

# Working with Blocks

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Blocks are such a great time saver. Here are a collection of time saving tips you can use with blocks.

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## Substitute one block for another

If you have used a block in a drawing which is repeated many time and you wish to change the block, it is possible to substitute one block for another.

In order for this to work, you need a drawing file that contains only the new block that you want to use. This allows you to replace all instances of Block A in Drawing 1 with Block B from Drawing 2.

If the block's base point (in Drawing 2) is not at 0,0, use the [base](#) command in that drawing and set the base point to the base point you want to use for the block, perhaps somewhere on the block.

Follow these steps:

1. Type **-insert** at the command line.
2. Type **blockname=filename**, where blockname is the name of the current block in Drawing 1 and filename is the name of the Drawing 2 containing the new block. If the file is not in the support file search path, type its path. Press Enter.
3. You will be prompted to redefine the block (the current one in Drawing 1), type **y** (yes) and press Enter.
4. Press Esc to avoid inserting a new copy of the file. The Block B in Drawing 2 replaces all instances of Block A in Drawing 1.

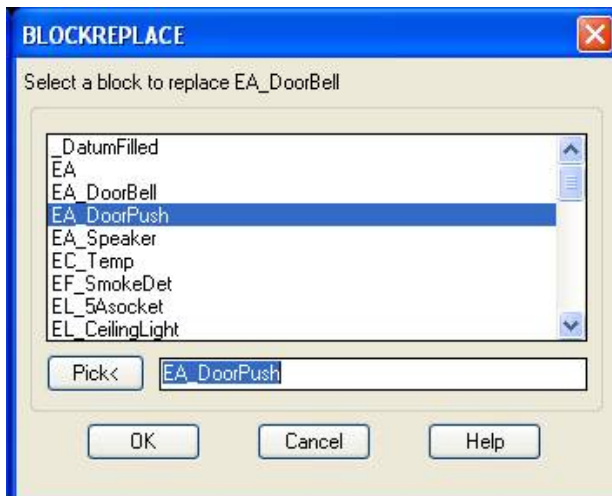
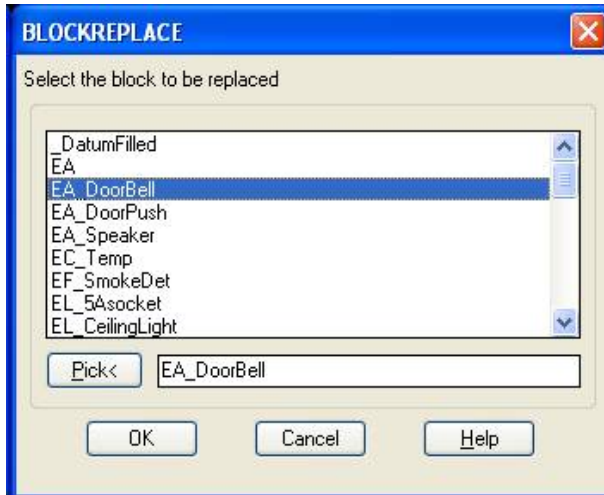
It should be noted that Drawing 1 now has a block with the same name as before (Block A), but, the block is actually defined as something different (Block B).

If this does not suit, then either try the next tip, [blockreplace](#), or simply edit the block with the Bedit <shortcut BE> command.

## Blockreplace

An Express Tool that allows you to globally replace all inserts of one block with another block in the same drawing.

BLOCKREPLACE searches the entire drawing for a specified block and replaces all instances with another block. You will be prompted to purge unreferenced items when completed.



## Burst, Explode and Xplode

BURST allows you to explode an attributed block to the insertion layer and convert the attributes to text.

 BURST > 

Explode - Blocks are usually created from entities on layer 0, thus when a block is inserted on any layer it inherits the properties of the insertion layer. When a block is exploded all of the components revert back to Layer 0 (the original state) and any attributes will revert to attribute definitions with the loss of text values.

 EXPLODE > 

XPLODE works similarly to EXPLODE except it gives you the opportunity to override component entity properties. You can control the target layer, linetype, lineweight, and color, or inherit all properties from the block insertion.

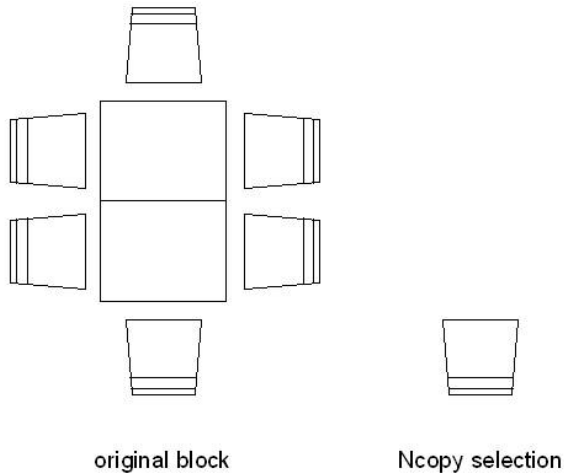
 XPLODE > 

Enter an option

All
Color
LAYER
LType
LWeight
Inherit from parent block
● Explode

## Ncopy

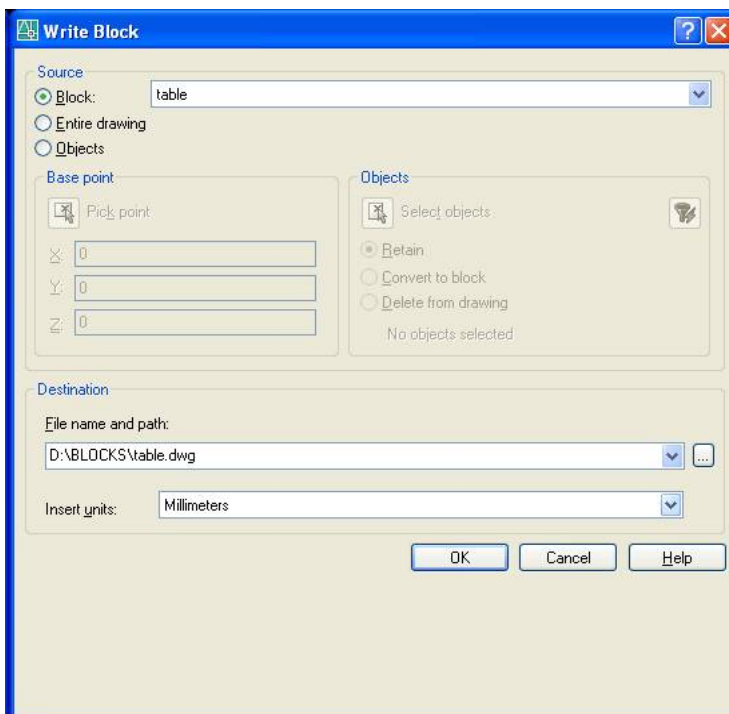
Copies objects nested in an xref or a block. Just type NCOPY and select anything from a block.



## Wblock

Wblock <shortcut W> writes objects or a block to a new drawing file. Note the objects will be present in the drawing, but, not the block definition.

The objects in the specified block definition are saved as objects in the new drawing file. The insertion base point of the block definition will be located at the origin point (0,0,0) in the new drawing.



## Base

Setting the base may be critical if you substitute one block for another.

Type BASE to change the base point coordinates in the current UCS. You may then need to move the block to co-ordinates 0,0. When you insert or externally reference the current drawing into other drawings, this base point is used as the insertion base point.

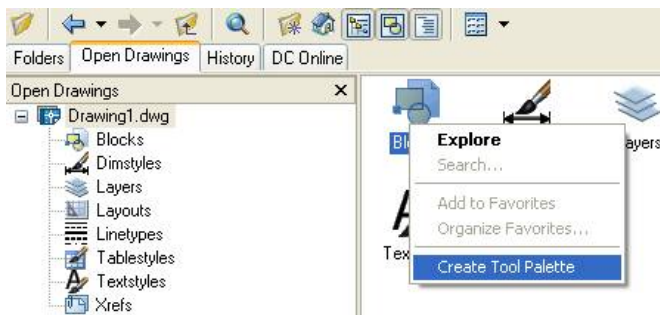
Note, from AutoCAD 2006 onwards you can change the insertion point on the fly. INSERT and select B (basepoint). This allows you to pick anywhere in the drawing (and anywhere in the block you are inserting) as your new insertion point (basepoint).

## Use Tool Palettes to Organise Blocks

You can use tool palettes to organise a selection of blocks that are stored in one drawing file or separate drawing files.

Once you have added a block tool to a tool palette, you can easily insert the block reference in any drawing by dragging it from the tool palette to the drawing or by clicking and placing it in the drawing.

To create a tool palette open design center <shortcut DC> and locate Blocks in your drawing (the drawing must contain the blocks you want on the tool palette). Right-click on Blocks and select Create Tool Palette. That's it!



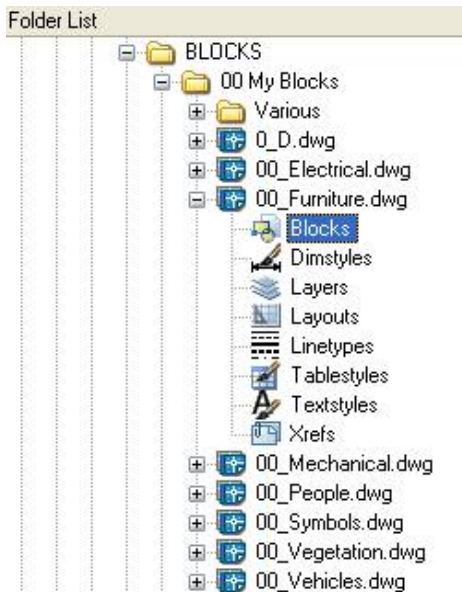
## Copy a block to the Tool Palette

Having just created a tool palette with blocks you may find that you want to add new blocks. This is easily done by following the above step, but, this time navigating to the individual block in design center. Select the block and drag it to the tool palette.

## Library Files

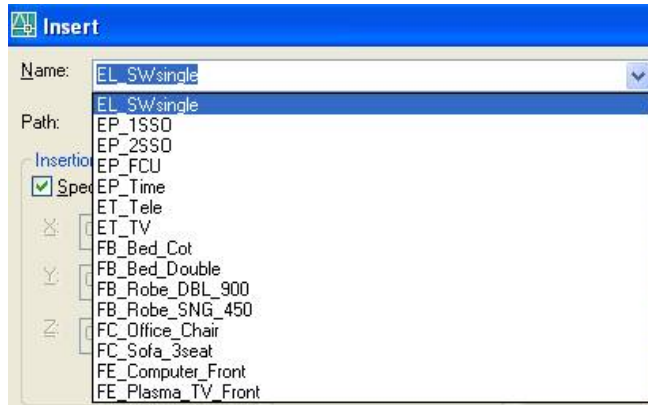
A block library is a collection of block definitions stored in a single drawing file. If you have a collection of similar blocks, then insert all of these blocks into one drawing for quick and easy access. For example, all collection of furniture blocks could be saved in a drawing named Furniture.dwg.

Blocks in a library file can be quick accessed through design center. Navigate to Folders and find the path where your block library files are saved, find the drawing with the correct group of blocks and select blocks. You can now double click or drag a block to your current drawing.



## Naming Blocks

It is a good idea to create some order when naming blocks. By adopting a simple alphanumeric convention, blocks will be displayed in order when you use the insert command, thus making it easier to select the correct block.



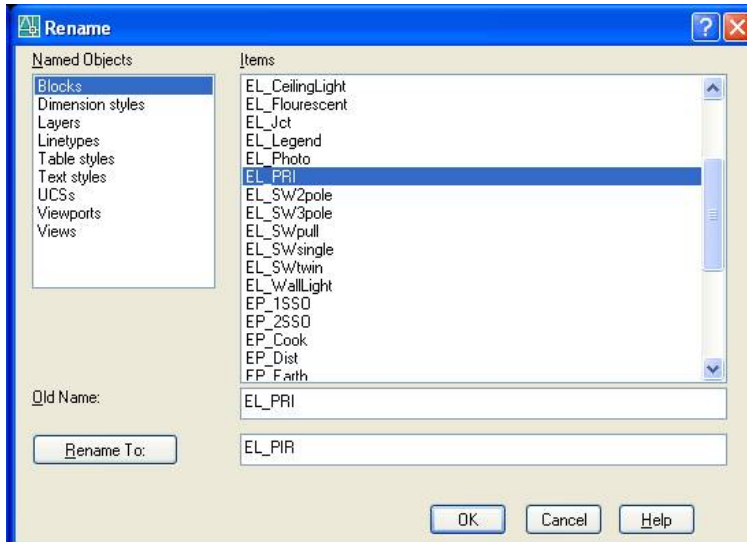
Here are some naming convention examples you may wish use or adapt to suit your own circumstances.

Category	Group/Service	Comment
E=Electrical	A=Audio Visual	
	C=Controls	
	F=Fire	
	L=Lighting	
	P=Power	
	S=Security	
	T=Telecoms/data	

Category	Group/Service	Comment
F=Furniture	A=Appliances	White goods
	B=Bedroom	
	C=Chairs	
	E=Electrical	TV, computer, etc.
	G=Garden	
	K=Kitchen	Cupboards, etc.
	L=Living	Sofas, cabinets, tables, etc.
	O=Office	All commercial furniture

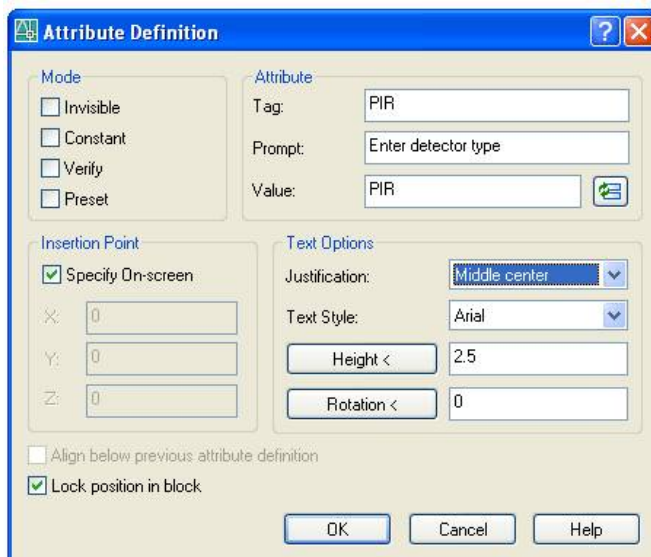
## Renaming a Block

A block can be renamed by using the RENAME command <shortcut REN>. This can be very useful if you edit a block and make a mistake with the name.



## Mirror a block with text

The MIRRTEXT variable has no influence if a text entity is part of a block definition, it is always mirrored, independently on the MIRRTEXT value. To overcome this define text as a block attribute (ATTDEF) with a preset value - variable (non-constant). Attributes are influenced by the MIRRTEXT variable.





## Shortcuts

SHORTCUT	COMMAND	COMMENT
ATT	ATTDEF	Opens attribute definition dialogue box
ATTDISP	ATTDISP	Globally controls visibility of block attributes in a drawing
ATTEDIT	ATTEDIT	Edit attribute values for a specific block
B	BLOCK	Opens block dialogue box in order to make a block
BATTMAN	BATTMAN	Opens block attribute manager
BATTORDER	BATTORDER	Displays attribute order dialogue box
BC	BCLOSE	Closes the block editor
BCOUNT	BCOUNT	Counts the blocks in a drawing
BE	BEDIT	Opens the edit block definition dialogue box
EATTEXT	EATTEXT	Enhanced attribute extraction wizard to count blocks
GATTE	GATTE	Global attribute edit of multiple blocks
I	INSERT	Opens insert dialogue to insert a block
-I	INSERT	Insert a block by name
MINSERT	MINSERT	Insert block in rectangular array
REFEDIT	REFEDIT	Edit a block reference in place
REN	RENAME	Opens rename dialogue box to rename blocks, layers, etc
W	WBLOCK	Write a block - for use in other drawings
XLIST	XLIST	Lists type/block name/layer name/color/linetype of a nested object in a block or an xref
<p><b>TIPS</b></p> <ol style="list-style-type: none"> <li>1. Create a new block on layer 0 so that the block will use the layer and properties of the current layer it is inserted on. Text can be set to colour white.</li> <li>2. Set ATTDIA to 1 to use dialog box with block attributes or 0 to use command line.</li> <li>3. AutoCAD 2006 allows you to change the insertion point on the fly. INSERT and select BASEPOINT. This allows you to pick anywhere in the drawing (and anywhere in the block you are inserting) as your new insertion point (basepoint).</li> </ol>		