Using Attributes

Attributes are specialized text in block definitions used as a generic placeholder for commonly used text.

For instance, on a title block you typically have a project name and project number. You can create a title block using attributes so that you are always prompted for “Project Name” and “Project Number”. When prompted, you provide this information as entries in a dialog box instead of having to manually create the text each time.

To create blocks with attributes:
1. Draw the geometry as you typically would for any other block
2. Define attributes
3. Define the block. When selecting objects for the block, choose the attributes first and in order of entry.
4. Insert the block into a drawing.

Defining Attributes

You define attributes through the Attribute Definition dialog box.

Command: ATTDEF

Menu: Draw> Block> Define Attributes

![Attribute Definition Dialog Box](image-url)
Mode
Invisible - Specifies that attribute values are not visible when the block is inserted
Constant - Gives attributes a fixed value when the block is inserted
Verify - Prompts you to verify that the attribute value is correct when the block is inserted
Preset - Sets the attribute to its default value when the block is inserted

Attribute
Tag - The identifier for that attribute. The tag can not have spaces. You may have more than one attribute in the block with the same tag name, but you will have to enter the same information for every occurrence.

Prompt - This is what the user will see when entering the data for the attribute. If a prompt is not entered the attribute Tag is used as a prompt. If you have selected the Constant mode, the Prompt option is not available.

Value - This is default text for the attribute.

Insert Field Button - Displays the Field Dialog box. You can insert a field as all or part of the value for an attribute

Insertion Point
Give you the choice to either select the insertion point on the screen or specify the X, Y and Z coordinates.

Text Options
This box allows you to specify the Justification, Text Style, Height and Rotation of the attributed text.

Height - You can enter the text height or select points on the screen to define the height of the text. If you selected a Text Style that has fixed height (other than 0.0), or if you select Align in the Justification list, the Height option is not available.

Rotation - You can enter the rotation angle or select points on the screen to define the rotation of the text. If you selected Align or Fit in the Justification list, the Rotation option is not available.

Align Below Previous Attribute Definition
This places the attribute tag directly below the previously defined attribute. If this option is selected, the Insertion Point and Text Options are not available. If you have not previously defined an attribute, this option is not available.

Lock Position in Block
This option locks the position of the attribute within the block reference. If not selected, after definition, the attribute can be moved around as if it were regular text.
What You Need To Know About Attributes

Once created, attributes may be edited easily through the Object Properties manager. You are able to modify the properties (text style, color, height, etc.) just as you would regular text.

System Variables - Entered at the command line

  ATTDIA - When set to “0”, will disable the “Enter Attributes” dialog box and prompt via the command line

  ATTDISP - Has three settings: Normal, On and Off. The Normal settings will honor the Invisible mode setting for each attribute definition. ON and OFF will override the Invisible mode.

Commands - Entered at the command line

  BATTMAN - Manages the attribute definitions for blocks in the current drawing. You can edit the attribute definitions in blocks, remove attributes from blocks and change the order in which you are prompted for attribute values when inserting a block.

  DDATTE - Used to edit attribute values, not properties

  ATTEDIT - Used to launch the “Edit Attributes” dialog box

  EATTEDIT - This command displays the “Enhanced Attribute Editor” dialog box. Lists the attributes in a selected block and displays the properties of each attribute. You can change the attribute properties and values.

  EATTEXT - This command launches the “Attribute Extraction Wizard” which provides you with step-by-step instructions for extracting information from block attributes in the current drawing or other drawings. This information is used to create a table in the current drawing or is saved to an external file such as Excel.

Double clicking on an attribute that is contained inside a block will launch the “Enhanced Attribute Editor” dialog box and will have already selected that specific attribute.