Snap



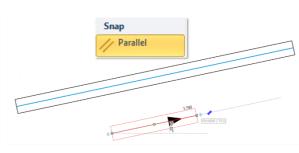
The Object Snaps bind a representative point of the object that you are drawing (e.g. the ending node of a vertical envelope) at a certain point of another object (e.g. at the edge or midpoint of a column, etc.).

There are also object snaps that constrain the drawn object to follow a certain direction considering an edge (or other lines) of already drawn objects (parallel, perpendicular and tangent).

The Object Snap is activated only when the cursor is at a certain distance from snap point and the indication is given when clicking on the object.

In e selection of the object snaps to be activated and the relative rules are accessible from the Snap box of the ribbon.

Here the descriptions of the object snaps available.



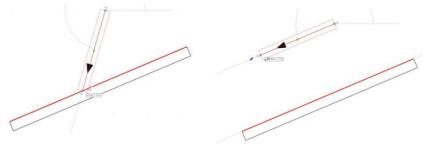
Parallel: this button activates the snap that allows you to draw an object (e.g. a building envelope) parallel to one already drawn.

To use the *parallel* snap, you just need to move closer to one side of the reference object, wait for the hint "Line/F11" to appear and press the keyboard key F11, then orient the object parallel to the

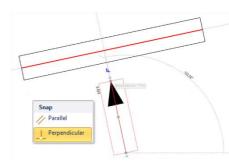
reference entity and lock the direction with F11, fix the second node of the object with a left click of the mouse.

Alternatively, you can use the parallel snap combined with the extension, in this case, whenever the object we are inserting turns out to be parallel to a wall (or similar objects), the parallel snap will automatically activate.

To insert one building envelope parallel to another, proceed as follows:



- Activate the parallel snap from the snap menu
- insert the first point of the building envelope;
- move the mouse cursor closer to one side of the reference envelope and press F11;
- when the casing is positioned parallel to the reference one, the parallel graphic is activated;
- to fix the position along the parallel axis click F11 again;

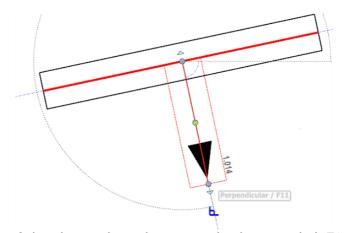


Perpendicular: activates the snap for drawing an object perpendicular to another one already drawn.

To use the *perpendicular* snap, simply approach one side of the object considered as a reference and, when the hint appears, click with the left mouse button; to lock the direction press F11.

To insert one casing parallel to another, proceed as follows:

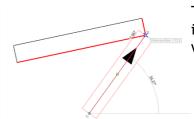
- from the snap menu activate the perpendicular snap
- draw the first point of the envelope;
- move the mouse cursor closer to one side of the reference envelope and press F11;



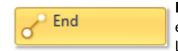
- to set the direction of the object along the perpendicular axis click F11



Intersection: activates the snap at the intersections between edges or axes of the drawn objects; if the Extension snap is active, the intersection snap also includes the points of intersection between extensions lines generated by edges or axes of the drawn objects.



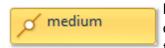
To use the *intersection* snap, you just need to approach a point of intersections between two lines/extensions of entities and click with the left mouse button.



End: activates the snap at the ending nodes of the drawn objects (for example the lateral face of a building envelope, or the representative line of a beam, etc.).



To use the *end* snap, you must approach the end of an entity and click with the left mouse button.



Midpoint: activates the snap to the midpoints of the drawn objects (for example the lateral face of a building envelope, or the representative line of a beam, etc).



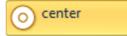
To use the *midpoint* snap, simply approach the midpoint of the object and click with the left mouse button.



Near: activates the snap at some point close to the edges or axis of the objects already drawn.



To use the *near* snap, you simply approach any point on the object edge and click with the left mouse button.

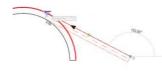


Center: activates the snap to the central node of circular objects (curved envelope, circular section column) and polylines arcs.



To use the *center* snap, simply approach any point on the outline of an object with a circular edge and click with the left mouse button.

Tangent: activates the snap to draw an object tangent to an arc of any object drawn by means of polylines.



To use the *tangent* snap, move the cursor on the contour of the object (circular part) and click when the pop-up hint appears.

O Point Cloud

Point Cloud: activates the snap to the point cloud nodes.

____ Extension (auto)

Extension (auto): activates the snap on extension, and it is available only for objects like:

- building envelope, curved envelope
- ornamental wall, curved ornamental wall
- curved filling
- curtain wall, curved curtain wall
- dummy envelope

The extension snap is automatically active only in the direction parallel to the major length of the object and not for the perpendicular direction.

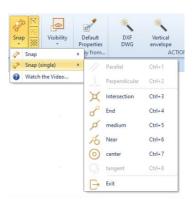
Snap parallel to the length

Snap parallel to the short edge

Snap parallel to the short edge

not automatically available

Snap (single)

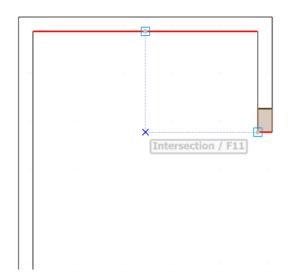


Snap (single) temporarily replaces the Snap feature's general settings and is active for one-time use only, after which the general snap settings are restored.

The single snap is activated only if an object is selected, otherwise the menu remains disabled.

Snap (single) parallel, perpendicular, tangent are activated only if we start drawing the object (for example after the first click for the envelope).

When you activate the symbol of a snap, by clicking the F11 key you can set reference points (a blue square) from which you activate the extension snaps.



Reference points are temporary and deactivate automatically.

If you are drawing a new object, the snaps turn off when the command is unchecked.

For example, after activating the references, selecting the building envelope object from the objects menu, you can draw more than one without losing the references but, when "Esc" is pressed to deselect the command, these points disappear.

If you select an object already inserted, for example a beam and activate reference points, these disappear only if after positioning the beam, I select another object



Parallel: activates the snap that allows you to draw an object (e.g. a building envelope) parallel to one already drawn.

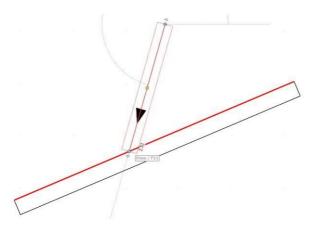
Function keys: Ctrl + 1

To use the (single) parallel snap, it is necessary to approach one side of the entity considered as a reference and the object being inserted is automatically positioned in a parallel direction, to fix the direction press the F11 key on the keyboard.

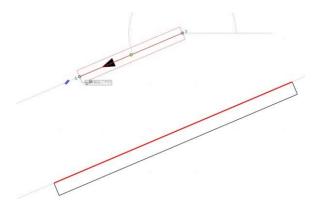
Example:

To insert one building envelope parallel to another, proceed as follows:

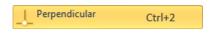
- insert the first node of the building envelope;
- from the snap menu activate the parallel (single) snap;
- move the mouse cursor closer to one side of the reference building envelope (already drawn) and press F11;



 when the building envelope is positioned parallel to the reference one, the parallel graphic is activated;



to fix the position along the parallel axis click F11 again



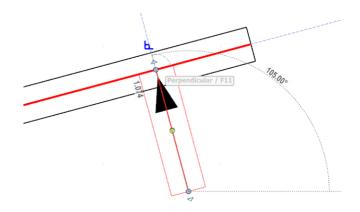
Perpendicular: to activate the perpendicular snap, it is necessary to approach one side of the object considered as a reference, at the appearance

of the pop-up hint, click with the left mouse.

Function keys: Ctrl + 2

To insert one building envelope parallel to another, proceed as follows:

- draw the first point of the envelope;
- from the snap menu activate the (single) perpendicular snap;
- move the mouse cursor closer to one side of the reference building envelope (already drawn) and press F11;

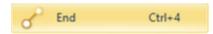


- to fix the position along the perpendicular axis press the F11 key



Intersection: activates the snap at the intersections between edges or axes of the drawn objects; if the Extension snap is active, the intersection snap also includes the points of intersection between extensions lines generated by edges or axes of the drawn objects.

Function keys: Ctrl + 3



End: activates the snap to the ending node of the drawn objects (the side of a building envelope, the face of a beam, etc.).

Function keys: Ctrl + 4



Midpoint: activates the snap to the midpoints of the drawn objects (the side of a building envelope, the face of a beam, etc.).

Function keys: Ctrl + 5



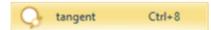
Near: activates the snap at some point close to the edges or axis of the objects already drawn.

Function keys: Ctrl + 6



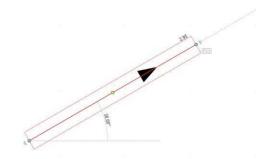
Center: activates the snap to the central node of circular objects (curved envelope, circular section column) and polylines arcs.

Function keys: Ctrl + 7



Tangent: by selecting it activates the snap to draw an object tangent to an arc of polyline or to an arc of any object drawn by means of polylines.

Snap to Angle

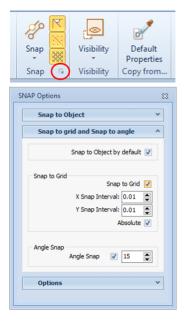


The Snap to Angle function constrains the drawn object (e.g. a building envelope) to follow specific direction considering a specific angle defined by the User.

The Snap to Angle customization options can be access in the "Snap to Grid and Snap Angle" sections of the toolbox.

The "Snap Options" toolbox is accessed by clicking on the "Enable SNAP Options" button, located at the bottom right of the "Snap" menu.

You can set the direction of the object by pressing the F11 key when activating the corner snap



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