

MAXONFORM FOR ARCHICAD TUTOR

4. THE WORKFLOW PROCESS

Content Outline

- Part 1: Create new Object
- Part 2: Modify existing ArchiCAD element

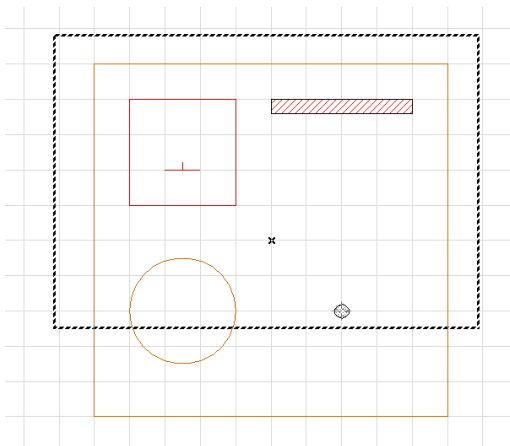
Exercises

- Create new Object in MaxonForm and send back to ArchiCAD
- Modify existing ArchiCAD element in MaxonForm and send back to ArchiCAD

CREATE NEW OBJECT

To work effectively, it is important to understand the workflow process between ArchiCAD and MaxonForm.

Start ArchiCAD and open the TestModel.pln file. Select only a part of your design by using the selection rectangle in the Floor Plan window.

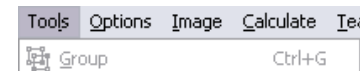


Objectives

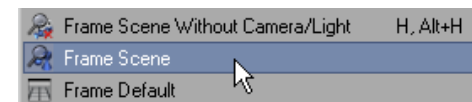
At the completion of this lesson you will be able to

- 1 Understand the nature of ArchiCAD elements in MaxonForm
- 2 Modify Object color and link it to ArchiCAD material
- 3 Understand which Object parameters are sent to ArchiCAD
- 4 Understand the process of modifying existing ArchiCAD elements in MaxonForm

Go to the 3D window (as described in Chapter 2:Working Environment) and choose the Create New Object in MaxonForm command..



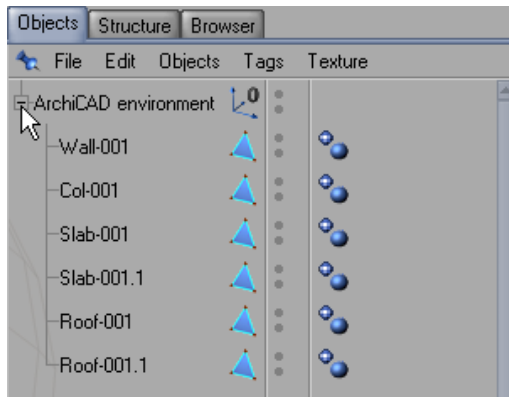
After MaxonForm is opened, use the Frame Scene command of the Edit menu of the Editor Window to see the whole model.



Hint: Alternatively, you can use the Frame Scene Without Camera/Light command, or its shortcut 'H'. This way you can make a Fit in Window in MaxonForm. Pressing the 'Alt' key optimizes the view onto the whole scene (model) in all open Editor Windows.

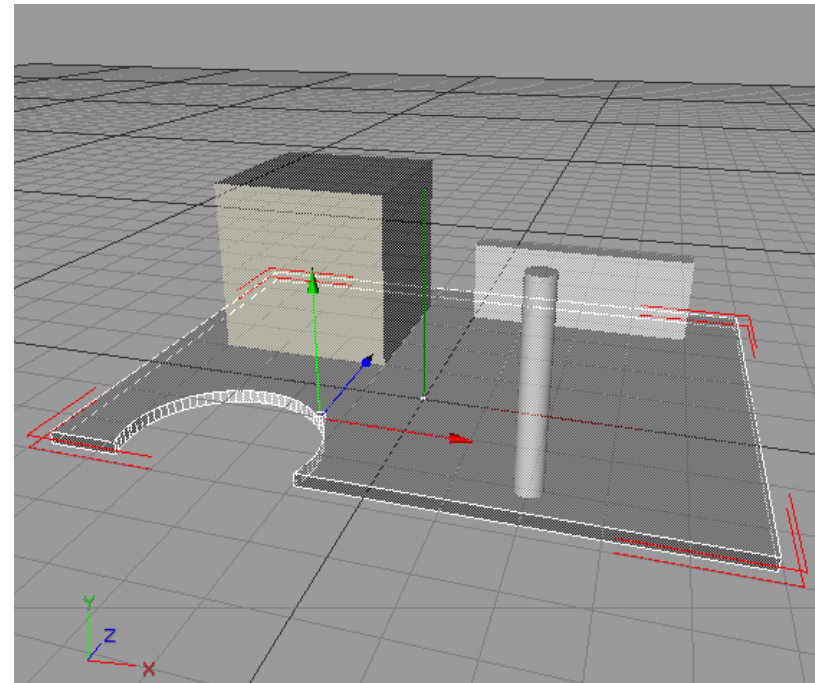
As you can see, all elements of the ArchiCAD 3D window are imported into MaxonForm. This is a generic rule in the communication between ArchiCAD and MaxonForm.

To check, click the '+' icon in the Object Manager beside the ArchiCAD environment label.



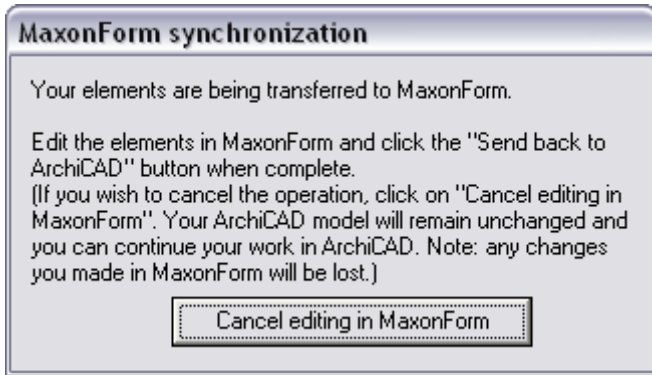
Note: Before starting MaxonForm, always make sure that the 3D Window is active. If you are still in the Floor plan window in ArchiCAD, the Create new Object in MaxonForm command is active, and it will start MaxonForm, but opens an empty project.

In the scene, clicking any element that came from ArchiCAD will show that element as selected, but you will not be able to edit it. When you click its name in Object Manager with the right mouse button, you can choose the Current State to Object command, which creates a duplicate element of your selection. This duplicated element is not editable, either.

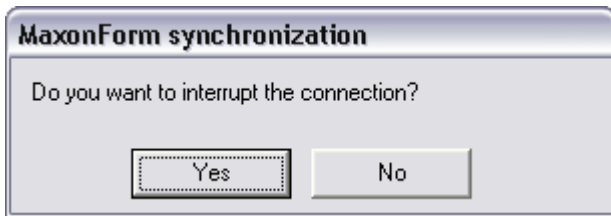


Exercise

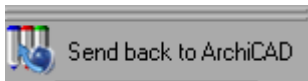
If you go back to ArchiCAD now, you will see the following dialog:



If you click "Cancel editing in MaxonForm" a new dialog window appears:

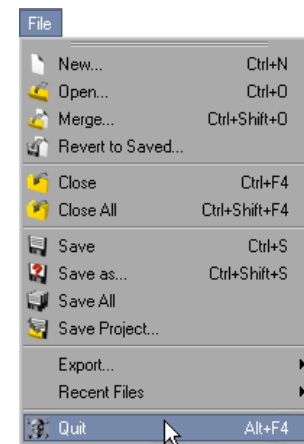
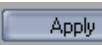
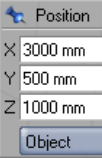
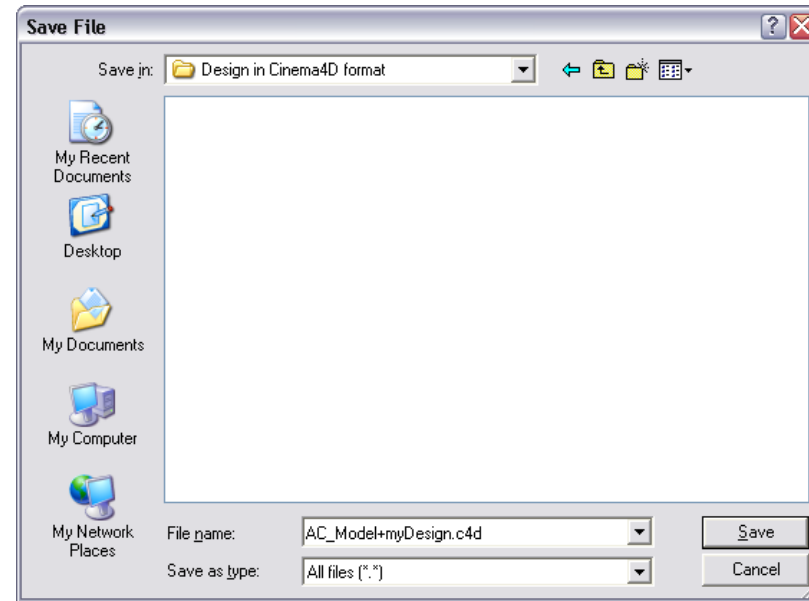


If you click No, you return to the previous dialog. If you click Yes, the connection between ArchiCAD and MaxonForm will be broken. This means you can continue your work in both ArchiCAD and MaxonForm, but if you do so and click the Send back to ArchiCAD button in MaxonForm, your work will be lost.

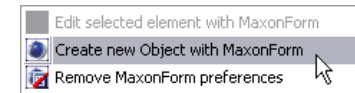


MaxonForm closes the file you were working on, and opens a new, empty file. If you want to keep your design, save it as a Cinema 4D file right before clicking on Send back to ArchiCAD.

If you broke the connection between ArchiCAD and MaxonForm by accident and want to keep your design, save it as Cinema 4D file as follows: AC_Model+myDesign



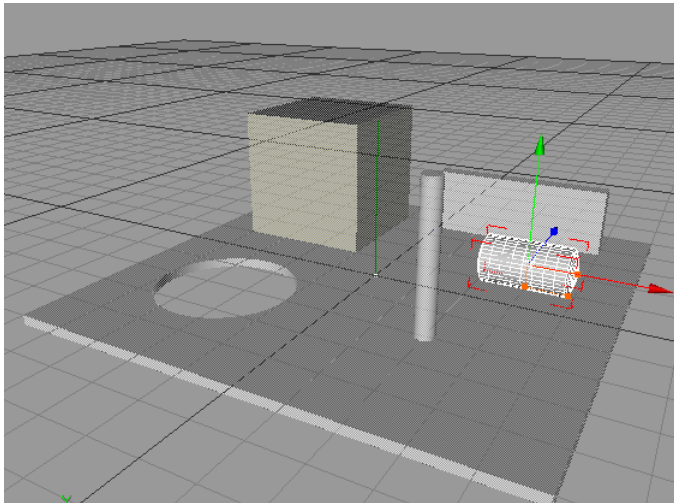
Then Quit MaxonForm. Go to ArchiCAD and choose Create new Object with MaxonForm again.



Open the previously saved Cinema 4D file (AC_Model+myDesign). MaxonForm is able to open several files, so your scene coming from ArchiCAD will remain open.

Note: If MaxonForm is open already and you open a Cinema 4D file prior to exporting the model from ArchiCAD, the Cinema 4D file will be closed. So make sure you first export the file from ArchiCAD and then open the Cinema 4D file.

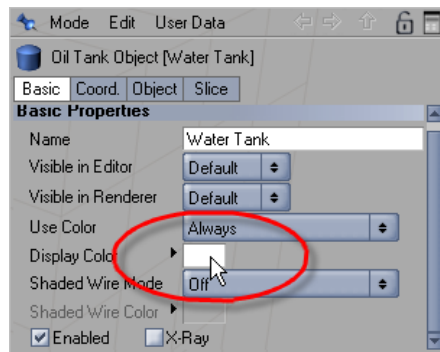
Make sure the elements you created/modified in MaxonForm are selected in the newly opened file. Relocate the object using Coordinate Manager (see below) and push the Apply button.



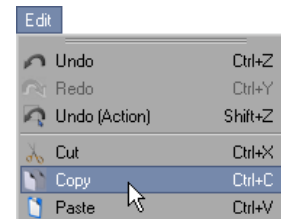
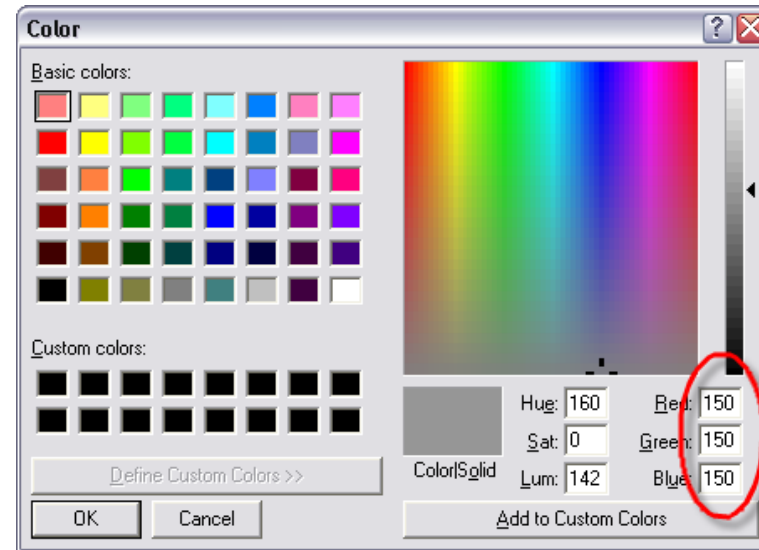
The result will look like the figure at left.

Let's change the color of the water tank from the default white to a light grey.

First, click the color field in the Basic tab page of Object Manager



In the appearing dialog change the RGB values of the color like below:

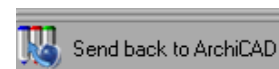


Use the Copy command on Edit menu. Go back to the file you just exported from ArchiCAD using the Window menu. Usually the ArchiCAD model is opened in an "Untitled" window.

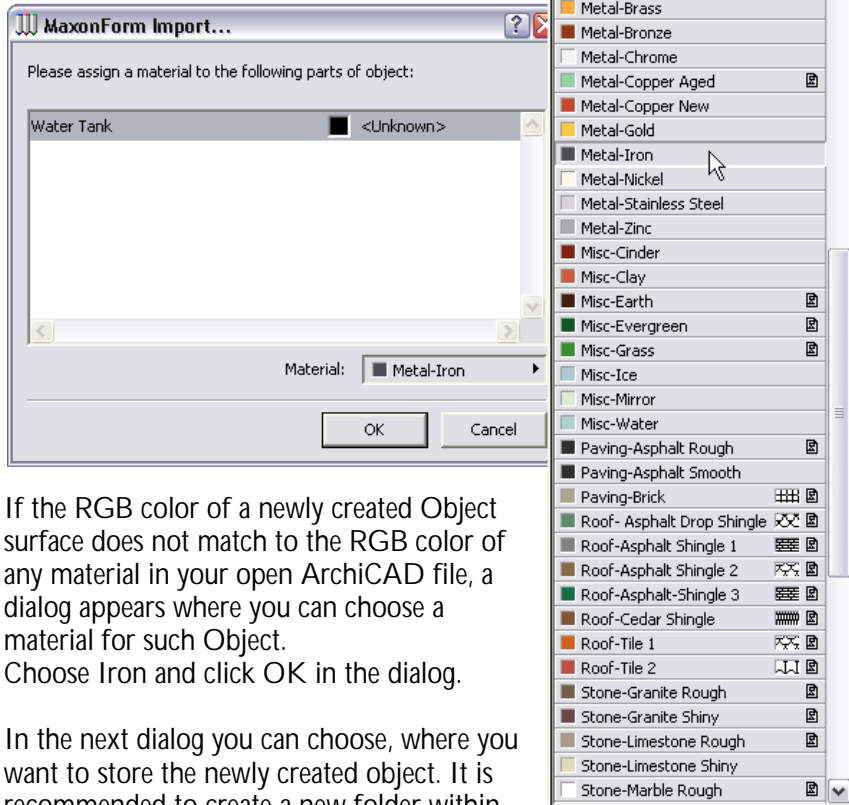
Use Paste command.

As you can see, the object is placed with the same coordinates it had in the other window – similarly to the way this function works in ArchiCAD.

Choose the Frame Scene command (or press 'H' on your keyboard) and push the Send Back to ArchiCAD button on the Left Command Bar.

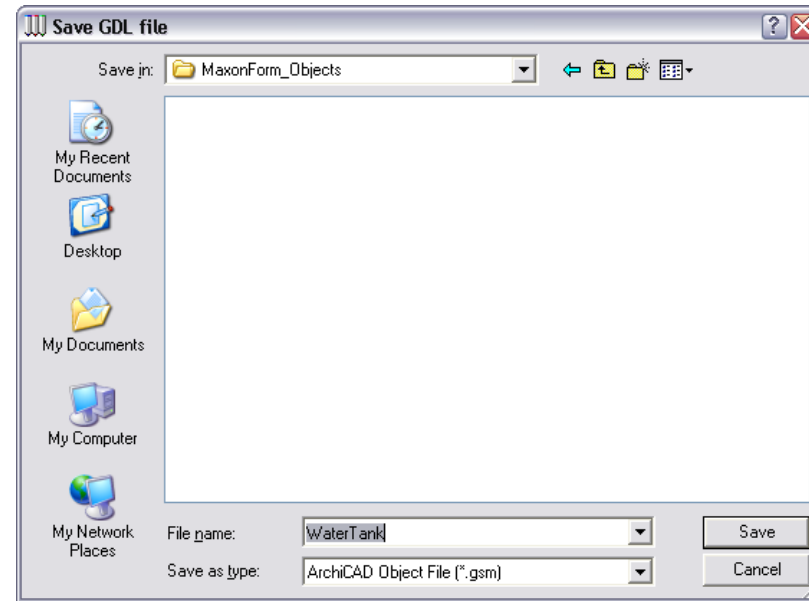


If the RGB color of the new Object matches the RGB color of an ArchiCAD material in your current project, you are led directly to the dialog where you can save the newly created object as an ArchiCAD Library element.

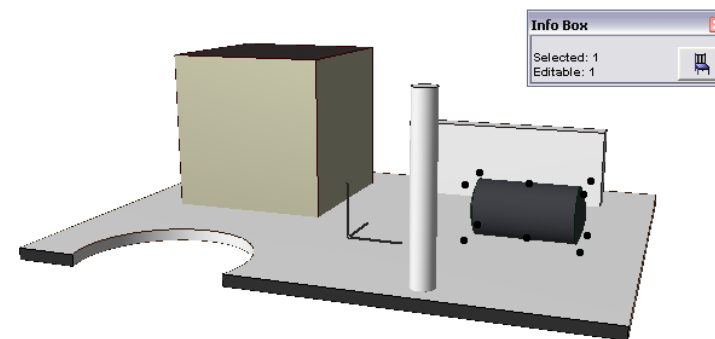


If the RGB color of a newly created Object surface does not match to the RGB color of any material in your open ArchiCAD file, a dialog appears where you can choose a material for such Object. Choose Iron and click OK in the dialog.

In the next dialog you can choose, where you want to store the newly created object. It is recommended to create a new folder within the active Object Library and use it to store all Objects created by MaxonForm.



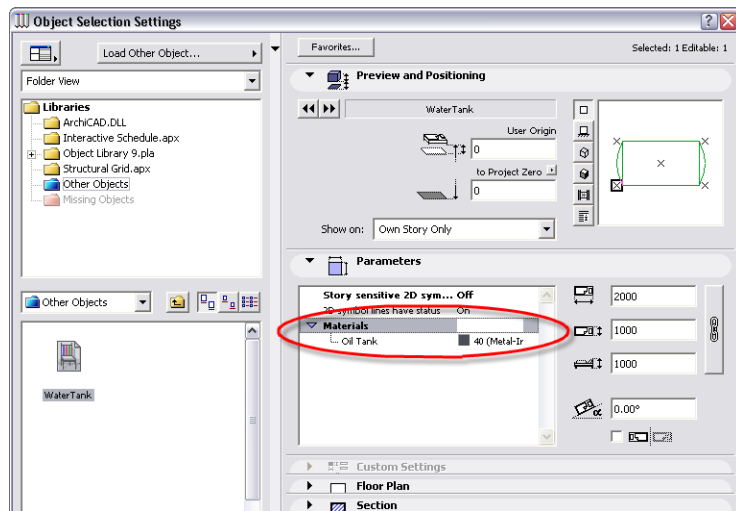
After you have saved the newly created Object as a Library Part, it appears selected in ArchiCAD at the same place it was placed in MaxonForm.



Note: The object appears in the model also if it is saved outside the active library. ArchiCAD will find it outside the active library as well, if you later

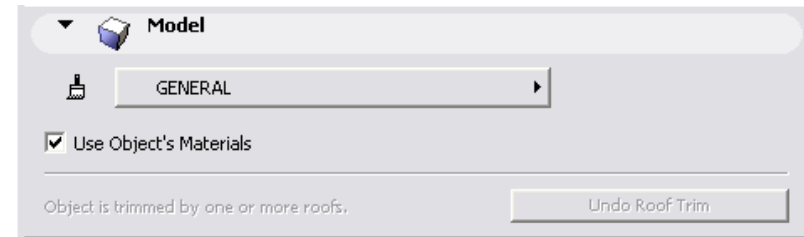
open the project. Furthermore, you might not want to mix objects created in MaxonForm into your standard library. Follow the way you think works the best for you.

If opening the Object Settings dialog you will see that object's material can be set using the Additional Parameters besides other two switches: 'Story sensitive 2D symbol' and '2D lines have status'. As you might have experienced already, the latter two are especially useful in case of building elements.



Exercise

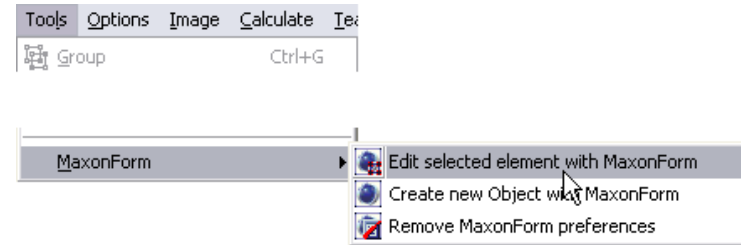
Note: If you click Cancel in the MaxonForm Import... dialog or do not choose a material, the Script of the Library object will not contain the material setting i.e. you can not set the object material among the Additional Parameters in ArchiCAD. By default its material in ArchiCAD will be GENERAL, which is the same as the pen color of the object. You can choose a material for these objects in the Model section of the Object Settings dialog.



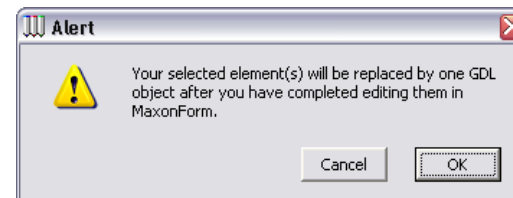
Note: If you click Cancel in the Save GDL file dialog box, no object will be imported into ArchiCAD and your work will be lost.

MODIFY AN EXISTING ARCHICAD ELEMENT

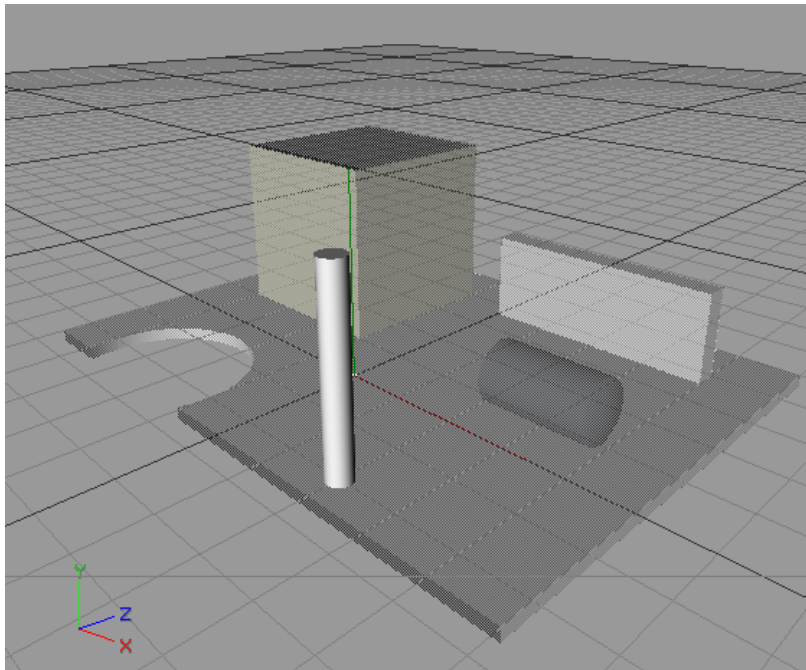
In ArchiCAD, deselect the Water Tank Object and select the Column. Choose 'Edit selected element with MaxonForm' in the Tools menu.



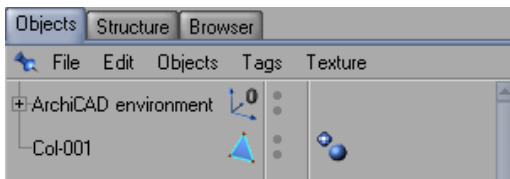
A dialog appears warning you that the element you are about to edit in MaxonForm will be deleted in the current project as an ArchiCAD element and will be replaced by the element (Library Part) sent back from MaxonForm.



When the model opens in MaxonForm, you can see that the column looks a bit different from other elements.



And it is separate from the group of ArchiCAD elements in Object Manager.

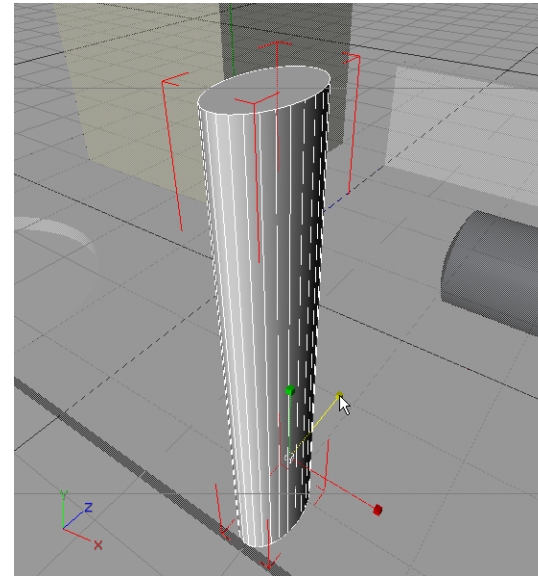


Select the Column by clicking its name in Object Manager, and press 'S' on the keyboard to activate the Frame Selected Elements command. Similarly to other Frame... commands described in Chapter 2: Working Environment, holding down the 'Alt' key while pressing 'S' will zoom onto the Column in every open Editor Window.

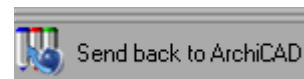


As you can see, you can now freely drag the ArchiCAD element. Use Undo to get it back to its original position and activate Scale mode.

Approach the scale box pointing in the 'Z' direction and drag it while the cross section of the Column changes to an ellipse.



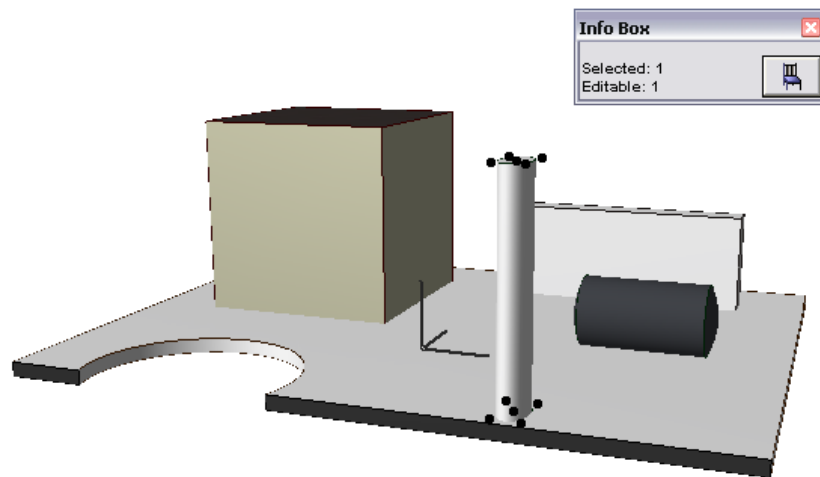
Click the Send back to ArchiCAD command in the Left Command Bar.



The Save as GDL dialog appears in ArchiCAD. Name your Oval Column object and click OK.

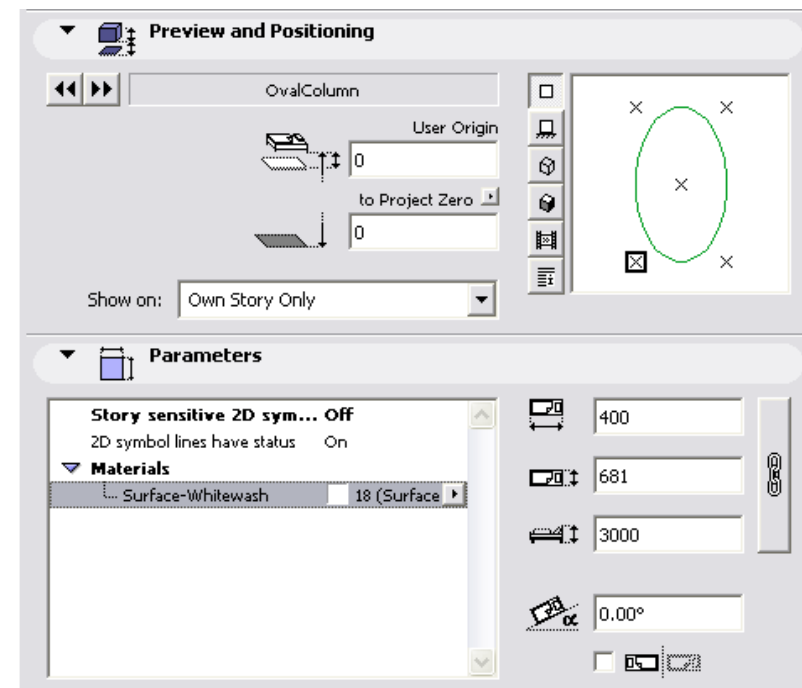


The new Object will appear in the ArchiCAD 3D Window, replacing the original column element.



Open the Object settings dialog while the new column is selected. As you can see, the Column has kept its original material.

Exercise



Note: if you click Cancel in the Save as GDL dialog, the original column will remain in the project.

Lesson review

- 1 Can you edit ArchiCAD elements in MaxonForm when choosing the Create new Object ... command?
- 2 What can you do if you accidentally break the connection between ArchiCAD and MaxonForm?
- 3 How do you link an Object color to an ArchiCAD material?
- 4 If you edit an ArchiCAD element in MaxonForm and send it back to ArchiCAD, what happens to the original element?