in the field.

Comment: When you use this calculating method, some rounding inaccuracy may take place. The elemental values are the dx, dy values. The value of alpha helps you to fill in the definition field and is only used for reference value.

The field for entering elevation height: The roofedge-contour starts higher by the value entered here. In order to be exact, the roof contour is considered 0 base level and the value you enter is offset vertically from this 0 base. This value is used for those roof contour sides which are set elevated roof (see later).

The field for entering default width: The roofedge-contour starts further out from the wall perimeter by the value entered here. Using this function, you can get a larger eave overhangs.

The **Refresh** button updates the top-view picture of the roof. However, pressing the button is not always necessary because pressing the Enter key after entering any roof parameters has the same effect.
You can customize the roof by using the three different roof defining types:

- normal roof ,
- elevated roof or
- gable end.

For each side of the roof contour, one of these types are assigned. To assign a type to a roof contour side choose the type with the buttons and click on a roof contour side on the top view picture of the roof.
Use Normal roof setting for the sides on which the roof is not elevated. Using elevated roof will shift up the roof planes by the value entered at Elevation height. Choosing Gable wall setting will result in a vertical cutting of the roof at the specified sides. The three types are shown with different colours on the top view roof contour.