

**User Guide**  
**for**  
**Import Rhino Model to ARCHICAD**  
**Add-On**  
**(BETA)**

**Version 18.0.0.7509.18 for ARCHICAD 18**  
**and**  
**Version 19.0.0.4517.8 for ARCHICAD 19**

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**This tool is available free, from GRAPHISOFT only. Distribution of this tool through any other channel is prohibited. This tool is currently under development and is in a trial phase.**

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### **User Guide for**

### **Import Rhino Model to ARCHICAD Add-On**

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# Introduction

This tool enables the user to pass on the model or part of the model produced in Rhino to ARCHICAD. The imported model will appear in ARCHICAD as a non-editable GDL object, maintaining the logical build-up of the original Rhino model. This add-on contains a 3rd party engine that interprets NURBS coming from Rhino and turn them into tessellated surfaces in ARCHICAD.

This Add-On, available for ARCHICAD 18 and 19, enables you to open or merge native Rhino (\*.3dm) files directly in ARCHICAD.

## Key features and benefits

- Native file handling through import
- Retaining project data stored in Rhino file that are available in both applications (view settings, attributes, grouping)
- Retaining project/element data in a form of linked metadata that are not directly translatable to ARCHICAD. These metadata are available for the Find and Select function in AC.
- Choice between “open” and “merge” functionality
- Support of minimalized file size in cases where Rhino file contains multiple instances of the same model part
- Handling of large complex Rhino models in ARCHICAD

## Scope of the guide

This guide is intended to explain the circumstances and available options while importing a 3dm (Rhinoceros) file format into ARCHICAD. For further details on working with 3dm files in Rhinoceros software, please visit: <http://www.rhino3d.com>

# Getting Started

## Install Add-On

1. Before installing the Add-On, make sure that ARCHICAD - either version 18 or 19 – is installed on your computer.
2. Download the Add-On to your computer.
3. Launch the Setup Wizard
  - **On Windows:** Double-click on the .MSI file to launch the Setup Wizard.
  - **On Mac:** Double-click on the installer file to launch the Setup Wizard.

After installing, the Add-On will be placed in the following folder:

- **On Windows:** Program Files\GRAPHISOFT\ArchiCAD 18 (19)\Add-Ons\Goodies
- **On Mac:** Applications/GRAPHISOFT/ArchiCAD 18 (19) /Add-Ons/Goodies

## Uninstall Add-On

### On Windows:

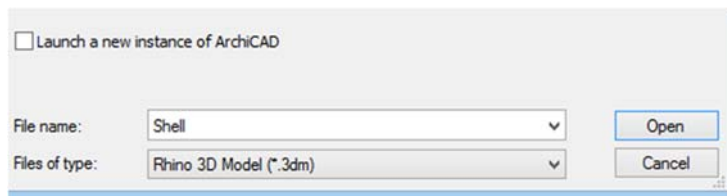
1. In the Control Panel, select “Programs and Features.”
2. Find “Rhino In” in the list of programs, and click the “Uninstall/Change” command. This will start the uninstaller, which will remove all its components from your computer.

### On Mac:

1. Navigate to the Applications/GRAPHISOFT/ArchiCAD 18 (19) /Add-Ons/Goodies folder.
2. Find the “Rhino In” Add-On in the list of programs.
3. Remove the Add-On file by placing it in the trash.

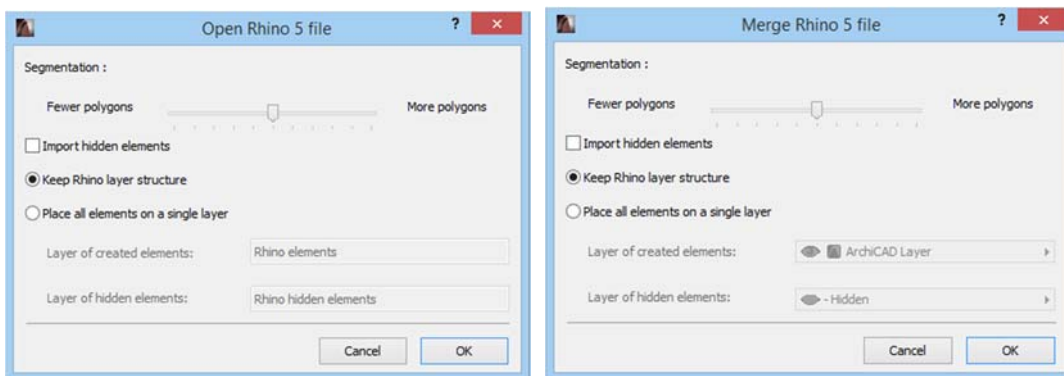
# Open/Merge Rhino File in ARCHICAD

1. In the **File > Open** or **File > File Special > Merge** dialog box, browse for the .3dm file to open.
2. Click **Open** or **Merge**.

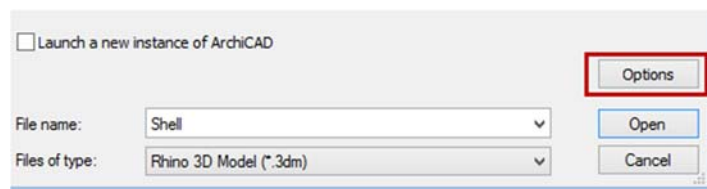


3. If needed, adjust the options to change the way that Rhino elements and layers are interpreted.

- **In ARCHICAD 18:** The Open or Merge Rhino File dialog box appears.



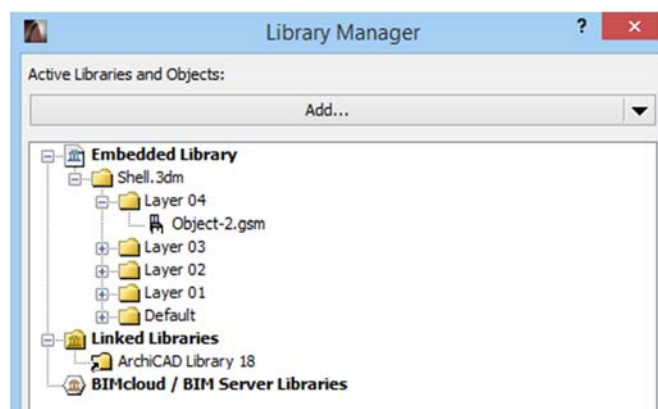
- **In ARCHICAD 19:** Click the Options button of the Open or Merge dialog box to see import options.



See [Open/Merge Options](#), below.

## Rhino Elements as ARCHICAD Objects

Each imported Rhino element becomes a separate ARCHICAD object (.gsm). These are stored in the ARCHICAD Embedded Library, in a separate folder for each imported Rhino File, and a separate sub-folder for each layer.



## Project Location

If you used **Open** to create a new ARCHICAD project out of the Rhino file, then the ARCHICAD Project Location is based on the Rhino project's Project Location.

## View Display Mode

After **Open**, the views of the imported Rhino model are now 3D axonometric views listed in the ARCHICAD View Map. The view's display mode (a 3D Window Setting) depends on the original display mode in Rhino.

Display Mode of View in Rhino	Display Mode of View in ARCHICAD
Wireframe, Ghosted, X-Ray, Technical	Wireframe
Shaded, Rendered, Artistic, Pen	Shaded

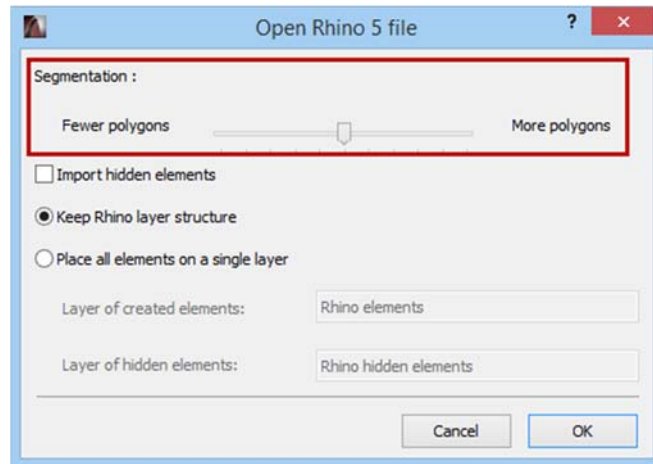
# Open/Merge Options

These options are available when Opening or Merging a Rhino file in ARCHICAD.

## Segmentation

Use the slider to adjust the segmentation of NURBS surfaces imported from Rhino.

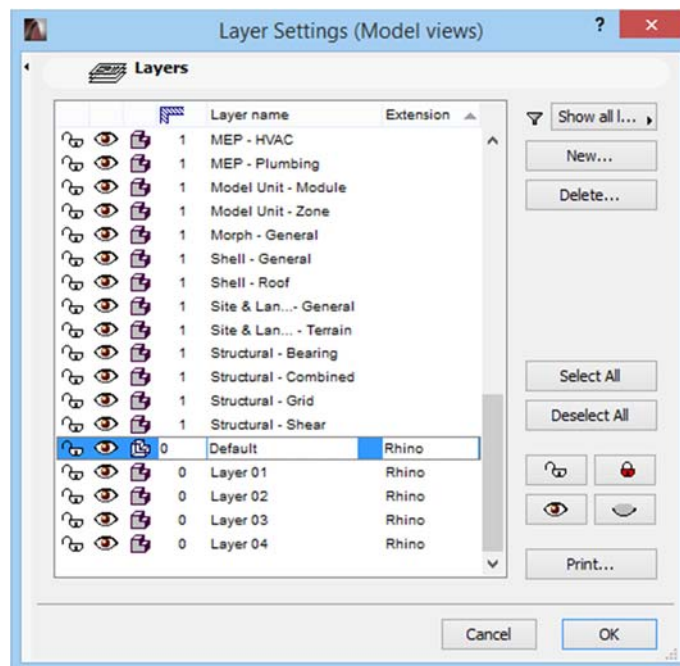
**Note:** Mesh-type elements from Rhino are not affected by this setting.



## Keep Rhino Layer Structure (Default)

Each Rhino Layer is recreated as a separate ARCHICAD Layer, named after the Rhino Layer's folder path: folder\_subfolder\_layer, plus the extension Rhino.

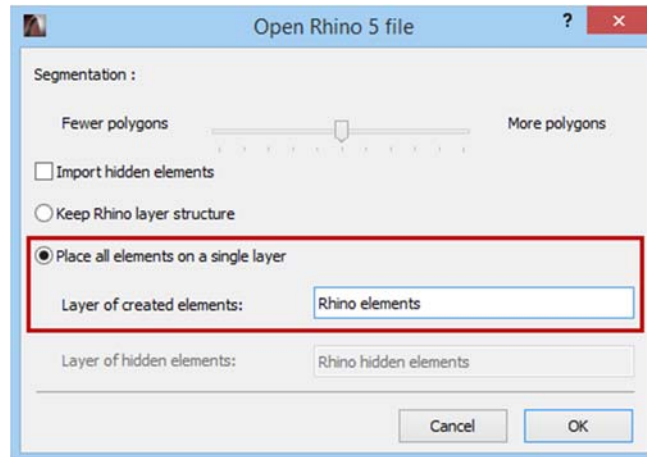
The Layer name + extension in ARCHICAD can be a maximum of 255 characters. Any resulting identical Layer names are differentiated with a number added onto the extension.



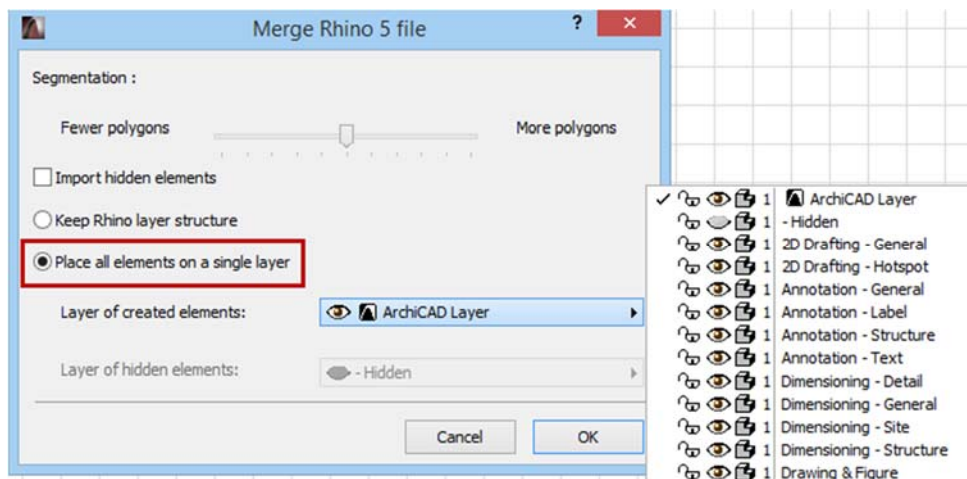


## Place all Rhino Elements on a Single ARCHICAD Layer

- If you used **Open** to import the Rhino model: Type a name for the Layer onto which to place the entire Rhino model.



- If you used **Merge** to import the Rhino model: Use the pop-up to choose the ARCHICAD Layer onto which to place the entire Rhino model.



## Import Hidden Rhino Elements

In Rhino (unlike in ARCHICAD), it is possible to hide an individual element, whether its Layer is visible or not.

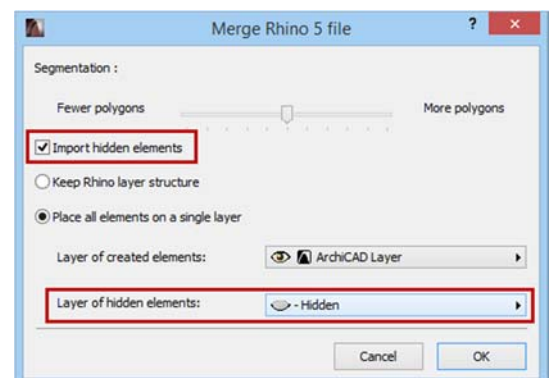
By default, such hidden elements are NOT imported to ARCHICAD.

If you want to import hidden elements, check the **Import hidden elements** box.

In this case, you can choose or create a separate ARCHICAD Layer for these elements.

For imported hidden elements:

- Layer visible but Element hidden in Rhino: Layer (and all its elements) are visible in ARCHICAD
- Layer hidden and Element hidden in Rhino: Layer (and all its elements) are hidden in ARCHICAD



# Object Settings

## Adjust Object Parameters

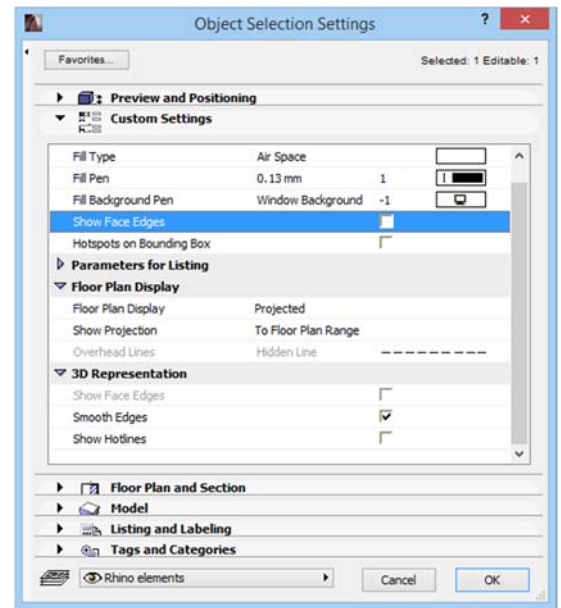
As with any object in ARCHICAD, use Object Settings to set its 2D and 3D appearance.

Note the following specific parameters:

- **Show Face Edges:** Show them if you want to see the internal surface edges in 2D.
- **Hotspots on bounding box:** Turn this on if you want to see additional hotspots on Rhino objects in 2D. This can be useful, for example, for dimensioning an orthogonal object such as a curtain wall.

## 3D Representation

- **Show Face Edges:** Not available if Smooth Edges is turned on. Show them if you want to see internal surface edges in 3D.
- **Smooth Edges:** On by default. If it is off, these edges become hidden edges (no visible contours), but they still affect the shading.
- **Show Hotlines:** If this is on, you can snap to edge hotlines to facilitate selection.



## Find Rhino Elements by Original Layer

Every element imported from Rhino and placed in ARCHICAD is assigned a Custom IFC Property called Rhino Layer, which stores the element's original Layer. (This is true even if you chose to place all Rhino elements onto a single Layer in ARCHICAD.) Use this property to find and filter Rhino elements by Layer, even after modifying the ARCHICAD Layer structure.

