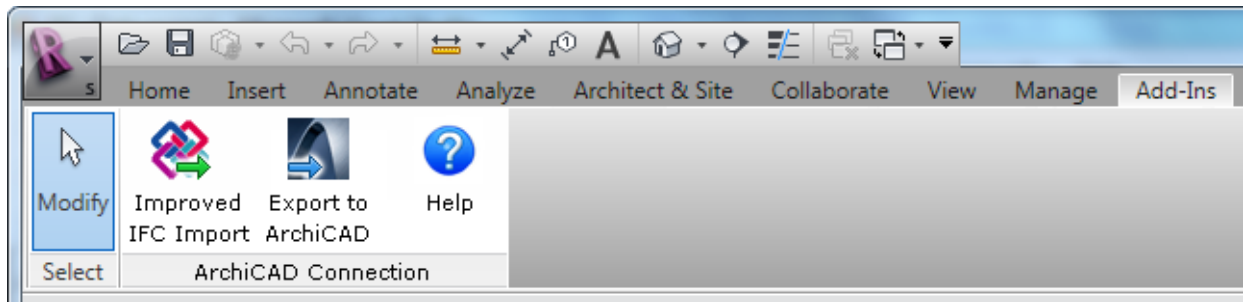


# GRAPHISOFT ArchiCAD Connection Add-In

The GRAPHISOFT ArchiCAD Connection is a free Add-In for Autodesk Revit Structure and Revit MEP 2013 (32- and 64-bit) softwares. The Add-In improves the IFC model-based and bi-directional data exchange between GRAPHISOFT ArchiCAD and Autodesk Revit applications.



This GRAPHISOFT ArchiCAD Connection Add-In has two functions:

- Import of IFC models to Revit using extra features that improve the interpretation of architectural models, and
- Export of IFC models to ArchiCAD, optimizing the model data for use in ArchiCAD.

# Improved IFC Import

The Improved IFC Import command of the Add-In is recommended for IFC import of architectural models to Revit Structure and Revit MEP - especially in case of model-exchange with GRAPHISOFT ArchiCAD - and has the following main functions:

- **Direct import of IFC 2x3 files**
- **Additional improved import functions:**
  - **Import of Grid elements**

Full conversion of grid (IfcGrid) elements is done during the import process.
  - **Handling of Load-bearing slabs**

Imported load-bearing slabs (IfcSlabs) are set to Structural Floor-type elements in Revit Structure.
  - **Keeping IFC GUIDS**

Add the IFC GUID to the IFC Parameters (as IFC Global Unique ID) of the imported elements to use them for listing purposes (Schedule/Quantities).
  - **Import of ArchiCAD Renovation Status**

Add the Renovation Status data (exporting from ArchiCAD) to the IFC Parameters of the imported elements (by instances) for listing purposes.

The steps of the improved architectural model import:

1. In the Revit application, go to the ArchiCAD Connection panel on the Add-Ins ribbon and click the Improved IFC Import command.
2. In the open dialog box, select the IFC (2x3) file you would like to import.

**Hint:** If you have received an IFCZIP file (a format supported by ArchiCAD but not Revit), extract it to a normal IFC file with your ZIP-extractor before starting the open process in Revit.
3. The Add-In now begins the import process, applying the previously mentioned additional improvements.
4. When the process is finished, a dialog summarizes the corrections made by the Add-In during IFC import.

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# Export to ArchiCAD

The Export to ArchiCAD command of the Add-In is recommended for IFC model export from Revit structure to ArchiCAD.

**Hint:** For the HVAC element export from Revit MEP via IFC, we recommend a special GRAPHISOFT-developed Add-In for Revit MEP, called MEP Export to ArchiCAD. It is available from <http://www.graphisoft.com/support/archicad/downloads/interoperability/>.

The **Export to ArchiCAD** command has the following main functions:

- **Direct export of models as IFC 2x3 files**
- **Additional improved export functions:**
  - o **Export of Grid elements**

Full conversion of grid elements is done during the export process.
  - o **Export of project north data**

Project north data is exported correctly to the IFC file to place/merge the Revit IFC model correctly to the ArchiCAD project.

The steps of the improved model export:

1. In the Revit application, go to the ArchiCAD Connection panel on the Add-Ins ribbon and click the Export to ArchiCAD command.

**Hint:** If you have special elements in the current model which are not supported by the default Revit export settings, you have to set their export permission in the **Export > Options > IFC Options** dialog. For example, to export structural connection elements (categorized as Structural Connections) from Revit Structure, just type IfcBuildingElementProxy instead of Not Exported.

2. In the export dialog box, set a file name for the export.
3. The Add-In now begins the export process, applying the previously mentioned additional improvements.
4. When the process is finished, a dialog summarizes the corrections made by the Add-In during IFC export.