Quick start guide

Tekla Structures interoperability with Autodesk Revit

Exchanging model information between Tekla Structures and Autodesk Revit is simple and reliable using an intelligent link created by Tekla. Supported version for the link are; Tekla Structures v18.0 and above. Autodesk Revit 2013 and above.
Best results are experienced Tekla Structures 18.1 or later and Revit 2014 or later.

The link is in two parts; with installations required in Tekla and Revit.

- **The Tekla Structures User** can export a Revit compatible version of requested parts of the Tekla model by installing the appropriate Export to Software extension

- **The Autodesk Revit User** can import requested Tekla model parts and use them within Revit software by installing the Import from Tekla Add-in. Ensure that you discuss with the Tekla user exactly what content you require, since not all modeled elements in the Tekla model are likely to be of use to you.

The Tekla User; Steps to Export from Tekla Structures to Revit

1. Discuss with the Revit user what model information they require. It is unlikely that the whole Tekla model is required.
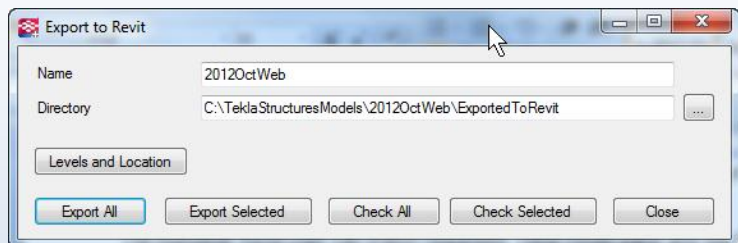2. Install the Export to Software Extension
3. Launch Tekla Structures
4. Click on the 'Export to Revit' button in the 'Export to Software' toolbar.
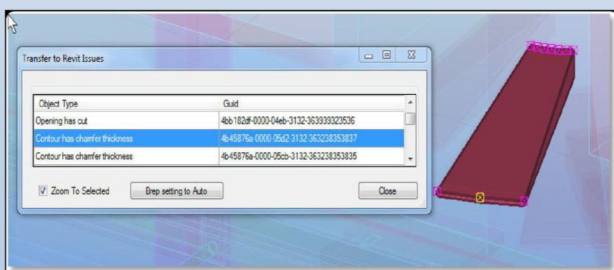5. Click on the Levels and Location button. Manually add the height and names of each level / story of the building.
6. Also in the Levels and Location window; you may enter Origin offset information as you have calculated compared to the Revit model.
7. Select objects to be exported by 'Export Selection' or by 'Export All'. Be sure that you only send objects that have been specifically requested, since the Revit User may not wish to see all highly detailed parts common to Tekla models.
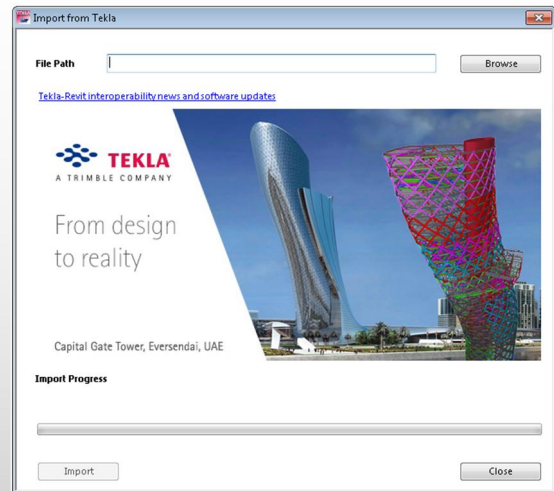
9. Select Check model. Note that curved members and complex geometries will be classified as BREPS*. They will go into Revit as individual families. The user can choose to include them/exclude them through the relevant selection.
10. Export. A special Revit compatible file is created containing dedicated Revit 2013 information (ifcZIP file).

Tekla Structures interoperability with Autodesk Revit

The Autodesk Revit User; Steps to Import from Tekla

1. Discuss with the Tekla user which Tekla model parts you require for your work (e.g. slabs and columns but not reinforcing bars).
2. Install the Import from Tekla Add-In from the Tekla.com website.
3. Launch Autodesk Revit.
4. Go to Add-Ins tab and select 'Import from Tekla'.
5. Browse to the sent ifcZIP file.
7. Click Import.
8. If you have requested a substantially detailed model from the Tekla User, the import process could take a considerable time.
9. Once complete, close the UI and the imported model will be visible in the Revit 3D view. Depending on original complexity of the model, Tekla authored objects are now available correctly placed and organized as Revit 2013 native objects.
10. You will noticed that Void objects were created during the import. The objects were created because of limitations in using 'cuts' in the Revit API at the time of writing. Autodesk are currently reviewing this limitation of their API. These voids can be made invisible by using a view filter in Revit.

*Importing Objects into Revit: Notes

- If you wish to update the structural model, simply re-import the new IFCZIP file as created by the engineer. All Revit ID's are maintained between updates so if you have dimensioned back to structure or added hatching, these notations and overrides will be maintained.
- Where objects have not been able to be imported in Revit correctly, we will replace the failed imported object with, in the best case, a solid object which you can then dimension, hatch, annotate etc. . Standard types of objects, such as steelwork based on national steel profile standards, rectangular or circular columns etc will import more easily than complicated parts which are highly specialized.

Please feel free to contact us at Tekla_Revit_Feedback@Tekla.com if you have any feedback that you would like to offer. We greatly appreciate hearing from you.

*For more detailed information please refer to the 'Tekla interoperability with Autodesk Revit' webpage on Tekla.com or contact your local area Tekla Office or Reseller.