

Blocks and Symbols can be great time savers when used with TurboCAD drawings.
Use them whenever possible. You won't be disappointed.



Play on words used here
for images .
"Blocks" and "Symbols".

A **Block**, when used within TurboCAD, may be defined as a 2 or 3 dimensional drawing (or object) that is created and stored for repeated usage in the current drawing. That is not to say that a block cannot be made into a symbol, but that is a different topic yet to come.

Blocks help fulfill the basic CAD rule of "Never draw the same thing twice". This also applies to having to edit multiple instances of the same object, which is not an issue when blocks are used.

Blocks are great time savers and, assuming the block has been precisely created, assure the user that the same precision will be there with any additional usage.

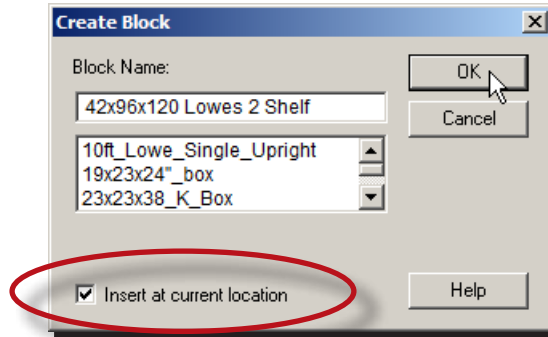


This Lowe's store render uses many blocks. The plain boxes are a number of separate blocks as is the main rack they are displayed. The reader box, the palette, the roof trusses and the overhead lights are also blocks.

The object or model is created and dragged to the Blocks palette in wire-frame mode, although it is illustrated here in Quality Render mode.

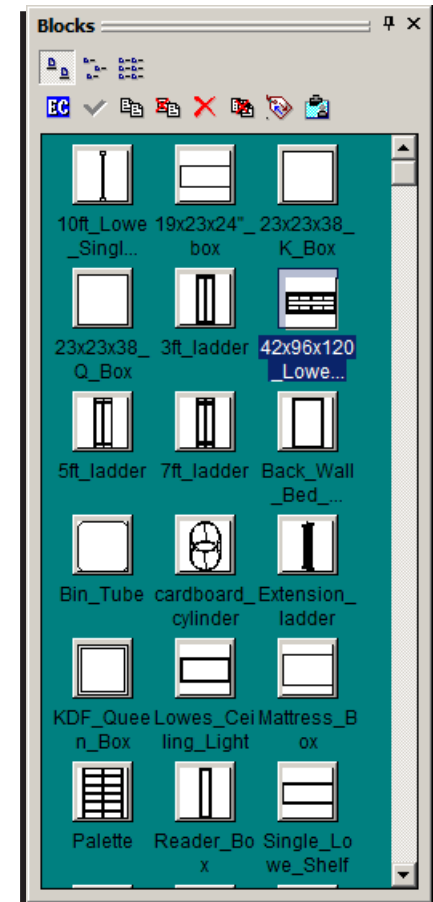
The user names the block and it is reinserted at the current location, if the option to do so is checked. Otherwise the object or model disappears from the drawing area.

Before a block is created the user can reposition the reference point for easy placement of additional copies when needed.



Note that blocks should be created on layer 0. They can be assigned to different layers after they have been placed in the drawing.

A user can make copies of the block within the drawing or they can be dragged in from the Blocks palette. Simply drag the thumbnail into the drawing and release the mouse button to drop it. Reposition as needs dictate.

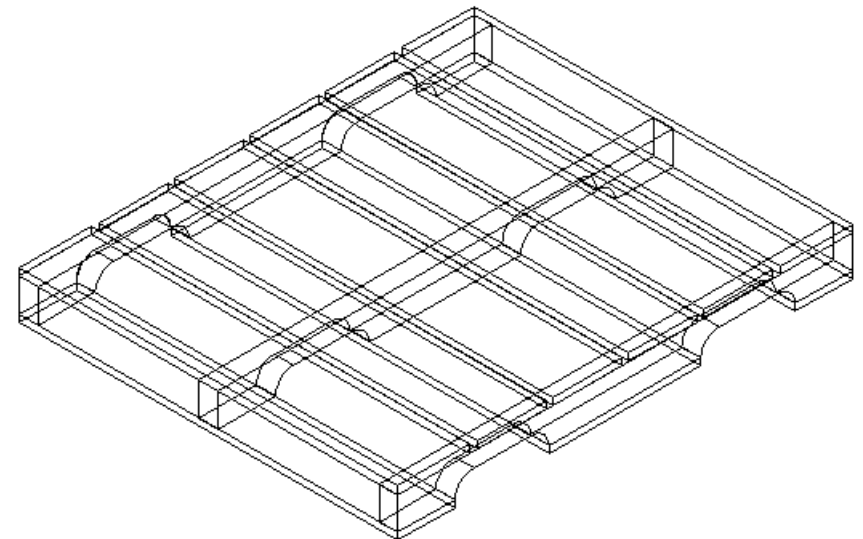
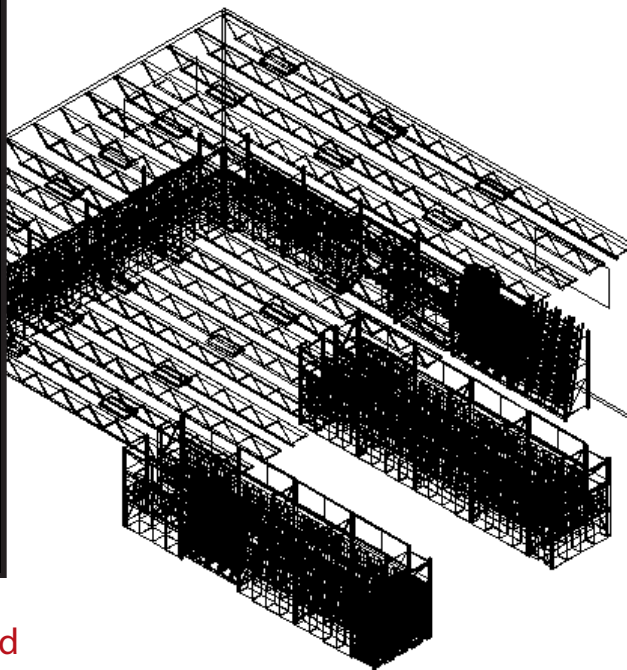
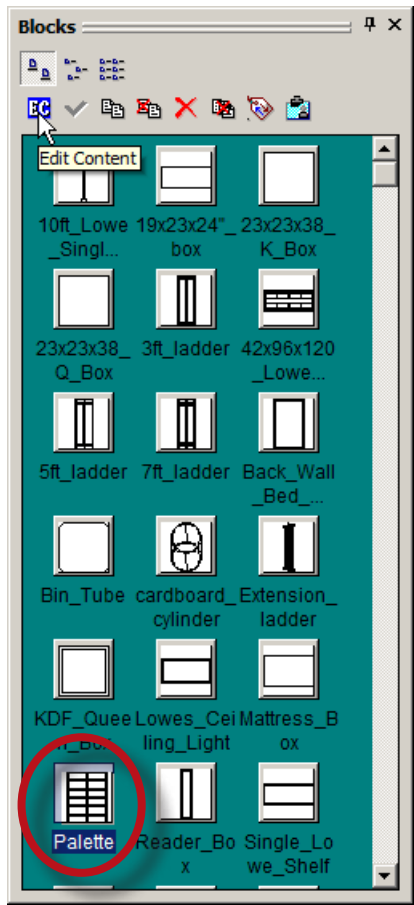


When it comes to editing a particular block the user simply selects the appropriate thumbnail on the Blocks palette and then selects the EC icon (Edit Content) at the top of the palette.

The block opens in a new window and edits can be made. **Don't** move the model from its current location otherwise all the blocks in the drawing will move as well. Select Finish Edit Content (green check mark) when the editing is complete.

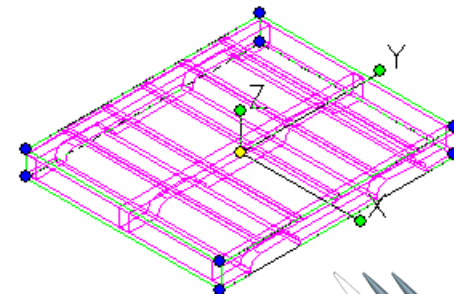
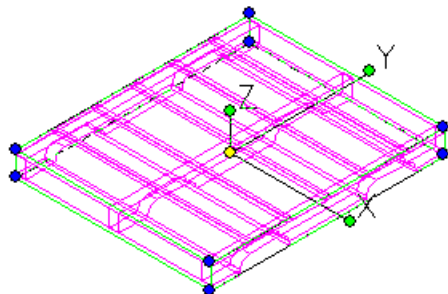
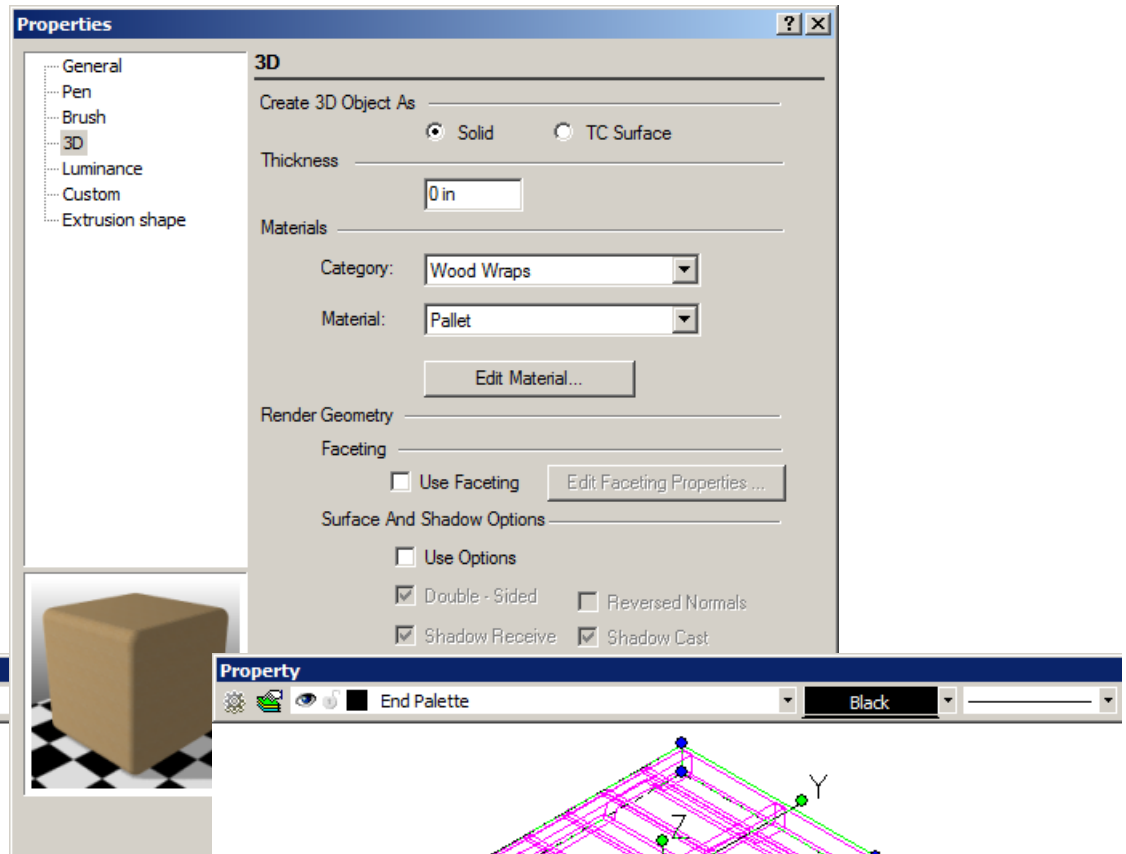
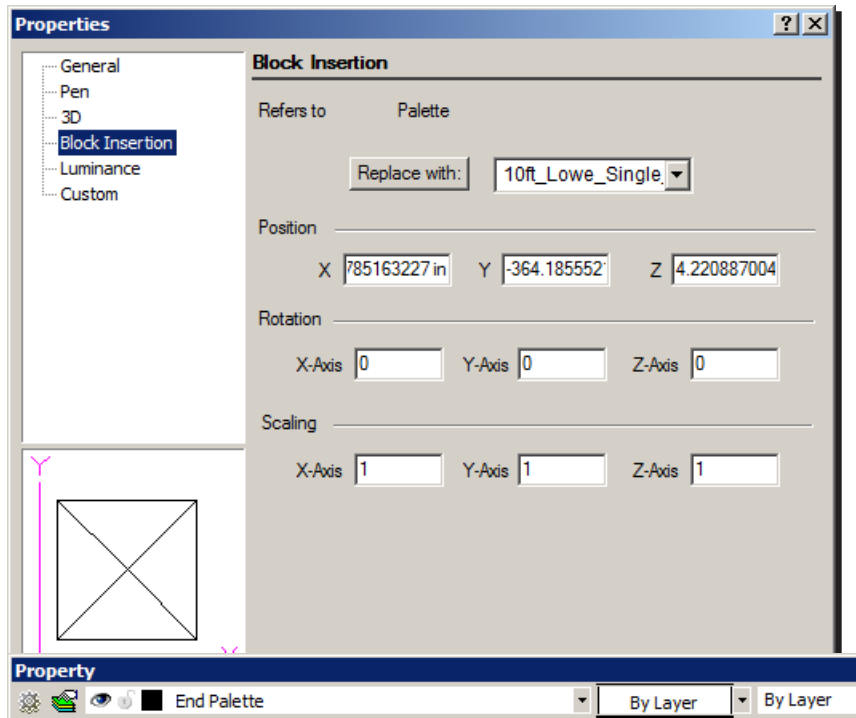
Any change to a block in this fashion will occur to all instances of the block in the drawing.

Be aware that a block can be resized in a drawing and it will retain its Block status, but this resizing may have consequences with regards to materials (i.e. scale) that have been applied to the original block.

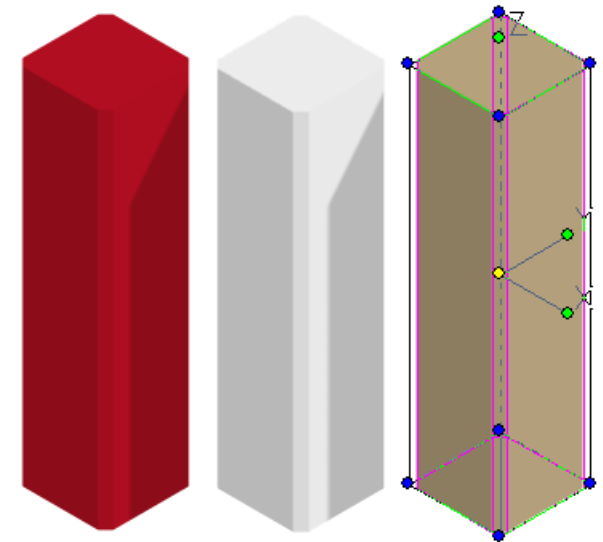
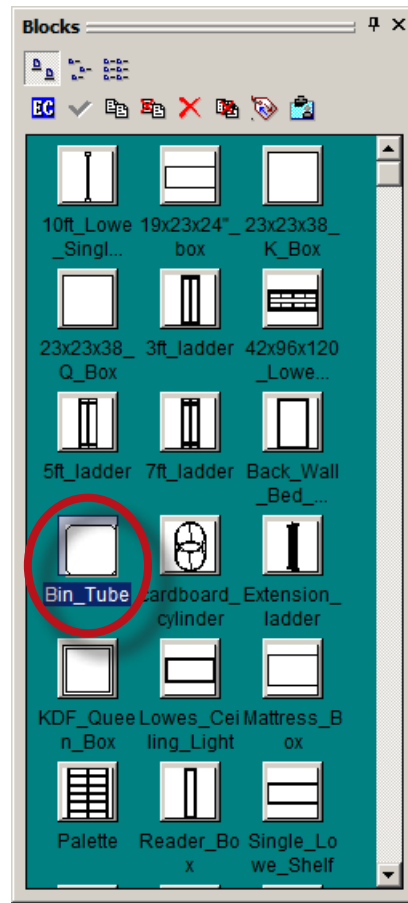
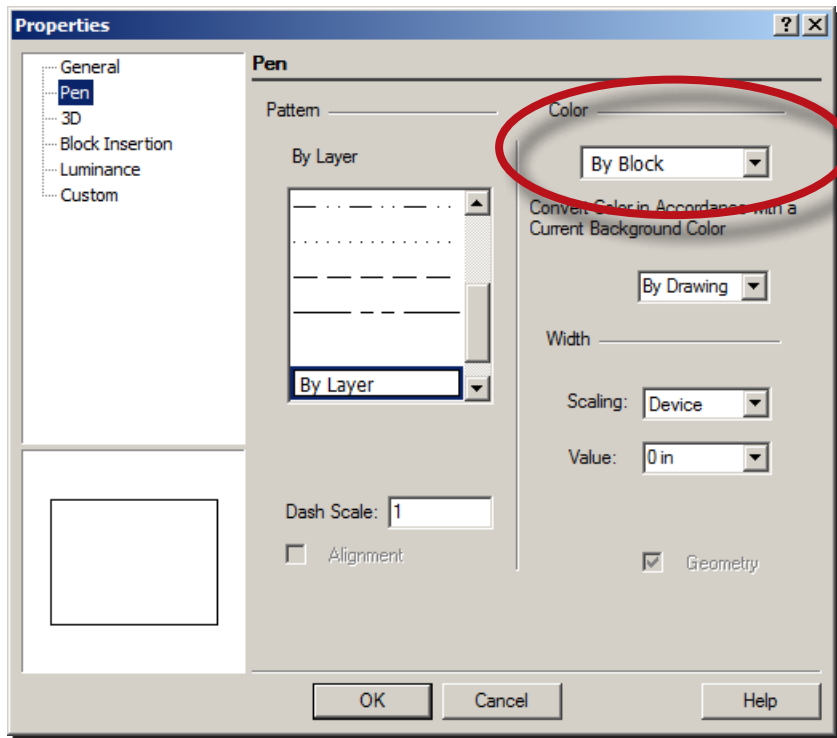


Pallet thumbnail is selected

If a block is exploded its Block status is broken and it becomes just a regular drawing object. Any subsequent use or copy of that object will add to file size as any 2D or 3D object does.



New to V16 was the ability to apply different materials to different instances of a specific block. To do this simply set the Pen color to By Block before the object is made into a block (or after via EC). Select the desired block in the drawing then apply the material by double clicking the desired material icon on the Materials palette. Note that the block on the Block's palette should not contain materials otherwise this will not work.



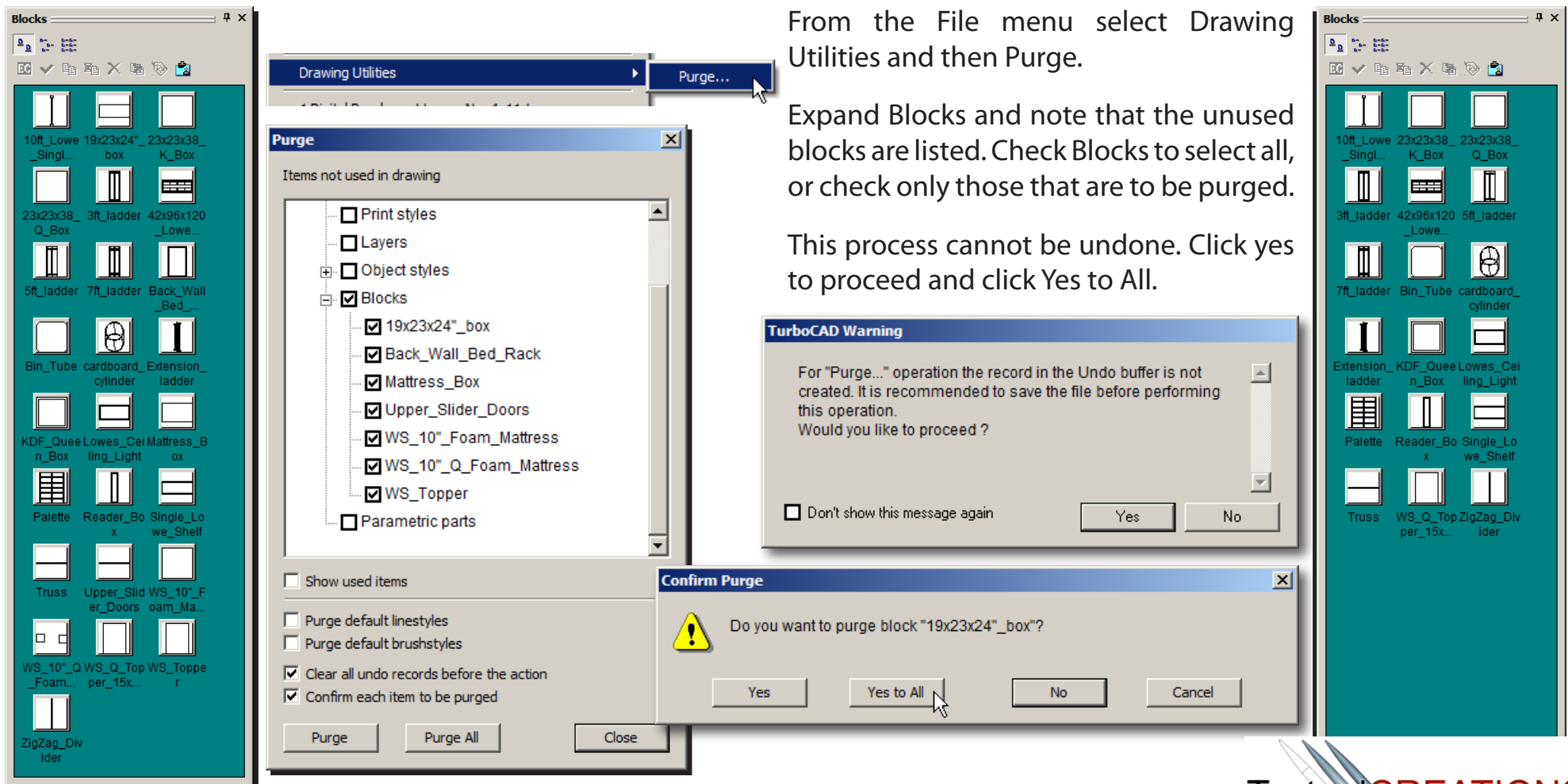
Bin Tube thumbnail is selected

New to V18 is the Purge tool. This long for asked tool allows a user to purge, among other things, blocks from the Blocks palette that are not used in the drawing. This can be a real benefit when drawings get reused time and again for new projects and have a constant supply of new blocks added while many unneeded ones remain. Besides clearing the clutter of the Block palette purging the drawing also has the benefit of reducing overall file size by getting rid of extraneous items.

From the File menu select Drawing Utilities and then Purge.

Expand Blocks and note that the unused blocks are listed. Check Blocks to select all, or check only those that are to be purged.

This process cannot be undone. Click yes to proceed and click Yes to All.



This trade show booth render uses many symbols (and blocks too). Many of the furnishing are common to other trade show booths designs that are created so it is handy to have a location to pull these furnishings from. The Library palette is the ideal place.

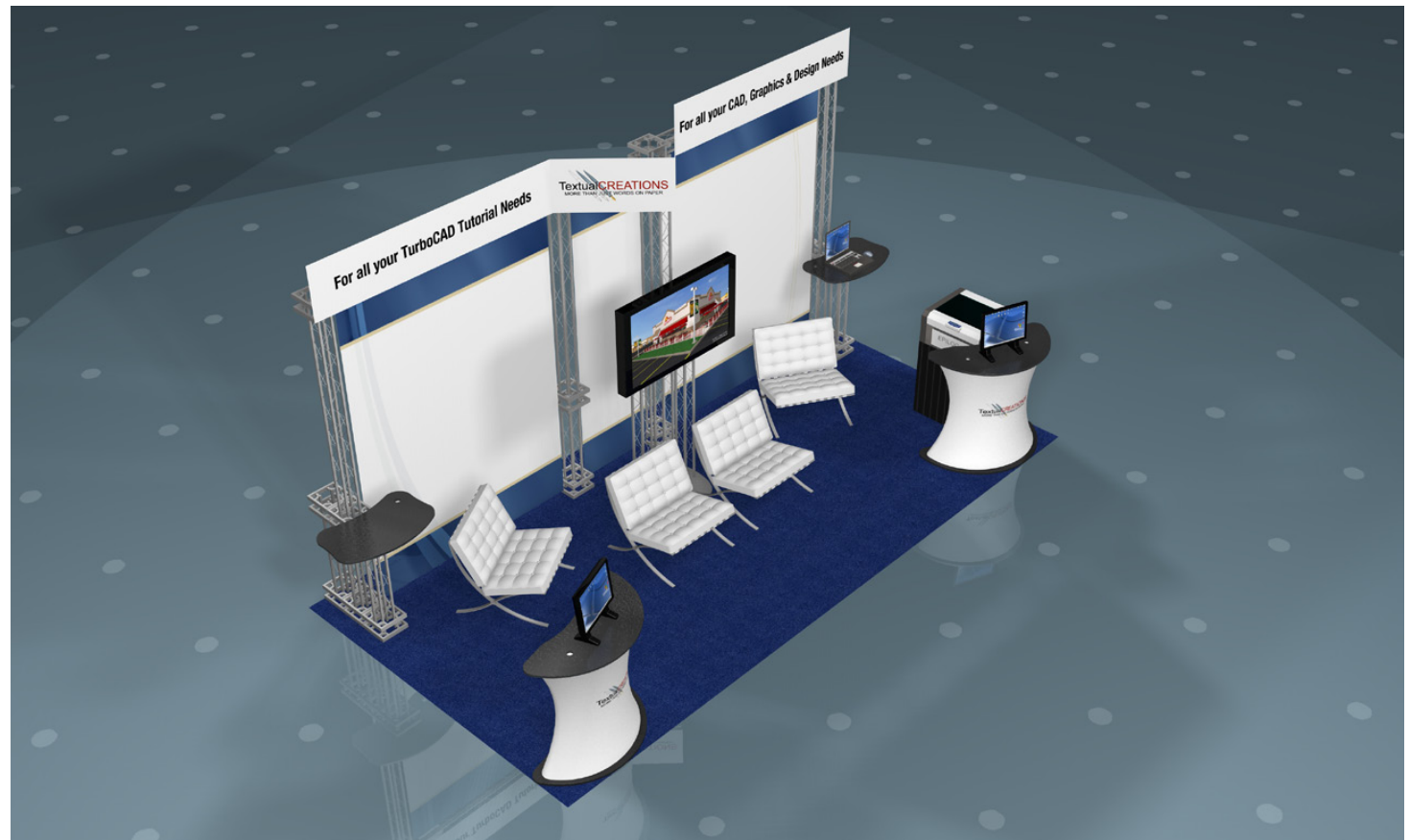
The monitors and plasma screen are symbols, as well as the Barcelona chairs, the demo tables, the engraver, the shelves and the laptop.

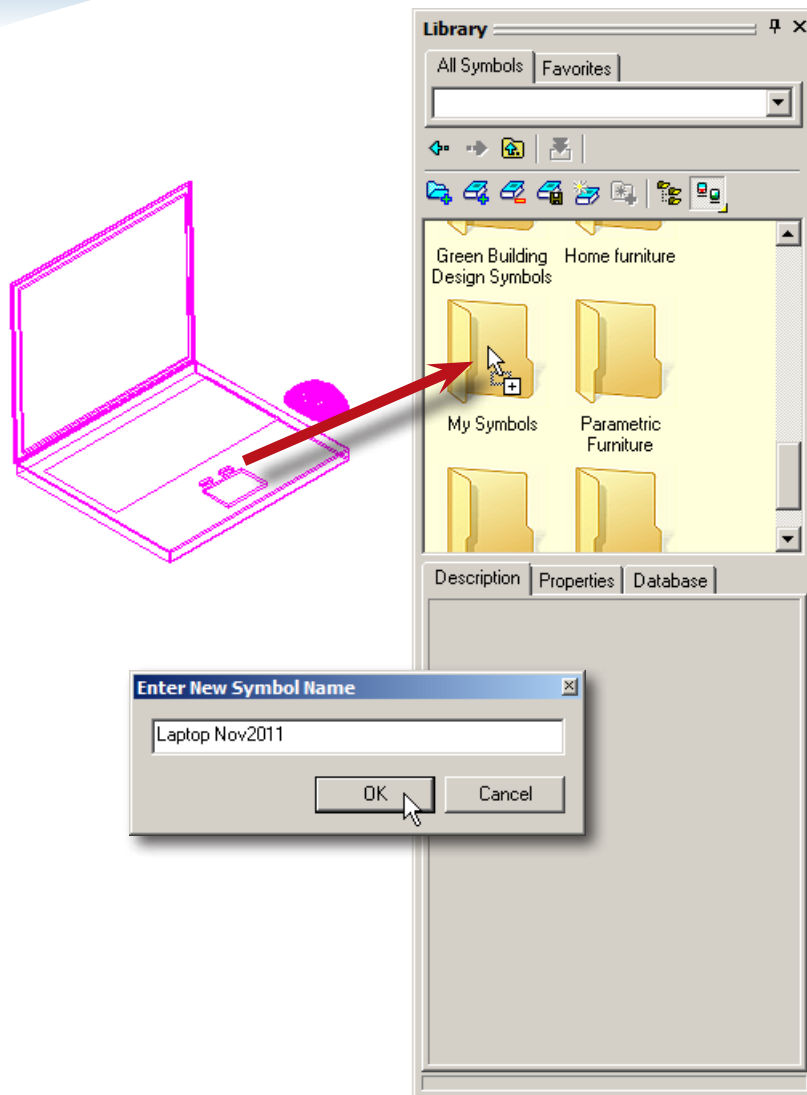
A **Symbol**, when used within TurboCAD, may be defined as a 2 or 3 dimensional drawing (or object) that is created and stored for repeated usage in any drawing.

Symbols, like Blocks help fulfill the basic CAD rule of "Never draw the same thing twice".

Symbols, like Blocks are great time savers and, assuming the block has been precisely created, assure the user that the same precision will be there with any additional usage.

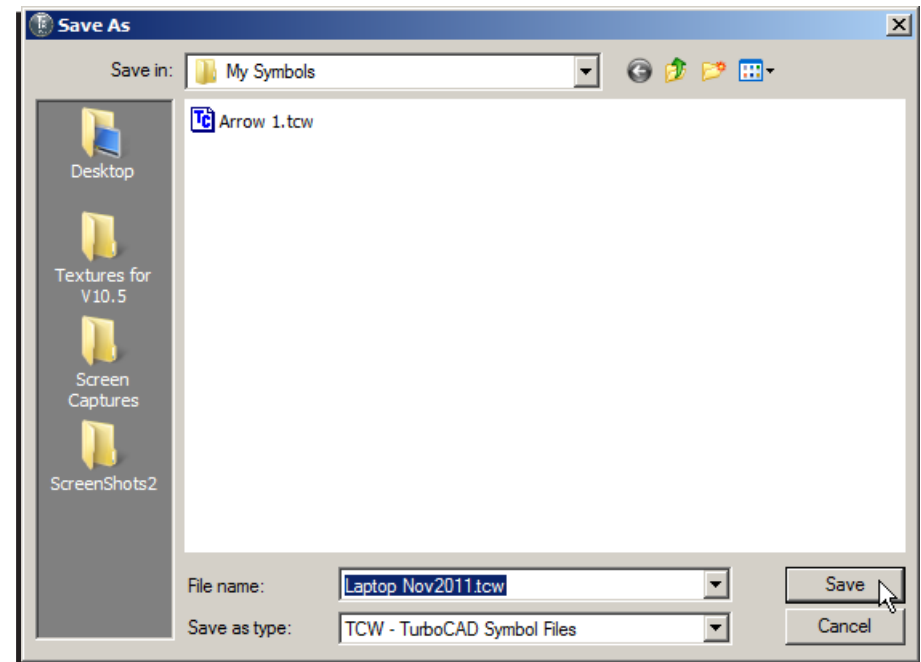
Note that it is possible to make a symbol from a block as is done with the truss sections of this trade show booth.





Symbols are basically separate drawing files with the desired objects within. In reality they are not much different than an external referenced file, but in this case they are permanently inserted and bound to the drawing they are placed. They have no continuing relationship with the folder from where they are drawn from or linked to any used in subsequent or previous files.

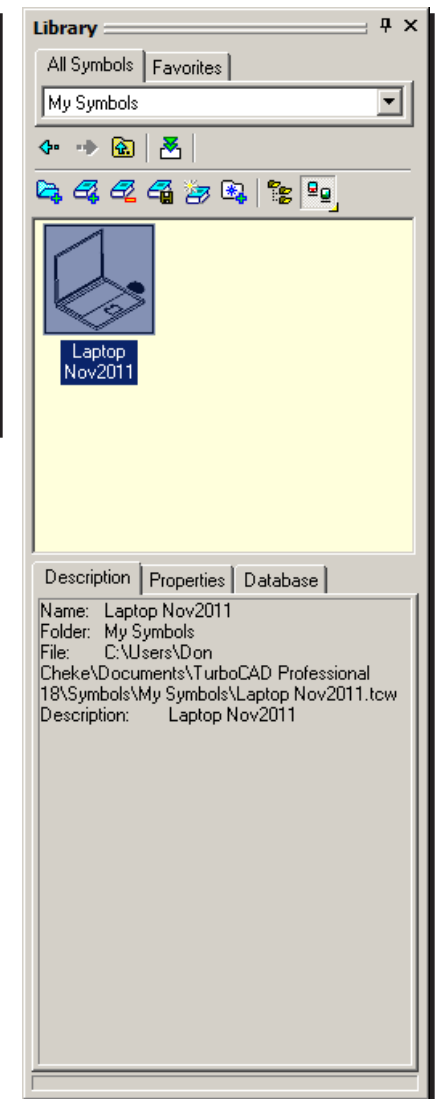
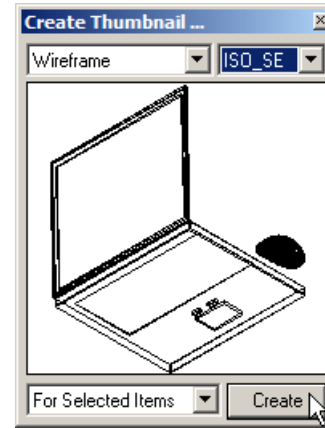
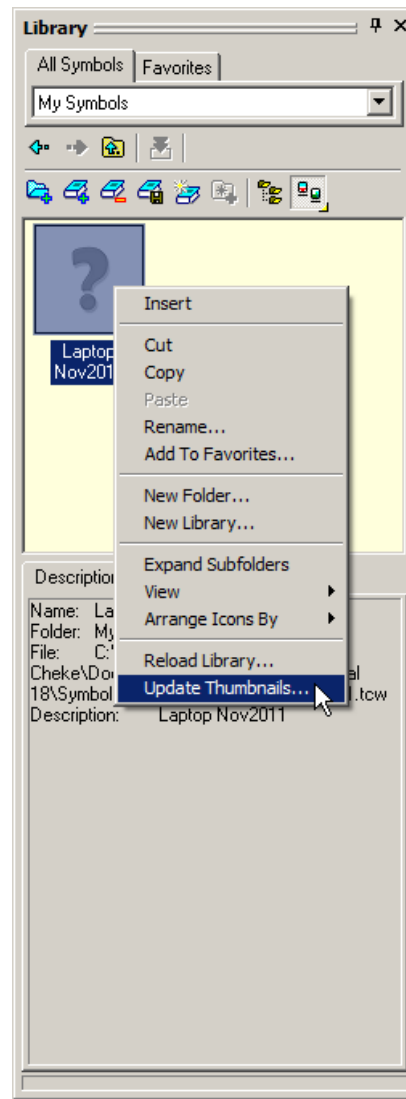
It is really rather easy to make symbols. Simply select the object(s) you want as the symbol and drag it to the desired folder on the Library palette. Give it a name and select Save.



Once it is in the library, right mouse click over the question marked thumbnail and select Update Thumbnails.

Select the desired view and click Create.

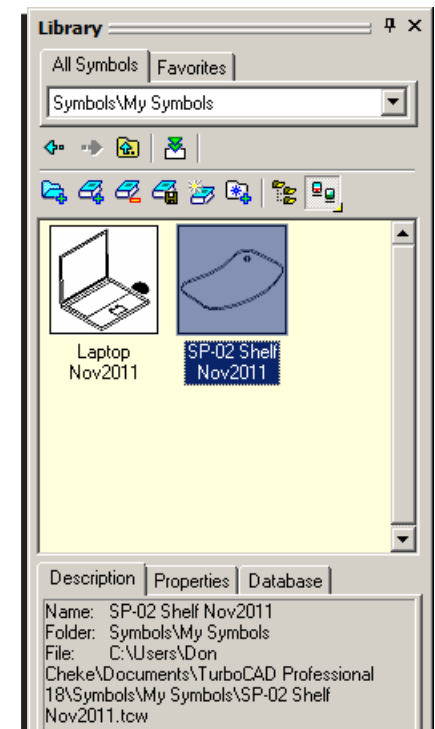
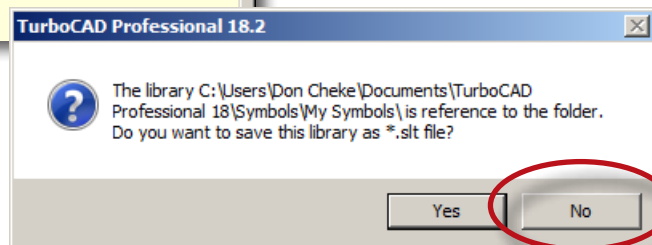
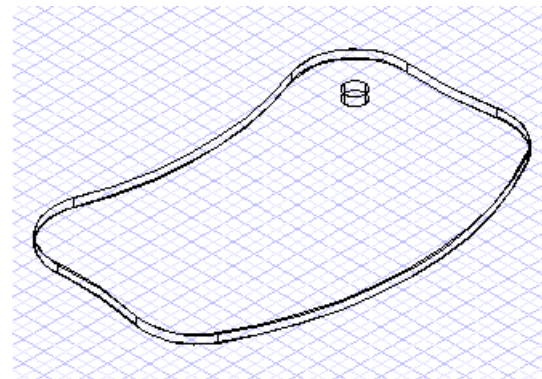
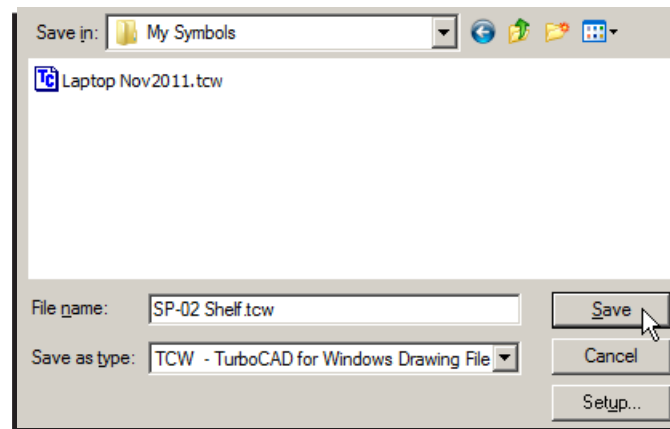
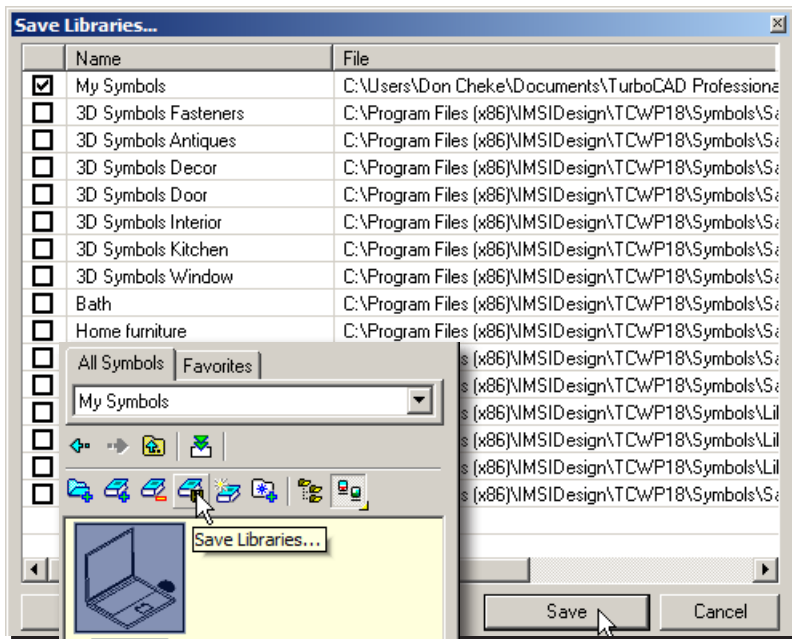
Note that symbols can be created having already been assign to a layer.



Select the Save Libraries icon. With the library checked, select Save.

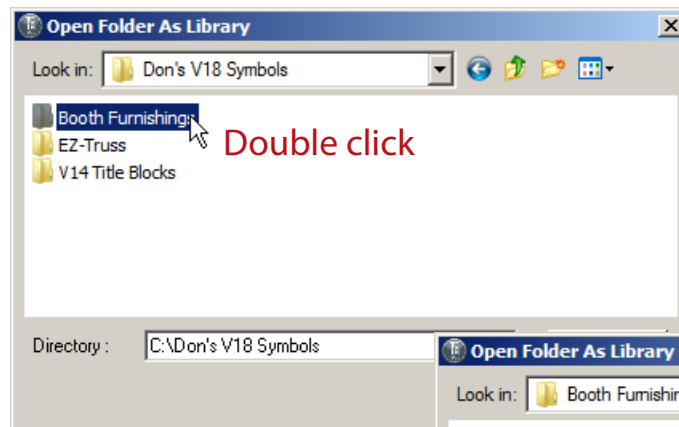
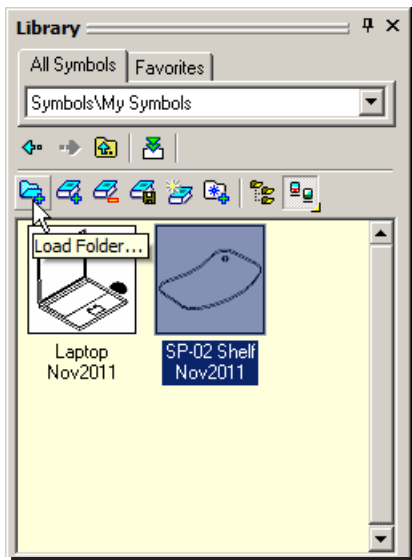
Select No at the .stl file question.

Note too, that any TurboCAD drawing can be saved directly to a folder designated by the user as a symbols folder and it will show up in the specified library folder. A user may need to right mouse click and select Reload Library. Save, Reload Library and Update thumbnails as needed.

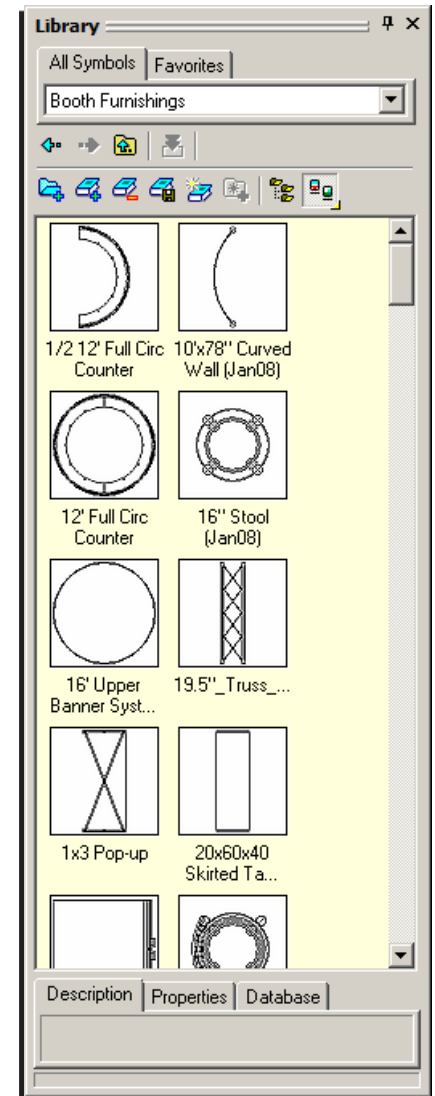
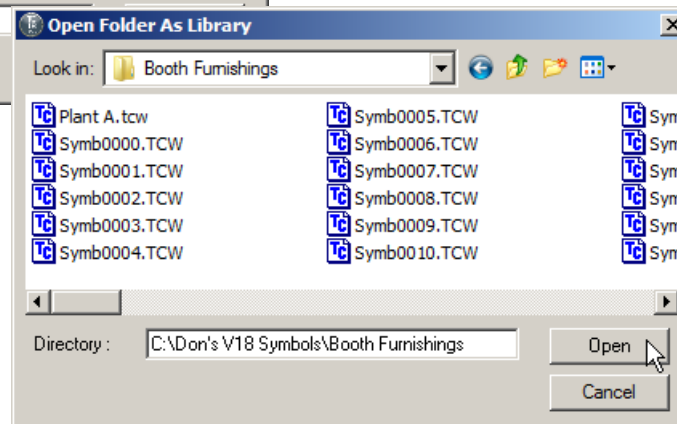


Create your own Library folders specific to different clients or jobs. It makes drawing so much faster when all one need do is pull components from the Library palette.

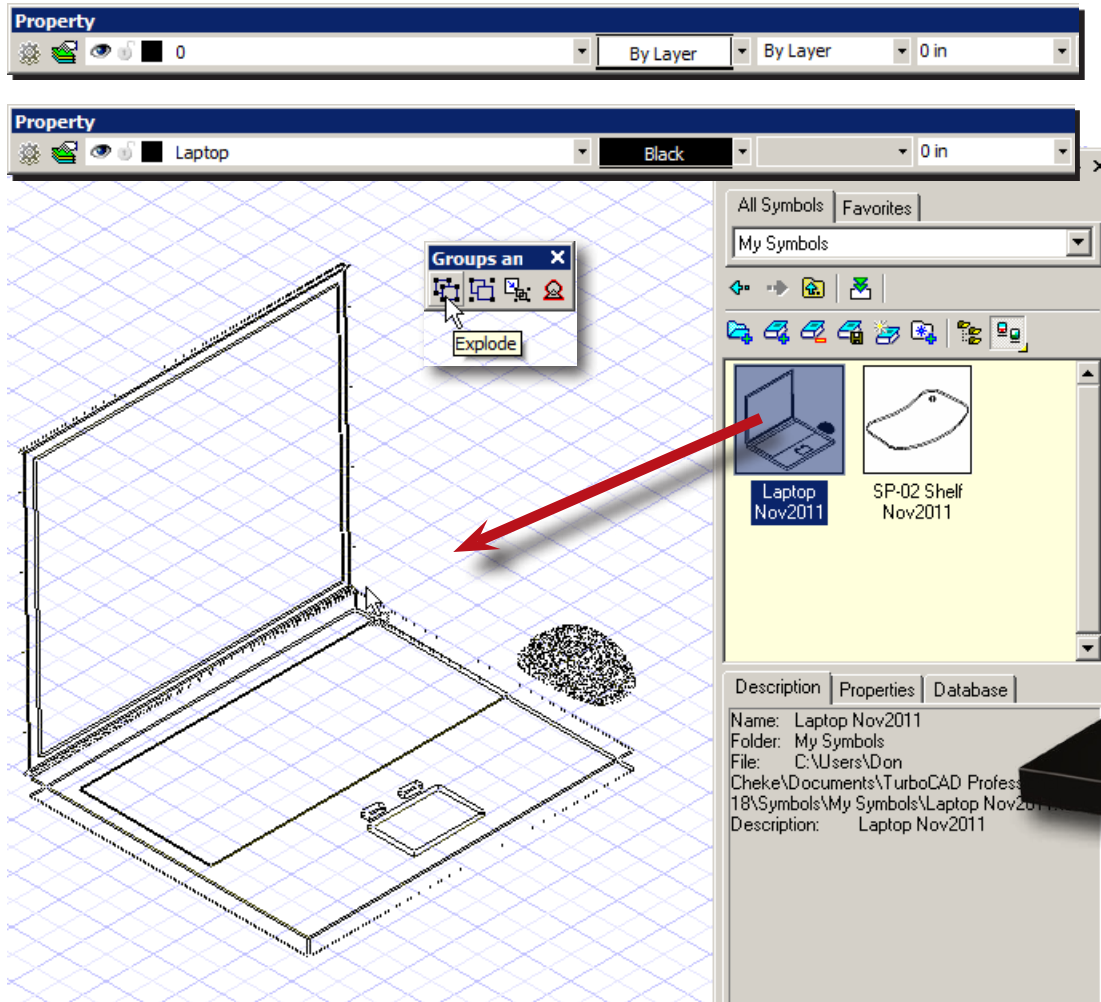
Select Load Folder, locate and open the desired folder and then click Open. The library loads. Reload Library and Update thumbnails as needed.



These symbols are from older versions of TurboCAD. That is why they have the numbered file names.



Symbols will always come into the new drawing file as a group. Explode once to break the grouping and the symbol will return to its original state.



If you found this TurboCAD tip helpful, please consider purchasing a full Textual Creations TurboCAD project tutorial that will lead you through an entire project, keystroke by keystroke. You won't be disappointed! Visit the [Textual Creations Shopping Page](#)