

## reference - create objects

This part of the reference is related to COMMANDs that create the graphic object directly, like **draw line**, **draw area** etc.:



And then to COMMANDs that derive a new object from another by copying, such as **copy** and **copy parallel**:



## common COMMAND properties

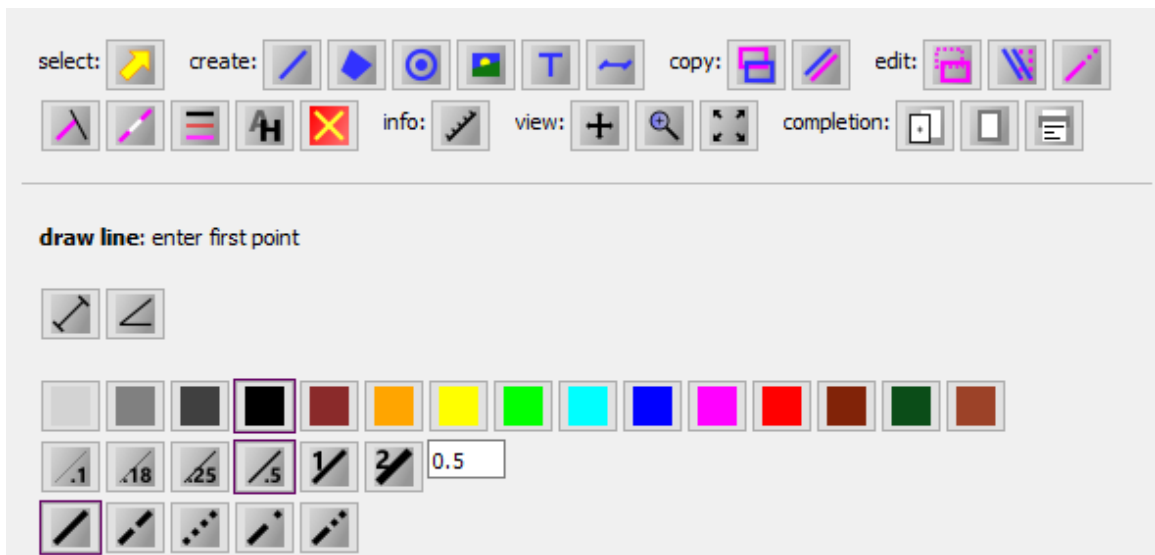


All the above buttons have a specific meaning and are named COMMANDs. Clicking on them switches the main program action, i.e. what is accomplished when you click POINT or RESET.

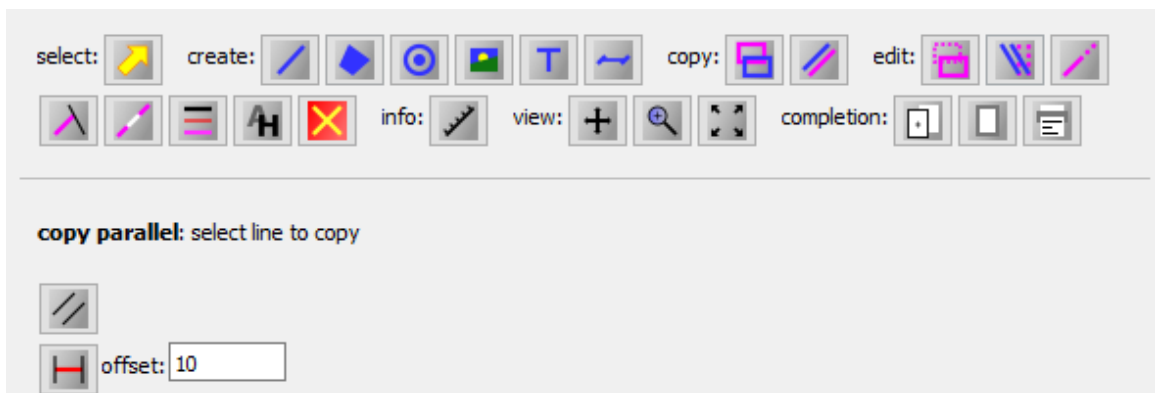
After the COMMAND is activated, only POINT, POINT, POINT and occasionally RESET are entered and these are interpreted depending on the activated COMMAND. For example, you activate COMMAND **draw line**, then enter POINT, POINT and a line is created. If you activate COMMAND **draw symbol**, entering first POINT will draw a symbol and entering another POINT will draw another symbol, etc.

The command runs in infinite mode, the COMMAND **create line** is ready to draw the next line after creating the first line, etc.

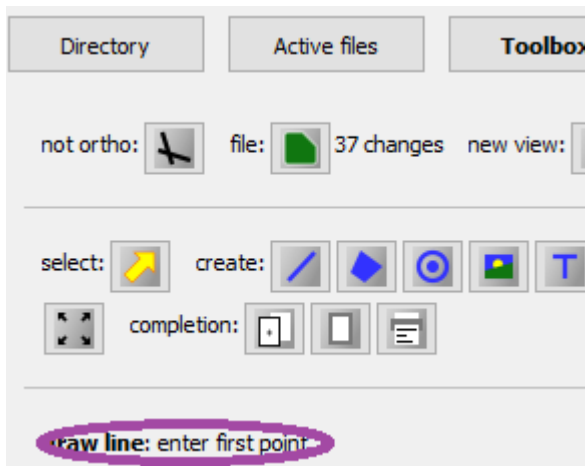
When COMMAND is activated, its specific dialog area is also activated. For example, if you activate COMMAND **draw line**, the specific dialog area will look like this:



While for COMMAND **copy parallel** specific dialog looks like this:



Whatever command is active, there is always a fixed field that gives you a short hint on what to do next.



When a command is executed, it is common to use RESET in addition to POINT. There are the following situations when to use RESET:

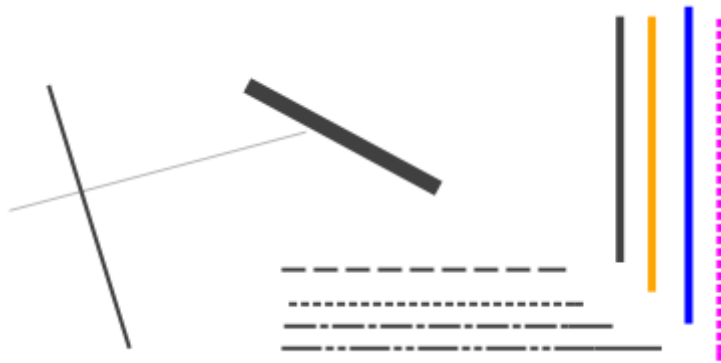
- 1.) Eliminates the previous POINT entry. Can be used repeatedly in this situation.

2.) If an object has been selected using POINT and you are not satisfied with the selection, use RESET to select an alternative object. It can be used repeatedly in this situation.

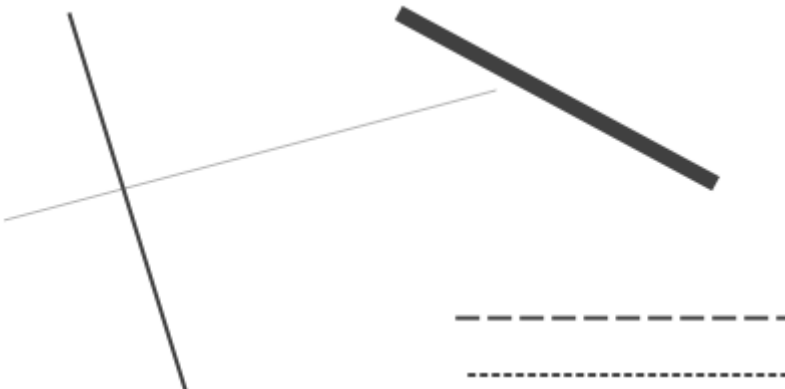
3.) Sometimes RESET completes the COMMAND job, for example **place area**.




## draw line

With this command you can specify the entity line. Examples of lines are in the following picture:



Line has an important property in T21CAD. The thickness and symbolism of the line does not change at different zoom levels. For example, the line has a thickness of 0.25 mm and it will have it at different zoom levels even when printing. This effect for two zoom levels is illustrated in the following image.




Activate the drawing mod using LP on the button . Enter the first POINT of the line . Enter another POINT to complete the drawing .


With RESET it is possible to undo the first POINT.


  - switching the ortho - non-ortho mode affects the heading of the line.

 - you can activate and enter the exact length of the line

 - you can activate and specify the exact angle of the cara

 - you can specify the line thickness. The thickness is in millimeters and is constant at different zoom or print scale.

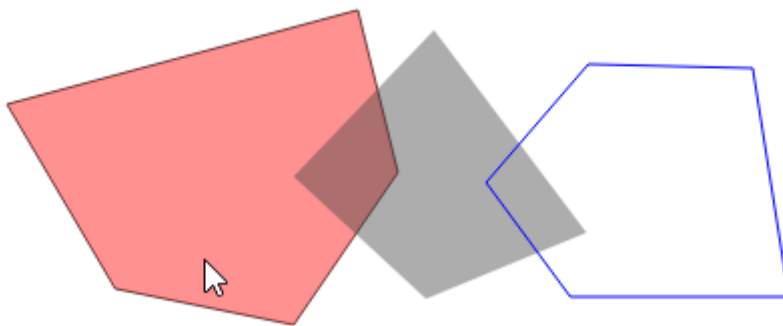
 - we can specify the line thickness. The thickness is in millimeters and it is constant at different zoom or print scale.



 - we can specify the line style. The line style is in millimeters and is fixed in size at different zoom or print scales.



## **draw area**

With this command you can enter the graphic object **area**. This object has only basic symbology, which consists in semitransparent coloring and outlining with a border as seen in the following picture:



Activate COMMAND **draw area** using LP on the button . You enter individual POINTs of the area . To finish drawing the **area**, use RESET

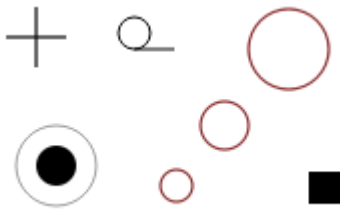
 - you can specify the color of the line.


- the border line or color is not used.



## **draw symbol**

Pomoci tohoto prikazu muzeme zadat symbol. Prikłady entity symbol jsou na nasledujícím obrazku:



Aktivujeme mod kresleni pomoci leveho tlacitka mys na tlacitko  a vyberte symbol [\[circle\]](#) [\[target\]](#) [\[cross\]](#) [\[square\]](#) umistete pomoci leveho tlacitka.

size: [\[0.5\]](#) [\[1\]](#) - you can enter size of symbol. The size is in milimeters and will be in the drawing fixed in this size, independently of actual size of the drawing.



## draw image

With this COMMAND you can insert a pixel image into the drawing. The image must be in \*.png format and must be in the same directory as the drawing.


The image is not embedded in the plot, but a reference to it is always used, so it is not good to remove it from the directory afterwards.



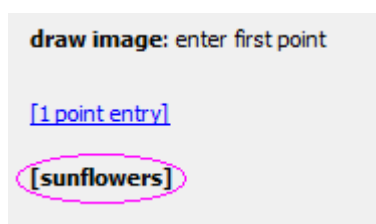
sunflowers.png



sunflowers.

Activate COMMAND **place image** using LP on the button . There are two modes to choose from [\[2 points entry\]](#) or [\[1 point entry\]](#). Mody prepiname pomoci LP.

In both mods we are selecting the image to be placed:



In the “2 points entry” mode you can select [\[keep ratio is on\]](#).

Now, depending on the one-point or two-point mode, you should enter one or two POINTS to place the image in the drawing.

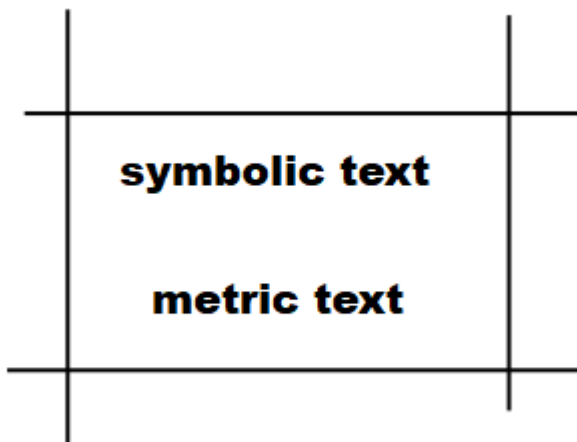
It is also necessary to note that if the “single point entry” mod is used, the pixel is as large as one drawing unit.

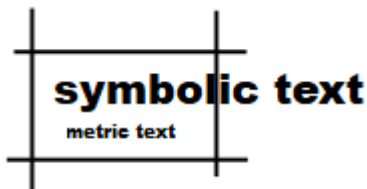
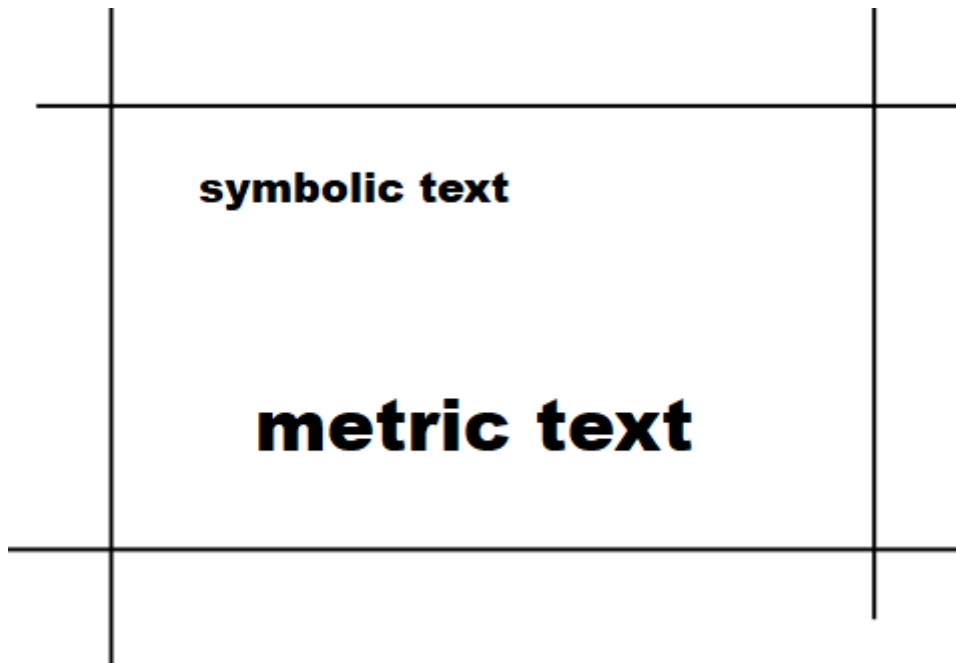
## **T** draw text

With this COMMAND it is possible to insert single line text of different color and size into the drawing:

text  
**text**  
**text and text**

Text can be symbolic or metric. With symbolic, the size of the text on the screen does not change when zooming, while with metric, the size changes, as does the size of the other objects.





- you can enter text here. Remember that to activate it you must press the ENTER key after entering it.

[normal](#) [bold](#) - you can toggle normal/bold if you click here.

[\[symbolic\]](#) [\[metric\]](#) - you can switch symbolic/metric mode if you click here.

color:     - here you can set the text color.

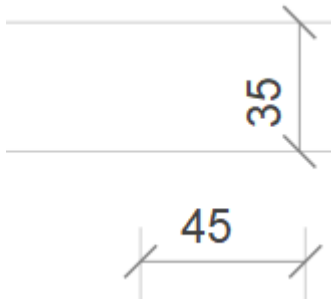
size: [\[0.5\]](#) [\[1\]](#) - here you can specify the text size. The size is in mm. If metric mode is specified, the size is valid only in the scale that is specified here: scale: [\[10\]](#) [\[25\]](#) [\[50\]](#)

Nyní můžete zadat pozici textu ve výkresu pomocí POINT.




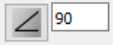
## **draw dimension**

With this command it is possible to perform the quotation in the drawing:



size: [0.5][1][1.5] - size of the quote description in millimetres.

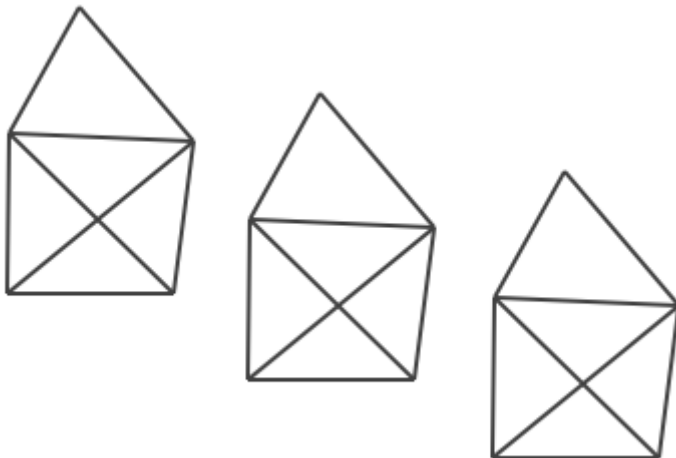
scale: [10][25][50][100] - the scale of the drawing in which the size of the quote label will match the specified size.

 - Here you can switch to the mode where the angle direction is fixed. It is suitable for situations where the base of the quote is at different levels. After you enter LP on this button, a text box appears  where you can enter the angle direction in degrees.


Use POINT to enter the first and then the second point of the quoted dimension in the plot. With the third POINT enter the offset of the quotation line.



COMMAND creates a copy of the selected object with a specified offset.



Enter POINT to select the object. Enter another POINT to specify its new position.

You can combine copying with the COMMAND **select** . First, use COMMAND **select** to select the objects. Then run the copy tool. If something is selected, it copies the selected objects. So you only enter the first and second POINT to specify the size of the displacement.





## copy parallel

The tool allows you to copy a line in parallel mode. The result of copying a line looks like this.



- switches between parallel copy and parallel move



- switches between copy positioned by POINT / copy positioned by exact distance. In the latter case, POINT specifies only the left/right placement of the copy.

Select the line you want to copy using POINT. Enter a second POINT to specify the new position.